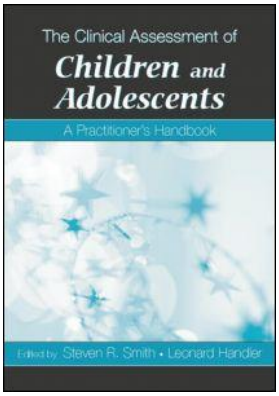

The Clinical Assessment of Children and Adolescents: A Practitioner's Handbook

Steven R. Smith, Leonard Handler

Interpretation of Storytelling in the Clinical Assessment of Children and Adolescents

Publication details
https://www.routledgehandbooks.com/doi/10.4324/9781315827308.ch12
Mary Louise Cashel, Ben Killilea, Stephen J. Dollinger
Published online on: 11 Aug 2006

CHAPTER

12

Interpretation of Storytelling in the Clinical Assessment of Children and Adolescents

Mary Louise Cashel
Ben Killilea
Stephen J. Dollinger
Southern Illinois University, Carbondale

There are many available methods and procedures for the clinical assessment of children and adolescents. Among them, narrative approaches have long held popularity with practicing clinicians for a variety of reasons. Storytelling is an engaging activity that is familiar and appealing to most children across ages and cultures. Thus, as a task demand, stories are often a welcome addition to a battery of tests. Furthermore, in the process of storytelling, the child or examinee reveals considerable aspects of himself or herself that might not otherwise be communicated. In the broadest sense, children's stories can be analyzed to evaluate thoughts, behaviors, emotions, perceptions of self, relationships with others, and coping and problem-solving skills. As such, they can inform clinical conceptualizations from multitheoretical perspectives, including psychodynamic, behavioral, cognitive-behavioral, interpersonal, and family systems orientations.

This chapter explores the history and theoretical underpinnings of the storytelling approaches. An overview of the Thematic Apperception Test and interpretive systems with applications for children and adolescents is provided. The discussion then focuses on three principal storytelling tests developed specifically for children, namely the Children's Apperception Test (C.A.T; Bellak & Bellak, 1949), the Roberts Apperception Test for Children (RATC; McArthur & Roberts, 1982; Roberts–2; Roberts & Gruber, 2005), and the Tell-Me-A-Story test (TEMAS; Costantino, Malgady, & Rogler, 1988). Finally, a case example is presented, integrating data from social history information, intellectual assessment, behavior report forms, and self-report inventories.

HISTORY OF APPERCEPTIVE APPROACHES AND THE THEMATIC APPERCEPTION TEST

The theoretical foundation for narrative or thematic approaches is based on the psychoanalytic concept of projection and the projective hypothesis. The projective hypothesis, in essence, states that perception and interpretation of contemporary events is based upon the memory and interpretation of past experiences. This process was labeled "apperception" by Morgan and Murray (1935) and "apperceptive distortion" by Bellak (Bellak, 1944; Bellak & Brower, 1951). Apperception can be thought of as the interpretive process by which the individual makes sense of or understands what he or she sees, hears, or experiences. The way an individual interprets any given experience or situation (or picture) is largely shaped or colored by his or her past experiences. This is the heart of apperception as it applies to storytelling tasks. The assumption is that the story created by an individual in response to a picture with sufficient ambiguity will reflect his or her own conflicts, thoughts, needs, and feelings.

The history of storytelling as a clinical assessment procedure is largely rooted in the development of the Thematic Apperception Test (TAT; Murray, 1943). Henry Murray created the TAT in collaboration with Christiana Morgan at the Harvard Psychological Clinic and published an initial description of the test and its applications (Morgan & Murray, 1935). The TAT is composed of 31 pictures chosen for their stimulating power and ambiguity. Subsequent to its publication, the TAT quickly gained widespread popularity in clinical practice and remains among the most frequently used assessment measures. It has consistently been listed as one of the top four or five ranked measures among practicing psychologists (Camara, Nathan, & Puente, 2000; Geiser & Stein, 1999; Lubin, Larsen, & Matarazzo, 1984; Piotrowksi & Keller, 1989). Surveys conducted specifically of clinicians working with children and adolescents mirrored these findings for many years (Archer, Maruish, Imhof, & Piotrowski, 1991; Elbert & Holden, 1987; Rosenberg & Beck, 1986; Tuma & Pratt, 1982). Most recently, Cashel (2002) found less frequent usage of the TAT and other projective tests in a survey of 162 clinical child (and adolescent) and school psychology practitioners. Nevertheless, over 24.7% of clinicians working with children and 43.2% of clinicians working with adolescents reported that they had incorporated the TAT into their assessment batteries.

The original instructions for administration of the TAT to children are as follows (Murray, 1943, p. 4): "This is a story-telling test. I have some pictures here that I am going to show you, and for each picture I want you to make up a story. Tell what has happened before and what is happening now. Say what the people are feeling and thinking and how it will come out. You can make up any kind of story you please." Murray suggested that these instructions could be modified or repeated as needed. After the first story, the administrator informs the storyteller of any missing elements in the story and encourages the development of longer or more detailed stories, if necessary. For the remaining cards the administrator only briefly queries any critical elements missing for each story (i.e., the beginning, middle, or ending). The most common error the novice clinician is prone to make is failure to sufficiently query for missing elements.

Most clinicians administer 10 or fewer TAT cards in a single testing session, and various researchers have recommended specific sets of cards for use with children. Obrzut and Boliek (1986) stated that the cards best suited for children aged 7 to 11 are 1, 3BM, 7GF, 8BM, 12BM, 13B, 14, and 17BM. These cards tend to elicit themes related to achievement, aggression, parental nurturance, parental rejection, and attitudes toward parents. For adolescents, they

recommended cards 1, 2, 5, 7GF, 12F, 12M, 15, 17BM, 18BM, and 18GF. Cooper (1981) developed a set of cards specifically for adolescent males, including 3BM, 4, 6BM, 7BM, 8BM, 10, 13BM, 15, and 18BM. Although the cards are labeled GF and MB for girls/females and men/boys, few if any clinicians adhere strictly to these designations.

In addition to the general projective hypothesis, there are a number of assumptions related to the use of thematic tests, as outlined by Lindzey (1952). In creating a story, the storyteller typically identifies with one character, and the needs, wishes, and conflicts experienced by that character reflect those of the storyteller, either directly or symbolically. However, not all stories will be equally reflective of these needs, conflicts, or impulses. In general, story content that appears most closely related to the pictures on the card will yield less interpretively meaningful information than themes or stories that are not directly inspired by the card material. Repetitive stories and themes occurring across cards are apt to provide the most interpretively meaningful information. Finally, stories can reflect a variety of other factors, including recent situational events, sociocultural determinants, and ethnic group membership. It is thus most important to interpret thematic tests within the context of additional background and assessment information.

INTERPRETIVE SYSTEMS FOR THE TAT

There are many interpretive systems available for the TAT, and most of them are used primarily for research purposes. The interested reader is referred to Shniedman (1951, 1999), Murstein (1963), and Winter (1999) for excellent reviews of these systems. For clinical purposes, four approaches have gained considerable recognition for their utility with children and adolescents; these include the systems developed by Leopold Bellak (1954, 1971, 1975, 1986, 1993), Phebe Cramer (1996), Drew Westen (1991), and Teglasi (1993).

The Bellak Scoring System

Bellak's scoring system, first published in 1947, extended Murray's interpretation to include many aspects of Anna Freud's (1937) ego psychology, namely analysis of defense mechanisms, anxieties and conflicts, and superego (or moral) functioning. As described in the most recent edition of his text, *The T.A.T., the C.A.T., and the S.A.T. in Clinical Use*, 6th Ed. (Bellak & Abrams, 1997), his scoring categories include 10 variables:

1. The Main Theme
2. The Main Hero
3. Main Needs and Drives of the Hero
4. The Conception of the Environment (World)
5. Figures Seen as . . .
6. Significant Conflicts
7. Nature of Anxieties
8. Main Defenses Against Conflicts & Fears
9. Adequacy of Superego
10. Integration of the Ego

The first variable, Main Theme, is essentially a summary of the meaning of the story. Beginning clinicians might think of this as identifying the moral to the story, or what might be generalized from the sequence of events and experiences as they occur in the story. Cognitive psychologists might refer to this as "identifying cognitive schemas," or "learned expectations for interpersonal situations and interactions." The second and third variables in the scoring system assess features of the protagonist or main character, such as basic demographic features and such psychological concepts as sense of adequacy or self-competency, body image, and emotional and behavioral needs. These are largely inferred from the outcome of the stories and from either the introduction or omission of specific figures or characters, items or objects, and problems or circumstances. Generally speaking, story material that is introduced (i.e., that has no obvious or apparent representation on the actual stimulus card) has greater projective value than themes or stories more directly tied to the picture content on the card.

The fourth and fifth variables assess perceptions of the storyteller's environment, social world, and possible interpersonal relationships with family, parents, siblings, peers, and romantic partners. For example, is the world a harsh, unpredictable place where people are rejected, abandoned, or victimized? Alternatively, does the main character experience a supportive environment in which he or she can overcome obstacles and find success and satisfying relationships? The sixth, seventh, and eighth variables focus on possible underlying intrapsychic constructs, namely internal conflicts, such as the need for compliance with authority figures versus maintaining personal autonomy, or the need to pursue achievement and success versus maintaining family relationships, or conflict over sexual guilt. The ninth and tenth variables address specific aspects of ego psychology and may be thought of in terms of coping mechanisms, moral development, thought processing, and reality testing. The integration of the ego is inferred based on the storyteller's ability to perform the task and produce a logical, realistic story that generally conforms to the content on the card. The storyteller's attention, concentration, and thought processes are specifically evaluated, in much the same way they might be assessed in a mental status exam (for coherence, bizarre vs. appropriate content, etc.).

To illustrate this process, read the TAT story below told by a 13-year-old Caucasian male to Card 4. Card 4 depicts a woman clutching the shoulders of a man whose face and body are averted, as if he were trying to pull away from her (Murray, 1943).

> Well, like I have no idea what this picture is supposed to be. There's this guy . . . well, this guy is, this is during the Vietnam times and there's going to be a draft. So he's going to go away on the war for the draft. And yet his wife doesn't want him to do it because she does not want him to get hurt or injured or killed. So, this is sort of a picture of their goodbye before he goes off and gets drafted. He's sort of scared of the situation because he thinks he might be killed. In the end I think he ends up getting drafted, goes to war, comes back—may have been wounded, but he's still alive.

The interpretive theme of this story might be summarized as follows: Although it may be difficult, following through with social responsibilities is important, and such efforts will generally prove successful. The main hero appears to be the male in this story and is essentially a responsible individual who overcomes the obstacle before him (going to war). His behavioral need is to fulfill social expectations or demands, but he also has a need for safety. He could be characterized as "adequate," perhaps with a sense of moral responsibility (he does not dodge or otherwise avoid the draft, despite his fears). The circumstance the boy introduced in this story is the draft. The figure he omitted is the semi-nude individual in the background, which may imply a need to deny sexuality (Bellak, 1993). However, it is our experience that this figure is often omitted by youth. The conception of the world or envi-

ronment is somewhat precarious and coercive (being drafted to go to war against one's will), and the anxiety is fear of being overcome (killed). But the outcome is somewhat positive on the whole, given that he returns home alive, if wounded. The only other character described in the story is a marital partner, who understandably does not want him to go. With respect to the main defenses against conflicts and fears, there is no evidence of defensive reactions or indication of specific coping behaviors. On the whole, the story is logical, realistic, and reasonably consistent with the content depicted in the picture. Consider now the following story, told by an 18-year-old male to the same card:

> This looks like a married couple whose husband has decided he wants to leave. His wife thinks that they can work things out, but he doesn't. And he's decided that he wants to start his life over again. They end up divorcing [Q-happening in the picture?] He's finally leaving. [Q—thinking?] He looks unconcerned, but she does. [Q-feeling?] Anxious to leave.

The theme in this story might be described as follows. In order to pursue individual aspirations, one must end past relationships and disregard the interests of others. The conflict appears to be one between maintaining a relationship and pursuing ambitions. As in the previous card, this story is quite logical, and the main character is generally successful in fulfilling his needs. However, the story has a more negative tone; the marital relationship is more conflicted and the main character is altogether dismissive of the needs or desires of his wife and ends the relationship.

In such manner, the clinician evaluates each story told with respect to all 10 of these variables and records comments and observations on either the short or long form of the Bellak TAT Analysis Blank and Sheet. Although this system is described as a "scoring" system, it does not generally yield quantitative data or scores. The emphasis for interpretation is on evaluating repetitive patterns across stories. Thus, a storyteller who produced three or more stories in which characters aspired to obtain some degree of success or fame might be said to have a need for achievement. A youth describing numerous hostile interactions between parents and children, or children and teachers, might be said to have conflict with authority figures. Stories in which characters are consistently overwhelmed and overcome by adverse circumstances, depicted as sad, tearful, unable to resolve problems or conflicts, or even suicidal, might be told by a youth struggling with depression, limited problem-solving skills, or poor impulse control. Bellak cautioned against drawing conclusions about the storyteller based on observations made to one story. Furthermore, he recommended corroboration of interpretations made on themes drawn from multiple stories with other testing data.

The principal criticism of the Bellak scoring system, as noted by Abrams (1999), is that "it is a clinical checklist approach to the TAT, a way of summarizing themes and noting different areas of functioning" (p. 151) and is not an empirically based approach. However, a variety of studies over the past 40 or more years examined and supported the construct and concurrent validity of many of the scoring variables, including nature of anxieties (Mandler, Lindzey, & Crouch, 1957), main defenses and defense mechanisms (Blum, 1964; Cramer & Carter, 1978; Haworth, 1963), and morality development and superego functioning (Kohlberg, 1969; Shore, Massimo, & Mack, 1964). This research ultimately laid the empirical foundation for the systems described next.

Cramer's Analysis of Defense Mechanisms

Phebe Cramer extended clinical applications for the TAT through her research on the study of defense mechanisms. Cramer (1987, 1991) proposed a developmental theory of defenses,

suggesting that different defenses became salient at different periods of development such that a chronological order for their emergence could be established. Specifically, she found that young children tend to rely more heavily on denial as a coping mechanism, whereas the use of projection is more characteristic of youth in middle adolescence, and the use of identification increases gradually in frequency through late adolescence. As part of her research, she created a scoring system (Cramer, 1982) to assess these defenses in TAT stories. The scoring categories are presented below (Cramer, 1996, p. 89). To score a story, 1 point is given for each manifestation of the criteria, yielding scores for each defense mechanism.

Denial

1. Omission of major characters or objections
2. Misperception
3. Reversal
4. Negation
5. Denial of reality
6. Overly maximizing the positive or minimizing the negative
7. Unexpected goodness, optimism, positiveness, gentleness

Projection

1. Attribution of aggressive or hostile feelings, emotions or intentions to a character or other feelings, emotions or intentions that are normatively unusual
2. Addition of ominous people, ghosts, animals, objects or qualities
3. Magical or circumstantial thinking.
4. Concern for protection from external threat
5. Apprehensiveness of death, injury, or assault
6. Themes of pursuit, entrapment, and escape
7. Bizarre or very unusual story or theme

Identification

1. Emulation of skills
2. Emulation of characteristics
3. Regulation of motives or behaviors
4. Self-esteem through affiliation
5. Work; delay of gratification
6. Role differentiation
7. Moralism

As an example, the TAT story told by the 13-year-old male (above) could be scored as follows: Denial = 0, Projection = 1, Identification = 1. The score for projection would be given for apprehension of death. The main character fulfills his obligation, despite his fears and concerns, resulting in a score of 1 for identification.

Dollinger and Cramer (1990) evaluated the ability of the scoring system to detect the adaptive functioning of defense mechanisms subsequent to real-life trauma. They assessed

stories told by a group of 27 boys between the ages of 10 and 13 who had experienced a lightning strike during a soccer game. This was a potentially traumatic event, given that one boy died as a result of the incident. Approximately 1 to 2 months after the lightning strike, the boys were asked to create two stories in response to TAT-like cards, both depicting scenes with a lightning bolt. The stories were scored with the use of the Defense Mechanism Manual (Cramer, 1982), and information regarding youth fears and distress, sleep disturbance, and somatic complaints was also obtained. Youth demonstrating the greatest use of defenses, and especially the age-appropriate use of projection, exhibited the least degree of emotional impairment.

Cramer (1996) also observed that behavioral responses to the TAT sometimes yield clinically useful information, because for some, taking it can be an anxiety-inducing activity. Some individuals may fear what they will reveal about themselves; others may fear that they may not possess sufficient imagination or creativity to produce an interesting story and will appear inadequate; still others may confront their own personal conflicts and become anxious, "sensing that there is a potential psychological threat involved in formulating and voicing a story" (p. 84). Statements made in response to this anxiety may be interpreted in some cases as defensive strategies. For example, denial and/or repression might be manifested in comments such as, "I can't think of anything." The statement "The picture doesn't remind me of anything" incorporates aspects of repression and projection, because the picture is blamed for inadequate content. Some individuals may demonstrate passive resistance, by telling a highly stereotyped story, borrowed from storybooks or the media. In this instance they are copying as opposed to creating a story. Some individuals will use ridicule or denigration, such as "This is a stupid card/test," to distance themselves from any personal connection to the material.

In summary, Cramer's system offers an empirically based approach to evaluating the thought processes and stress and coping behaviors among children. The study of defense mechanisms is a key component of ego (or psychodynamic) psychology, although coping behaviors more broadly construed are also largely the focus of cognitive-behavioral interventions. Next, we briefly examine another empirically supported approach to the clinical analysis of TAT stories developed by Drew Westen (1991).

Westen's Analysis of Social Cognition and Object Relations

Westen's Social Cognition and Object Relations System (SCORS) is an integrative approach to interpretation of the TAT and other storytelling tests that synthesize aspects of cognitive and psychodynamic theories. Social cognition is largely the study of person perception, information processing, attributions, and cognitive schema or expectations of self, others, and interpersonal interactions. The psychodynamic study of object relations is devoted to understanding the development of an individual's sense of self in relation to significant others, typically caregivers. This theory suggests that early experiences with primary caregivers (or "objects") and internal representations of these people form the templates for subsequent interpersonal functioning. In sum, social cognitive and object relations approaches both address the representational and affective processes that mediate interpersonal functioning (Westen, 1991). The SCORS approach is an innovative combination of these theories with an empirically supported, psychometrically sound scoring system. The SCORS scoring system is described in detail by Kelly in another chapter in this volume. Thus, for the sake of brevity, only an overview of the scoring categories or structural dimensions is presented below (Westen, Lohr, Silk, Kerber, & Goodrich, 1985, 1990, 2002).

Complexity of Representations of People: measures the extent to which the subject clearly differentiates the perspectives of self and others; sees the self and others as having stable, enduring, multidimensional dispositions; and sees the self and others as psychological beings with complex motives and subjective experience.

Affect Tone of Relationships Paradigm: measures affective quality of representations of people and relationships. It attempts to assess the extent to which the person expects from the world, and particularly from the world of people, profound malevolence or overwhelming pain, or views social interactions as basically benign and enriching.

Capacity for Emotional Investment in Relationships and Moral Standards: measures the extent to which others are treated as ends rather than means, events are regarded in terms other than need gratification, moral standards are developed and considered, and relationships are experienced as meaningful and committed.

Understanding of Social Causality: measures the extent to which attributions of the causes of people's actions, thoughts, and feelings are logical, accurate, complex, and psychologically minded.

The scoring system was updated in 2002 (SCORS-R; Westen, 2002). The capacity for Emotional Investment in Relationships and Moral Standards was split into Emotional Investment in Values and Moral Standards and Capacity for Investment in Relationships. In addition, a new category was added, Dominant Interpersonal Concerns (see Kelly, in this volume, for details of this change).

Stories told to the TAT are rated for each category on a Likert scale, ranging from very poor to superior development (or in the case of Affect-Tone, from highly malevolent or hostile to benevolent and supportive relationships). Mean scale scores are derived for each category based on the average of the card ratings. Scale scores are derived for the categories with the use of a weighting system described in detail in the manual.

A variety of studies support the reliability and validity of the SCORS system for use with TAT stories completed by children. Scores on the Affect Tone, Capacity for Emotional Investment and Moral Standards, and Understanding of Social Causality successfully discriminated adolescent girls diagnosed with borderline personality disorder from a normal community sample and other psychiatric patients (Westen, Ludolph, Lerner, Ruffins, & Wiss, 1990). Ornduff and her colleagues demonstrated the ability of the SCORS scales to discriminate between groups of sexually and physically abused female children from other clinic-referred children without such histories (Ornduff, Freedenfeld, Kelsey, & Critelli, 1994; Freedenfeld, Ornduff, & Kelsey, 1995). Finally, one recent study demonstrated the convergent validity of SCORS-Q weighted scores with measures of self and teacher ratings of empathy among 8–10-year-olds (Niec & Russ, 2002).

Cognitive, Behavioral, and Multitheoretical Perspectives

Many contemporary clinicians view TAT stories as a modified behavioral sample of cognitive integration, problem solving, affect modulation, self-monitoring, and interpersonal functioning. Such an approach can prove very useful in cognitive-behavioral treatment planning. Even those completely disinterested in the content analysis of stories often find evaluation of the form and process of such material clinically useful. McGrew and Teglasi (1990) adapted scoring categories for the TAT designed to distinguish emotionally disturbed children from normal groups. These included the following (p. 223):

1. Verbalizations Unrelated to the Story: picture criticism, expressions of frustration or disinterest, irrelevant comments, expressions of inadequacy
2. Disruptions to the Internal Logic of the Story: contradictions within the story, perseveration of story content, personal references
3. Judgment and Reality Testing: inappropriate or bizarre actions or verbal expressions that occur during the session, inappropriate, bizarre or highly unlikely story content
4. Actions and Outcome: positive actions, negative actions, no action, with outcome rated on a Likert-scale ranging from 1 to 5 (most adaptive)

Teglasi (1993) discussed in detail how this system can be applied to the assessment of emotional and behavioral and cognitive functioning. Consider the following story told by an eight-year-old Caucasian female referred for behavioral dysregulation and evaluation of a possible Attention Deficit/Hyperactivity Disorder.

> Card 1. Once upon a time a girl wanted to lose a tooth. Her mother and father said, "Noooo." She was wearing a good dress and her mom thought it was unusual for her dad not to let her lose a tooth. She can fix her hair on her own. They are rich. [What led up to this picture? What happened before?] She asked for a, for tweezers to fix her hair. Her dad said, "Whatever would you want tweezers for?" "I want to lose a tooth." "You aren't going to lose a tooth in that good dress!" Well, if she changed clothes she could. Of course she could. She could never lose a tooth unless she had on her aprons. She heard that and decided to go to the kitchen. That's all. [What are they feeling in this picture?] The girl is feeling sad. The dad is feeling mad because she wanted to steal her father's tweezers. And the mom is kind of uncomfortable seeing the daughter very, very sad. [How does the story end?] She gets an apron, she gets tweezers and brushes her hair at the same time. She put on the apron as good as she could, only put it on upside down. Then she decided to change it and it was okay. Next, she took off her dress and then her dad caught her and she said, "My tooth is out!" Her father said, "I should have listened!" The end.

With respect to Teglasi and McGrew's categories, perhaps most striking in this story is the bizarre content and the verbal exchanges between characters. This child demonstrates loose associations, strained and illogical thinking, and cognitive perseveration, namely preoccupation with teeth (which was noted in two additional stories). Although this child was functioning within the average range of intellectual ability with strong verbal skills, her stories gave clear indication of significant thought processing problems and prompted a more thorough evaluation for a psychotic disorder.

APPERCEPTIVE TESTS SPECIFICALLY DESIGNED FOR CHILDREN

Although the TAT gained rapid and enormous popularity for the assessment of adults, many were dissatisfied with it as a tool for the assessment of children. This precipitated the development of measures specifically created with children in mind. The three most widely known measures are the C.A.T. (Bellak & Bellak, 1949), the Roberts Apperception Test for Children (RATC; McArthur, & Roberts, 1982), currently in its second edition (Roberts–2; Roberts & Gruber, 2005), and the Tell-Me-A-Story test (TEMAS; Costantino, Malgady, & Rogler, 1988).

Children's Apperception Test and Children's Apperception Test—Human Figures

In response to concerns that the stimulus materials of the TAT were inappropriate for young children, Bellak and Bellak (1949) created the Children's Apperception Test (C.A.T.). The pic-

tures selected as stimuli involved animals rather than people and were designed to facilitate the understanding of a child's intrapsychic needs, drives, and relationship to important figures. These pictures portrayed themes related to feeding problems, sibling rivalry, attitudes toward parents, and Oedipal feelings and were intended for children 3 to 10 years of age. Subsequent to the publication of the C.A.T., a number of studies compared the narratives of children told in response to animal versus human figure pictures. Whereas some studies found no differences (Budoff, 1960; Biersdorf & Marcuse, 1953), a few suggested that human figures were better (Armstrong, 1954). In response to these studies, Bellak and Bellak (1965) developed a human modification of the C.A.T., the C.A.T.-H. The scene content of the C.A.T.-H cards remained virtually the same, but the animal figures were changed to human figures.

Interpretation of the C.A.T. and C.A.T.-H, as recommended by Bellak and Abrams (1997), is generally consistent with the procedures for the TAT, using either the short or long form. The same 10 variables are considered, and the record is evaluated for repetitive themes, conflicts, needs, and drives. In addition, Mary Haworth (1963) developed a scoring checklist for the evaluation of defense mechanisms in C.A.T. responses, using a methodology very similar to the system that was later developed by Cramer (1982). See Table 12.1 for the complete description. Also noteworthy in her system is the delineation of critical scores per category. Haworth suggested that five or more critical scores would indicate emotional disturbance warranting clinical intervention.

Over the years, many clinicians and researchers voiced clear preferences for the TAT (Cramer, 1996; Teglasi, 1993). However, the results of test usage studies (Cashel, 2002; Hutton, Dubes & Muir, 1992) suggested that the C.A.T. continues to have a following. As many as 24–41.4% of surveyed practicing clinicians endorsed the inclusion of the C.A.T. in test batteries.

Roberts Apperception Test for Children

The Roberts Apperception Test (RATC; McArthur & Roberts, 1982) was developed for the assessment of school-aged children, with the intent of addressing a number of limitations observed in the TAT and C.A.T. The RATC authors asserted that the C.A.T. and TAT were each useful for a limited age range of children and that only very young children would likely respond in a serious manner to animals. They also believed that the original TAT was equally unsuitable for most school-aged youth, given that only 2 of the 31 cards recommended for such use actually depicted children in them. They claimed that the artistry of the TAT cards rendered the scenes unfamiliar and unrealistic, and that they lacked evocative potential. Finally, they noted that no single scoring approach for evaluating children's responses with either the C.A.T. or TAT had gained universal acceptance.

Currently in its second edition, the Roberts–2 is appropriate for children between 6 and 18 years of age. Curiously, as part of the rationale for renaming the measure, the authors suggested that the test assesses social cognition and interpersonal problem-solving skills, and they essentially disavowed its psychodynamic or projective roots. They maintained its recommended use for the assessment of children's perceptions of interpersonal situations and as an aid to clinical decision-making.

The Roberts–2 (and its predecessor) is composed of 27 stimulus cards with realistic illustrations emphasizing everyday interpersonal events as experienced by children and adults in a variety of social situations. The administration procedures for the RATC are explicit and very similar to those for the TAT/CAT. Eleven of the 27 cards have parallel versions for boys and girls, and five are administered to both. For any given child, 16 cards are adminis-

TABLE 12.1.
Content Reflective of Haworth's Adaptive Mechanisms

Defense Mechanisms

Reaction Formation: Exaggerated goodness or cleanliness; oppositional attitudes, rebellion, stubbornness; story tone opposed to picture content

Undoing and Ambivalence: Undoing (changing or contradicting a story line); respondent gives alternatives; balanced phrases (asleep-awake; hot-cold, etc.); indecision by respondent or story character; restating (e.g., "that _____, no this _____"; "He was going to, but _____")

Isolation: Detached attitude toward picture or story ("It couldn't happen," "It's a cartoon"); literal interpretations ("It doesn't show, so I can't tell"); comments on story or picture ("This is hard"; "I told a good one"); laughs at card, exclamations; use of fairy tale, comic-book, or "olden times" themes or characters; describes in detail, logical; "the end"; gives title to story; specific details, names, or quotes ("four hours"; she said, "_____"); character gets lost; character runs away because of anger; subject aligns with parent against "naughty" child character; disapproves of child's actions

Repression and Denial: Child character waits, controls self, conforms, is good, learned lesson; character accepts fate, didn't want it anyway; prolonged or remote punishments; respondent or character states that events were "just a dream"; character forgets or loses something; respondent omits figures or objects from story; omits usual story content; no fantasy or story (describes card blandly); refuses card

Deception: Child character described as superior to adult, laughs at adult, is smarter, tricks adult, sneaks, pretends, hides from, steals from, peeks at or spies on adult; adult character tricks child, is not what appears to be (only one check per story)

Symbolization: Children play in bed; see parents in bed; open window (Cards #5, #9); dig, or fall in a hole; babies born; rope breaks (#2); chair or cane breaks (#3); balloon breaks (#4), tail pulled or bitten (#4, #7); crib broken (#9); rain, river, water, storms, cold; fire, explosions, destruction; sticks, knives, guns; cuts, stings, injuries, actual killings (other than by eating); oral deprivation

Projection and Introjection: Attacker is attacked, "eat and be eaten"; innocent one is eaten or attacked; child is active aggressor (bites, hits, throws; does not include verbal or teasing attacks); characters blame others; others have secrets or make fun of somebody; respondent adds details, objects, characters, or oral themes; magic or magical powers

Phobic Immature or Disorganized

Fears and Anxiety: Child character hides from danger, runs away because of fear; fears outside forces (wind, ghosts, hunters, wild animals, monsters); dreams of danger; parent dead, goes away, or doesn't want child; slips of tongue by respondent

Regression: Respondent exhibits much affect in telling story; personal references; stories of food spilled; bed or pants wet, water splashed; dirty, messing, smelly; person or object falls in toilet; ghosts, witches, haunted house

Controls Weak or Absent: Story content of bones, blood; poison; clang or nonsense words; perseveration of unusual content from a previous story; tangential thinking, loose associations; bizarre content

Identification

Adequate, same-sex: Respondent identifies with same-sex parent or child character; child character jealous of, scolded or punished by same-sex parent; child loves, or is helped by parent of opposite sex

Confused or opposite-sex: Respondent identifies with opposite-sex parent or child character; child character fears or is scolded or punished by opposite-sex character; misrecognition by subject of sex or species; slips of tongue with respect to sex of figures

Adapted from Haworth (1963).

tered in their exact numerical sequence. Querying for missing story elements is restricted to the first two cards. This is important because a child's lack of response after the first two cards is considered clinically significant and influences the scoring of the profile. According to the standardized instructions, querying on the first two cards should be limited to the following five questions: 1) What is happening? 2) What is he/she feeling? 3) What is he/she talking about? 4) What happened before? 5) How does the story end? The current scoring system comprises seven groups of scales:

1. Theme Overview Scales: Popular Pull, Complete Meaning
2. Available Resources scales: Support Self—Feeling, Support Self—Advocacy, Support Other—Feeling, Support Other—Help, Reliance on Other, Limit Setting
3. Problem Identification (PID) scales: PID1—Recognition, PID2—Description, PID3—Clarification, PID4—Definition, PID5—Explanation
4. Resolution (RES) scales: RES1—Simple Closure or Easy Outcome; RES2—Easy and Realistically Positive Outcome; RES3—Process Described in Constructive Resolution; RES4—Process Described in Constructive Resolution of Feelings and Situations; RES5—Elaborated Process with Possible Insight
5. Emotion Scales: Anxiety, Aggression, Depression, Rejection
6. Outcome scales: Unresolved Outcome, Nonadaptive Outcome, Maladaptive Outcome, Unrealistic Outcome
7. Unusual or Atypical Responses: Refusal, No Score, Antisocial, Atypical Categories

The principal changes to the scales in the new edition focused on greater differentiation (elaboration and extension) of the Support-Self, Support-Other, Problem Identification, Resolution, Maladaptive Outcome, and Atypical scales. Each story is scored separately for all scales, and each scale is scored (checked) once per story, if applicable, on the Coding Protocol. Raw scale scores are derived by addition of the number of checkmarks for each scale and are then transferred to the Scoring Profile for the specific age group of the respondent.

In contrast to the original RATC, the standardization sample for the second edition is much more substantial, composed of 1,060 youth, and was stratified according to the U.S. Census for ethnic representation. Interpretation of the Roberts–2 profile is based strictly on *T*-score analysis, for which scores $\geq 60T$ or $\leq 40T$ are suggested to reflect potential clinical significance. The second edition no longer includes a group of "Clinical" scales. The authors recommended that greatest emphasis be given to evaluating the Outcome scales for clinical relevance. They observed that the Theme Overview, Problem Identification, and Resolution scales are also generally quite reliable, but they suggested using caution in the interpretation of the scales assessing Available Resources and Emotion because these demonstrated much weaker test-retest reliability.

Research with the original RATC demonstrated support for its interrater reliability, with average agreement ranging from 80% to 95% (Kaleita, 1980; McArthur, 1976; McArthur & Roberts, 1982; Muha, 1977) and discriminant validity for identifying clinic referred children and families from children in the normative sample and nonreferred families (Muha, 1977). Moreover, prior studies confirmed the factor structure originally described by the authors (Palomares, Crowley, Worchel, Olson, & Rae, 1991) and supported its discriminant validity for identifying sexually abused children from nonabused samples (Friedrich & Share, 1997; Louw & Ramkisson, 2002). Joiner (1996) found that the RATC was less susceptible to

defensiveness than the Children's Depression Inventory (CDI; Kovacs, 1992) and suggested that it may be a good index of depression when this response style is suspected. Finally, the RATC proved to be fairly popular among practicing clinicians, with reported usage ranging from 27.8% to 29% in the most recent surveys (Cashel, 2002; Hutton, Dubes, & Muir, 1992). With regard to the Roberts–2, the authors reported strong interrater reliability, test-retest reliability, and construct validity for the measure in the technical section of the manual. More independent studies evaluating its concurrent, discriminant, and predictive validity are needed.

Tell-Me-A-Story

The third principal storytelling test for children is the Tell-Me-A-Story test (TEMAS) (Costantino, Malgady, & Rogler, 1988), which was originally designed as a multicultural projective test for use with Hispanic youth. The authors observed the need for a psychometrically sound instrument appropriate for minority populations. Prior research evaluating the responses of Hispanic and Black youth to projective tests suggested that these groups of children were less verbally fluent, less mature, and poorly adjusted when compared with nonminority children (Ames & August, 1966; Booth, 1966; Costantino & Malgady, 1983; Dana, 1996; Durret & Kim, 1973). However, as noted by the TEMAS authors, such studies incorporated the use of stimulus materials (primarily the TAT) depicting Anglo-American individuals in scenes with which minority youth were not likely to identify. The authors of the TEMAS thus sought to develop a more culturally sensitive measure with multicultural norms. Similar to the Roberts–2, the TEMAS is intended for school-aged youth, specifically children and adolescents between 5 and 18 years of age.

The TEMAS is composed of 23 cards, with parallel sets for minorities and nonminorities. The minority version depicts Hispanic and Black children in urban settings in scenes intentionally created to represent polarized conflict, for example, between nurturance and rejection or dependence and individuation. The pictures are thus less ambiguous than the TAT or Roberts cards and are presented in color to "facilitate verbalization and projection of emotional states" (Costantino & Malgady, 1999, p. 193). The nonminority version consists of corresponding pictures, identical in design but depicting predominantly White characters. Both versions contain a 9-card short form. The long form includes 11 sex-specific and 12 general cards. The administration instructions are also very similar to those for the TAT/C.A.T.; however, reaction time to each card and the total time for each story are recorded. All cards are administered in numerical order. Each card is designed to pose a dilemma, and the resolutions that children generate reveal information regarding personality dimensions related to emotional, behavioral, and interpersonal functioning. Like the Roberts, a quantitative scoring system was developed for the TEMAS that evaluates 18 cognitive functions, 9 personality functions, and 7 affective functions:

> Cognitive Functions: Reaction Time, Total Time, Fluency, Total Omissions, Main Character Omissions, Secondary Character Omissions, Event Omissions, Setting Omissions, Total Transformations, Main Character Transformations, Secondary Character Transformations, Event Transformations, Setting Transformations, Inquiries, Relationships, Imagination, Sequencing and Conflict
>
> Personality Functions: Interpersonal Relationships, Aggression, Anxiety/Depression, Achievement Motivation, Delay of Gratification, Self-Concept, Sexual Identity, Moral Judgment, Reality Testing

Affective Functions: Happy, Sad, Angry, Fearful, Neutral, Ambivalent, Inappropriate Affect

The affective and cognitive functions are scored for the presence or absence of related content. A score for Fluency is derived from a count of the number of words per story. The personality functions are rated based on the presence of relevant content with the use of a Likert-type scale. The scoring system was standardized on a sample of 642 children (281 boys and 361 girls), ages 5 to 13, from the New York City area, representing Whites, Blacks, Puerto Ricans, and other Hispanic youth. According to the authors, there were no significant differences in responses, and thus there are no sex-specific norms.

Interpretation of the TEMAS can be made based on a profile analysis using the scoring system. Scores >60*T* or qualitative indicators exceeding critical levels are considered clinically significant. Alternatively, qualitative strategies as developed for the TAT and other content-based approaches can additionally be used and are necessary for interpretation of adolescent responses. Research with the TEMAS suggests adequate test-retest reliability, content, and predictive validity (Costantino, Malgady, & Rogler, 1988; Costantino, Malgady, Casullo, & Castillo, 1991). Furthermore, discriminant validity has been demonstrated in the ability of the TEMAS scores to distinguish groups of children with Attention Deficit/Hyperactivity Disorder and nondisordered youth, in addition to other clinical and nonclinical groups of African American, Hispanic, and White children (Cardalda, 1995; Costantino, Malgady, Colon-Malgady, & Bailey, 1992; Costantino, Malgady, Rogler, & Tsui, 1988).

The strengths of the TEMAS clearly include its multicultural emphasis and objective scoring system. Also noteworthy is the emphasis on assessing verbal fluency, which is often overlooked in the interpretation of such tests. The TEMAS has been recommended for inclusion in psychological assessment batteries for culturally and linguistically diverse children and adolescents (Dana, 1996) and has been used in the United States, Central America, and South American (Barona & Hernandez, 1990; Bernal, 1991; Walton, Nuttal, & Vaszquez-Nuttal, 1997). The few principal criticisms reflect the small size and regional homogeneity of the standardization sample and the limited independent research conducted by individuals other than the test authors (Flanagan & Giuseppe, 1999). With respect to clinical practice, approximately 12% of survey respondents (Cashel, 2002) indicated use of the TEMAS in test batteries of children. However, the extent to which the respondents worked with ethnic minority children was not queried.

Integration of Storytelling Measures in Psychological Assessment Batteries

There are many factors that must be considered when one decides whether to incorporate a storytelling measure in a psychological assessment battery. These include the purpose of the evaluation, the cognitive and verbal functioning of the youth, and the cultural background of both the youth and the examiner. Flanagan and DiGiuseppe (1999) suggested that assessments conducted strictly for diagnostic purposes are best addressed by administration of "objective," psychometrically validated instruments such as structured diagnostic interviews and behavior report forms. However, Flanagan and DiGuiseppe also suggested that practitioners are often concerned with "why" a problem exists. Projective measures can be helpful in informing "motivations, schema, circumstances and constructs of the individual which drive the emotions" (p. 26). In such manner, they can be very useful for generating hypotheses to inform treatment planning.

Other individual factors related to intellectual functioning, verbal fluency, and ethnic background are equally important. Generally, most clinicians will concede that storytelling tasks are less than useful for youth with borderline or lower levels of cognitive ability. Similarly, interpretation of stories must be made within the context of the child's or adolescent's capacity for verbal expression, cultural background, and sense of familiarity with the card content and the examiner. Costantino and his colleagues effectively demonstrated the significance of these issues (Costantino & Malgady, 1983; Costantino, Malgady, & Vasquez, 1981).

Case Study

The final section of this chapter illustrates the integration of a storytelling measure, the RATC, within a testing battery. For our purposes, we call the referred youth "Jane Smith."

Jane was a 10-year-old Caucasian female referred for evaluation at a university-based clinic for emotional and behavioral problems, which were said to occur primarily at home. Jane was a middle child with three older siblings (two brothers and one sister) and one younger sister. Her developmental history was nonremarkable, and there was no reported history of abuse or neglect. Her parents were married and the family was described as very stable. Her mother, Mrs. Smith, noted that Jane had significant difficulty adjusting to the birth of her younger sister, because Jane had been "the baby" of the family. Her academic history was also generally quite strong. Her mother noted that Jane developed language skills far ahead of age expectancy, and she suspected that Jane was extraordinarily bright. Jane never struggled with academics, although she had periodic difficulties in the classroom related to boredom, testing limits with teachers, "eye-rolling," and "sassing back." Mrs. Smith believed these were successfully addressed with more authoritative teachers. Mrs. Smith indicated that the principal behaviors prompting her to seek evaluation for Jane included the following: being excessively demanding, lying, belligerence, self-defeating behaviors, and difficulties with siblings and peers. Jane had previously participated in a social skills group at school during the previous academic year (fourth grade). She had also participated in individual counseling sessions, but Mrs. Smith did not believe these had been effective, because of Jane's tendency to lie and to manipulate others. With regard to her family history of psychological problems, one of her older brothers was diagnosed with Attention Deficit/Hyperactivity Disorder. Mrs. Smith acknowledged that she had been taking an antidepressant for eight years.

Jane was administered the following tests: Wechsler Intelligence Scale for Children–Fourth Edition (WISC-IV); Beery-Buktenica Developmental Test of Visual Motor Integration (VMI); Woodcock Johnson III Tests of Achievement (WJ-III); Computerized–Diagnostic Interview Schedule for Children (C-DISC); Child Behavior Checklist (CBCL); Behavior Assessment Scale for Children–Second Edition (BASC–2; Parent Rating Scales and the Self Report of Personality); Personality Inventory for Youth; and the Roberts Apperception Test for Children (RATC).

The results of testing revealed the following: Jane was functioning within the Superior range of intellectual ability (FSIQ = 123 ± 4) with consistent development demonstrated between her verbal (VCI = 134 ± 5) and perceptual (PRI = 135 ± 5) skills. However, she obtained significantly lower scores on the two remaining factors, which were in the Low Average and Average range for Working Memory (WMI = 88 ± 8) and Processing Speed (PSI = 103 ± 9). Her performance on the VMI was poor because she completed it quickly and carelessly, making several integration errors and she obtained a score within the borderline range, at the 5th percentile. In contrast, her scores on the Woodcock Johnson–III were consistently within the High Average to Superior range. She particularly excelled in written

expression, achieving a score on the Writing Samples test that was above the 99th percentile. Her lowest score was still in the High Average range and was obtained on the Calculation subtest, a test of basic math abilities.

Mrs. Smith's responses to the C-DISC, CBCL, and BASC forms consistently demonstrated that Jane clearly met full criteria for Oppositional Defiant Disorder. Although she did not meet full criteria for a depressive or anxiety disorder, significant elevations were noted on both the CBCL and BASC on scales assessing depressed and anxious behaviors and social problems, in addition to low scores on scales assessing competencies and adaptive functioning. Unfortunately, a Teacher Report Form was not obtained, although Mrs. Smith indicated that Jane's current teacher thought she behaved quite well in the classroom.

Jane's profiles on both the BASC and PIY were considered invalid according to scoring guidelines because of a grossly exaggerated response style. She endorsed highly significant problems across most all scales, including those assessing depression, conduct problems, and attention and social problems. Problems with parental relationships were particularly noteworthy. Perhaps most revealing, however, were her stories on the RATC. A selection of these stories is presented in Table 12.2.

The thematic content was remarkably well developed, with elaborate detail, and suggested that she frequently felt rejected, isolated, unheard, and misunderstood. Most notable are the vivid descriptions she provided of her negative family interactions and her frustration with her parents and siblings. She used her own name in one of the stories and inadvertently referenced herself again in the middle of another. With regard to her coping behaviors, she demonstrated greater tendencies toward help-seeking than youth her age, yet also a good capacity for self-reliance, as illustrated in the success of her characters to ultimately solve their own problems. Alternatively, her stories also suggested tendencies toward engaging in defensive strategies such as withdrawal, isolation, and deception, and it appeared she viewed herself as more clever than her parents or significant others. Her story outcomes indicated that she struggled at times to identify a realistic process for solutions to conflict. When scored according to the RATC manual guidelines, Jane's stories yielded significant elevations on the following scales (*T*-scores are provided in parentheses): Reliance on Others (65), Support Child (79), Problem Identification (77), Resolution—1 (62), Anxiety (67), Aggression (63), and Rejection (>85).

A clinician making treatment recommendations based on the C-DISC and behavior report forms might appropriately make a referral for parent training interventions for her oppositional defiant children or teens and perhaps individual therapy to address depression or anxiety. However, analysis of Jane's RATC stories suggested that these recommendations alone would be insufficient. Much of Jane's distress and behavioral reactions stemmed from marked dissatisfaction with her family and with her parents' reaction to sibling conflict. This indicated that family-based interventions would perhaps be more effective and were also recommended.

With regard to Jane's relative deficits in specific cognitive and fine motor skill domains, these may have been related to internal preoccupation with emotional distress or anxiety and poor attention to detail. Alternatively, these lower scores may have reflected genuine weaknesses, and further monitoring in the classroom was recommended. Other recommendations included intervention focused on enhancing coping and interpersonal problem-solving skills, based on the results from the behavior report forms and her own responses to the RATC.

TABLE 12.2.
RATC Stories as Told by "Jane Smith"

Card 3
Once there was a girl named Jane who hated math very, very much. She could not stand it. So one day, at school, she had a really hard time at math. She told her teacher this. Her teacher gave her some extra math to do at home for bonus points. That made Jane mad, because she already hated math and she just made it harder for her. She decided to go home, sitting at the kitchen table, trying to do her homework, with her brothers and sisters fighting, the phone ringing, and mom cooking dinner. She decided to go up to her room to do homework on the floor, because she didn't have a desk in her room. She sat there for a while, and got like three problems done. Her little sister came upstairs and started blasting her radio, so she had to move again, so this time she was getting pretty mad, because she had to do her homework. She went into the garage, in the car, and did her homework there. But it got uncomfortable, so she went outside and did her homework there, and she got all but one problem done. The last problem she didn't really understand, so she decided to take it to her teacher the next day. And so what happened is she had her entire family inside, fighting, and she had got away and gotten what she wanted to do in a place they weren't. She got her things done without them bothering her.

Card 12
Makala would always spy on her mom and dad. She would always follow them around, and hide behind corners and walls and furniture. Once her parents were talking about adopting a kid. Her dad didn't want to, and the mom did. Makala really didn't want a little brother, which is what they were talking about. She didn't way to say, "No!" because that would give away her spying and so she had to listen to them talking about getting a little brother. Finally, they decided they would. She was mad that she would have a little brother, because she didn't like little boys very much. But, when they did decide to get one, and they finally got the brother, it turned out that he liked Makala a lot, so they became good friends. And it was actually a good thing that she got a little brother, because she had a little friend to play with all the time. The end.

Card 13
Once a girl named Shannon had a really annoying family. Her brother was always making stupid commentaries about everything that anyone said and always blaming her for everything. Her other brother was always, always, always trying to push people around to make people do what he wanted. Her older sister Rachel always thought that whatever she (Shannon) did was wrong and would never amount to anything and she would always tell her this, and how she was overweight, and all this stuff. And her little sister would always get away with everything she did, and she knew that, and she would bug Jane, no I mean Shannon, especially. One day Shannon couldn't take it anymore and she got really mad, because her sister just called her fat and everyone else was laughing, except for her parents. So she grabbed the chair she was sitting on at the table, picked it up and smashed in on the floor and ran outside yelling how her family was so stupid. But, then she felt bad about it later, and she came back in and her family was all sitting in the exact same places as before and were looking at each other. And she said, "Sorry! I just got a little mad," and so they didn't think about it anymore and didn't care about it anymore, and that's the end.

Card 14
The Smiths were having their house repainted. Little Danielle had taken a bucket of bright red paint into the white living room, and began finger-painting on the wall, and that's what she was doing in class, and she thought that's what you do with paint. She was painting all over the wall; she was painting handprints and everything. Then her mom came in and was so mad. She was like, "What are you doing? Ahhh! (Gasp)." She got in trouble, but after a while her mom actually realized that she liked it. They made a new style of painting, with a white wall, and you put handprints and smears and stuff, so it looked pretty cool, like red clouds on a white background. So that's what they would do, and they started doing that at other people's houses, and they would ask, "Now how did you learn to do this?" The mom and dad would always say, "Well, we can tell you about half of it. The other part you will have to ask Danielle about." So they did a painting business with their own unique style of painting. The mistake she had made actually turned out to be good. So Danielle felt pretty good about what she had done. The mom felt pretty upset with herself because she had yelled at first, but then she rewarded her and felt better.

CONCLUSIONS

Storytelling tests are rooted in a rich psychological history and remain a significant component of psychological testing for many practicing clinicians. Efforts to improve their psychometric properties and to enhance more generally their reliability and validity are continuous. With appropriate use and interpretation, they offer much to improve our understanding of the needs, perceptions, and motivations of children and adolescents.

REFERENCES

Abrams, D. M. (1999). Six decades of the Bellak scoring system, among others. In L. G. Gieser & M. I. Stein (Eds.), *Evocative images: The Thematic Apperception Test and the art of projection* (pp. 143–159). Washington, DC: American Psychological Association.

Ames, L. B., & August, J. (1966). Comparison of mosaic responses of Negro and white primary-school children. *Journal of Genetic Psychology, 109*, 123–129.

Archer, R. P., Maruish, M., Imhof, E. A., & Piotrowski, C. (1991). Psychological test usage with adolescent clients: 1990 survey findings. *Professional Psychology: Research and Practice, 22*, 247–252.

Armstrong, M. (1954). Children's responses to animal and human figures in thematic pictures. *Journal of Consulting Psychology, 18*, 67–70.

Barona, A., & Hernandez, A. E. (1990). Use of projectives in the assessment of Hispanic children. In A. Barona & E. E. Garcia (Eds.), *Children at risk: Poverty minority status and other issues in educational equity* (pp. 297–304). Washington, DC: National Association of School Psychologists.

Bellak, L. (1944). The concept of projection: An experimental investigation and study of the concept. *Psychiatry, 7*, 353–370.

Bellak, L. (1954). *The T.A.T. and the C.A.T. in clinical use*. New York: Grune & Stratton.

Bellak, L. (1971). *The T.A.T. and the C.A.T. in clinical use* (2nd Ed.). New York: Grune & Stratton.

Bellak, L. (1975). *The T.A.T. and the C.A.T. in clinical use* (3rd Ed.). New York: Grune & Stratton.

Bellak, L. (1986). *The T.A.T. and the C.A.T. in clinical use* (4th Ed.). Boston: Allyn & Bacon.

Bellak, L. (1993). *The T.A.T. and the C.A.T. in clinical use* (5th Ed.). Boston: Allyn & Bacon.

Bellak, L., & Abrams, D. M. (1997). *The T.A.T., the C.A.T. and the S.A.T. in clinical use* (6th Ed.). Boston: Allyn & Bacon.

Bellak, L., & Bellak, S. (1949). *The Children's Apperception Test*. Larchmont, NY: C.P.S.

Bellak, L., & Bellak, S. (1965). *The C.A.T.–H–A human modification*. Larchmont, NY: C.P.S.

Bellak, L., & Brower, D. (1951). Projective methods. In *Progress in neurology and psychiatry* (Vol. 6). New York: Grune & Stratton.

Bernal, I. (1991). *The relationship between level of acculturation, the Robert's Apperception Test for Children, and the TEMAS (Tell-Me-A-Story Test)*. Doctoral dissertation, California School for Professional Psychology, Los Angeles.

Biersdorf, K. R., & Marcuse, F. L. (1953). Responses of children to human and animal pictures. *Journal of Projective Techniques, 17*, 455–459.

Blum, G. S. (1964). Defense preferences among university students in Denmark, France, Germany and Israel. *Journal of Projective Techniques and Personality Assessment, 28*, 13–19.

Booth, L. J. (1966). A normative comparison of the responses of Latin American and Anglo American children to the Children's Apperception Test. In M. R. Haworth (Ed.), *The CAT: Facts about fantasy* (pp. 115–138). New York: Grune & Stratton.

Budoff, M. (1960). The relative utility of animal and human figures in a picture story test for young children. *Journal of Projective Techniques, 42*, 347–352.

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.

Cardalda, E. (1995). *Socio-cultural correlates to school achievement using the TEMAS (Tell-Me-A-Story) culturally sensitive test with sixth, seventh and eighth graders.* Doctoral dissertation, New School for Social Research, New York.

Cashel, M. L. (2002). Child and psychological assessment: Current clinical practices and the impact of managed care. *Professional Psychology: Research and Practice, 33*, 446–453.

Cooper, A. (1981). A basic set for adolescent males. *Journal of Clinical Psychology, 37*, 411–414.

Costantino, G., & Malgady, R. G. (1983). Verbal fluency of Hispanic, black and white children on TAT and TEMAS, a new thematic apperception test. *Hispanic Journal of Behavioral Sciences, 5*, 199–206.

Costantino, G., & Malgady, R. G. (1999). The Tell-Me-A-Story test: A multicultural offspring of the Thematic Apperception Test. In L. G. Gieser & M. I. Stein (Eds.), *Evocative images: The Thematic Apperception Test and the art of projection* (pp. 191–206). Washington, DC: American Psychological Association.

Costantino, G., Malgady, R., Casullo, M. M., & Castillo, A. (1991). Cross-cultural standardization of TEMAS in three Hispanic subcultures. *Hispanic Journal of Behavioral Sciences, 13*, 48–62.

Costantino, G., Malgady, R. G., Colon-Malgady, G., & Bailey, J. (1992). Clinical utility of the TEMAS with non-minority children. *Journal of Personality Assessment, 59*, 433–438.

Costantino, G., Malgady, R. G., & Rogler, L. H. (1988). *TEMAS (Tell-Me-A-Story) manual.* Los Angeles, CA: Western Psychological Services.

Costantino, G., Malgady, R. G., Rogler, L. H., & Tsui, E. (1988). Discriminant analysis of clinical outpatients and public school children by TEMAS: A thematic apperception test for Hispanic and Blacks. *Journal of Personality Assessment, 52*, 670–678.

Costantino, G., Malgady, R. G., & Vasquez, C. (1981). A comparison of the Murray-TAT and a new thematic apperception test for urban Hispanic children. *Hispanic Journal of Behavioral Science, 3*, 291–300.

Cramer, P. (1982). *Defense mechanism manual.* Unpublished manuscript, Williams College.

Cramer, P. (1987). The development of defense mechanisms. *Journal of Personality, 55*, 597–614.

Cramer, P. (1991). *The development of defense mechanisms: Theory, research, and assessment.* New York: Springer-Verlag.

Cramer, P. (1996). *Storytelling, narrative, and the Thematic Apperception Test.* New York: Guilford Press.

Cramer, P., & Carter, T. (1978). The relationship between sexual identification and the use of defense mechanisms. *Journal of Personality Assessment, 42*, 63–73.

Dana, R. H. (1996). *Multicultural assessment perspectives for professional psychology.* Boston: Allyn & Bacon.

Dollinger, S., & Cramer, P. (1990). Children's defensive responses and emotional upset following a disaster: A projective assessment. *Journal of Personality Assessment, 54*, 116–127.

Durret, M. E., & Kim, C. C. (1973). A comparative study of behavioral maturity in Mexican American and Anglo preschool children. *Journal of Genetic Psychology, 123*, 55–62.

Elbert, J. C., & Holden, E. W. (1987). Child diagnostic assessment: Current training practices in clinical psychology internships. *Professional Psychology: Research and Practice, 18*, 587–596.

Flanagan, R., & Di Giuseppe, R. (1999). Critical review of the TEMAS: A step within the development of thematic apperception instruments. *Psychology in the Schools, 36*, 21–30.

Freedenfeld, R. N., Ornduff, S. R., & Kelsey, R. M. (1995). Object relations and physical abuse: A TAT analysis. *Journal of Personality Assessment, 64*, 552–568.

Freud, A. (1937). *The ego and the mechanisms of defense.* London: Hogarth Press.

Friedrich, W. N., & Share, M. C. (1997). The Roberts Apperception Test for Children: An exploratory study of it use with sexually abused children. *Journal of Child Sexual Abuse, 64*, 83–91.

Geiser, L., & Stein, M. I. (1999). *Evocative images: The Thematic Apperception Test and the art of projection.* Washington, DC: American Psychological Association.

Haworth, M. R. (1963). A schedule for the analysis of C.A.T. responses. *Journal of Projective Techniques and Personality Assessment, 27*, 181–184.

Hutton, J. B., Dubes, R., & Muir, S. (1992). Assessment practices of school psychologists: Ten years later. *School Psychology Review, 21*, 271–284.

Joiner, T. E. (1996). The relations of thematic and nonthematic childhood depression measures to defensiveness and gender. *Journal of Abnormal Child Psychology, 24*, 803–813.

Kaleita, T. A. (1980). *The expression of attachment and separation anxiety in abused and neglected adolescents.* Unpublished doctoral dissertation, California School of Professional Psychology.

Kohlberg, L. (1969). *Stages in the development of moral thought and action.* New York: Holt.

Kovacs, M. (1992). *Children's Depression Inventory Manual.* Los Angeles: Western Psychological Services.

Lindzey, G. (1952). Thematic Apperception Test: Interpretive assumptions and empirical evidence. *Psychological Bulletin, 49*, 1–25.

Louw, A. E., & Ramkisson, S. (2002). The suitability of the Roberts Apperception Test for Children (RATC), the House-Tree-Person (HTP) and Draw A Person (D-A-P) scales in the identification of child sexual abuse in the Indian community: An exploratory study. *Southern African Journal of Child and Adolescent Mental Health, 14*, 91–106.

Lubin, B., Larsen, R. M., & Matarazzo, J. D. (1984). Patterns of psychological test usage in the United States. *American Psychologist, 39*, 451–454.

Mandler, G., Lindzey, G., & Crouch, R. G. (1957). Thematic Apperception Test: Indices of anxiety in relation to test anxiety. *Educational Psychological Measurements, 17*, 466–474.

McArthur, D. (1976). *A comparison of the stimulus influence of three thematic projective techniques with children.* Unpublished doctoral dissertation, California School of Professional Psychology.

McArthur, D. S., & Roberts, G. E. (1982). *Roberts Apperception Test for Children manual.* Los Angeles, CA: Western Psychological Services.

McGrew, M. W., & Teglasi, H. (1990). Formal characteristics of thematic apperception test stories as indices of emotional disturbance in children. *Journal of Personality Assessment, 54*, 639–655.

Morgan, C. D., & Murray, H. M. (1935). A method for investigating fantasies: The Thematic Apperception Test. *Archives of Neurology and Psychiatry, 34*, 289–306.

Muha, T. W. (1977). *A validation study of the Roberts' Apperception Test as a measure of psychological dysfunction in families.* Unpublished doctoral dissertation, California School of Professional Psychology.

Murray, H. A. (1943). *Thematic apperception test manual.* Cambridge, MA: Harvard University Press.

Murstein, B. I. (1963). *Theory and research on projective techniques (emphasizing the TAT).* New York: Wiley.

Niec, L. N., & Russ, S. W. (2002). Children's internal representations, empathy and fantasy play: A validity study of the SCORS-Q. *Psychological Assessment, 14*, 331–338.

Obrzut, J. E., & Boliek, C. A. (1986). Thematic approaches to personality assessment with children and adolescents. In H. M. Knoff (Ed.), *The assessment of child and adolescent personality* (pp. 183–198). New York: Guilford.

Ornduff, S. R., Freedenfeld, R. N., Kelsey, R. M., & Critelli, J. W. (1994). Object relations of sexually abused female subjects: A TAT analysis. *Journal of Personality Assessment, 63*, 223–238.

Palomares, R. S., Crowley, S. L., Worchel, F. F., Olson, T. K., & Rae, W. A. (1991). The factor analytic structure of the Roberts Apperception Test for Children: A comparison of the standardization sample with a sample of chronically ill children. *Journal of Personality Assessment, 56*, 414–425.

Piotrowski, C., & Keller, J. W. (1989). Psychological testing in outpatient mental health facilities. *Professional Psychology: Research and Practice, 20*, 423–425.

Roberts, G. E., & Gruber, C. (2005). *Roberts–2 manual.* Los Angeles: Western Psychological Services.

Rosenberg, R. P., & Beck, S. (1986). Preferred assessment methods and treatment modalities for hyperactive children among clinical child and school psychologists. *Journal of Clinical Child Psychology, 15*, 142–147.

Shneidman, E. S. (1951). *Thematic test analysis.* New York: Grune & Stratton.

Shneidman, E. S. (1999). The Thematic Apperception Test: A paradise of psychdynamics. In L. G. Gieser & M. I. Stein (Eds.), *Evocative images: The Thematic Apperception Test and the art of projection* (pp. 87–97). Washington, DC: American Psychological Association.

Shore, M. F., Massimo, J. L., & Mack, R. (1964). The relationship between levels of guilt and unsocialized behavior. *Journal of Projective Techniques and Personality Assessment, 28*, 346–349.

Teglasi, H. (1993). *Clinical use of story telling: Emphasizing the TAT with children and adolescents.* Boston: Allyn & Bacon.

Tuma, J. M., & Pratt, M. J. (1982). Clinical child psychology practice and training: A survey. *Journal of Clinical Child Psychology, 11*, 27–34.

Walton, J., Nuttall, R. R., & Vazquez-Nuttall, E. (1997). The impact of war on the mental health of children: A Salvadoran study. *Child Abuse & Neglect, 21*, 737–749.

Westen, D. (1991). Clinical assessment of object relations using the TAT. *Journal of Personality Assessment, 56*, 127–133.

Westen, D. (2002). Current rating summary sheet, Department of Psychology, Emory University, Atlanta, GA.

Westen, D., Lohr, N., Silk, K., Kerber, K., & Goodrich, S. (1985; 1990; 2002). *Measuring object relations and social cognition using the TAT: Scoring manual.* Department of Psychology: University of Michigan.

Westen, D., Ludolph, P., Lerner, H., Ruffins, S., & Wiss, C. (1990). Object relations in borderline adolescents. *Journal of the American Academy of child and Adolescent Psychiatry, 29*, 338–348.

Winter, D. G. (1999). Linking personality and "scientific" psychology: The development of empirically derived Thematic Apperception Test measures. In L. G. Gieser & M. I. Stein (Eds.), *Evocative images: The Thematic Apperception Test and the art of projection* (pp. 107–124). Washington, DC: American Psychological Association.

This page intentionally left blank