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Projective Assessment and School Psychology: Contemporary Validity Issues and Implications for Practice

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Projective techniques continue to be widely used by school psychologists despite frequent criticisms of their use. This article reviews contemporary validity issues in the use of projective techniques with children and adolescents, including incremental validity, treatment validity, and problems associated with professional judgment and experience. A discussion of these issues and their implications for school-based projective assessment is provided, along with recommendations for the appropriate use of projective techniques with children and youth within a problem-solving framework.

A central component of contemporary school psychology training and practice is data-based decision making and accountability (Ysseldyke et al., 2006). Consistently recommended practices for conducting reliable, valid, and comprehensive assessments of child and adolescent emotional and behavioral problems involve gathering various sources of assessment data from multiple informants (e.g., parents, teachers, students) across different settings (McConaughy & Ritter, 2002). In addition, assessments should not only estimate current student functioning by defining problems, needs, and assets, but should also be linked directly to the development and evaluation of interventions (Ysseldyke et al.).

Behavioral assessment methods (e.g., interviews, observations, informant-report measures) are generally viewed by school psychologists as more useful (Cheramie, Griffin, & Morgan, 2000) and acceptable (Eckert, Hintze, & Shapiro, 1997) than traditional assessment procedures such as projective techniques for assessing students with suspected emotional and/or behavioral problems. However, projective techniques continue to be widely used with this population in schools (Hosp & Reschly, 2002; Shapiro & Heick, 2004; Wilson & Reschly, 1996) and are viewed as important in the assessment process (Kennedy, Faust, Willis, & Piotrowski, 1994). For example, results from a recent national survey indicated that school psychologists view projective techniques as helpful and that they frequently use them with children and adolescents across grade levels and for a variety of purposes, including special education eligibility determination and intervention development (Hojnoski, Morrison, Brown, & Matthews, 2006).

Projective techniques are assessment methods in which unstructured stimuli (e.g., inkblots; pictures) are presented to individuals who are then expected to respond verbally or motorically (e.g., drawing) depending on the requirements of the task. Unlike other assessment tools, responses to projective techniques are not "right" or "wrong" in a traditional sense. Rather, responses to projective techniques are typically assumed to reflect the unconscious drives, wishes, and/or feelings of a particular individual (Chandler, 2003). Projective techniques originated from psychodynamic theory and their use is based on the "projective hypothesis," which is the hypothesized tendency of individuals to view and interpret the world in terms of their own unique experience. An assumption underlying the use of projective techniques is that "in trying to make sense out of vague, unstructured stimuli, individuals 'project' their own problems, motives, and wishes" into the ambiguous situation that is pre-

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sented (Butcher, Mineka, & Hooley, 2007, p. 119). Examples of projective techniques include sentence completion tests, apperception tests, and projective drawings. These techniques are in contrast to more objective, behaviorally-based assessment methods.

Despite their wide use in schools, projective techniques have consistently been criticized throughout much of their history (Dawes, 1994; Lilienfield, Wood, & Garb, 2000), and their use with children and adolescents remains highly controversial (Merrell, 2003), with many promoting their use in schools (e.g., Bardos, 1993; Chandler, 2003; Naglieri, 1993; Yalof, Abraham, Domingos, & Socket, 2001) and others condemning them (e.g., Batsche & Peterson, 1983; Gittelman-Klein, 1986; Merrell, Ervin, & Gimpel, 2006; Motta, Little, & Tobin, 1993). Much of the controversy surrounding the use of projective techniques has focused on their psychometric properties. In particular, projective techniques have been criticized for their questionable degree of reliability (e.g., test-retest reliability) and validity (e.g., construct validity), as well as their sometimes inadequate norms (Salvia & Ysseldyke, 2001). These issues, as well as the recent emphasis on evidence-based assessment practices (Mash & Hunsley, 2005) and the threat of legal sanction arising from decisions based on the results of questionable assessment tools (Kerr & Nelson, 2002), have led to an increased call for restricting the use of projective techniques with children and youth, particularly in schools (Knoff, 2003; Merrell et al., 2006).

A central criticism of the use of projective techniques is ultimately related to the validity of the projective hypothesis in general, and with children and youth in particular (Chandler, 2003). Issues related to the psychometric properties of projective techniques and difficulties with validating the projective hypothesis have been discussed in many sources (e.g., Chandler, 2003; Lillienfield et al., 2000; Merrell, 2003), and it is not the purpose of this article to review them here. Instead, the purpose of this article is to review research on some contemporary validity issues in the use of projective techniques with children and adolescents, focusing on issues of incremental validity, treatment validity, problems associated with professional judgment and experience, and the implications of these issues for school psychologists. A review of such issues is needed, given that no articles published in prominent school psychology journals (e.g., *The California School Psychologist; Journal of Applied School Psychology; Journal of School Psychology; Psychology in the Schools; School Psychology International; School Psychology Review; School Psychology Quarterly*) in the last decade have comprehensively addressed these topics in the context of projective assessment in the schools. Prior to examining these issues, however, we begin with a brief discussion of the use of projective techniques with children and adolescents, as well as some unique reliability and validity problems associated with their use.

RELIABILITY AND VALIDITY ISSUES IN THE USE OF PROJECTIVE TECHNIQUES WITH CHILDREN AND ADOLESCENTS

As with adults, a variety of projective techniques have been used with children and adolescents, including the Rorschach (Allen & Hollifield, 2003; Ornberg & Zalewski, 1994), human figure and kinetic family drawings (Knoff, 2003; Knoff & Prout, 1985), the Bender-Gestalt Test (Koppitz, 1975; Tolor & Brannigan, 1980), the Hand Test (Sivec & Hilsenroth, 1994; Wagner, 1986), sentence-completion techniques (Holt, 1980; Zlotogorski & Wiggs, 1986); and thematic storytelling techniques such as the Thematic Apperception Test, the Children's Apperception Test, and the Roberts Apperception Test for Children (Dupree & Prevatt, 2003; Teglasi, 2001). Children and adolescents exhibit continuous developmental changes, including variations in cognitive development, abstract thought, and language acquisition (Chandler, 2003), which frequently make reliability and validity issues associated with projective techniques much more challenging. Further, the use of projective techniques with children

and adolescents has been criticized for several reasons, including difficulties in defining particular constructs projective techniques are purported to assess (Merrell, 2003), possibilities of illusory correlations between assessment responses and child behavior (Gresham, 1993), the subjective nature of evaluating responses (Hall, 2004), the potential for cultural bias (Paniagua, 1998), and the impossibility of disconfirmation (e.g., one cannot *prove* the null hypothesis that small human figure drawings are *not* indicative of a low self-concept; Gresham, 1993).

Some individuals have suggested that projective techniques are not tests and therefore should not be subjected to the constraints normally applied to psychometric instruments (e.g., Schwartz & Lazar, 1979), though as noted by Chandler (2003): "Certain basic questions may legitimately be asked of any assessment method: Does it do what it purports to do, and does it do so with consistency?" (p. 55). Validity is not, however, a static or fixed construct; an assessment device can only be valid to a particular degree and for a particular purpose. These purposes may include the description of personality, to diagnose or classify, to give a prognosis or make a prediction, to identify therapeutic needs, to provide treatment goals, and/or to select appropriate interventions and to monitor and revise them as needed (Meyer et al., 2001; Nelson-Gray, 2003).

A number of researchers examining the psychometric properties of projective techniques with both children and adolescents have concluded that they have questionable or even poor levels of reliability and validity, particularly as diagnostic instruments or for predicting behavior (e.g., Gittelman-Klein, 1978, 1986; Knoff, 2002, 2003; Merrell, 2003; Merrell et al., 2006). In response to this criticism, some proponents of projective techniques argue that their real value lies not in assisting with diagnostic decision-making or prediction, but rather in their utility for helping clinicians to better understand and describe the individual being assessed (e.g., Lerner, 2000). This perspective, however, has been challenged by individuals such as Knoff (2003), who contend that "the primary goal of the (personality assessment) process is the treatment or resolution of referred behavioral or social-emotional problems so that a child's normal development and positive mental health can continue. Thus, it is not enough to *describe* or *understand* a child's social-emotional problems; we must move from problem analysis to intervention by *using* this understanding" (p. 105). The importance of the linkage between assessment and intervention is an increasingly significant one in school psychology (Brown-Chidsey, 2005), and is directly related to issues of incremental and treatment validity.

INCREMENTAL VALIDITY OF PROJECTIVE TECHNIQUES WITH CHILDREN AND ADOLESCENTS

Validity defines the inferences that one can make on the basis of a particular test score or assessment method. Evidence that a test is valid for particular inferences, however, does not necessarily mean that the test is valuable (Kaplan & Saccuzzo, 1997). A test or technique may be both reliable and valid, but the decision to use it depends on additional considerations. For example, what information does the test provide above that which is already known? Or, what information can the assessment procedure provide that cannot be gained in some other, easier way? This added bit of information is referred to as incremental validity.

The notion of incremental validity is not a new one. Theoretical and applied work on test validity in the 1950s and 60s, particularly publications by Campbell, Cronbach, and their colleagues (e.g., Campbell, 1960; Campbell & Fiske, 1959; Cronbach & Gleser, 1957), provided much of the groundwork. Building on this work, Sechrest (1963), who first proposed and articulated the concept of incremental validity, argued that assessment methods must lead to an improved prediction compared with the results derived from other data that are easily and routinely obtained as part of the assessment

process. This requirement is a rather stringent one, in that "it requires not only that the prediction of an outcome with a test be better than that obtained by chance but also that the test demonstrate its value in comparison with other relevant sources of information" (Hunsley & Meyer, 2003, pp. 446-447).

In the context of projective techniques with children and adolescents, the concept of incremental validity is particularly important, given that there are a number of other assessment procedures (e.g., direct observations of behavior; broad-band and narrow-band behavior rating scales; structured diagnostic interviews) that have demonstrated clear utility for diagnostic and predictive purposes, as well as for suggesting treatment goals (Shapiro & Kratochwill, 2000). Despite the importance of this issue, a literature search conducted in PsycINFO with the words "incremental validity" and "projective techniques" or "projective tests" produced only five articles. Three of these articles (Garb, 2003; Garb, Lilienfield, Scott, & Wood, 2004; Lilienfield, Wood, & Garb, 2000) dealt primarily with incremental validity and projective techniques in the context of adults, and uniformly concluded that the evidence for incremental validity of projective techniques for identifying both causal variables and problem behaviors was weak. For example, Garb (2003) found that greater incremental validity was found for interviews, objective personality inventories, and self-report measures than for widely used projective techniques.

Similarly, in a comprehensive review of the scientific status of projective techniques, Lilienfield et al. (2000) concluded that, "with a few exceptions, projective indexes have not consistently demonstrated incremental validity above and beyond other psychometric data" (p. 27). Only two articles in this search dealt with children and adolescents, both of which found no evidence of incremental validity in projective techniques when used with children and youth for diagnostic purposes (Gittelman-Klein, 1987; Hartman, 1972).

Literature searches containing the words "incremental validity" and other commonly used projective techniques (e.g., apperception tests, Thematic Apperception Test, Children's Apperception Test, family drawings, school drawings, figure drawings, house-tree-person, sentence completion, etc.) produced similarly sparse results. A study by Graybill and Blackwood (1996) was found that examined the utility of projective techniques (i.e., the Children's Form of the Rosenzweig Picture-Frustration Study and the Make a Picture Story), self-report measures, and teacher behavior ratings for predicting adolescent aggressive behavior six years later. Although the authors concluded that the projective techniques were at least as valid as the other measures in predicting adolescent aggressive behavior, methodological problems with this study (e.g., limited items used in teacher ratings) make its results suspect.

Proponents of projective techniques have argued that the techniques possess incremental validity in the sense that they assess unconscious aspects of behavior that cannot be assessed via other, more objective personality assessment measures (Chandler, 2003). This contention, however, assumes that unconscious processes have a significant and causal impact on behavior. Although this viewpoint has been supported by some investigators (e.g., Westen, 1998), other researchers have not found this evidence compelling (e.g., Mash & Terdal, 1997; Shapiro & Kratochwill, 2000), and it is not a view that appears to be widely accepted among contemporary school psychologists, given that many are increasingly adopting more behaviorally-oriented assessment techniques (Shapiro & Heick, 2004).

An important aspect of incremental validity is whether information can be gathered in other, easier ways. Assessment procedures such as standardized rating scales and diagnostic interviews are often easier and simpler to administer than many projective techniques, and frequently require less time and training on the part of the assessor. For example, even though research suggests that the Rorschach may be a valid instrument for assessing adolescent thought disorders (Ornberg & Zalewski, 1994),

other assessment methods (e.g., structured diagnostic interviews) provide equally valid assessments (Wood, Nezworski, & Garb, 2003) while having the additional advantage of frequently being quicker and easier to score and interpret. Moreover, given the relative rarity of schizophrenia or other thought disorders in children and youth, the practical utility of using the Rorschach for this purpose is highly questionable.

Given the existing evidence indicating that projective techniques have problematic incremental validity, it is incumbent upon proponents of these techniques to empirically and convincingly demonstrate that (a) the use of them adds needed and useful information in assessing children and adolescents; and (b) this information cannot be gained in any other way except through the use of projective techniques. To date, however, neither of these goals has been realized (Johnston & Murray, 2003).

A Special Case: The Rorschach

Almost all the research conducted to date on incremental validity and projective techniques has involved the Rorschach, a technique in which individuals are asked to describe what they see in a series of 10 cards containing ambiguous pictures of inkblots. The Rorschach is a "special case" within personality assessment, however, because contemporary conceptualizations of the Rorschach consider it to primarily be a cognitive-perceptual task rather than a projective one (Exner, 2003), and responses to it are believed to reflect the way in which individuals normally act in problem-solving situations (Prevatt, 1999). Administration, scoring, and interpretation of the most widely used approach to the Rorschach, Exner's (2003) Comprehensive System, is highly complex and requires advanced training. Although the Rorschach is not used by most school psychologists (Wilson & Reschly, 1996), it continues to be described by some as useful in the assessment of students' emotional functioning (e.g., Flanagan & Esquivel, 2006; Prevatt, 1999; Yalof et al., 2001).

The Rorschach is the most widely recognized projective technique and the most controversial (Prevatt, 1999). The controversy surrounding its use is reflected in the studies which have examined its incremental validity, with many researchers contending there is evidence to support it (e.g., Meyer, 2000; Meyer & Archer, 2001; Viglione & Hilsenroth, 2001) and others arguing against it (e.g., Garb, 2003; Garb et al., 2004; Lilienfield et al., 2000). Much of this research, however, has dealt with the incremental validity of the Rorschach with adults rather than children or adolescents. In one of the few studies that examined this issue with children or adolescents, Archer and his colleagues (Archer & Gordon, 1988; Archer & Krishnamurthy, 1997) studied adolescents and found that the Rorschach did not provide incremental validity in terms of improved diagnostic prediction in comparison with the Minnesota Multiphasic Personality Inventory (MMPI), an objective measure of personality functioning.

More recently, Janson and Stattin (2003) examined the incremental validity of the Rorschach in relation to parental (i.e., mothers) reports of their children's externalizing behavior and mother-child relations in the prediction of adult delinquency. The authors found that an aggregate of Rorschach-based ratings of ego strength significantly improved the prediction of delinquency in adolescence over and above earlier identified best predictors (i.e., mothers' ratings of mother-child relations and externalizing behavior problems). An important limitation of this study, however, is that externalizing behavior problems were measured by clinical parent interview (consisting of only 10 questions) rather than standardized rating scales, and "mother-child relations" were based on only one interview question ("How do you and your son get along together?") rather than direct observations. The lack of appropriate measures therefore makes the authors' conclusions regarding the incremental validity of the Rorschach in this study questionable. More research examining the incremental validity of the

Rorschach with children and adolescents is clearly needed. To date, however, there does not appear to be compelling evidence to support the incremental validity of the Rorschach, or any other projective technique, with children and youth.

TREATMENT VALIDITY OF PROJECTIVE TECHNIQUES WITH CHILDREN AND ADOLESCENTS

Treatment validity (also known as treatment utility) refers to "the degree to which assessment is shown to contribute to beneficial treatment outcome" (Hayes, Nelson, & Jarrett, 1987, p. 963). Although incremental and treatment validity are separate concepts, they are related. For example, when evaluating the incremental value of a particular assessment instrument, Meehl (1959) recommended that one should also consider the extent to which assessment information is associated with the provision of effective services.

Although case examples describing how projective techniques could potentially be used to suggest specific treatments have been reported in the professional literature, these cases are typically anecdotal, descriptive, and non-experimental (e.g. Dubey & Cassell, 2000). Empirical evidence demonstrating the treatment utility of projective techniques with children and adolescents is lacking. For example, a literature search conducted by the authors in PsycINFO containing the words "treatment validity" and a variety of descriptors (e.g., "projective techniques," "projective tests", "apperception tests," "Rorschach," "figure drawings," etc.) revealed no published articles in any peer-reviewed journals for children, adolescents, or adults.

It should be noted that lack of treatment utility in child/adolescent personality assessment is not restricted to projective techniques; many objective child and adolescent personality assessment methods and procedures lack treatment validity as well (Braden & Kratochwill, 1997; Kratochwill & McGivern, 1996), and researchers such as Haynes (1993) have argued that "the integration of assessment data into treatment decisions remains one of the least researched aspects of applied psychology" (p. 252). However, given that projective techniques also frequently exhibit questionable or poor degrees of *other* forms of reliability and validity – a situation which is typically not the case for many objective personality assessment methods – their lack of treatment validity provides additional support for individuals criticizing their use with child and adolescent populations. Moreover, there are other assessment methods which have demonstrated treatment validity, such as functional behavioral assessment (Gresham, Watson, & Skinner, 2001). Although functional behavioral assessment is not without technical adequacy problems of its own (Gresham, 2003), this assessment methodology has convincingly demonstrated something that projective techniques to date have not – an effective link from assessment to intervention.

PROJECTIVE TECHNIQUES, PROFESSIONAL JUDGMENT, AND CLINICAL EXPERIENCE

Piotrowski and Keller (1984) suggested that the validity problems associated with projective techniques are largely the result of inadequate instruction at the college and university level, and that as a consequence "the validity of these tests has been underestimated since they are often used improperly or superficially without the extensive and intensive training and experience needed for their appropriate application" (pp. 453-454). The suggestion that projective techniques can be used validly and effectively if they are employed by individuals with extensive clinical experience and skill is a common one among advocates of projective techniques (e.g., Lerner, 2000; Wagner, 1986). Given that the use of projective techniques by school psychologists remains popular, and that many of them do not have formal scoring systems (e.g., TAT; CAT) or are often scored by "personalized" rather than stan-

dardized scoring systems (Kennedy et al., 1994), it appears that many school psychologists are relying on their own clinical experience and professional judgment when interpreting them. Research, however, has found significant problems and limitations associated with these variables.

Barnett (1988) described professional judgment as "personal processes that guide scientist and practitioner behavior in controversial and ambiguous circumstances" (p. 658). Along with clinical experience, professional judgment has often been viewed as a key variable in determining clinicians' effectiveness (Dawes, 1994). Despite the intuitive appeal of the value of these variables, however, research examining their utility has not been positive. For example, in the context of projective drawings with children, results from several studies have indicated that practitioners are frequently unable to discriminate clinically unremarkable from clinically identified populations beyond a chance level (Cummings, 1986; Knoff, 2003). Research examining professional judgment in the context of other projective techniques has found similar results (Lilienfield et al., 2000).

In general, research suggests that school psychologists and other mental health professionals frequently make a variety of cognitive errors in conducting assessments, such as asking the wrong questions, or engaging in fundamental attribution or information processing errors (Macmann & Barnett, 1999). Assessments also are guided by the implicit or explicit theoretical orientation of the assessor, and conceptual and/or theoretical differences can lead to highly variable interpretations and practices (Barnett, 1988). For example, a particular child's human figure drawing would likely be interpreted much differently by a school psychologist espousing a cognitive-developmental theoretical orientation than by one with a psychodynamic orientation.

A school psychologist's overconfidence in his or her own judgment and clinical experience can also be problematic. Macmann and Barnett (1999) describe the "myth of the master detective," which refers to "the erroneous belief that through sheer power of will or intellect, professionals can overcome the limitations of their techniques" (p. 534). These researchers cite an extensive literature indicating that, without clear decision rules, exercising clinical judgment typically leads to great variability in decision outcomes. The research examining the value of clinical experience is similarly discouraging. Although training and experience may enable clinicians to develop an increased sense of confidence in their diagnostic skills, research suggests this increased confidence does not improve the accuracy of their decisions. In fact, negative correlations between professional confidence and diagnostic accuracy have been reported in several studies (Macmann & Barnett, 1999).

The potential for overconfidence in the accuracy of one's clinical intuition (Myers, 2002), judgment (Meyer et al., 2001), and skill (Dawes, 1994; Garb, 1989) when making assessment decisions is a very real threat to assessment validity, and school psychologists who use projective techniques with children and youth would appear especially vulnerable, given the aforementioned potential problems with these techniques. Although there have been occasional reports of statisticians being stunned by the clinical acumen of particular highly skilled and experienced professionals (Kaplan & Saccuzzo, 1997), such expert clinicians are often difficult to accurately identify, they frequently have difficulty teaching clinical skills to others (Butcher et al., 2007), and the processes by which they make clinical decisions have not been adequately investigated.

PROJECTIVE ASSESSMENT AND SCHOOL PSYCHOLOGY: IMPLICATIONS FOR PRACTICE

Given the aforementioned evidence indicating the lack of incremental and treatment validity of projective techniques with children and adolescents, we conclude, as have others such as Knoff (2002) and Merrell et al. (2006), that projective techniques are not needed in most cases for the personality assessment of children and adolescents. Other assessment tools are available for purposes of diagno-

sis, classification, and the identification of treatment goals (e.g., broad- and narrow-band behavior rating scales; structured diagnostic interviews; direct observations) that are more reliable, valid, and easier to interpret without reliance on clinical judgment. In addition, other methods provide a greater link between assessment and intervention (e.g., functional behavioral assessment).

There may, however, be some unique situations in which projective techniques might be useful when assessing children and youth, such as for purposes of establishing rapport (Merrell et al., 2006) or generating hypotheses (Knoff, 2003). For example, when establishing rapport with a reticent child or adolescent who does not respond well to typical open-ended or close-ended interview questions, it may be helpful to provide sentence stems or request a kinetic family drawing. Sentence stems, where the child completes the sentence with anything that comes to mind, may resemble more of a structured school task and be less threatening than face-to-face questions. When using sentence completion tasks, we recommend using the information provided to generate hypotheses and identify themes for further questioning rather than interpreting responses from a traditional projective perspective (i.e., representing an unconscious conflict). Similarly, the kinetic family drawing (KFD) can be an effective way to assess a child's perceptions of his or her family (McConaughy, 2005). In fact, it is standard to administer the KFD to 6- to 11-year-old children as part of the Semistructured Clinical Interview for Children and Adolescents (McConaughy & Achenbach, 1994), and to follow up with questions about what they perceive to be their family members' thoughts, feelings, and actions in the picture.

If and when projective techniques *are* used with children and adolescents, however, they (like any other assessment technique) should never be used in isolation. Rather, they should be used as only one component of a comprehensive, multi-dimensional, multi-method assessment (Meyer et al., 2001). Further, projective techniques should never be used as the primary data source in the assessment of children's social-emotional-behavioral functioning (Prout & Ferber, 1988) or to make diagnostic or classification decisions. Projective techniques also should be used to *generate* hypotheses – not to *confirm* them (Knoff, 2003). Such hypotheses can then be supported, modified, or even discarded based on the results from other assessment procedures that possess greater validity.

It is also recommended that a very low level of inference be employed by school psychologists using such procedures, and that interpretations of student responses be conducted from a cognitive-behavioral framework rather than a psychodynamic one. Although projective techniques have traditionally been interpreted from a psychodynamic or psychoanalytic orientation, the techniques themselves are essentially atheoretical (Prout & Ferber, 1988). Knoff (2003), for example, suggested that three other theoretical frameworks can potentially be useful in the interpretation of projective drawings, including cognitive-developmental, behavioral, and cognitive-behavioral orientations. In particular, a cognitive-behavioral framework was identified as being potentially useful in the context of projective assessment under certain circumstances.

Knoff (2003), Prout and Ferber (1988), and Stark (1990) provide excellent examples of how a cognitive-behavioral framework for the interpretation of a variety of projective techniques can be effectively used with children and youth under certain conditions. For example, Stark (1990) described how certain projective techniques may be useful with children who may be depressed but are resistant to directly revealing what they are thinking, or for children who for whatever reasons are verbally uncommunicative. He recommends that the content of the projective stimulus should be chosen based on the information that is of concern. For example, if the assessor is concerned about the child's thoughts in social situations, the assessor might choose a card from an apperception test (e.g., Roberts Apperception Test for Children), or a picture from a book, magazine, or cartoon, that would most likely elicit a useful response. The stimulus would then be used as a springboard for questions about

what the figures in the picture might be thinking and/or feeling. Further probing can then be conducted to gain a better understanding of what the child believes is happening in the picture, what happened before, what will happen next, as well as anything else that might help clarify the child's thoughts in such situations (Stark, 1990). Pictures are not the only techniques that can be used in these situations; others such as incomplete sentences, play, and figure drawings may be useful as well. In each case, however, "the child's responses are directly interpreted as being a reflection of his or her own thinking" and "there is no attempt…to interpret symbols as representative of underlying processes" (Stark, 1990, p. 119).

CONCLUSION

In summary, despite the wide use of projective techniques by school psychologists with children and adolescents, the continued use of these techniques would appear inconsistent with best practices in school psychology assessment. Although some unique circumstances in which projective techniques might be useful were identified (e.g., establishing rapport; generating hypotheses), at the present time projective techniques for children and adolescents have not demonstrated a substantial degree of either incremental validity or treatment validity, and there appears to be substantial problems associated with clinical experience and professional judgment in their interpretation. As such, these techniques will generally not be useful for identifying (a) significant variables that are causing, supporting, or maintaining the problem; or (b) interventions that will effectively and efficiently resolve the problem or the variables causing or maintaining it (Knoff, 2003). School psychologists who continue to use projective techniques with children and adolescents are therefore encouraged to do so sparingly and cautiously, and to be cognizant of their strengths and limitations.

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