Analogue Assessment of Child Behavior Problems

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The psychometric properties of analogue assessment measures of child behavior problems are reviewed. Analogue assessment refers to an observational measure of targeted behaviors that are elicited by simulated experimental conditions, which, in turn, are devised to approximate natural circumstances. For the most part, this assessment approach has been used sporadically in the clinical setting with children who are behaviorally disturbed. Lack of standardization of measures and inconsistent findings of ecological validity are among several concerns noted. The paucity of available data limits conclusions that can be drawn at this time about the role of analogue assessment in the evaluation and treatment of child behavior problems.

Analogue assessment methodology has been applied to the evaluation of child behavioral disturbances by clinical researchers since the 1960s (Barkley, 1991; Barrios, Hartmann, & Shigetomi, 1981). Analogue assessment is defined here as an observational measure of the child behavior(s) of interest elicited through the use of simulated conditions that take place in a laboratory or clinic. These simulated conditions are typically created with the naturalistic setting in mind, such that the behaviors of interest occur under circumstances that are in some way reminiscent of home, community, or school conditions. Naturalistic observational measures of child behavior are viewed as separate from analogue assessment approaches; because the former do not involve experimental manipulation of environmental conditions to sample target behaviors, they are conducted within the child’s home, school, or community environments, and the issue of within-subject generalization of findings does not arise. Barkley (1991) defined analogue assessment as “direct, systematic behavioral observations made of child behavior in a clinic or laboratory setting, especially where efforts are made to have the setting approximate in some ways more natural situations, such as performance of school work or chore performance at home” (p. 150).

In the present article, we review the status of analogue assessment as applied to child behavior problems within the clinic or laboratory. Behavior problems of interest include children’s fears and anxieties, as well as broad diagnostic categories, such as attention deficit-hyperactivity disorder (ADHD; American Psychiatric Association, 1994). Although many studies incorporated role plays or other simulated devices as part of school-based or community programs, only studies that used analogue assessment in clinic or laboratory settings were included in the present article.

Furthermore, this article is limited to a focus on child behaviors or behavioral disorders that occur outside of parent–adult-child interactions and excludes severe behavior problems, such as self-injurious behavior, as well as the diagnostic child populations of mental retardation; learning, motor skills, and communication disorders; and pervasive developmental disorders. The intent of the present article is to review and critique research findings of the psychometric aspects of child analogue measures within these boundaries.

This article incorporates studies of children between the ages of 2 and 13 years, typically the cohort when reference to child behavioral problems is made. We decided to exclude adolescents, who are generally considered as representing a distinct developmental category different from children. Thus, the upper limit of age 13 or 6th-grade elementary school status appeared reasonable.

Because analogue methods for assessing child behavior problems were not used until the 1960s, the time period of the review was set accordingly. Studies meeting the above criteria that were published between 1960 and 1999 were identified using the WebSPIRS computer search engine of the PsycINFO, WorldCat, Education Abstracts, and ERIC databases. In the literature search we used key terms, such as role play, analogue, and behavior observation, and authors, such as Russell Barkley, Alan Bellack, Michel Hersen, Richard Milich, Thomas Ollendick, Donald Routh, and Vincent Van Hasselt. A representative sample of articles was identified and selected for inclusion.

The present review is organized as follows: First, problematic psychometric aspects of analogue assessment in this area are identified, namely the lack of standardization of measures and questionable incremental usage. Next, findings on the reliability of child analogue assessment measures are examined. After this, validity of analogue assessment of child behavior problems is reviewed. A summary of studies that used analogue measures is provided in Table 1.

Standardization of Child Analogue Assessment Measures

One of the major difficulties in evaluating the usefulness of child analogue assessment is the lack of standardization demonstrated for the vast majority of measures. One of the best examples illustrating this dilemma is seen in the repeated use of the behavioral avoidance tests (BATs) in studies of child anxiety and phobias. BATs involve simulated situations in which an individual’s re-