

Entry for *Encyclopedia of Standardized Testing* (Reynolds, Kamphaus, & DiStefano: Oxford University Press)

[Adjustment Scales for Children and Adolescents (ASCA)]

Adjustment Scales for Children and Adolescents (ASCA; McDermott, Marston, & Stott, 1993) is a teacher-report behavior-rating instrument designed for use with all noninstitutionalized youths ages 5 through 17 (grades K through 12). It was created as a major revision of the Bristol Social Adjustment Guides (BSAG, Stott, 1966; Stott, Marston, & Neill, 1975), which had both British and Canadian (Ontario) norms. ASCA was based on psychologists' preferences for objective definitions of child and adolescent psychopathology and offers advantages of unobtrusive observations. The method for assessing psychopathology with the BSAG and the ASCA is unique among behavior rating scales in that teachers are not asked to provide ratings or estimates about how often they perceived a specific behavior to occur (i.e., Never, Sometimes, Often, Very Often) or how severe they perceived a specific behavior to be. Rather, teachers are presented with descriptions of behavioral contexts and a list of representative behaviors within each context and are asked to select the behaviors that reflect the target child's typical responses or behaviors in that context. Psychopathology is then uniquely defined by multi-situational expression of problem behaviors that constitute specific syndromes.

The ASCA consists of 156 behavioral descriptions within 29 specific school situations where teachers may observe students' behaviors. Of the 156 items, 97 reflect problem behaviors associated with psychopathology and based on factor analyses of standardization data, singularly assigned to one of six core syndromes (Attention-Deficit/Hyperactive [ADH], Solitary Aggressive-Provocative [SAP], Solitary Aggressive-Impulsive [SAI], Oppositional Defiant [OPD], Diffident [DIF], and Avoidant [AVO]) or two supplementary syndromes (Delinquent [DEL] and Lethargic/Hypoactive [LEH]). The six core syndromes are combined to form two composite indexes: Overactivity (ADH, SAP, SAI, and OPD syndromes) and Underactivity (DIF and AVO syndromes). Twenty-six ASCA items describe positive behaviors and were observed in more than 50% of the standardization sample so teachers are not presented with only problem behaviors.

The ASCA rating form is to be completed by the student's classroom teacher after they have observed the student a minimum of 40 school days in order to have sufficient opportunities to observe the child or adolescent in multiple school contexts. Completion of the ASCA rating form takes approximately 10-20 minutes and instructions are clearly presented. The ASCA consists of a male form and a female form where only the gender referents differ. Once completed, ASCA should be scored and interpreted by a psychologist or other assessment specialist with appropriate training. Scoring involves examining the self-scoring rating form and summing the distinct symbols highlighted by teacher marks reflecting the unique syndrome to produce the total syndrome raw score. Raw scores are then converted to *T* scores and percentiles using the table in the ASCA manual. Like other behavior rating scales of psychopathology, ASCA score distributions are positively skewed.

Standardization

ASCA was standardized on a random and demographically representative United States national sample ($N = 1400$) of 5-17 year olds with the sample stratified across key demographic variables of sex, race/ethnicity, social class, family structure, community size, geographic region, disability and giftedness. The only children not included were those institutionalized and not participating in traditional school environments. ASCA was co-normed with the Differential

Ability Scales (Elliot, 1990) for 1,260 students and with the Learning Behaviors Scale (LBS; McDermott, Green, Francis, & Stott, 1999) for 1,252 students. ASCA standardization data were collected by The Psychological Corporation. Such co-norming allows for multivariate examination of child difficulties across domains of cognitive abilities, academic achievement, learning behaviors, and child psychopathology. This information is extensively used in the syndromic profile interpretation method.

Interpretation

McDermott (1993, 1994) presented three methods of interpretation for the ASCA: Cut-Score, Syndromic Profile, and Discriminant Classification interpretation. The Cut-Score approach is the typical method of psychopathology scale interpretation and is a univariate approach where T scores indicate the individual to be “Adjusted” ($T < 60$), “At-Risk” ($T = 60$ to 66), or “Maladjusted” ($T > 66$). These are applied to the six core syndromes, two supplementary syndromes when appropriate, and to the two overall global adjustment scales. The Syndromic Profile method of interpretation is based on simultaneously comparing the individual’s six core syndrome T scores to 22 different core syndrome profiles identified in cluster analysis of the ASCA standardization sample (McDermott & Weiss, 1995). This is done through the use of generalized distance scores (GDS) and the profile that produces the smallest GDS is the profile most similar to that of the individual student. Each profile is accompanied by descriptors of characteristics of the individuals representing the specific cluster along dimensions of demographics, cognitive abilities, academic achievement, learning behaviors, and child psychopathology. Discriminant Classification is a method where the individual’s six core syndromes are entered into a discriminant classification regression formula representing normal children and a discriminant classification regression formula representing children previously classified as socially/emotionally disturbed (McDermott et al. 1995). The formula producing the highest score is the group the individual child is classified as statistically likely to belong. The ASCA Manual presents detailed instructions and rationale for the application of each of these methods as well as appropriate limitations and cautions.

Psychometric Investigations

Extensive evidence for ASCA score reliability and validity is presented in the ASCA manual (McDermott, 1994) and in independent studies in the extent literature. Internal consistency estimates (Canivez, 2004, 2006a, 2006b; Canivez & Bohan, 2006; McDermott, 1993, 1994), short-term stability estimates (Canivez, Perry, & Weller, 2001; McDermott, 1993, 1994), and interrater agreement estimates (Canivez & Watkins, 2002; Canivez, Watkins, & Schaefer, 2002; McDermott, 1993, 1994; Schaefer, Watkins, & Canivez, 2001; Watkins & Canivez, 1997) have supported various types of reliability for ASCA scores. Due to ASCA items being scored on a two-point continuum (Present/Absent), variability within syndromes is considerably less than rating scales on a four-point scale and internal consistency estimates reported in the above studies are somewhat lower than other behavior rating scales assessing psychopathology.

Evidence of convergent validity (Canivez & Bordenkircher, 2002; Canivez & Rains, 2002; McDermott, 1993, 1994), divergent validity (Canivez & Bordenkircher, 2002; Canivez, Neitzel, & Martin, 2005; Canivez & Rains, 2002; McDermott, 1993, 1994), discriminative/discriminant validity (Canivez & Sprouls, 2005; McDermott, 1993, 1994; McDermott et al., 1995), and factorial validity and factorial validity generalization (Canivez, 2004, 2006a, 2006b; Canivez & Beran, 2009; Canivez & Bohan, 2006; Canivez & Sprouls, 2010; McDermott, 1993, 1994) of ASCA scores have also been reported. Results from factor analyses referenced above consistently find ASCA OVR and UNR scales to be independent with near zero factor

correlations and correlations between core syndromes are lower than for other behavior rating scales assessing psychopathology which is an advantage for interpreting core syndromes beyond the global scales they also represent. In general, psychometric characteristics of the ASCA are acceptable and meet standards for both group and individual decision-making (Canivez, 2001; Hills, 1981; Salvia & Ysseldyke, 1995).

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