

THE FOURTEENTH MENTAL MEASUREMENTS YEARBOOK

BARBARA S. PLAKE and JAMES C. IMPARA

Editors

LINDA L. MURPHY

Managing Editor

The Buros Institute of Mental Measurements
The University of Nebraska-Lincoln
Lincoln, Nebraska

2001

Distributed by The University of Nebraska Press

[6] Adjustment Scales for Children and Adolescents

items on each subscale may limit the sensitivity of the instrument to detect change.

For the parent form an item-level discriminant function analysis was conducted to evaluate each item's ability to differentiate ADHD diagnosed children from nondiagnosed children. No information was presented to evaluate the results of this analysis. A series of univariate tests demonstrated statistically significant group mean differences between 256 children with an attention disorder diagnosis and 221 controls on all five subscales. A more appropriate multivariate technique such as MANOVA with follow-up testing would provide more information regarding the nature of group differences.

SUMMARY. The ACTeRS is easy to administer, score, and interpret. This reviewer encourages additional reliability and validity studies using the Teacher and Parent forms before using these instruments for diagnostic purposes or for monitoring the effects of treatment. Details concerning the development of the Self-report form needs to be included.

REVIEWER'S REFERENCE

Andrich, D. (1978). A binominal latent trait model for the study of Likert-type attitude questionnaires. *British Journal of Mathematical and Statistical Psychology*, 31, 84-98.

[6]

Adjustment Scales for Children and Adolescents.

Purpose: "Designed to assess through teacher observation behavior pathology in youths."

Population: Ages 5-17.

Publication Dates: 1993-1994.

Acronym: ASCA.

Scores, 10: Overactivity, Underactivity, Attention-Deficit Hyperactive, Solitary Aggressive-Provocative, Solitary Aggressive-Impulsive, Oppositional Defiant, Diffident, Avoidant, Delinquent, Lethargic-Hypoactive.

Administration: Individual.

Price Data, 1995: \$74.95 per complete kit including 25 male and 25 female self-scoring forms and profiles and manual ('94, 68 pages); \$20.56 per 25 self-scoring forms and profiles (specify male or female); \$34.95 per manual.

Time: (10-20) minutes.

Comments: Behavior checklist to be completed by a teacher about a student; scored by a psychologist or assessment specialist.

Authors: Paul A. McDermott, Neville C. Marston, and Denis H. Stott.

Publisher: Ed & Psych Associates.

Cross References: See T5-69 (1 reference)

Review of the Adjustment Scales for Children and Adolescents by GARY L. CANIVEZ, Associate Professor of Psychology, Eastern Illinois University, Charleston, IL:

The Adjustment Scales for Children and Adolescents (ASCA) is an objective behavior rating instrument completed by the student's classroom teacher and designed for use with all noninstitutionalized youths ages 5 through 17 (Grades K-12). The ASCA was based on psychologists' preferences for objective definitions of youth psychopathology and advantages of unobtrusive observations. In contrast to instruments that require teachers to estimate the general frequency or severity of problem behaviors and infer pathology from those ratings, the ASCA uniquely assesses psychopathology based on problem behaviors that occur in multiple situations within the school environment and in general norms (McDermott, 1994). In addition to the core and supplemental syndromes, the ASCA provides two global (broad band) or overall adjustment scales (Overactivity and Underactivity), which correspond to the second order factors that emerged. These global scales are similar to the externalizing (conduct problem) and internalizing (withdrawal) dimensions frequently found in the literature on childhood psychopathology (Quay, 1986) and the majority of child psychopathology measures.

The ASCA has excellent normative characteristics. It was standardized on 1,400 (700 male, 700 female) noninstitutionalized children ages 5 through 17 (Grades K-12) and very closely matches the United States Census estimates for race/ethnicity, parent education (primary social class index), national region, and community size as well as U.S. Department of Education estimates for various disabilities and giftedness. Standardization data were collected by The Psychological Corporation and the ASCA was conormed with the Differential Abilities Scales (DAS; Elliot, 1990) for 1,260 youths. The ASCA sample ranged from 55 to 145 on the DAS, and the means and standard deviations for all intellectual and achievement areas closely approximated 100 and 15, respectively (McDermott, 1993, 1994).

Reliability estimates are generally acceptable and typical of better measures of child and adolescent psychopathology. Internal consistency estimates for the total standardization sample ranged from .67 to .86 for the six core syndromes and two

supplementary syndromes and equaled .92 for the Overactivity scale and .82 for the Underactivity scale. Test-retest reliabilities over a 30-school-day interval ($n = 40$) ranged from .66 to .91 for the six core syndromes and two supplemental syndromes and equaled .75 for the Overactivity scale and .79 for the Underactivity scale. Interobserver reliabilities ($n = 22$) ranged from .65 to .85 for the six core syndromes and two supplemental syndromes and equaled .75 for the Overactivity scale and .79 for the Underactivity scale. Mean differences across time and between the two observers for the six core syndromes and two global adjustment scales were not significant and indicated consistent levels of stability and agreement.

Initial validity studies summarized in the ASCA manual and published elsewhere (McDermott, 1993; McDermott et al., 1995) provide broad support of the first and second order factor structure, convergent and divergent validity, and discriminant validity. Studies examining convergent and divergent validity of the ASCA with the Conners' Teacher Rating Scale (CTRS; Trites, Blouin, & Laprade, 1982) and the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983) showed significant positive correlations among similar dimensions and low, nonsignificant correlations among dissimilar dimensions. Correlations between the ASCA and the DAS, although statistically significant because of the large sample size, were low, accounting for no more than 5% shared variance for any cognitive or academic variable, also supporting the ASCA's divergent validity (McDermott, 1994, 1995). Additional research has indicated the ASCA is excellent in discriminating students classified as socially or emotionally disturbed (SED) from normal, learning disabled, speech/language disabled, and gifted youths (McDermott, 1993, 1994; McDermott et al., 1995).

The ASCA rating form is completed by the student's teacher after having observed the student for a minimum of 40 school days to provide adequate opportunity to view the student in multiple situations. The ASCA takes about 10 to 20 minutes to complete and the directions are clearly presented. Although there are male and female versions of the ASCA rating form, each rating form is identical in content with the exception of gender referents. According to McDermott (1994) the ASCA should be scored by a psychologist or other assessment specialist. The scoring key for

the ASCA self-scoring rating form is printed on the reverse side of the back page and the examiner need only unfold the form to expose the key. This allows the examiner to score the six core syndromes, two supplementary syndromes, and two overall adjustment scales by observing which distinct symbols are marked/shaded and summing like symbols. Syndrome raw scores are transferred to the back page of the ASCA rating form allowing the examiner to plot a profile and record *T* scores and percentiles, which are easily obtained from the Appendix of the ASCA manual. *T* scores were reportedly "normalized" to equate the core, supplemental, and global syndromes so identical *T* scores indicate equal rarity (percentiles) (McDermott, 1994). ASCA score distributions are positively skewed, a common feature of scales assessing psychopathology (McDermott, 1993; Kamphaus & Frick, 1996). Extensive clinical use of the ASCA indicates that due to occasional subtle imperfections in the printing process, examiners should check the alignment of the rating form and scoring key to verify correct alignment to ensure scoring accuracy.

McDermott (1993, 1994) presents three methods of interpretation for the ASCA: Cut-Score, Syndromic Profile, and Discriminant Classification interpretation. The Cut-Score approach is a univariate approach; the Syndromic Profile and Discriminant Classification approaches are multivariate classification methods. The ASCA manual presents detailed instructions and rationale for the application of each of these methods as well as appropriate limitations and cautions. Additional guidance in interpretation integrating forthcoming validity studies should be incorporated in future editions of the ASCA manual.

Both the Syndromic Profile Interpretation and Discriminant Classification Interpretation methods are dependent on multiple mathematical calculations for accurate classification. In the case of Syndromic Profile Interpretation an examiner could compare the youth's profile to as many as 22 different profile types yielding 22 generalized distance scores (GDS) and the probability of calculation errors increases with each GDS produced. Examiners utilizing the ASCA should be extremely careful in their calculations to be sure results and classifications are accurate or utilize computerized methods now available (Canivez, 1998; Watkins, 1996).

An advantage of the ASCA's large, representative national sample is that it allows for estimation of prevalence or base rates of various problem behaviors and psychopathologies and investigation of demographic variability with respect to differential prevalence in the population. Such studies are now available for the ASCA (McDermott, 1996; McDermott & Schaefer, 1996; McDermott & Spencer, 1997) and are useful for interpreting results.

SUMMARY. The ASCA is a new, nationally normed objective behavior rating scale completed by a student's classroom teacher. Nearly all behaviors presented are directly observable by a teacher; however, some are unlikely to be observed by teachers and would likely be dependent on reports from others (viz., delinquent activities outside of school). Reliability data presented in the ASCA manual are generally acceptable and initial validity studies provide support for the ASCA. Due to the dichotomous nature of ASCA items, internal consistency estimates may be somewhat lower than instruments that require raters to estimate frequency or intensity of behaviors (items) on a 3–5-point continuum. Additional independent investigations utilizing larger samples are needed to verify and extend the preliminary psychometric data reported in the ASCA manual. Although Native American and Asian American students were included proportionally in the standardization sample, little is presently known about the psychometric characteristics of the ASCA with these specific groups and should be the focus of future research. Future validity studies will help to determine whether the factor structure and syndrome types for large representative samples of these students are consistent with those obtained with the standardization sample. The large nationally representative standardization sample, multisituational assessment, and multivariate test interpretations through syndromic profile and discriminant classification analyses are noteworthy strengths of the ASCA. As the ASCA is a teacher report behavior rating scale it should not be, nor is it intended to be, the only method used in assessing child psychopathology, as other sources of information about other environments where the child interacts are also important. This reviewer's appraisal of the ASCA based on clinical use is very positive. It is easy to administer, score, and interpret, and provides relevant data. Teachers reported having en-

joyed being able to endorse positive behaviors and not just rating negative or problematic behaviors. Teachers also reported that completion of the ASCA rating form was easy, demanded minimal amounts of time, and did not require them to estimate "how much or how often" behaviors were demonstrated. Most importantly, teachers found ASCA results relevant to child behaviors and situations they encounter in school environments. Cut score and syndromic profile interpretation descriptions in clinical cases resulted in both teachers and parents positively endorsing the accuracy of the ASCA (social validity). If future psychometric research is as positive as that presently conducted, the ASCA should become one of the most popular and cost effective behavior rating instruments available.

REVIEWER'S REFERENCES

- Stott, D. H. (1966). *The social adjustment of children*. London: University of London Press.
- Stott, D. H., Marston, N. C., & Neill, S. J. (1975). *Taxonomy of behaviour disturbance*. London: University of London Press.
- Trites, R. L., Blouin, A. G. A., & Laprade, K. (1982). Factor analysis of the Conners Teacher Rating Scale based on a large normative sample. *Journal of Consulting and Clinical Psychology*, 50, 615–623.
- Achenbach, T. M., & Edelbrock, C. (1983). *Manual for the Child Behavior Checklist and Revised Child Behavior Profile*. Burlington, VT: University of Vermont.
- Quay, H. C. (1986). Classification. In H. C. Quay & J. S. Werry (Eds.), *Psychopathological disorders of childhood* (3rd ed., pp. 1–34). New York: Wiley.
- Elliot, C. D. (1990). *Differential Ability Scales: Introductory and technical handbook*. San Antonio: Psychological Corporation.
- McDermott, P. A. (1993). National standardization of uniform multisituational measures of child and adolescent behavior pathology. *Psychological Assessment*, 5, 413–424.
- McDermott, P. A. (1994). *National profiles in youth psychopathology: Manual of Adjustment Scales for Children and Adolescents*. Philadelphia, PA: Edumetric and Clinical Science.
- McDermott, P. A. (1995). Sex, race, class, and other demographics as explanations for children's ability and adjustment: A national appraisal. *Journal of School Psychology*, 33, 75–91.
- McDermott, P. A., Watkins, M. W., Sichel, A. F., Weber, E. M., Keenan, J. T., Holland, A. M., & Leigh, N. M. (1995). The accuracy of new national scales for detecting emotional disturbance in children and adolescents. *Journal of Special Education*, 29, 337–354.
- McDermott, P. A., & Weiss, R. V. (1995). A normative typology of healthy, subclinical, and clinical behavior styles among American children and adolescents. *Psychological Assessment*, 7, 162–170.
- Kamphaus, R. W., & Frick, P. J. (1996). *Clinical assessment of child and adolescent personality and behavior*. Boston, MA: Allyn and Bacon.
- McDermott, P. A. (1996). A nationwide study of developmental and gender prevalence for psychopathology in childhood and adolescence. *Journal of Abnormal Child Psychology*, 24, 53–66.
- McDermott, P. A., & Schaefer, B. A. (1996). A demographic survey of rare and common behaviors among American students. *Journal of Clinical Child Psychology*, 25, 352–362.
- Watkins, M. W. (1996). *ASCA Calculator* (Computer Software). State College, PA: Author.
- McDermott, P. A., & Spencer, M. B. (1997). Racial and social class prevalence of psychopathology among school-age youth in the United States. *Youth and Society*, 28, 387–414.
- Canivez, G. L. (1998). Automated syndromic profile and discriminant classification analyses for the Adjustment Scales for Children and Adolescents (ASCA). *Behavior Research Methods, Instruments, and Computers*, 30, 732–734.

Review of the Adjustment Scales for Children and Adolescents by **RICHARD V. SCHOWENGERDT**, Assistant Professor of Psychology and Counseling, Pittsburg State University, Pittsburg, KS, and School Psychologist, Olathe, KS: