

ASCA Bibliography & Abstracts

Canivez, G. L. (1998). Automated syndromic profile and discriminant classification analyses for the Adjustment Scales for Children and Adolescents. *Behavior Research Methods, Instruments, & Computers*, 30, 732-743.

Abstract: A Microsoft Excel spreadsheet template to automatically calculate generalized distance scores for each syndromic profile type and discriminant function regression formulae for the Adjustment Scales for Children and Adolescents is described. Normalized *T* scores from the 6 core syndromes are entered in the spreadsheet for further analyses. This guards against miscalculation and subsequent misclassification of a youth's profile.

Canivez, G. L. (2000). *Stability of regular education teacher ratings of normal and exceptional students on the Adjustment Scales for Children and Adolescents (ASCA)*. (ERIC Document Reproduction Service No. TM030644).

Abstract: Independent investigation of the short-term (45 day) stability of the Adjustment Scales for Children and Adolescents is reported. Significant test-retest reliability coefficients were obtained and mean differences from test to retest did not exceed .5 raw score points. Only two scales (Solitary Aggressive-Impulsive & Lethargic/Hypoactive) showed significant changes across the retest intervals for *T* scores. Individual variation for some scales, however, was at times quite extreme. Syndromic profile classifications and discriminant classifications were also significantly consistent across the retest interval.

Canivez, G. L. (2001). Review of the Adjustment Scales for Children and Adolescents. In J. Impara and B. Plake (Eds.), *The Fourteenth Mental Measurements Yearbook* (pp. 22-24). Lincoln, NE: Buros Institute of Mental Measurements, University of Nebraska.

Canivez, G. L. (2004). Replication of the Adjustment Scales for Children and Adolescents core syndrome factor structure. *Psychology in the Schools*, 41, 191-199.

Abstract: Independent examination and replication of the core syndrome factor structure of the Adjustment Scales for Children and Adolescents (ASCA; McDermott, Marston, & Stott, 1993) is reported. A sample of 1020 children were randomly selected from their classroom and rated on the ASCA by their teacher. The six ASCA core syndromes produced a two-factor solution through principle axis analysis using multiple criteria for the number of factors to extract and retain. Varimax, direct oblimin and promax, rotations produced identical results and nearly identical factor structure coefficients. It was concluded that the ASCA indeed measures two independent dimensions of psychopathology (Overactivity and Underactivity) that are similar to the conduct problems/externalizing and withdrawal/internalizing dimensions commonly found in the child psychopathology assessment literature (Cicchetti & Toth, 1991; Quay, 1986).

Canivez, G. L. (2006). Adjustment Scales for Children and Adolescents and Native American Indians: Factorial validity generalization with Ojibwe youths. *Psychology in the Schools, 43*, 685-694.

Abstract: Adolescents (ASCA; P.A. McDermott, N.C. Marston, & D.H. Stott, 1993) is reported for a sample of 183 Native American Indian (Ojibwe) children and adolescents from North Central Minnesota. The six ASCA core syndromes produced an identical two-factor solution as the standardization data through principal axis analysis using multiple criteria for the number of factors to extract and retain. Varimax, direct oblimin, and promax rotations produced identical results and nearly identical factor-structure coefficients. Coefficients of congruence resulted in an excellent match to the factorial results of the ASCA standardization sample and a large, independent sample. It was concluded that for these Ojibwe students, the ASCA measures two independent dimensions of psychopathology (i.e., Overactivity and Underactivity) that are similar to the conduct problems/externalizing and withdrawal/internalizing dimensions commonly found in the child psychopathology assessment literature.

Canivez, G. L., & Beran, T. N. (2009). Adjustment Scales for Children and Adolescents: Factorial validity in a Canadian sample. *Canadian Journal of School Psychology, 24*, 284-302.

Abstract: The core syndrome factor structure of the Adjustment Scales for Children and Adolescents (ASCA; McDermott, Marston, & Stott, 1993) was examined with a sample of 375 randomly selected Canadian youths in a large western city. The six ASCA core syndrome raw scores produced an identical two-factor solution as observed in samples of American youths (Canivez, 2004; Canivez, 2006a, 2006b; Canivez & Bohan, 2006; Canivez & Sprouls, 2007; McDermott, 1993, 1994). Principal axis exploratory factor analysis with varimax and promax rotations produced similar factor structure coefficients. It was concluded that the ASCA measures two independent dimensions of youth psychopathology (Overactivity and Underactivity); similar to the conduct problems/externalizing and withdrawal/internalizing dimensions commonly found in the child psychopathology assessment literature (Cicchetti & Toth, 1991; Kamphaus & Frick, 2005; Merrell, 2003; Quay, 1986).

Canivez, G. L., & Bohan, G. L. (2006). Adjustment Scales for Children and Adolescents and Native American Indians: Factorial validity generalization with Yavapai Apache youths. *Journal of Psychoeducational Assessment, 24*, 329-341.

Abstract: The present study reports on the replication of the core syndrome factor structure of the Adjustment Scales for Children and Adolescents (ASCA) for a sample of 229 Native American Indian (Yavapai Apache) children and adolescents from rural north-central Arizona. The six ASCA core syndromes produced the identical two-factor solution as the standardization sample, an independent sample, and a sample of Native American Indians (Ojibwe) from north-central Minnesota. Principal-axis analysis using multiple criteria for the number of factors to extract and retain was used with varimax, direct oblimin, and promax rotations producing identical results and nearly identical factor structure coefficients. As with earlier studies, it was concluded that the ASCA measures two independent global dimensions of youth psychopathology (Overactivity and Underactivity) that are similar to the conduct problems/externalizing and withdrawal/internalizing dimensions commonly found in the child psychopathology assessment literature.

Canivez, G. L., & Bordenkircher, S. E. (2002). Convergent and divergent validity of the Adjustment Scales for Children and Adolescents for Children and the Preschool and Kindergarten Behavior Scales. *Journal of Psychoeducational Assessment, 20*, 30-45.

Abstract: Convergent and divergent (construct) validity of the Adjustment Scales for Children and Adolescents (ASCA) and the Preschool and Kindergarten Behavior Scales (PKBS) is reported. With a random sample of 154 five- and six-year old children rated by 16 classroom teachers in a Midwestern state, convergent evidence of construct validity was provided for the PKBS Externalizing Problems scale and the ASCA Overactivity syndrome. Divergent evidence of construct validity was provided for the PKBS Externalizing Problems scale and ASCA Underactivity syndrome. Convergent and divergent evidence of construct validity for the PKBS Internalizing Problems scale and ASCA Overactivity and Underactivity syndromes was mixed. Specific scale comparisons found the ASCA to result in significantly higher mean ratings than the PKBS in 9 of 10 specific comparisons and the effect sizes (η^2) were moderate to large.

Canivez, G. L., Neitzel, R., & Martin, B. E. (2005). Construct Validity of the Kaufman Brief Intelligence Test, Wechsler Intelligence Scale for Children-Third Edition, and Adjustment Scales for Children and Adolescents. *Journal of Psychoeducational Assessment, 23*, 15-34.

Abstract: The present study reports data supporting the construct validity of the Kaufman Brief Intelligence Test (K-BIT; Kaufman & Kaufman, 1990), Wechsler Intelligence Scale for Children-Third Edition (WISC-III; Wechsler, 1991), and the Adjustment Scales for Children and Adolescents (ASCA; McDermott, Marston, & Stott, 1993) through convergent and discriminant comparisons in a sample of 207 students receiving special education evaluations. Results were as hypothesized with high and statistically significant correlations between the K-BIT and WISC-III supporting convergent validity. Moderate and statistically significant correlations were obtained between the two intelligence measures (K-BIT and WISC-III) and measures of academic achievement (WIAT, WIAT-II, WJ-R ACH, or WJ-3 ACH) at levels typical of ability-achievement correlations. Correlations between the two intelligence measures (K-BIT and WISC-III) and the ASCA, a measure of child psychopathology, were low to near zero, supporting discriminant validity. Further discriminant evidence of construct validity was provided by the low to near zero correlations between the ASCA and the measures of academic achievement.

Canivez, G. L., Perry, A. R., & Weller, E. M. (2001). Stability of the Adjustment Scales for Children and Adolescents. *Psychology in the Schools, 38*, 217-227.

Abstract: Investigation of the short-term (90-day) stability of the Adjustment Scales for Children and Adolescents is reported for 124 randomly selected children ranging from kindergarten to grade 12. Significant test-retest stability coefficients were obtained and mean differences across the retest interval did not exceed .8 raw score points. The Solitary Aggressive-Impulsive, Diffident, and Lethargic/Hypoactive syndromes and the global Underactivity scale showed significant raw score and *T* score changes across the retest interval but the effect strengths were small. Syndromic Profile Classifications and Discriminant Classifications were also significantly consistent across the retest interval. Results were similar to those obtained in other stability studies of teacher report behavior rating scales.

Canivez, G. L., & Rains, J. D. (2002). Construct validity of the Adjustment Scales for Children and Adolescents and the Preschool and Kindergarten Behavior Scales: Convergent and divergent evidence. *Psychology in the Schools, 39*, 621-633.

Abstract: Construct validity (convergent and divergent) of the Adjustment Scales for Children and Adolescents (ASCA; McDermott, Marston, & Stott, 1993) and the Preschool and Kindergarten Behavior Scales (PKBS; Merrell, 1994a) is presented. Regular classroom teachers ($n = 38$) randomly selected five- and six-year old children ($N = 123$) and rated them on the ASCA and PKBS in counterbalanced order. Convergent evidence of construct validity was observed for the PKBS Externalizing Problems scale and the ASCA Overactivity syndrome. Divergent evidence of construct validity was provided for the PKBS Externalizing Problems scale and ASCA Underactivity syndrome. Convergent and divergent evidence of construct validity for the PKBS Internalizing Problems scale and ASCA Overactivity and Underactivity syndromes was mixed. Results were identical to those of Canivez and Bordenkircher (2002).

Canivez, G. L., & Sprouls, K. (2005). Assessing the Construct Validity of the Adjustment Scales for Children and Adolescents. *Journal of Psychoeducational Assessment, 23*, 3-14.

Abstract: This study examined the construct validity of the Adjustment Scales for Children and Adolescents (ASCA; McDermott, Marston, & Stott, 1993). Distinct group differences and discriminative validity (Youngstrom, Findling, Danielson, & Calabrese, 2001) were examined with a sample of 106 students ranging from grade 1 through 6 (53 met the DSM-IV/DISC-IV criteria for ADHD and 53 were members of a randomly selected and matched control group). Statistically significant group differences were observed with large effect sizes. Further, the ASCA demonstrated near perfect discrimination of the two groups and all diagnostic efficiency statistics were highly supportive in differentiating students meeting DISC-IV/DSM-IV criteria for ADHD from random and matched control group.

Canivez, G. L., & Sprouls, K. (2010). Adjustment Scales for Children and Adolescents: Factorial validity generalization with Hispanic/Latino youths. *Journal of Psychoeducational Assessment, 28*, 209-221.

Abstract: Replication of the Adjustment Scales for Children and Adolescents (ASCA; McDermott, Marston, & Stott, 1993) core syndrome factor structure with a sample of 124 randomly selected Hispanic/Latino youths is reported. The six ASCA core syndromes produced the identical two-factor solution observed in other samples. Principal-axis exploratory factor analysis using multiple factor extraction criteria and varimax, direct oblimin, and promax rotations, produced nearly identical factor structure coefficients. Consistent with earlier studies, the ASCA was observed to measure two independent dimensions of youth psychopathology (Overactivity and Underactivity) that are similar to the conduct problems/externalizing and withdrawal/internalizing dimensions typically found in the child psychopathology assessment literature.

Canivez, G. L., & Watkins, M. W. (2002). Interrater agreement for syndromic profile classifications on the Adjustment Scales for Children and Adolescents. *Assessment for Effective Intervention, 28*, 39-46.

Abstract: Investigation of the interrater agreement on the Adjustment Scales for Children and Adolescents Syndromic Profile Classifications is reported. Teaching professionals ($N = 29$) who shared the same classroom for a minimum of one hour per day provided independent ratings of the same child on the ASCA. Results indicated that statistically significant interrater agreement was achieved across all 22 syndromic profile classification levels. However, good clinical significance was only obtained for the three and two level broad classifications while fair clinical significance was obtained for the five level broad classifications. Thus, there was adequate interrater agreement for ASCA classifications that reflected broad levels of adjustment and maladjustment but inadequate agreement for specific behavioral types of adjustment and maladjustment. Additional research with much larger sample sizes is needed to better investigate the agreement for the 22 syndrome profiles.

Canivez, G. L., Watkins, M. W., & Schaefer, B. A. (2002). Interrater agreement of Discriminant Classifications for the Adjustment Scales for Children and Adolescents. *Psychology in the Schools, 39*, 375-384..

Abstract: Investigation of interrater agreement for the Adjustment Scales for Children and Adolescents (ASCA) discriminant classifications is reported. Two teaching professionals or paraprofessionals working in the same classroom for a minimum of 1 hour per day provided independent ratings of the same child using the ASCA. A total of 119 students ranging in age from 7 to 18 years were independently rated on the ASCA. Results indicated significant and moderate to substantial interrater agreement for the discriminant classifications.

McDermott, P.A. (1993). National standardization of uniform multisituational measures of child and adolescent behavior pathology. *Psychological Assessment, 5*, 413-424.

Abstract: Presents the design, nationwide standardization, and validation of the Adjustment Scales for Children and Adolescents (ASCA), a device that bases psychopathology on pervasiveness of problem behavior across multiple situations. A norm sample of 1,400 5- through 17-year-old subjects was stratified according to the U.S. Census by age, gender, academic level, ethnicity, handicapping condition, national region, community size, and parent education. An additional 1,418 subjects comprised supplementary validity generalization samples and all subjects were evaluated by teachers using ASCA. Exploratory and confirmatory components analyses revealed 8 distinct and reliable syndromes, 6 of which are core syndromes found generalizable across age, gender, and ethnicity. They include Attention-Deficit Hyperactive, Solitary Aggressive (Provocative), Solitary Aggressive (Impulsive), Oppositional Defiant, Diffident, and Avoidant. Concurrent and discriminant validity were demonstrated for the core syndromes, and their use in practice and future research is discussed.

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.

Abstract: The study explores the extent to which important demographic characteristics (age, gender, ethnicity, social class, national region, community size, and their interactions) are able to account for variability in children's cognitive ability, academic achievement, and social adjustment. Using a representative national sample ($N = 1,200$) of 5- through 17-year-old subjects, ability constructs were assessed through the individually administered Differential Ability Scales (i.e., verbal, nonverbal, and spatial ability, and reading and numerical achievement). Adjustment constructs were assessed through teacher ratings via the Adjustment Scales for Children and Adolescents (i.e., attention-deficit hyperactive, solitary aggressive-provocative, solitary aggressive-impulsive, oppositional defiant, diffident, and avoidant). Partialled canonical redundancy and regression analyses revealed that 18.9% of ability variation (assuming control for chronological age and social adjustment) could be accounted for by demographics, particularly social class and ethnicity. Only 5.5% of the variability in adjustment (controlling for varied ability) related to demographic factors, mainly gender and age. Results are discussed in the context of recent trends to advocate the use of separate norms and comparative assessments for distinct demographic groups.

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.

Abstract: Psychopathology was assessed through standardized observations by teachers of 1,400 5-through 17-year-old youths comprising the national norm sample of the Adjustment Scales for Children and Adolescents. The sample was stratified according to the U.S. population by age, sex, ethnicity, parent education, family structure, national region, community size, and handicapping condition. The maladjusted portion of the sample for each of 6 specific syndromes was examined for departures from expected developmental and gender prevalence. Males outnumbered females for most types of maladjustment, including attention-deficit hyperactive, both provocative and impulsive forms of solitary aggressive, oppositional defiant, and avoidant disorders. Also revealed were general patterns of reduced behavior excess and increased avoidant behavior with advancing age.

McDermott, P. A., Goldberg, M. M., Watkins, M. W., Stanley, J. L., & Glutting, J. J. (2005). A nationwide epidemiologic modeling study of learning disabilities: Risk, protection, and unintended impact. *Journal of Learning Disabilities, 39*, 230-251.

Abstract: Through multiple logistic regression modeling, this article explores the relative importance of risk and protective factors associated with learning disabilities (LD). A representative national sample of 6- to 17-year-old students ($N = 1,268$) was drawn by random stratification and classified by the presence versus absence of LD in reading, spelling, and mathematics according to ability-achievement discrepancies or low achievement levels. The dichotomous classifications were regressed on sets of explanatory variables indicating potential biological, social-environmental, and cognitive factors, problem behavior, and classroom learning behavior. Modeling revealed patterns of high risk for male students and students evincing verbal and nonverbal ability problems and processing speed problems. It was shown that, absent controls for cognitive abilities (such as provided by the ability-achievement discrepancy definition), definitions keyed to low achievement will substantially overidentify ethnic minority and disadvantaged students and will be confounded by significantly higher proportions of students who display oppositional and aggressive behavior problems. Alternatively, good learning behaviors uniformly provide substantial reduction in the risk for LD.

McDermott, P. A., Marston, N. C., & Stott, D. H. (1993). *Adjustment Scales for Children and Adolescents*. Philadelphia, PA: Edumatic and Clinical Science.

McDermott, P. A., & Schaefer, B. A. (1996). A demographic survey of rare and common problem behaviors among American students. *Journal of Clinical Child Psychology*, 25, 352-362.

Abstract: Presents a nationwide survey of base rates for specific problem behaviors observed by classroom teachers of 1,400 youth between 5 and 17 years of age. Participants comprised the standardization cohort of the Adjustment Scales for Children and Adolescents (McDermott, 1994) stratified according to the U.S. Census. Base rates are analyzed for both rank-order precedence and percentage prevalence overall, and across youth developmental levels, sex, race/ethnicity, and social class. Also considered are distinctions between commonplace and rare behaviors and the contextual situations and surface syndromes with which behaviors are associated. Rank order correlations detected generally similar patterns of behavioral precedence across demographics. In contrast, logistic regression revealed numerous differences in prevalence of problem behaviors across developmental levels and student sex, with certain behaviors more likely to emerge in minority ethnic groups or among students from educationally disadvantaged families. Implications are considered for the construction of useful scales of youth problem behavior and in light of recent epidemiologic evidence and policy initiatives concerning the prevalence of child psychopathology.

McDermott, P. A., & Spencer, M. B. (1997). Racial and social class prevalence of psychopathology among school-age youth in the United States. *Youth & Society*, 28, 387-414.

Abstract: This article assesses the relative base rates of common forms of youth psychopathology among Whites, African Americans, Hispanics, and rarer minorities, and across social classes as defined by parent education levels. A nationwide sample of 1,400 subjects aged 5-17 years was stratified demographically according to the U.S. Census. Standardized teacher observational scales were applied and the most maladjusted youths identified in terms of attention-deficit hyperactive, provocative-aggressive, impulsive-aggressive, oppositional defiant, diffident, and avoidant disorders. Most psychopathology was distributed proportionately across race and class. Patterns displayed by maladjusted White participants were not uniformly common among minorities, with racial or ethnic groups manifesting variable propensity for pathology, depending on level of social advantage and specific type of disorder. Implications are explored as they relate to distinct cultural and social contexts, to popular contemporary perceptions, and to future research and policy development in youth psychopathology.

McDermott, P. A., Steinberg, C. M., & Angelo, L. E. (2005). Situational specificity makes the difference in assessment of youth behavioral disorders. *Psychology in the Schools*, 42, 121-136.

Abstract: In this article we examine the ability of contextual information to enhance assessment of behavior problems in schools. Capitalizing on the multisituational structure of the Adjustment Scales for Children and Adolescents, exploratory and confirmatory analyses with a representative national sample ($N=1,400$, ages 5–17 years) revealed three unique and reliable behavioral situtypes (problems in Peer Contexts, Academic Contexts, and Teacher Contexts). The situtypes were found internally consistent and structurally generalizable across age, sex, and ethnicity. Multiple logistic and discriminant analyses confirmed the ability of the situtypes to identify accurately those youth independently diagnosed as emotionally disturbed, as well as distinguish those diagnosed as learning disabled. Information gleaned from the situtypes was substantially better able than conventional psychopathology syndromes (attention-deficit hyperactivity, oppositional defiance, etc.) to forecast later academic achievement. Implication for informing motivation and intervention are discussed.

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 of children and adolescents. *Journal of Special Education, 29*, 337-354.

Abstract: A series of multiversity classification studies examines the sensitivity, specificity, and overall accuracy of the Adjustment Scales for Children and Adolescents (ASCA) in detecting emotional disturbance. The ASCA, a teacher rating scale normed on a stratified national sample of 5- through 17-year-old youths, was first applied for a sample of 150 normal and 150 socially or emotionally disturbed (SED) subjects matched for age, sex, race, and grade level. Discriminant analyses, including single- and split-sample crossvalidations, produced sensitivity, specificity, and overall accuracy ratings of approximately 80%, a level significantly above chance expectancy. The discriminant solution maintained similar accuracy when applied independently to preadolescent, adolescent, male, female, White, and African American children. Accuracy also sustained when the scale was used to differentiate the SED subjects from samples of learning disabled, communication impaired, gifted/talented, and a mixtures of 1,843 normals and 537 others with learning, mental, and physical handicaps. The scale's performance is evaluated in the light of classification accuracy research on other popular instruments.

McDermott, P. A., & Weiss, R. V. (1993). *Syndromic profile types for the Adjustment Scales for Children and Adolescents*. Philadelphia, PA: Edumetric and Clinical Science.

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.

Abstract: Develops an empirical typology of behavior styles that define distinct variations of healthy, marginal, at risk, and maladjusted behavior. Based on a stratified national sample ($N = 1,400$) of youths aged 5-17 years, multistage hierarchical cluster analyses with independent replications are applied to identify 22 distinct styles and severity across measures of behavior pathology. Initial behavioral measures are obtained through standardized teacher observations using the Adjustment Scales for Children and Adolescents. For each consequent behavior style, relative population prevalence is reported, as well as distinguishing demographic features and significant trends for intellectual functioning, academic achievement, concomitant risk and protective factors, and comorbidity. Results are compared to recent epidemiologic surveys and application of the typology is demonstrated for differential classification and hypothesis generation.

Schaefer, B. A., Watkins, M. W., & Canivez, G. L. (2001). Cross-context agreement of the Adjustment Scales for Children and Adolescents. *Journal of Psychoeducational Assessment, 19*, 123-136.

Abstract: Interobserver agreement of children's problem behavior was assessed using two samples of special education students ages 5 to 18 years. The first sample had observers from the same setting ($N = 71$); the second sample ($N = 182$) had observers from different settings with no concurrent observation. Regular and special education teachers and aides completed the Adjustment Scales for Children and Adolescents (ASCA; McDermott, Marston, & Stott, 1993). Inter- and intraclass correlations were generally significant for both samples, with some exceptions. Substantial interobserver agreement was found for the same-setting sample; however, agreement coefficients were lower for the different-setting sample and some level effects were noted. Overall, interobserver agreement for the ASCA was supported in common settings, but rating variability was evident across classrooms and appears indicative of contextual influences on behavior.

Watkins, M. W., & Canivez, G. L. (1997). Interrater agreement of the Adjustment Scales for Children and Adolescents among exceptional students. *Diagnostique*, 22, 205-213.

Abstract: Standardized behavior rating scales and checklists offer unobtrusive evaluations of students' behavior in natural social environments. The Adjustment Scales for Children and Adolescents (ASCA) is a new behavior rating scale for use in school settings. This study investigated the interrater agreement of the ASCA. Participants were 71 students enrolled in a variety of special programs who were rated by 29 observers in 24 classrooms. Resulting interrater reliability coefficients were substantial (median syndrome $r = .72$, median global scale $r = .84$) and level differences, although significant, were not meaningful (group means differed by less than .5 raw score points). It was concluded that the ASCA produced acceptable levels of interrater agreement when educational professionals and paraprofessionals observed exceptional students within a common environment.
