TEST REVIEW:
Reynolds Adolescent Depression Scale
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Title: Reynolds Adolescent Depression Scale

Acronym: RADS

Author: William M. Reynolds, Ph.D.

Publication Date: 1987

Publisher: Psychological Assessment Resources, Inc.

Publisher’s Address: P.O. Box 998, Odessa, Florida 33556

Price: $89.00 per RADS Introductory Kit (Includes Manual, 50 Hand-Scorable Answer Sheets, and Scoring Key).

Computer Scoring Software Available: Form HS was created to be hand-scored. However, machine scoring is available for Forms G and 1.

GENERAL INFORMATION

Primary Construct Assessed: Depressive symptoms associated with adolescence.

Test Purpose: The RADS was designed to assess depressive symptoms in adolescents, aged 13-18. Reynolds stressed that the purpose of this test was not to diagnose adolescents with a particular disorder but rather to assess the symptoms associated with depression (Reynolds, 1987).

Administration Type: The RADS was designed to be administered to an individual, small group or large group depending on the purposes. Form HS (hand-scored) is used for individuals or small groups for a case study. Form I (Machine-scored) is used for individuals or small groups for a case study. Form G (Machine-scored) is used for large group screening, research and program evaluation.


Time Required to Administer: 5-10 minutes.

Time Required to Score and Interpret: Easy to score in under 5 minutes. The RADS was developed to assess clinical depressive symptoms in adolescents. Interpretation of, the raw score might, lead to further evaluation.
Interpretive Scores Derived: Total score from the test is calculated by a simple sum of raw scores. Percentile rank scores that correspond to raw scores are provided in the manual.

Subtest Format. None.

Item/Scoring Format: Scores are derived from the 30 items on the RADS weighted from 1 to 4 (1= almost never, 2= hardly ever, 3 = sometimes, 4= most of the time). There is a total score range of 30 to 120. The author used a cutoff point of 77 to identify those students for further evaluation. A level of 77 or above on the RADS was determined to be the level of symptom endorsement associated with clinical depression (Reynolds, 1987, p. 6).

Qualifications of Examiners: PAR requires a qualification level of B. Level B means an examiner must have at least a B.A. in Psychology, Counseling, or a closely-related field, and relevant training or coursework in the interpretation of psychological tests and measurement at an accredited college or university; or verification of membership in a professional association recognized to require training and experience in the ethical and competent use of psychological tests; or licensed or certified by an agency that does the same.

PRACTICAL CONSIDERATIONS

Attractiveness of Test Materials: Reading materials are clear and in bold print. Introduced as "About Myself", this questionnaire provides an inviting atmosphere for the participant.

Durability of Test Materials: Since only one sheet is needed to administer the test all pertinent material is contained on this single form.

User- Friendly Format: The questionnaire is double-sided and very user-friendly.

Ease of Administration: Administration of RADS is an easy process. However, the manual gives clear instructions for teachers to administer the test.

Clarity of Administration and Scoring Procedures: Clear procedures and concise instructions are given to administer and score the RADS.

GENERAL ADMINISTRATION AND SCORING PROCEDURES

Administering the RADS Form HS, to either an individual or a small group will take approximately five to ten minutes. Students should not view this test as a depression questionnaire. To avoid mood induction, the BADS identifies the questionnaire at the top with the heading, 'About Myself'. Participants should be told that there are no right or wrong answers and the administration should take place in a private setting. There are a number of demographic items that the adolescent should complete. For confidentiality purposes, the BADS items are located on the reverse side of the
questionnaire (Reynolds, 1987). Hand scoring of Form HS is completed through the use of the scoring key. Scorers must be careful in using the scoring template since seven of the items are reverse-scored. Scores for each item range from one to four and reverse scores range from four to one. A simple sum of raw scores results in the total score. A score at or above 77 should result in further evaluation. As stated in a previous study by Evert and Reynolds (1986), a number of items on the BADS have been identified as critical items on the basis of their ability to discriminate between clinically depressed and non-depressed adolescents. Cases where four or more of these items are endorsed at a critical level should be viewed as serious regardless of the BADS total score. Mail-in services are available by the publisher for Form I and Form G administrations. Mail-in report Form I produces a 4-5 page report to develop an in-depth analysis of item responses. Mail-in report Form G for larger groups lists the adolescents with scores at the 95th percentile or above, scores at or above the cutoff score, and invalid BADS protocols.

NORMATIVE INFORMATION:

Type of Norm: Norms are provided for grade and sex.

Age/Grade of Students: The ages ranged from 13-18, including students in grades 7-12.

Sex of Students: 50.2% males, 49.8% females.

Dates of Norming: No specific dates are given, however, Reynolds work began in 1981 and the test was published in 1987.

Number of Students in Sample: The sample consisted of 2,460 students.

SAMPLE CHARACTERISTICS:

Geographic Composition: Although the standardization sample was gathered from one location, the Midwestern portion of U.S., the authors report that "subsequent data do not indicate that additional locations would change the norms" (Kaplan, p.767).

Racial Composition: 75.8% white, 20.6% African-American and 3.6% minority.

Residential Composition: Urban/suburban composition.

Socioeconomic Composition: Heterogeneous in composition with a wide range of occupational positions. The majority of occupations were in the lower middle SES range.

Availability of Sub-group Norms: Reynolds (1987) provided tables of means for boys and girls, a table of BADS scores for both sexes combined, and BADS means scores by grade, sex and race for the entire standardization sample.
RELIABILITY:

Inter-item Consistency: Over a total sample of 2,402 ranging from grades 7 to 12, the coefficient alpha ranged from .909 to .939 (median = .922). The total standardization sample alpha was reported as .922. In a second study, coefficient alpha was computed to be .96 (n = 111) adolescents (Reynolds, 1987).

Split-half: The split-half reliability coefficient for the standardization sample was .91 (Reynolds, 1987).

Test-Retest: Test-retest reliability of the BADS was explored through three studies. The first study involved a six week test-retest of 104 adolescents which resulted in a reliability coefficient of .80. The second study involved a three month test-retest of 415 adolescents which resulted in the reliability coefficient of .79. The final study involving 601 adolescents over a one year interval produced a test-retest coefficient of .63 (Reynolds, 1987).

Alternate Form: Not applicable.

Scorer Reliability: Not reported.

VALIDITY:

Content Validity: Reynolds (1987) discussed that the BADS reflected the basic and associated symptoms characteristic of depression. The thirty items of the test relate to specific symptoms of depression. The BADS does not define a theory of depression. Instead item content displays descriptive components of depression. Content validity was obtained by examining the congruence of item content with depressive symptomatology and item to total scale correlations demonstrating item consistency. Based on a sample of 2,296 adolescents, the item to total correlation coefficients were generally high, with the majority of correlations in the .50s and .60s. Correlations ranged from .160 to .697 with a median correlation of .53 (Reynolds, 1987).

CRITERION RELATED VALIDITY:

Concurrent: Individual Hamilton Rating Scale (Hamilton, 1967) interviews were administered to 111 adolescents attending an urban- suburban high school. Participants were selected to include both depressed and normal 10th and 11th grade students. The sample consisted of 57 males and 47 females. Racially, 83.8% were White, 13.5% were African-American and 2.7% were Asian-American. The average age of the sample was 15.52 years. Five trained interviewers administered the Hamilton Rating Scale and the RADS to participants. The correlation between scores on the RADS and the Hamilton Rating Scale was .83 (p < .001, Reynolds, 1987).

Predictive: Not reported.
Construct Validity: Evidence of construct validity was provided by several studies presented in the manual. Over 11,000 adolescents from various geographical locations and different socioeconomic groups were involved. The RADS was compared to several other self report measures of depression such as the Beck Depression Inventory (BDI; Back, Ward, Mendelson, & Erbaugh, 1961), the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977), the Self Rating Depression Scale (Zung, 1965), and the Children s Depression Inventory (CDI; Kovacs, 1979). Correlations between the RADS and BDI ranged from .68 to .76 with a median correlation of .73 (p < .001, n = 9583). Additionally, correlations between the RADS and CES-D ranged from .74 to .76 with a median correlation of .75 (p < .001, n = 2,881). The correlation between the RADS and Self-Rating Depression Scale was .72 (p < .001, n = 723). Finally, the correlation found between the RADS and the CDI, with n = 3728, was .73 (p <. 001; Reynolds, 1987).

Moreover, relationships were found between the RADS and related affective constructs such as self-esteem (general and academic), anxiety, loneliness, learned helplessness, suicidal ideation, and hopelessness. The correlations found between the RADS and Rosenberg Self-Esteem Scale (1965) for general self-esteem ranged from 1.671 to 1.751, with a median of 1.711 (p < .001, n = 6,463). For academic self-esteem, correlations between the RADS and the Academic Self-Concept Scale-High School Version (Reynolds, 1981) ranged from 1.561 to 1.591, with a median of 1.581 (p < .001, n = 5059). The construct of anxiety was examined by determining the correlation between the RADS and the Children s Manifest Anxiety Scale-Revised (CMAS-R; Reynolds & Richmond, 1978) as well as the State-Trait Anxiety Inventory-Trait Scale (STAI-T; Spielberger, Gorsuch, & Lushene, 1970). The correlations between the RADS and the CMAS-R ranged between .73 to .74, with a median of .73 (p < .001, n = 4,862). In addition, the correlations between the RADS and the STAI-T Scale ranged between .78 to .80, with a median of .79 (p < .001, n = 1536).

For loneliness, the correlations between the RADS and the UCLA Revised Loneliness Scale (Russell, Peplau, & Curtona, 1980) were .64 and .67 for sample sizes of n = 681 and n = 723, respectively (p <.001). The correlation between learned helplessness, as measured through Reynolds and Miller s (1986) Mastery Orientation Inventory (MOI), was 1.531 based on a sample of 647 adolescents (p < .001). Additionally, the correlations between the RADS and suicidal ideation using the Suicidal Ideation Questionnaire Reynolds, 1986) ranged from .59 to .61 with a median of .59(p<.001, n=4862). Finally, correlations between the RADS and the Beck Hopelessness Scale (1974) were .50 and .54 for sample sizes of 2,460 and 1,134 respectively (p < .001; Roynolds, 1987).

STRENGTHS

The appearance of the test was very attractive to the eye. Titling the questionnaire "About Myself", depicted to the user that this was a friendly questionnaire about "myself". The simplicity of the front cover of the questionnaire allowed the participants to feel at ease as they described their feelings. The instructions on the cover page were direct and to the point. The administration and scoring of the RADS was quick and easy. The RADS is "descriptive, not diagnostic in nature, and provides an efficient and
economical method for individual, small or large group prevent screening". (Ramsey 1994, p. 258) To account for truthful respondents, validity checks were made.

For example, responding in an unusual manner to the statements. The way in which adolescents respond to pairs of statements that are worded as opposites, like items 1 and 7, but are similar logically can help identify respondent anomalies (Reynolds, 1987). Coefficients ranging from .909 to .939 support the inter-item consistency. Test- retest correlations over a six-week period resulting in a correlation of .81, and 3 months at .79, supported the reliability over time of the RADS for screening purposes. Evidence of content, concurrent and construct validity was provided in the manual with a thorough explanation. 'For the proper utilization of the RADS, it is incumbent upon the psychologist or counselor to be knowledgeable about depression. The domain of assessment must well be understood if valid inferences and recommendation are to be made ' (Reynolds, 1987, p. 30). Overall, the RADS can be a helpful instrument for school- aged students who might be at risk for depression or suicide.

WEAKNESSES

Although the standardization sample of 2,460 adolescents represented a large population, the sample did not take into account more than one geographic area or racial diversity. The stated reliability was adequate for screening purposes. However, in the RADS test- retest reliability over a one-year time interval, the coefficient dropped to .63. External and internal factors could influence the drop in scores over time and affect the consistency. For example, mental interventions could have occurred between testing to influence the outcome. Additionally, day to day occurrences that alter mood could be a contributing factor. Finally, the manual stated that a teacher can administer this questionnaire to a group of students. However, PAR suggested a level B qualification as a test usage policy. Clearly, the RADS can be a helpful instrument in the school setting. But responsible and knowledgeable professionals must act appropriately in administering and interpreting the RADS.

REFERENCES


Zung, W. W. K. (1965). A self-rating depression scale. Archives of General Psychiatry, 12, 63-70. Edited by Bradley T. Erford, Ph.D., Chair of AACE’s Screening Assessment Instruments Committee