Mood & Anxiety Measures

BAI, BDI, STAIC, MASC, RCMAS, CDI, RADS, HAM-D, GDS

Beck Anxiety Inventory

Administration

- 21-Item, Self-Report Questionnaire
- 5-10 minutes to complete
- 4-point Likert-type scale
  - Not all (0), Mildly (1), Moderately (2), Severly(3)
- Paper & Pencil or Computer Administered versions are available
- Can be administered as an interview if necessary

Population & Use

- Age range typically 17 to 80
  - Has been used in peer-reviewed studies with adolescents age 12 and older
- 13 different language translations
- Intended use as screening measure that discriminates anxiety from depression
- Recommended for clinical and research populations

Development

- Developed by Aaron Beck in 1988 (published 1990) to address need for an instrument that would reliably discriminate anxiety from depression
- Developed with a focus on subjective, somatic, or panic related symptoms of anxiety
- Designed to address both physiological and cognitive components of anxiety

Norms

- Original norms apply to both males and females
- Three normative samples of psychiatric outpatients drawn from consecutive evaluations (n = 1086)
- 42% males, mean age =36.4 years, SD = 12.4
- 58% females, mean age =35.7, SD =12.1
- Research suggest the need for separate norms by gender and age, women on average score higher than men, and there is now a BAI for youth aged 7-14

Reliability

- High internal consistency and item total correlations, ranging from .30 to .71 (medium = .60)
- Cronbach's alpha ranged from .90 -.94 in samples of psychiatric inpatients (n = 250), outpatients (n = 40 and 160), undergraduates (n = 326), and adults in community (n = 255)
- Has satisfactory to high test-retest reliability
- 1 week test-retest interval r = .67 to .93
- 7 week test-retest interval r = .62

Validity

- Good convergent validity with other measures of anxiety in adults, adolescent psychiatric patients, older psychiatric patients, and community samples
- Correlations with
- Hamilton Anxiety Rating Scale (HARS): r = .51
- State-Trait Anxiety Inventory: r = .47-.58
- Symptom Checklist 90 Revised: r = .81

Interpretation

- The BAI assesses anxiety and discriminates between anxiety and depression
- Anxiety symptoms include nervousness, inability to relax, dizziness or light headedness, and heart pounding or racing
- Scores range from 0 to 63
- Score of 0 – 21 indicates very low anxiety
  - This is usually a good thing, however could indicate unrealistic assessment or denial, also too little anxiety could indicate being detached from self, others and environment

Interpretation

- Score of 22 – 35 indicates moderate anxiety
  - Need to look for patterns to explain symptoms being experienced, conflicts may need to be resolved
- Score 36 – 63 indicates severe anxiety
  - Look for patterns of time when symptoms occur, anxiety at this level can have impact mentally and physically

Strengths

- Quick screening measure used to identify anxiety symptoms
- Measure can be self-reported or orally administered
- Discriminates anxiety symptoms from depression
- The measure is reliable and valid across age, gender, and in numerous cultures

Limitations

- A screening measure and a tool to assist in diagnosis, but not a diagnostic measure in itself
- Measures somatic symptoms, but not symptoms that commonly appear in trauma-exposed individuals
- Given research that females score higher than males, separate norms are needed by gender, but as of yet have not been developed
- Most studies use predominantly white samples, more research is needed involving greater ethnic and socioeconomic diversity

Beck Depression Inventory II

Administration

- 21-item, multiple choice self-report questionnaire
- 5-10 minutes to complete
- Each item has a series of 4 statements that describe symptom severity along an ordinal continuum from absent (a score of 0) to severe (a score of 3)
- Paper & pencil or computer administered versions
- Measure can be administered as an interview if necessary (15 minutes)

Population & Use

- Age range 13 to 80
- 11 different language translations
- Intended use as a screening measure
- The most widely used instrument for detecting depression in adolescents and adults
- Recommended for clinical, non-clinical and research settings

Development

- Developed by Aaron Beck in 1961 to measure current presence of depression in adolescents and adults
- Revised in 1978 (BDI-IA) to eliminate duplicate descriptors and lengthen time frame for assessment to the "last week, including today"
- Modified in 1996 (BDI-II) to reflect DSM-IV criteria and lengthen time frame for assessment to the "past two weeks, including today"
- Developed with focus on behavioral, cognitive, and emotional symptoms of depression

Norms

- Original norms included psychiatric inpatient and outpatients
- Normative sample for BDI-II was 500 outpatients in rural and suburban locations
- 63% women, 37% men
- Age range 13 – 86, mean age = 37.20 years
- Racial/ethnic makeup was 91% white, 4% African American, 1% Asian American and Hispanic

Reliability

- Internal consistency coefficients measured on meta analysis was high range .73 to .95
  - Sample consisted of schizophrenic, substance abusers, college students and depressed patients
- Cronbach's alpha ranged from
  - .76 to .95 in psychiatric population
  - .82 to .92 in student population
  - .73 to .90 in non-psychiatric sample

Reliability

- Good test-retest on original BDI scores 1-6 hours later (*r* = .83), 4-6 hours (*r* = .81)
- Test-retest on BDI-II one week apart correlation coefficient *r* = .93

Validity

- Good convergent validity between BDI and BDI-II (r = .93)
- Content validity evaluates well with symptoms associated with depression (r = .77)
- Correlation with
  - Hamilton Rating Scales for Depression (Ham-D) r = .61-.86
  - Symptom Checklist-90 (SCL-90) depression subscale r = .76
  - Minnesota Multiphasic Personality Inventory Depression Scale (MMPI-D) r = .60
  - Beck Hopelessness Scale (BHS) r = .60

Interpretation

- Intended to assess the existence and severity of symptoms of depression
- Scores range from 0 to 63
- Scores of 0-13 is considered minimal range, which indicates the absence of or very low level of depression
- Scores of 14-19 mild range, indicate a low level or potential for depression

Interpretation

- Scores of 20-28 in moderate range
  - Indicates symptoms of depression that need resolving, but client is still able to function at general level
- Scores of 29-63 are in the severe range
  - Depression levels are elevated and disrupt individual functioning mentally and physically

Strengths

- Quick screening measure to identify depression symptoms
- Sensitivity in measuring change in depressive symptoms and severity
- Used in studies to assess efficacy of pharmacological interventions
- Reliable for assessing depression in adolescents and adults 13 years of age and older, and can be used with clinical and non-clinical populations

Limitations

- Developed as a symptom inventory, not a diagnostic instrument
- Inappropriate use of BDI as a diagnostic instrument can lead to misleading information and overestimate the prevalence of depressive illness

State-Trait Anxiety Inventory for Children

Administration

- The STAIC is comprised of two separate self-report scales that measure two distinct anxiety concepts: state anxiety (A-State) and trait anxiety (A-Trait)
- STAIC Form C-1 is a 20 –Item A-State Self-Report Questionnaire
- STAIC Form C-2 is a 20 – Item A-Trait Self-Report Questionnaire
- Time to complete is 8-12 minutes for either scale, and 20 minutes for both

Administration

- Paper & Pencil version used with children
- Standard procedure for administration is for an examiner to read the directions aloud while the child reads them silently

Population & Use

- Constructed for age range 9-12
  - May also be used with younger children with average or above reading ability and older children with below average ability
- Designed for the study of anxiety in 4th, 5th & 6th grade children
- A-State scale measures transitory anxiety from perceived feelings of apprehension, tension, and worry that vary in intensity and fluctuate over time

Population & Use

- A-Trait scale measures relatively stable individual differences in anxiety proneness between children in their tendency to experience anxiety
- Recommended for Educational, Psychological and health research

Development

- Developed in 1970 by Charles Spielberger in collaboration with Drew Edwards, Robert Lushene, Joseph Montuori, and Denna Platzek
- Developed initially as a research tool for the study of anxiety in elementary school children
- Developed with a focus on state anxiety and trait anxiety

Norms

- Norms are fourth, fifth, and sixth grade elementary children (reported by gender and by grade level)
- Sample size of 1554 from in six different schools
- 53% males, 47% females
- 59% white, 40% black, 1% other
- The mean A-Trait scores for girls = 38, SD = 6.68
- The mean A-Trait scores for boys = 36.7, SD = 6.32
- The mean A-State scores for girls = 30.7, SD = 6.01
- The mean A-State scores for boys = 31.0, SD = 5.71

Reliabiliy

- Internal consistency coefficient is reasonably good
- Cronbach's alpha of
  - A-State scale was .82 for males, and .87 for females
  - A-Trait scale was .78 for males and .81 for females
- Test-retest reliability of A-State scale are low at .31 males, and .47 females
  - This is expected for a measure designed to be sensitive to influence of situational factors
- Test-retest reliability of A-Trait scale are moderate at .65 males, and .71 females
  - Reflects instability of the personality structure of children of this age

Validity

- Concurrent validity demonstrated in A-Trait scale correlation
  - The Children's Manifest Anxiety Scale (CMAS): r = .75
  - General Anxiety Scale for Children (GASC): r = .63
- Construct validity of the A-State scale demonstrated in a sample of 900 fourth, fifth, and sixth grade students with Norm and Test conditions
  - Mean scores for A-State scale were considerably higher in Test conditions (males, 41.76: females, 43.79)
  - Mean scores for A-State scale were lower in Norm conditions (males, 31.10; females, 31.03)

Interpretation

- Children respond to the STAIC by selecting one of the three alternative choices for each item which best describes their anxiety
- The STAIC A-Trait and A-State scale are each 20 item self-report measures
- Each STAIC item is a 3-point rating scale having values of 1,2, or 3 assigned
- Scores range from 20 to 60

Interpretation

- The stem for all 20 statements of STAIC A-State items is “I feel”
- The A-State scales 20 statements ask how children feel at a particular moment in time
  - Terms in half the items indicate presence of anxiety (e.g., very nervous = 3, nervous = 2, not nervous = 1)
  - Terms in half the items indicate absence of anxiety (e.g., very calm = 1, calm = 2, not calm = 3)

Interpretation

- The STAIC A-Trait 20 statements indicate how the child generally feels
- A-Trait indicates the frequency of occurrence of the behavior described (e.g., item 6 “I worry to much”, hardly ever = 1, sometimes = 2, often = 3)

Strengths

- Quick and easy to administer and score
- Measure of both temporary and dispositional anxiety
- State and Trait anxiety define different aspects of anxiety
- A-State demonstrates the sensitivity of the influence of environmental factors on males and females
- A-Trait shows moderate genetic effects, and substantial non-shared environment effects

Limitations

- The ability of children to articulate their true psychological condition
- Children must meet a minimum reading and comprehension level to be able to successfully complete the measure

Multidimensional Anxiety Scale for Children

Administration

- 39-item self-report rating scale
- 10-15 minutes to complete
- 4-point Likert scale ranging from 1 = never to 4 = often
- Can be administered with computer program or paper & pencil Quikscore forms

Population & Use

- Age range 8 to 19
- Intended use as a screening measure and as part of diagnostic assessment to assess the major dimensions of anxiety in children and adolescents
- Assesses four domains
  - Physical symptoms, social anxiety, harm avoidance, and separation/panic anxiety
- Assess six subdomains
  - Restless symptoms, somatic/autonomic symptoms, perfectionism, anxious coping, humiliation/rejection fears, and performance fears
- Used in schools, outpatient clinics, residential treatment centers, child protective services, juvenile detention centers, and private practice

Development

- John Marsh at Multi-Health Systems Inc. developed the MASC in 1997
- Developed to assess anxiety symptoms across clinically significant symptom domains in children and adolescents
- Developed for tracking of psychosocial and pharmacological treatments of youth

Norms

- Separate norms are provided for males and females
- The norm sample consisted of 2,698 children and adolescents ages 8-19
- Racially diverse sample
  - 53.3% Caucasians, 39.2% African American, 7% Hispanic/Latin American, 1.4% Asian American, 2.4% Native American, and 3% other
- Norm sample was based on a 4th grade reading level

Reliability

- Internal reliability coefficient for main factors and subfactors were satisfactory, ranging from .60 - .85
- Internal reliability of the total score was .90, with equally high reliability for boys (.85) and girls (.87)
- Correlation coefficients of 3 week test-retest reliabilities were *r* = .79, 3 month test-retest reliabilities were *r* = .93

Reliability

- The 3 week and 3 month test-retest reliabilities for subscales were > .70
- Test-retest was unaffected by age
  - Children *r* = .77, adolescents *r* = .79
- Test-retest for males *r* = .81, females *r* = .75

Validity

- Has good convergent validity with other measures of anxiety such as the Revised Children's Manifest Anxiety Scale
- Correlates minimally with measures of depression and not at all with measures of disruptive behavior
- Discriminates between patients with anxiety and healthy control group
  - Sensitivity 90%, specificity 84%, kappa coefficient .74, and overall correct classification 87%
- Mean scores for baseline, posttreatment, and follow-up conditions were 74.46, 53.58, and 44.93, demonstrating sensitivity

Interpretation

- Can be used to screen children and adolescents for the presence of anxiety disorders
- MASC factors and subfactors measure separate dimensions of anxiety
  - Makes the measure well suited for discriminating patterns of anxiety in subgroups of children with anxiety disorders
- High scores on certain subfactors would suggest problem areas to be targeted ad well as types of treatment to be undertaken

Strengths

- Screening measure used to identify anxiety disorders in children and adolescents
- High sensitivity and specificity rates of the measure discriminate children with anxiety from healthy control subjects
- The MASC is particularly useful for informing treatment selection
- High test-retest reliability suggest the MASC has potential use in monitoring treatment responses over time

Limitations

- The MASC is a screening measure , and can assist in diagnosis, but not as a diagnostic measure in itself
- All data supporting the utility of the MASC currently come from the scale developer, therefore data from independent investigations are needed
- No validity data regarding the ability of non-native English speakers to respond to the test items is provided

Revised Children's Manifest Anxiety Scale

Administration

- 37-item self-report instrument
- May be administered either individually or to a group
- The child responds to each statement by circling a "Yes" or "No" answer
- Paper & pencil is the standard version used
- For children who have difficulty reading or circling the appropriate response, the items may be read and the indicated response circled by an examiner

Population & Use

- Designed for children and adolescents ages 6 to 19 years old
- Based on a trait theory of manifest anxiety
- Assesses a Total Anxiety Scale
- Assesses three anxiety subscales and a Lie scale
  - Physiological Anxiety, Worry/Oversensitivity, and Social Concerns/Concentration
- This instrument is used is school settings for grades 1-12

Development

- Original CMAS was criticized for having words that were to difficult for children and for not assessing certain areas of anxiety
- The RCMAS was developed in 1978 to address the concerns of the CMAS
- Developed to assess the level of anxiety in children across five scales
- Developed for use in psychoeducational assessments and personality assessments

Norms

- Recommend using the separate norms provided according to age, sex, and ethnicity
- Standardization sample of 4,972 children and adolescents
- 44% white males, 44% white females, 5.8% African American males, and 6% African American females
- The normative sample covered a variety of geographic regions throughout the United States

Reliability

- The primary interest of reliability of the RCMAS was the accuracy of scores at time of assessment and stability of scores across time
- Internal consistency coefficient alpha for Total Anxiety scores were consistent across ethnicity, sex, and age
- For entire age range, reliability estimates were .84 for white males, .85 for black males, .85 for white females, and .78 for black females

Reliability

- For the anxiety subscales, reliability is considered adequate range of .50 to .80
  - Physiological Anxiety subscale alpha reliability range .60s and .70s
  - Worry/Oversensitivity subscale alpha reliability range .70s and .80s
  - Social Concerns/Concentration subscale alpha reliability range .50s and .70s
  - For the Lie subscale, reliability is surprisingly good, consistently in .70s and .80s

Reliability

- Little research has been done on test-retest reliability, only available for the Total Anxiety score and the Lie subscale
- 9 month length of time between test
  - Total Anxiety reliability coefficient was .68, which indicates stability of general trait anxiety
  - Lie subscale correlated at .53 across 9 months, which is still encouraging
- 3 week test-retest interval
  - Total Anxiety *r* = .97 males, and .98 females
  - Lie subscale 3 week test-retest interval *r* = .90 males, and .98 females

Validity

- Preliminary factor analysis study lends strong support to the construct validity of the RCMAS and to contention that anxiety is multidimensional in nature
  - Factor I - Physiological Anxiety produced a KR20 reliability of .65
  - Factor II - Worry/Oversensitivity produced a KR20 reliability of .64
  - Factor III - Social Concern/Concentration KR20 reliability of .60
- Another larger factor analysis found the three anxiety factors were essentially the same as the preliminary analysis

Validity

- Showed substantial convergent validity with the STAIC Trait scale (r = .89, p < .001)
- Divergent validity is indicated by the lack of correlation between RCMAS and STAIC State scale (r = .24, p <.05)
- Results provide considerable support for the construct validity of the RCMAS as a measure of chronic manifest anxiety, independent of state anxiety

Interpretation

- Consist of five scores
- The Total Anxiety score is based on 28 anxiety items
  - These 28 items are also divided into three anxiety subscales: Physiological Anxiety, Worry/Oversensitivity, and Social Concern/Concentration
- The remaining 9 items are part of the Lie subscale
  - The raw score on each subscale is the number of items circled “Yes”, score may vary from 0 to 28

Interpretation

- High score on Physiological Anxiety suggest that the child has a physiological response during anxiety such as sleep difficulty, nausea, and fatigue
- High score on Worry/Oversensitivity subscale suggest a child who internalizes much of the anxiety such as worry, fear and mental stress
- High score on Social Concern/Concentration subscale suggest a concern about the self with other people, such as feeling not as good, effective, or capable as others

Interpretation

- The Lie subscale raw score vary from 0 to 9
- The Lie subscale indicates the child is revealing a picture of an 'ideal" behavior that is generally not characteristic of anyone, such as (I never get angry)
- High score on the Lie subscale may be quite indicative of an inaccurate self-report

Strengths

- The RCMAS is a good measure for identifying the presence of anxiety
- Measure can be self-reported or given by an examiner
- The measure is reliable and valid across age, gender, and ethnicity

Limitations

- Should never be used as the sole determinant of anxiety
- Another limitation resides in the ability of some children to understand its purpose, and therefore scores could be subject to distortion
- Lack of data and established norms on different cultural groups

CHILDREN'S DEPRESSION INVENTORY

Administration

- 27-item self-report measure
- Time to complete 15-20 minutes
- Each item has 3 statements that use a 3-point scale to describe symptom severity ranging from 0 (absence of the symptom) to 2(definite symptom)
- A QuikScore Form, paper & pencil, and computer version are available
- Can be administered individually or in small groups

Population & Use

- Age range 7-17 years old
- Intended use as a screening measure of depressive symptoms in children and adolescents
- Assesses a range of depressive symptoms, including disturbed mood, anhedonia, negative self-evaluation, ineffectiveness, and interpersonal problems
- CDI is readable at the first-grade level
- Utilized in clinical, non-clinical, school, and research settings

Development

- Developed Maria Kovacs in 1981
- The CDI was initially developed because of concerns of the use of the BDI with younger populations
- Developed in response to a need for an economical, easy-to-administer, and readily analyzable measure of depression in children

Norms

- Normative sample included 1266 public school students in Florida in grades 2–8
  - 592 boys ages 7-15 and 674 girls ages 7-16
- 77% white, 23% African American, Native American, or Hispanic
- The population was mostly middle class, with 20% from single homes
- Norms were also collected on a group of 134 clinically diagnosed children
- Separate norms developed based on ages (7-12 and 13-17), as developmental trends result in higher scores for the older group

Reliability

- Good internal consistency coefficients
  - Cronbach's alpha estimates from the normative sample range from .59 (Interpersonal Problems) to .68 (Negative Self-Esteem) for the five factors
- Test-retest reliability for 1-2 week intervals range from .38 (psychiatrically healthy youths) to .87 (psychiatric inpatients)
- Test-retest 1-week to 1-month reliabilities > .60
- 1-year stability coefficients ranges from .41 to .69

Validity

- Has shown convergent validity with other measures of childhood depression, including Reynolds Adolescent Depression Scale (RADS), Hamilton Rating Scale for Depression (HAM-D), and the Child Assessment Scale (CAS)
- Correlates with measures of related constructs, such as anxiety with the Revised Children's Manifest Anxiety Scales
- Demonstrates discriminate validity between children with depressive disorders and healthy control subjects
- Additional studies from randomized clinical trials are necessary to further support the measures sensitivity to change

Interpretation

- Designed to be used as a screening instrument or as a measure of depression symptom severity in children and adolescents
- Scores range from 0 to 54
- Each item is scored from 0 to 2: Score of 0 = absence of symptoms, 1 = mild symptoms, and 2 = definite symptoms
- The child rates his or her own behavior / feeling by selecting one statement

Interpretation

- Subscales are Negative Mood, Interpersonal Problems, Ineffectiveness, Anhedonia, and Negative Self-Esteem
- A total score and five subscale scores are derived
- A high score is a indication of high levels of depressive symptoms

Strengths

- Economical, easy-to-administer, interpret and score
- Can be administered individually or to small groups
- Measures five factors of depressive symptoms
- Able to use it with younger children as well as adolescents

Limitations

- A screening measure, not a diagnostic measure in itself
- Inappropriate use of the CDI as a diagnostic instrument can lead to misleading information and overestimation of the prevalence of depressive illness

Reynolds Adolescent Depression Scale, 2nd Edition

Administration

- 30-item self-report questionnaire
- 5-10 minutes to complete
- 4-point Likert-type scale: Almost never (1), Hardly ever (2), Sometimes (3), Most of the time (4)
- Paper & pencil, machine and mail-in administration versions are available
- Measure can be administered individually and in small or large groups

Population & Use

- Age range 11– 20 years old
- Intended as screening measure, and as part of a larger battery of diagnostic instruments
- Written for 3rd Grade reading level
- Measure of depressive symptoms in adolescents
- The RADS-2 measures four dimensions of depression; Dysphoric Mood, Anhedonia/Negative Affect, Negative Self-Evaluation, and Somatic Complaints
- Recommended for clinical, school, institutional and research settings

Development

- The RADS was developed by William M. Reynolds Ph.D. in 1981
- Revised to the RADS-2 in 1987
- Developed for the purpose of measuring depressive symptoms in adolescents
- Developed for evaluations of individuals, large scale intervention and prevention programs, and for evaluating treatment outcomes

Norms

- Norms are available for both boy and girls
- Sample size of 2,460 from students grades (7-9) and grades (10-12)
- Equal numbers of males and females
- 75.8% white, 20.6% black, and 3.6 percent other
- Norm sample is from urban/suburban community in the Midwestern USA

Reliability

- Internal consistency coefficient alpha ranged from .909 to .96
- Split-half reliability coefficient for the standardization sample was .91
- Test-retest reliabilty
  - 6-week test-retest interval r = .80
  - 3-month r = .79
  - 1-year r = .63

Validity

- Demonstrates content validity associated with symptoms of depression, correlation coefficients were in the .50s and .60s
- Good concurrent validity, correlation with the
  - Hamilton Rating Scale was .83
  - Beck Depression Inventory (BDI) range .68 to .76
  - STAI-T scale ranged between .78 to .80
  - Beck Hopelessness Scale (BHS) range .50 to .54

Interpretation

- The RADS-2 is a brief 30-Item self-report measure that evaluates the current level of an adolescent's depressive symtomatology
- Standard T score and clinical cutoff scores provide the clinician or research with an indication of the individual's depressive symptoms (normal, mild, moderate, or severe)
- Scores range from 30 to 120
- Scores on each item are weighted from 1 to 4 (1=Almost Never, 2 = Hardly Ever, 3=Sometimes, 4=Most of the time)
- A cutoff T-score of 77 and above has been determined to indicate a level of symptoms associated with clinical depression

Strengths

- Is a quick screening measure to identify depressive symptoms
- Provides an efficient and economical method for individual, small or large group screening
- Measure demonstrated good reliability and validity outcomes
- Overall the RADS-2 is a helpful instrument for school aged students who might be at risk for depression or suicide

Limitations

- Not a diagnostic instrument
- Inappropriate use of the RADS-2 as a diagnostic instrument can lead to misleading information and overestimate the prevalence of depression

HAMILTON RATING SCALE FOR DEPRESSION

Administration

- The HAM-D is a 21-item multiple choice questionnaire
- Time to complete is 15-20 minutes

  Should be administered by a clinician experienced in working with psychiatric patients

Population & Use

- Age range typically 18 years of age and older, can be used with younger psychiatric patients
- The HAM-D is the most commonly used observer-rated depressive symptom rating scale
- Designed to measure the severity of symptoms in patients with primary depressive illness, such as low mood, insomnia, agitation, anxiety and weight loss
- The quantification of symptom severity may be used to
  - 1) estimate symptom severity before treatment
  - 2) gauge the effect of treatment on symptoms
  - 3) detect a return of symptoms (e.g., relapse or recurrence)

Development

- The HAM-D was developed by Max Hamilton in 1960
- Developed to be used by clinicians such as physicians, psychologists, and social workers who have experience with psychiatric patients
- The first rating scale developed to quantify the severity of depressive symtomatology

Norms

- The HAM-D normative samples are on psychiatric inpatient and outpatients
- The norms are generally representative of gender, ethnicity, SES, and geographic regions

Reliability

- The reliability varies with conditions but is generally acceptable
- Internal consistency as measured by Cronbach's alpha was .76 in a study of 141 subjects and .92 in a study of more that 300 patients
- The internal consistency tends to be higher > .80 with structured that with unstructured interviews
- When 10 raters administered this instrument to 989 subjects, 75% in a current episode and 25% with a past episode of major depressive disorder, the intraclass correlation coefficient was .92

Validity

- The HAM-D has correlations with global measures of depressive severity that ranges between .65 and .90
- Correlation with the Montgomery-Asberg Depression Rating Scale (MADRS) and the Inventory of Depressive Symptomatology (IDS) range between .80 and .90
- Validity is not high in all populations
  - Depressive symptoms of older patients, who are more likely to have general medical illness may be overrated because of the reliance of the HAM-D on somatic symptoms

Interpretation

- 21-item multiple choice questionnaire
- Only the first 17 items are scored, because the last 4 items either occur infrequently (e.g., depersonalization) or describe aspects of illness rather than the severity (e.g., diurnal variation)
- Scores range from 0 to 50
- Score of 0-7 = Normal, which indicates the absence of depression

Interpretation

- Score of 8-13 = Mild Depression, indicates a low level or potential for depression
- Score of 14-18 = Moderate Depression, indicates symptoms of depression that need resolving
- Score of 19-22 = Severe Depression, depression levels are elevated and disruptive to the individual
- Score of > 23 =Very Severe Depression, indicates critical adverse affects mentally and physically on the individual

Strengths

- The most commonly used clinician-rated measure to identify depression symptoms
- Sensitive in monitoring change in depressive symptoms
- Beneficial in comparing the efficacy of various interventions if the patient requires more than one type of treatment

Limitations

- The validity and reliability is less in some subgroups, such as older people and individuals with general medical illness
- It gives more weight to somatic symptoms than to cognitive symptoms
- It also includes several noncriterion symptom items on anxiety that may reduce its specificity as a measure for depressive symptoms

GERIATRIC DEPRESSION SCALE

Administration

- The GDS Long Form is a 30-item self-report questionnaire, each answered by circling yes or no
- The GDS Short Form is a brief 15-item self-report questionnaire, each answered by circling yes or no
- Time to complete for the Long Form 10-15 minutes, Short Form 5-7 minutes
- Paper & pencil version is available
- Measure can be administered by an interviewer if necessary

Population & Use

- Developed to assess depression in geriatric populations
  - Depression affects nearly 5 million of the 31 million Americans aged 65 and older
- Both major and minor depression is reported in 13% of community dwellings, 24% of older medical outpatients, 30% of older acute care patients, and 43% of nursing home dwelling older adults
- The GDS may be used with healthy, medically ill and mild to moderately cognitively impaired older adults. It has been extensively used in community, acute, and long-term care settings

Development

- The original GDS was developed by J.A. Yesavage and T.L. Brink in 1983, and the Short Form was developed in 1986
- The GDS was developed as a Screening Measure of depression in older adults
- The Short Form was developed because it is more easily used by physically ill and mildly to moderately demented patients who have short attention spans and/or feel easily fatigued
- While there are many instruments available to measure depression, the GDS was created specifically for the purpose of being used with older populations

Norms

- The GDS was constructed using a two-stage design
- An initial sample of 47 subjects (both men and women over age 55) of depressed and nondepressed subjects
- The second sample consisted of 40 nondepressed and 60 depressed subjects

Reliability

- Internal consistency values were higher than those obtained when the Zung SDS was administered to the same subjects and about equal to those obtained using the HAM-D
- Cronbach's alpha was high at .94
- Split-half reliability was high at .94
- Test-retest reliability after 1 week indicated a r = .85

Validity

- The GDS shows high concurrent validity with scores on the Zung SDS (r = .84) and the HAM-D (r = .83)
- Discriminate validity is indicated with both the Long Form and Short Form in differentiating depressed from non-depressed adults, with a high correlation r = .84
- The GDS was found to have a 92% sensitivity and an 89% specificity when evaluated against diagnostic criteria

Interpretation

- The GDS is used to screen for depressive illness in geriatric patients
- On the Long Form scores range from 0 to 30
- Score of 1 - 9 is considered Normal, indicates the absence of depression
- Score of 10 – 22 is considered Mildly depressed
- Score of 23 – 30 is considered Very depressed

Interpretation

- On the GDS Short Form scores range from 0 to 15
- Scores of 0-4 are considered Normal
- Scores of 5-8 indicates mild depression
- Scores of 9-11 indicates moderate depression
- Scores of 12-15 indicates severe depression

Strengths

- A useful screening tool in clinical settings to facilitate assessment of depression in older adults
- Long and short forms are available

Limitations

- The GDS is not a substitute for a diagnostic interview by mental health professionals
- Does not assess for suicidality