# Ratings of Relations Between DSM-IV Diagnostic Categories and Items of the Adult Self-Report (ASR) and Adult Behavior Checklist (ABCL)

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## Abstract

This project was designed to: *(a)* construct DSM-oriented scales comprising ASR and ABCL items that mental health professionals rated as very consistent with DSM-IV categories; and *(b)* identify items that clinicians may be particularly concerned about ("critical items"). Psychiatrists and psychologists who had published on psychopathology rated the consistency of each ASR and ABCL problem item with DSM categories that are relevant to ages 18 to 59 years. They also identified items that are *definitely critical*. The 21 raters came from 10 cultures. Items that were rated by at least 13 of the 21 (62%) raters as being *very consistent* with a diagnostic category were assigned to that category. We constructed scales for the following categories: *Depressive Problems* (including Dysthymia and Major Depression); *Anxiety Problems* (including GAD, SAD, and Specific Phobia); *Somatic Problems* (including Somatization and Undifferentiated Somatoform); *Avoidant Personality Problems*; *Attention Deficit/Hyperactivity Problems* (including Hyperactivity-Impulsivity and Inattention subscales); and *Antisocial Problems*. For each instrument, a DSM-oriented scale comprises the items from that instrument that were rated as being *very consistent* with the respective diagnostic category. The scales are displayed on profiles for scoring people in relation to normative samples of peers. The profiles show raw scale scores (sum of the 0-1-2 ratings of items comprising a scale); *T* scores; percentiles; and cutpoints for normal, borderline, and clinical ranges. Windows software for scoring the profiles provides comparisons among DSM-oriented scale scores obtained from up to 8 ASR and ABCL forms per individual and lists scores for items that were identified as *definitely critical* by ≥62% of raters.

## Introduction

Questions often arise about relations between formal diagnostic systems, such as the DSM, and empirically based instruments. Studies have shown significant associations between DSM diagnoses of adults and scores on empirically based syndrome scales (e.g., Hofstra, van der Ende, & Verhulst, 2001, 2002a, b). However, the specific criteria for DSM diagnoses differ from the items of the empirically based scales. Furthermore, the associations that are found between diagnoses and scale scores may vary according to the training and orientation of the diagnosticians, the diagnostic procedures, the sources of data, and other factors.

### Purposes of this Project

One purpose of this project was to identify ASR and ABCL problem items that mental health professionals judged to be very consistent with particular DSM-IV diagnostic categories (American

Psychiatric Association, 1994). To obtain sophisticated judgments, we asked highly experienced psychiatrists and psychologists who had published on psychopathology to rate the consistency of each ASR and ABCL problem item with DSM diagnostic categories of disorders that are relevant for ages 18 to 59. To encompass variations in training, experience, and cultural backgrounds, we enlisted raters from 10 cultures who worked in diverse settings. If most raters judged particular ASR and ABCL items to be very consistent with particular DSM categories, these items would be used to construct DSM-oriented scales for scoring the ASR and ABCL. The scales would then be normed on national samples of adults who had not received mental health or substance abuse services in the preceding 12 months. The DSM-oriented scales would accompany empirically based syndrome scales for scoring the ASR and ABCL.

A second purpose of the project was to identify ASR and ABCL problem items that clinicians may be particularly concerned about, designated as *critical items*. Items identified by most raters as "definitely critical" would be displayed on narrative reports of ASR and ABCL results to help clinicians quickly spot those that were reported for a client. In addition, the client's scores on the critical items would be summed to form a scale that would be normed on the samples of adults that were used to norm the DSM-oriented scales.

## Method

We identified the following DSM-IV diagnostic categories that are defined largely in terms of behavioral/emotional problems and that are applicable to ages 18 to 59: Antisocial Personality Disorder; Attention-Deficit/Hyperactivity Disorder (ADHD) Hyperactive-Impulsive and Inattentive types; Avoidant Personality Disorder; Dysthymia; Generalized Anxiety Disorder (GAD); Major Depressive Episode; Obsessive-Compulsive Disorder (OCD); Obsessive-Compulsive Personality Disorder; Separation Anxiety Disorder (SAD); Schizotypal Personality Disorder; Somatization Disorder; Specific Phobia; and Undifferentiated Somatoform Disorder. Because of similarities in criteria, we combined the following disorders into single categories: Dysthymia and Major Depressive Episode were combined into Depressive Disorders; GAD, SAD, and Specific Phobia were combined into Anxiety Disorders; Obsessive-Compulsive Disorder and Obsessive-Compulsive Personality Disorder were combined into Obsessive-Compulsive; and Somatization and Undifferentiated Somatoform Disorders were combined into Somatic Disorders. We then did the following:

1. We invited participation by experienced psychiatrists and psychologists who had published on psychopathology.
2. Those who agreed to participate were sent the following materials:
   (A) Copies of the criteria for the DSM-IV diagnoses.
   (B) The instructions that are presented in Appendix A.
   (C) Rating forms on which the problem items of the ASR and ABCL were listed. For each of the nine DSM-IV categories, raters were asked to rate each of the problem items as *0 = not consistent, 1 = somewhat consistent,* and *2 = very consistent* with the DSM category. Raters were also asked to rate each item as *0 = not critical*, *1 = possibly critical*, or *2 = definitely critical* according to whether the item refers to problems that clinicians may be particularly concerned about.

Appendix B lists the 16 psychiatrists and 5 psychologists from 10 cultures who submitted ratings. The raters had a mean of 17.8 years of experience since receiving their first doctorate or equivalent

degree (eight had both M.D. and Ph.D. degrees; one of these also had a D.Sc. degree). Raters received $75 for participating.

## Results

### DSM-Oriented Scales

We based our selection of items for DSM-oriented scales on a criterion of at least 13 raters out of 21 (62%) rating an item *2 (very consistent)* with a diagnostic category. We used a criterion of ≥13 ratings of 2 because it was high enough to require considerable agreement among raters, while still allowing for the effects of differences among the raters in culture, professional training, theoretical orientation, and the kinds of clients served.

Other than items that received more ratings of *2* for other categories, only four items met the criterion of 13 ratings of *2* for Schizotypal Personality Disorder and for Obsessive-Compulsive. Because the numbers of items were thus relatively small and the items were rarely endorsed in our normative samples, we did not construct scales for Schizotypal Personality or Obsessive Compulsive.

At least seven problem items received ≥13 ratings of *2* for the following six DSM-oriented scales (the numbers reflect the left-to-right sequence in which the scales are displayed on scoring profiles): *1. Depressive Problems; 2. Anxiety Problems; 3. Somatic Problems; 4. Attention Deficit/Hyperactivity Problems; 5. Avoidant Personality Problems;* and *6. Antisocial Personality Problems*.

Seven items received ≥13 ratings of *2* for the DSM Inattentive type of ADHD, while six items received ≥13 ratings of *2* for the Hyperactive-Impulsive type of ADHD. To reflect the distinction between ADHD types, the ASR and ABCL profiles give users the option of computing separate scores for each of these subsets of problems.

Table 1 lists abbreviated versions of the ASR and ABCL items that comprise each scale. Eight items met the criterion of ≥13 ratings of *2* for a second DSM-oriented scale in addition to the scale on which the items are listed in Table 1. However, the number of ratings of *2* was smaller for the second scale than for the scale on which the items are listed in Table 1, with the following exceptions: *(a)* Item *25. Doesn't get along with other people* received 14 ratings of *2* for Antisocial Personality Disorder and for Avoidant Personality Disorder. It received 4 ratings of *1* and 3 ratings of *0* for both categories. Because there were only 6 other items on the Avoidant Problems scale, compared to 20 other items on the Antisocial Problems scale, the tie in ratings was decided in favor of assigning item 25 to the Avoidant Problems scale. *(b)* Item *47. Lacks self-confidence* received 19 ratings of *2* for both the Depressive Disorder and Avoidant Personality Disorder categories. However, it was assigned to the Avoidant Personality Problems scale because it received no ratings of *0* for Avoidant Personality Disorder, but 2 ratings of *0* for Depressive Disorder. *(c)* Item *56h. Heart pounding or racing* received 16 ratings of *2* for both the Anxiety Disorder and Somatic Disorder categories. However, it was assigned to the Anxiety Problems scale, because it received no ratings of *0* for the Anxiety Disorder category, but 1 rating of *0* for the Somatic Disorder category.

The six DSM-oriented scales are displayed on ASR and ABCL hand-scored and computer-scored profiles analogous to the profiles for the empirically based scales (Achenbach & Rescorla, 2003). Normative distributions of scores, percentiles, and *T* scores are based on a U.S. national sample of

adults who had not received mental health or substance abuse services in the preceding 12 months. The computer-scored versions of the profiles also print percentiles for the Inattention and Hyperactivity-Impulsivity subscales, as well as for the complete Attention Deficit/Hyperactivity Problems scale.

## Critical Items

Table 2 lists 19 items that were identified by $\geq$13 raters as definitely critical. Each of these items is thus important to consider in its own right, even if it is not included in a DSM-oriented scale. To make it easy for users to quickly spot a client's score for each critical item, the computer software for the ASR and ABCL prints a list of the critical items with the client's score for each item. The software also displays the sum of 0-1-2 scores on the 19 critical items as a bar graph in relation to $T$ scores and percentiles for the U.S. national normative sample.

## Discussion

Empirically based and DSM-oriented scales scored by the same respondents for the same people on the same pool of items can facilitate assessment that takes account of both the patterns of co-occurring problems reflected in the empirically based syndromes and groupings of problems that are consistent with DSM diagnostic categories. Both types of scales can be quantitatively scored in terms of gender- and age-specific $T$ scores and also in terms of raw scores indicating the absolute level of problems. This offers many possibilities for comparing and combining the empirically based and DSM-oriented scales for purposes such as the following: Assessment of initial problems; evaluation of outcomes and differential treatment efficacy; epidemiological studies; genetic research; cross-cultural comparisons; and testing of correlates of psychopathology. The *Manual for the ASEBA Adult Forms & Profiles* (Achenbach & Rescorla, 2003) provides further details of the development and applications of the empirically based and DSM-oriented scales. Scores on the DSM-oriented scales are not intended to be equivalent to DSM diagnoses, because DSM diagnoses are based on judgments of the presence of a fixed number of symptoms plus other criteria specified by the DSM.

In addition to scales that comprise multiple items, each ASR and ABCL item taps problems that may be important in their own right. Items that may be of particular concern to clinicians are identified as *critical items*. In addition to being displayed on profiles of scale scores, clients' scores on each critical item are displayed separately with the normative report produced by the software for the ASR and ABCL.

# References

Achenbach, T.M., & Rescorla, L.A. (2003). *Manual for the ASEBA Adult Forms & Profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, and Families.

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, D.C.: American Psychiatric Association.

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**Table 1**

**ASR and ABCL Items[a] Rated by ≥ 13/21 Experts as Very Consistent with DSM-IV Categories**

**DSM-Oriented Category**

| 1. Depressive Problems | 2. Anxiety Problems | 3. Somatic Problems | 4. Avoidant Personality Problems | 5. ADH Problems | 6. Antisocial Personaltiy Problems |
|---|---|---|---|---|---|
| 14. Cries | 22. Worries about future | 51. Feels dizzy | 25. Doesn't get along with others | 1. Too forgetful[I] | 3. Argues a lot |
| 18. Harms self | 29. Fears | 56a. Aches | 42. Would rather be alone | 8. Can't concentrate[I] | 5. Blames others |
| 24. Doesn't eat well | 45. Nervous | 56b. Headaches | 47. Lacks self-confidence | 10. Can't sit still[H-I] | 16. Mean |
| 35. Feels worthless | 50. Fearful | 56c. Nausea | 67. Trouble keeping friends | 36. Gets hurt[H-I] | 21. Damages others' things |
| 52. Feels too guilty | 56h. Heart pounding[c] | 56d. Eye problems | 71. Self-conscious | 41. Impulsive[H-I] | 23. Breaks rules |
| 54. Feels tired | 72. Worries about family | 56e. Skin problems | 75. Too shy or timid | 59. Fails to finish[I] | 26. Lacks guilt |
| 60. Enjoys little | 112. Worries | 56f. Stomach aches | 111. Withdrawn | 61. Poor work performance[I] | 28. Bad relations w. family |
| 77. Sleeps more | | 56g. Vomits | | 89. Rushes into things[H-I] | 37. Fights |
| 78. Trouble making decisions | | 56i. Numbness[c] | | 105. Is disorganized[I] | 39. Bad companions |
| 91. Talks about suicide | | | | 108. Loses things[I] | 43. Lies, cheats |
| 96. Passive[b] | | | | 115. Fidgety[H-I] | 57. Attacks people |
| 100. Sleep problems | | | | 118. Too impatient[H-I] | 76. Irresponsible behavior |
| 102. Lacks energy | | | | 119. Not good at details[I] | 82. Steals |
| 103. Sad | | | | | 92. Trouble with the law |
| 107. Can't succeed | | | | | 95. Hot temper |
| | | | | | 97. Threatens |
| | | | | | 101. Avoids work |
| | | | | | 114. Fails to pay debts |
| | | | | | 120. Drives too fast |
| | | | | | 122. Trouble keeping job |

[a]Items are designated in the table with the numbers they bear on the ASR and ABCL and summaries of their content.
[b]Not on ASR . [c]Not on ABCL. [H-I]Hyperactivity-Impulsivity subscale. [I]Inattention subscale.

**Table 2**

**ASR and ABCL Items Identified by ≥ 13/21 Experts as "Definitely Critical"**

| Item[a] | | Number Who Rated Item "Definitely Critical" |
|---|---|---|
| 91. | Talks (or thinks) about killing self | 21 |
| 18. | Deliberately harms self | 19 |
| 40. | Hears sounds or voices | 19 |
| 70. | Sees things that aren't there | 19 |
| 6. | Uses drugs for nonmedical purposes | 17 |
| 57. | Physically attacks people | 17 |
| 103. | Unhappy, sad, or depressed | 17 |
| 9. | Can't get mind off certain thoughts | 16 |
| 66. | Repeats certain acts | 15 |
| 10. | Can't sit still, restless, or hyperactive | 14 |
| 21. | Damages or destroys things belonging to others | 14 |
| 84. | Strange behavior | 14 |
| 55. | Mood swings between elation and depression | 14 |
| 8. | Can't concentrate | 13 |
| 14. | Cries a lot | 13 |
| 16. | Cruelty, bullying, or meanness | 13 |
| 90. | Drinks too much alcohol or gets drunk | 13 |
| 92. | Does things that may cause trouble with the law | 13 |
| 97. | Threatens to hurt people | 13 |

[a]Items are designated with the numbers they bear on the ASR and ABCL and
 summaries of their content.

## Appendix A

### Rating the Consistency of  Specific Problems with DSM-IV Categories

#### Purposes

1. To determine which problems listed on the Adult Self-Report (ASR) and Adult Behavior Checklist (ABCL) should be considered "critical" items, i.e., items that clinicians may be particularly concerned about.

2. To determine whether problems listed on the ASR and ABCL are diagnostically consistent with DSM disorders that might be found at ages 18 through 59 years.

Accompanying this instruction sheet are:

1. DSM-IV criteria for some disorders that are found at ages 18-59 years

2. A list of the problem items with spaces for rating the diagnostic consistency of each item with each DSM category

#### Instructions

If you are willing, please follow these steps:

#### Critical Items

(1) For each item on the list, consider whether it refers to problems that clinicians may be particularly concerned about, whether or not the items are included in diagnostic criteria.

(2) Enter *0* if you consider the item *"not critical"*; enter *1* if you consider the item *"possibly critical"*; or enter *2* if you consider the item *"definitely critical"*.

#### Consistency with DSM categories

(1) For each item on the list, consider its consistency with the first category of disorders, Depressive Disorders, including Dysthymia and Major Depressive Episode.  Consult the accompanying DSM-IV criteria for Dysthymia and Major Depressive Episode.

(2) Decide whether you think the first problem is diagnostically consistent with either of the Depressive Disorders.

(a) Please use the DSM-IV symptom criteria as a basis for deciding whether a problem is consistent with a category.

(b) You may feel that some problem items are appropriate diagnostic indicators of particular disorders, but that they do not have precise counterparts among the DSM-IV symptom criteria.  Feel free to rate these problem items as being consistent with the categories, according to the scoring rules listed in 3 below.

**Appendix A (cont.)**

(3) Please rate how consistent the problem is with the Depressive Disorders category, as follows:

> 0=Not consistent with the category.
> 1=Somewhat consistent with the category.
> 2=Very consistent with the category.

(4) After you have rated the consistency of the first problem item with the Depressive Disorders category, rate the consistency of each other problem item with each category specified on the rating form. You may prefer to rate the first item for all categories before proceeding to the second item, i.e., work from left to right. Or you may prefer to rate all items for the first category before rating any items for the second category, i.e., proceed from top to bottom.

(5) Feel free to rate an item 0, 1, or 2 for any category, regardless of the ratings you give that item for the other categories. For example, you can give an item a rating of 0 for three categories, 1 for four categories, and 2 for two categories. In other words, do not spend time choosing a single category for your highest rating of an item. Instead, just consider each category alone when rating each problem item. You may decide that some problem items should be rated 0 for all categories, whereas other problem items should be rated 2 for several categories.

(6) After you have finished your ratings, please enter the other requested information at the end of the rating forms. Then e-mail the rating form to Thomas.Achenbach@uvm.edu or fax it to 802-656-2602. We will then mail your check for $75.

Thanks very much for your help.

# Appendix B

## Psychiatrists and Psychologists Who Rated
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**Appendix B (cont.)**

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