

# Conners CBRS Update

The following updates have been made to the Conners Comprehensive Behavior Rating Scales™ (Conners CBRS™): (1) Validity scale interpretation, (2) *T*-score interpretation, (3) renaming the Aggressive Behaviors scale to Defiant/Aggressive Behaviors, (4) re-scoring the Violence Potential scale, and (5) adjusting triggers for the Other Clinical Indicators. These changes should improve the utility of the assessment in actual practice.

## 1. Validity Scale Interpretation

The Conners CBRS includes three Validity scales: the Positive Impression (PI), Negative Impression (NI), and Inconsistency Index (IncX) scales. In the initial release of the Conners CBRS documentation, the guidelines for interpretation of these Validity scales used the following language: *probably valid*, *possibly invalid*, and *probably invalid*. To better align the interpretation guidelines with the intent of the scales, the guidelines have been revised using new language. Validity scale scores should be considered as indicative of potentially problematic response styles (i.e., possible *positive*, *negative*, or *inconsistent* response style; see Table 1).

It is recommended that clinical judgment be used in the interpretation of elevated Validity scale scores (i.e., raw scores that are above the cut-offs presented in Table 1). Item-level analysis can be useful in this process. Elevated PI and NI scores may indicate a positive response style for the PI and a negative response style for the NI. However, it is possible that these scales could be elevated due to other reasons, such as in the case of an extremely well-behaved youth (an elevated PI score), or in the case of a youth who really does misbehave most of the time (an elevated NI score). Similarly, while an elevated IncX score likely reflects an inconsistent response style, it is possible that it is the youth’s behavior (rather than the rater’s responses) that is inconsistent. Reviewing the responses to the items that make up these scales can help determine if there is a problematic response style or if the scale elevations are accurate reflections of the youth’s behavior.

### Response Style Analysis using the Conners CBRS Validity Scales

**Table 1.a Positive Impression**

| Parent | Teacher | Self-Report | Interpretive Guideline   |
|--------|---------|-------------|--|
| 0–4    | 0–4     | 0–3         | Overly positive response style not indicated.  |
| 5–6    | 5–6     | 4–6         | Possible positive response style.<br>Scores may present a more favorable impression than is warranted. |

**Table 1.b Negative Impression**

| Parent | Teacher | Self-Report | Interpretive Guideline   |
|--------|---------|-------------|--|
| 0–4    | 0–4     | 0–4         | Overly negative response style not indicated.  |
| 5–6    | 5–6     | 5–6         | Possible negative response style.<br>Scores may present a less favorable impression than is warranted. |

**Table 1.c Inconsistency Index**

| Parent  | Teacher   | Self-Report   | Interpretive Guideline   |
|---|---|---|--|
| 0–5 or < 2 absolute differences equal to 2 or 3           | 0–4 or < 2 absolute differences equal to 2 or 3           | 0–8 or < 2 absolute differences equal to 2 or 3           | Inconsistent responding style not indicated.   |
| ≥ 6 and at least two absolute differences equal to 2 or 3 | ≥ 5 and at least two absolute differences equal to 2 or 3 | ≥ 9 and at least two absolute differences equal to 2 or 3 | Responses to similar items showed high levels of inconsistency.<br>Scores may not accurately reflect the individual due to a careless or unusual response to some items. |

## 2. T-Score Interpretation

A *T*-score is a standardized score, which means that it can be easily compared across different raters or administration dates. *T*-scores for Conners CBRS scales convert the raw scores to reflect what is typical or atypical for that age and gender. All *T*-scores have a mean of 50 and a standard deviation of 10. A perfectly average *T*-score of 50 is exactly equal to the mean score of that age and gender group. The average range falls within one standard deviation of the mean (i.e., between 40 and 59). For some scales on the Conners CBRS, it is possible to get very extreme *T*-scores (i.e., > 100). To avoid over-interpretation of these extreme values, all *T*-scores greater than 90 are reported as 90.

In the original guidelines for interpreting *T*-scores, the 60 to 69 range was considered “elevated.” An additional condition, however, was imposed in that scores from 57 to 63 were specified as being in the “borderline” range. The *T*-score interpretive guidelines have been adjusted so that the “borderline range” now reflects a specific category of scores (i.e., scores that are between 1 and 1.5 standard deviations above the mean; 60 to 64) and is described as “High Average.”<sup>1</sup>

The new interpretive guidelines are as follows: A *T*-score in the “Very Elevated” range (i.e., > 2 standard deviations above the mean) is very likely to indicate a significant area of concern. A *T*-score in the “Elevated” range (i.e., 1.5–2 standard deviations above the mean) usually indicates significant concerns. A *T*-score in the “High Average” range requires careful consideration and clinical judgment, as this range is the borderline between typical and atypical levels of concern. *T*-scores falling below 60 generally indicate typical or absent concerns for the child’s age and gender. (See Table 2 for a summary of these guidelines.) Remember that clinical training and judgment are required for responsible interpretation of any test score; these score classification guidelines should not be applied automatically without careful interpretation by a clinician.

Note that these guidelines are approximations and should not be used as absolute rules. There is no reason to believe that there is a perceptible difference, for instance, between a *T*-score of 64 and a *T*-score of 65. Even if a youth receives a score in a given range, if other information (e.g., observation, interview, clinical history) suggests something different, then this must be taken into consideration in the interpretation process.<sup>2</sup>

This change applies to the interpretation of *T*-scores for the Conners CBRS Content scales and DSM-IV-TR Symptom scales.

The interpretation of discrepancies between DSM-IV-TR Symptom Counts and *T*-scores has been updated to reflect the changes in the *T*-score guidelines; see Table 3. These discrepancies are to be expected, given that the Symptom Count and *T*-score are based on different metrics (i.e., absolute versus relative). Because the DSM-IV-TR Symptom scale *T*-scores take age and gender into account, they may at times be more sensitive to atypicality for that peer group, even if symptoms do not meet the absolute symptom count level.

The standalone Conners Clinical Index™ (Conners CI™) component items are identical to the Conners CI items that are included in the Conners CBRS. The interpretation of the Conners CI probability score does not differ between the two formats. The primary difference between the two formats is that the standalone form offers five subscale *T*-scores that are not available on the full-length Conners CBRS. Interpretation of these subscale *T*-scores should follow the guidelines presented in Table 2 (i.e., the interpretive guidelines regarding *T*-score cut-offs also apply to the Conners CI subscale *T*-scores).

**Table 2. Understanding T-scores and Percentiles**

| <b>T-score</b> | <b>Percentile</b> | <b>Guideline</b>  |
|----------------|-------------------|---|
| 70+            | 98+               | Very Elevated Score (Many more concerns than are typically reported)    |
| 65–69          | 93–97             | Elevated Score (More concerns than are typically reported)              |
| 60–64          | 84–92             | High Average Score (Slightly more concerns than are typically reported) |
| 40–59          | 16–83             | Average Score (Typical levels of concern)                               |
| < 40           | < 16              | Low Score (Fewer concerns than are typically reported)                  |

<sup>1</sup> Data analyses of the normative and clinical samples revealed that scores in the 60 to 64 range are almost equally likely to occur with clinical and non-clinical cases.

<sup>2</sup> This falls under Step 5 (Integrate Results) of the Step-by-Step Interpretation Guidelines in your Conners CBRS Manual.

**Table 3. Interpretation Guidelines for DSM-IV-TR Scores on the Conners CBRS**

|  | <b>DSM-IV-TR<br/>T-score</b> | <b>DSM-IV-TR<br/>Symptom Count</b>  | <b>Interpretation Guidelines</b>   |
|--|------------------------------|-------------------------------------|--|
| <i>T</i> -score and Symptom Count are elevated         | ≥ 65                         | At or above DSM-IV-TR cut-off score | Significant features of the disorder are present in that setting. The symptoms are occurring in excess of what is typical for that youth's age and gender. This diagnosis should be given strong consideration.  |
| Only <i>T</i> -score is elevated                       | ≥ 65                         | Below DSM-IV-TR cut-off score       | Features of this diagnosis are not prominent in that setting. The symptoms that are present are occurring in excess of what is typical for that youth's age and gender. Although the current presentation is atypical for the youth's age and gender, there are not sufficient symptoms reported to meet DSM-IV-TR symptomatic criteria for this disorder. The assessor may wish to consider alternative explanations for why the <i>T</i> -scores could be elevated in the absence of this diagnosis (e.g., another diagnosis may be producing these types of concerns in that particular setting). |
| Only Symptom Count is elevated                         | ≤ 64                         | At or above DSM-IV-TR cut-off score | Significant features of the disorder are present in that setting. The symptoms are at (or below) developmental expectations for that age and gender. Although the absolute DSM-IV-TR symptomatic criteria may have been met, the current presentation is not atypical for this age and gender. The assessor should carefully consider whether or not symptoms are present in excess of developmental expectations (an important requirement of DSM-IV-TR diagnosis).   |
| <i>T</i> -score and Symptom Count are average or below | ≤ 64                         | Below DSM-IV-TR cut-off score       | Features of this diagnosis are not prominent in that setting. Any symptoms that are present are at (or below) developmental expectations for that age and gender. It is unlikely that the diagnosis is currently present (although criteria may have been met in the past).  |

### 3. Defiant/Aggressive Behaviors Scale

All three versions (Parent, Teacher, Self-Report) of the Conners CBRS include an Aggressive Behaviors scale. However, the true content of the scale measures not only aggression, but also defiance (behaviors that are considered problematic but do not have overt expression of aggression). To reflect this broader content, the scale name has been changed from Aggressive Behaviors to Defiant/Aggressive Behaviors. The characteristics of high scorers on the Defiant/Aggressive Behaviors scale are:

May be argumentative. May defy requests from adults. May have poor control of anger and may lose temper. May be physically and/or verbally aggressive. May show violence, bullying, and destructive tendencies. May seem uncaring. May have legal problems.

The underlying cause of an elevated Defiant/Aggressive Behaviors score (i.e., defiant vs. aggressive) can be discerned by looking at the item-level responses (Step 4 of the Step-by-Step Interpretation Guidelines in your Conners CBRS Manual). The examination of the responses to items in the scale can help determine if the scale elevation is caused by defiant behaviors (e.g., "Actively refuses to do what adults tell him/her to do," "Argues with adults"), aggressive behaviors (e.g., "Physically hurts people," "Is violent and aggressive towards others"), or both types of behaviors.

## 4. Violence Potential Indicator (VPI)

Violence potential (i.e., the possibility that a youth may be at risk for violent behavior) is a concern that has received increased attention in recent years; as such, the Conners CBRS includes a Violence Potential scale. This scale has been renamed Violence Potential Indicator (VPI) to better reflect the intended interpretation of the scale (i.e., elevated VPI scores do not necessarily indicate that the youth is/has been violent, rather, it is an *indicator* that the youth *may* behave violently in the future). The items on the VPI scale were informed by available literature on school violence and violence prevention. Items were selected to represent concepts from the Warning Signs Antiviolence Initiative of the American Psychological Association (APA), which was developed in 1998 in an effort to help recognize the warning signs of teen violence.<sup>3</sup> Other items were added based on findings from the Safe School Initiative of the U.S. Secret Service and Department of Education.<sup>4</sup> Some of these items reflect extremely serious existing violent and aggressive behaviors (e.g., “Uses a weapon”); others are more benign (e.g., “Feels rejected”) and are only indirectly related to the potential for future violence.

Initially, like all other scales, all of the Violence Potential scale items had the same “weight” (i.e., the raw score is the sum of all item ratings). The scoring of the VPI scale has been refined so that the more serious items now “count” for more than the less serious items in computing the raw score. Table 4 displays the scoring rules applied to each item in the calculation of the VPI raw score. For example, a rating of “1” on the relatively less severe item “Annoys others” would be transposed such that only 0.5 was added to the raw score. Conversely, a rating of “1” on a severe item, such as “Physically hurts others” would be transposed such that 4 was added to the raw score. These changes have affected the score calculations in such a manner so that relatively few of the severe items are required to trigger an elevated *T*-score (for example, if “Uses a weapon,” and “Carries a weapon” are both endorsed items, then the VPI scale may receive a high

*T*-score, even if no other items are elevated). On the other hand, it would take many of the less serious items to be endorsed before the *T*-score would be high.

## 5. Other Clinical Indicators

When the Conners CBRS was released, for all Other Clinical Indicators (with the exception of the PDD items on the Self-Report form), any response of 1, 2, or 3 would flag a recommendation that suggested the need for further investigation. This approach was highly sensitive and ensured that any potential problems would be flagged. However, for the Specific Phobia item, this approach has led to many non-clinical youth being flagged because it is very common for youth to be afraid of something at least *occasionally*. Therefore, the trigger point for this single item across all three forms (i.e., Parent, Teacher, Self-Report) has been changed to 2 (i.e., ratings of 1 will no longer trigger a recommendation for follow-up). It should also be emphasized that for all of the Other Clinical Indicators, these are flags only of *potential* problems and may not reflect a clinical condition.

<sup>3</sup> American Psychological Association Practice Directorate. (1998). Warning Signs of Teen Violence. Retrieved September 29, 2005, from <http://helping.apa.org/featuredtopics/feature.php>

<sup>4</sup> Vossekuil, B., Fein, R., Reddy, M., Borum, R., & Modzeleski, W. (2002). The Final Report and Findings of the Safe School Initiative: Implications for the Prevention of School Attacks in the United States. U.S. Department of Education, Office of Elementary and Secondary Education, Safe and Drug-Free Schools Program and U.S. Secret Service, National Threat Assessment Center, Washington, D.C. Retrieved July 5, 2007, from [http://www.secretservice.gov/ntac/ssi\\_final\\_report.pdf](http://www.secretservice.gov/ntac/ssi_final_report.pdf)

**Table 4. VPI Transposing Rules**

| Item Content                       | Item # |         |             | Transposing Rule                     |
|------------------------------------|--------|---------|-------------|--------------------------------------|
|                                    | Parent | Teacher | Self-Report |                                      |
| Trouble controlling anger          | 5      | 38      | 157         | 0 → 0<br>1 → 0.5<br>2 → 1<br>3 → 1.5 |
| Feels rejected                     | 21     | 198     | n/a         |                                      |
| Loses temper                       | 45     | 3       | 58          |                                      |
| Argues with adults                 | 70     | 192     | 117         |                                      |
| Poor school performance            | 130    | 61      | 18          |                                      |
| Feels disrespected                 | 139    | 153     | 41          |                                      |
| Annoys others                      | 163    | 128     | 134         |                                      |
| Gets into trouble                  | n/a    | n/a     | 7           |                                      |
| Is lonely                          | n/a    | n/a     | 11          |                                      |
| Picked on or bullied               | 3      | 23      | 73          | 0 → 0<br>1 → 1<br>2 → 3<br>3 → 5     |
| Disregard for others' rights       | 13     | 57      | 120         |                                      |
| Drinks alcohol                     | 36     | 16      | 168         |                                      |
| Lost interest/pleasure             | 53     | 46      | 93          |                                      |
| Gets even                          | 54     | 182     | 172         |                                      |
| Starts fights                      | 69     | 148     | 85          |                                      |
| Seeks danger/risks/thrills         | 72     | 63      | 75          |                                      |
| Angry/resentful                    | 82     | 135     | 143         |                                      |
| Uses drugs                         | 131    | 75      | 68          |                                      |
| Cruel to animals                   | 161    | 115     | 112         |                                      |
| Bullies/threatens/scares others    | 177    | 73      | 6           |                                      |
| Damages/destroys others' property  | 179    | 163     | 48          |                                      |
| Gets high with household materials | 182    | 29      | 141         |                                      |
| Shows interest in weapons          | 170    | 196     | n/a         |                                      |
| Knows where to get a weapon        | n/a    | n/a     | 36          |                                      |
| Gets into trouble at school        | 101    | 45      | n/a         |                                      |
| Made plans to hurt others          | 15     | 161     | 79          | 0 → 0<br>1 → 4<br>2 → 6<br>3 → 8     |
| Carries a weapon                   | 106    | 179     | 56          |                                      |
| Uses a weapon                      | 122    | 101     | 170         |                                      |
| Gang membership                    | 132    | 30      | 136         |                                      |
| Violent/aggressive                 | 140    | 190     | 4           |                                      |
| Physically hurts others            | 144    | 52      | 144         |                                      |
| Trouble with police                | 195    | 88      | n/a         |                                      |

Note. n/a = not applicable.





