Appendix A: The Bipolar Affective Disorder Dimensional Scale, version 3.0 (BADDS 3.0)

General information

The Bipolar Affective Disorder Dimension Scale (BADDS) has been developed in order to address some of the disadvantages of a purely categorical approach to diagnostic classification of Bipolar Spectrum Disorders.

BADDS is a dimensional rating scheme that retains and builds upon current categorical classifications. It is intended for use in clinical samples from populations over-represented by Bipolar Spectrum illness. It was not developed for use in general population samples.

BADDS has been under development since 1996 and has now been used by a variety of researchers within our group on more than 1100 cases. It has proved to be user friendly and has excellent reliability, even on sets of diagnostically challenging cases.

BADDS comprises 4 dimensions: M: Mania; D: Depression; P: Psychosis; I: Incongruence. Each dimension is rated using integer scores on a 0 – 100 scale. Ratings are made after review of all available clinical data on a subject (eg. case records, semi-structured psychiatric interview and information from an informant) and can be performed as a simple addition to the conventional consensus lifetime psychiatric diagnostic procedures already in use by many research groups. Each rating reflects a mixture of severity and frequency of clinical features. Guidelines are provided that define anchor points in the rating scales and specify how ratings should be made.

Researchers and clinicians are welcome to use BADDS providing that an appropriate literature citation acknowledging its use is included in any published work that arises.

We welcome comments and suggestions about BADDS and will consider these when making revisions to the scale and rating guidelines. Please direct any correspondence to:

Professor Nick Craddock
Neuropsychiatric Genetics Unit
Department of Psychological Medicine
University of Wales College of Medicine
Heath Park
Cardiff CF14 4XN
United Kingdom
Email: craddockn@cardiff.ac.uk
BADDS: General rating guidelines

1) Do not rate a dimension if there is insufficient information - just leave the dimension blank.

2) Use all available information to make the best judgement for each rating.

3) It is expected that when used for research BADDS will be used within the accepted framework of the lifetime best-estimate consensus diagnostic procedure.

4) All ratings should be made using integers in the range 0 - 100.

5) Ratings for M and D are a mixture of severity and frequency. Generally the severity of the most severe episode identifies a range in which the rating will be made and the frequency determines the score assigned within the range. In assigning a rating, start at the lowest score in the range and then add points according to any relevant psychopathology over and above that of the most severe episode according to the following guidelines:
   a) In general each additional episode of that level of severity will add a score of 2 in a 20 point range and 1 in a 10 point range.
   b) Scores in the identified severity range can and should be modified according to severity and duration of total episodes – but with a substantial down-weighting for episodes of lower severity.
   c) For episodes that are one level of severity lower than the rating range, add 0.25 points for each episode of lower severity for a score in a 10 point range and 0.5 points for each episode of lower severity for a score in a 20 point range.
   d) For episodes that are more than one level of severity lower than the rating range the total adjustment should not normally exceed 1 or 2 points.

6) For the P and I dimensions anchor points are given in these guidelines. Judgment is used to assign scores between anchor points.

7) Under very exceptional circumstances a score can be rated outside the severity range. However, this should always be agreed by at least two raters and the rating should lie in the interval 0 - 100. Such a rating should be indicated by an asterisk (*) following the rating for that dimension. An example of the applicability of this rule is the rating up of an episode in which the balance of evidence clearly suggests a severe illness that is not adequately supported by the documented evidence because of poor documentation. Another example would be the rating down of an episode if the balance of evidence strongly suggests that the formal evidence clearly over-represents the clinical significance of the episode.
1) Mania dimension (M)

- The rating reflects severity and frequency.
- Use ICD10 to define symptom and duration criteria for hypomanic and manic syndromes.
- Sub-hypomanic features in the ranges 1 - 19 and 20 - 39 should be rated using judgement according to the balance of number and duration of symptoms.
- No impairment criterion is used for hypomania.
- The impairment criteria for mania are one or more of:

  - Disrupts work or social life more or less completely
  - Markedly inappropriate overspending that is reckless within the context of the Subject’s financial position
  - Fights
  - Lost job
  - Police involvement
  - Family split up
  - Received specific treatment (including dose increase of mood stabilizer) for acute mania
  - Psychotic features

- Incapacitating mania refers to a severe manic episode that includes the presence of one or more of the following features: incoherence, disorientation, loss of contact with reality (which includes psychotic features), frenzied or bizarre psychomotor activity.
- Mixed episodes are rated on the M dimension. If all manic episodes are mixed, add “m” to the rating (eg. 65m).

**Key points and ranges on the M dimension**

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No manic features.</td>
</tr>
<tr>
<td>1 - 19</td>
<td>Mild sub-hypomanic features. Elation/irritability and less than 3 symptoms.</td>
</tr>
<tr>
<td>20 - 39</td>
<td>Sub-hypomanic features. Elation/irritability and 3+ symptoms for at least 1 day.</td>
</tr>
<tr>
<td>40 - 59</td>
<td>Hypomanic features. At least one hypomanic episode.</td>
</tr>
<tr>
<td>60 - 79</td>
<td>Manic features. At least one manic episode.</td>
</tr>
<tr>
<td>80 - 100</td>
<td>Severe manic features. At least one episode of incapacitating mania.</td>
</tr>
</tbody>
</table>
2) Depression (D)

- Rating reflects severity and duration.
- Use ICD10 to define depressive syndromes. This includes 10 symptoms of depression that count for the purposes of diagnosis:

A  
Depressed mood  
Loss of interest/pleasure  
Loss of energy

B  
Suicidal ideation  
Pathological guilt  
Loss of confidence/self esteem  
Loss of concentration  
Slowed activity  
Change of appetite or weight  
Change in sleep pattern

- Depression severity: Mild - 4+ symptoms (2+ from A); moderate - 6+ symptoms (2+ from A); severe - 8+ symptoms (3 from A). Refer to ICD10 for full definition of syndromes and symptoms.
- Duration criterion for Major Depressive Episode is 2 + weeks. If 1- 2 weeks, classify as Minor Depression.
- Rate depression as severe if (a) ICD10 criteria fulfilled, or (b) criteria for major depression are fulfilled and there has been a serious suicide attempt, ECT treatment or hospital admission for depression.
- Minor depression refers to at least 1 week of low mood accompanied by 2 or more depression items or to brief episodes that would otherwise meet criteria for Major Depression.
- Incapacitating depression refers to severe major depression that includes presence of one or more of the following features: stupor; mutism; loss of contact with reality (including psychotic features).
- If psychotic features are present, a depressive episode can be rated as incapacitating if the minimum criteria for major depression are satisfied (ie. 4 items).

**Key points and ranges on D dimension**

<table>
<thead>
<tr>
<th>Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No features of depression during lifetime.</td>
</tr>
<tr>
<td>1 – 19</td>
<td>Sub-Minor depression.</td>
</tr>
<tr>
<td>20 - 39</td>
<td>Minor depression.</td>
</tr>
<tr>
<td>40 - 49</td>
<td>Mild major depression.</td>
</tr>
<tr>
<td>50 - 59</td>
<td>Moderate major depression.</td>
</tr>
<tr>
<td>60 - 79</td>
<td>Severe depression.</td>
</tr>
<tr>
<td>80 - 100</td>
<td>Incapacitating depression</td>
</tr>
</tbody>
</table>
3) Psychotic features (P)

- Psychotic features refers to delusions, hallucinations, positive formal thought disorder, catatonia or grossly disorganized behaviour (but see exclusions below).
- Ratings on this dimension exclude stupor or excitement during an affective episode or positive formal thought disorder during mania.
- Lifetime occurrence of psychotic features is rated.
- Near psychotic schizotypal features refers to the following DSMIV schizotypal items: ideas of reference; odd beliefs or magical thinking that influences behaviour and is inconsistent with sub-cultural norms; unusual perceptual experiences including bodily illusions; odd thinking and speech; suspiciousness or paranoid ideation; behaviour or appearance that is odd eccentric or peculiar. Depersonalization and derealization are not classified as near psychotic features.
- The period of illness considered refers to all affective and non-affective periods of psychopathology.
- Rating should take account of both number and duration of episodes with and without psychotic features. If in doubt, “rate up” the psychotic features. Examples:
  - If there have been two 1 week long affective psychotic episodes and a 1 year non-psychotic depressive episode, rate 60 (ie. approx. 2/3 of illness episodes).
  - If there have been nine 1 month non-psychotic affective episodes, one 1 month psychotic affective episode and 4 years of chronic hallucinations outside affective episodes, rate 80 (ie. approx. 80% of illness duration).
- The Uncertain category (P = 1) is used for situations in which insufficient information is available to determine if sign or symptom meets criteria for near psychotic feature.

**Key points and ranges on P dimension**

<table>
<thead>
<tr>
<th>Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Absent.</td>
</tr>
<tr>
<td>1</td>
<td>Uncertain.</td>
</tr>
<tr>
<td>2 – 9</td>
<td>Near psychotic features: occasional at low end of range, frequent at high end of range. Occurrence of true psychotic symptoms should not be rated in this range.</td>
</tr>
<tr>
<td>10 – 20</td>
<td>Brief clear-cut psychotic symptom that are not a prominent feature of illness.</td>
</tr>
<tr>
<td>21 – 100</td>
<td>Psychotic symptoms that are a prominent feature in one of more episodes of illness.</td>
</tr>
</tbody>
</table>
4) Mood incongruence (I)

- DSMIV definitions of congruence and incongruence are used.
- Rate incongruence of lifetime occurrence of psychotic features.
- For convenience, the set of psychotic symptoms recognized as having special weight in the diagnosis of schizophrenia and schizoaffective disorder (thought echo, insertion, withdrawal or broadcasting; passivity experiences; hallucinatory voices giving running commentary, discussing subject in third person or originating in some part of the body; bizarre delusions; catatonia) are denoted in the guidelines as the “S set”.
- If Psychosis Features dimension, P < 10, leave I blank.

**Key points on I dimension**

0 - 40 Psychotic symptoms occur only during affective episodes and do not include any of the S set.
- Rating 0 – virtually completely mood congruent.
- Rating 20 – approximate balance between mood congruent and incongruent.
- Rating 40 – virtually completely mood incongruent

43 Psychotic symptoms occur only during affective episodes and include one or more of the S set which have not definitely been present for 2 weeks.

47 Psychotic symptoms occur only during affective episodes and include one or more of the S set which have definitely been present for 2 weeks.

50 - 59 Psychotic symptoms probably present for at least 2 weeks either side of an affective episode.
- Rating 50 – on at least one occasion.
- Ratings of 51-59 used to reflect recurrence and/or certainty.

60 - 100 Psychotic symptoms definitely present for at least 2 weeks either side of an affective episode.
- Rating 60 – on at least one occasion.
- Rating 80 - on many occasions.
- Rating 100 – Psychotic symptoms predominate illness and occur chronically outside (or in absence of) affective episodes.