

International Society for CNS Clinical Trials and Methodology

A New Assessment for the Measurement of Anhedonia/Asociality/Avolition in Schizophrenia

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Guiding Principles

- 1. Psychometric soundness; data driven**
- 2. Empirically and conceptually separable measures of anhedonia, avolition, asociality**
- 3. Broad assessment**
- 4. User friendly**
- 5. Sensitive to change**

General Format

- **Semi-structured interview**
- **Standardized prompts**
- **Descriptive anchors**
- **Includes a judgment about primary cause**

Distinguishing feature: Pleasure, enjoyment

Domains:

- Physical
- Social
- Recreational/vocational

Ratings:

- Anticipatory pleasure: intensity
- Consummatory pleasure: frequency & intensity

Number of items: 9

Distinguishing feature: Quality of social interactions

Domains:

- Family
- Romantic
- Friends
- Others

Ratings:

- Frequency/quality of social interactions

Number of Items: 4

Distinguishing feature: Initiation and persistence

Domains:

- Social relationships
- Work/vocational/school
- Recreation/hobbies/pastimes
- Self-care/grooming

Ratings:

- Initiation/persistence in activities

Number of Items: 4

Experience of Negative Emotions

Distinguishing feature: Experience of negative, unpleasant emotions

Domains: Sadness, anger, anxiety, etc.

Ratings:

- Consummatory: Frequency & intensity

Number of Items: 2

The New Measure

- One domain for each symptom
- Sample Interview Probes
- Rating scales (0 –6 scale)

Anhedonia: Consummatory Pleasure Interview Probes

Social Domain

In the past two weeks...

*How did you feel when you were with _____
(family, friend, other)?*

Did you like spending time with them?

How often did you enjoy spending time with them?

Anhedonia: Consummatory Pleasure Intensity Rating

- 0 *Highly intense experience(s) of pleasure; delightful or deeply satisfying ("amazing").*
- 1 *Strong experience(s) of pleasure; very satisfying, fulfilling ("great", "wonderful", "fun").*
- 2 *Fairly strong experience(s) of pleasure; ("really good", "enjoyable").*
- 3 *Moderate experience(s) of pleasure ("good").*
- 4 *Mild experience(s) of pleasure (e.g., "nice" or "OK").*
- 5 *Fleeting or momentary experience(s) of slight pleasure.*
- 6 *No experience(s) of pleasure in any social context or complete emotional indifference or neutrality in the company of people.*

Anhedonia: Consummatory Pleasure Frequency Rating

- 0 *Very often.* Many pleasurable experiences nearly every day.
- 1 *Frequently.* Several pleasurable experiences most days.
- 2 *Often.* Some pleasurable experiences most days.
- 3 *Sometimes.* A few pleasurable experiences on about half of the days.
- 4 *Occasionally.* A few pleasurable experiences on a few days.
- 5 *Rarely.* Limited number of pleasurable experiences on a couple of days.
- 6 *Never.* No pleasurable experiences.

Anhedonia: Anticipatory Pleasure Interview Probes

Recreation/Vocation Domain

You mentioned that over the past two weeks you have been involved in _____. Do you have any plans to engage in these activities over the next few weeks?

If Yes: What are your plans? How does thinking about these plans make you feel? Are you looking forward to any of these activities in particular? How do you think it will feel when you actually _____.

Anhedonia: Anticipatory Pleasure Intensity Rating

- 0 *Highly intense*. Experience anticipated to be delightful or deeply satisfying ("amazing").
- 1 *Strong*. Experience anticipated to be very satisfying and fulfilling ("great", "wonderful", "fun").
- 2 *Anticipated Fairly strong* ("really good", "enjoyable").
- 3 *Anticipated Moderate pleasure* ("good").
- 4 *Anticipated Mild pleasure* (e.g., "nice" or "OK").
- 5 *Anticipated Minimal pleasure*.
- 6 *No pleasure in anticipation* of recreational/vocational activities – completely indifferent about prospect of experiencing pleasure from recreational/vocational sources.

Asociality: Interview Probes

Romantic Relationships Domain

If contact with a romantic partner in past two weeks:

*What kinds of things have you done with [partner]?
How often have you done [activity] in past two
weeks? How much time did you spend together?*

*Tell me about what you did during that [visit, activity,
conversation]? If patient describes partner's
behavior during activity be sure to clarify and have
patient describe their own involvement and how
they interacted with partner. *When you were
together, who does the talking? What did you talk
about?**

Asociality Rating

- 0 *No impairment.*** Frequent and involved social activities with romantic partner(s), well within normal limits.
- 1 *Very slight deficit.*** Very slight deficit in frequency and involvement, of questionable clinical relevance.
- 2 *Mild deficit.*** Mild deficit in frequency and involvement; may report 5-7 interactions, with moderate involvement in the social exchanges.

Asociality Rating

- 3 *Moderate deficit.*** Notable deficit in frequency and involvement; may report 4-5 interactions and/or not very involved in these interactions.
- 4 *Moderately severe deficit.*** Significant deficit in frequency and involvement; may report 3-4 interactions with partner(s) but only superficial.
- 5 *Marked deficit.*** Obvious lack of frequency and involvement; 1-2 superficial interactions.
- 6 *Severe deficit.*** No romantic partner or total lack of involvement with romantic partner(s).

Avolition: Interview Probes

Recreation/Hobbies/Pastimes Domain

In the past two weeks...

How often do you do {hobbies}?

When you wanted to do an activity, did you initiate [arrange it, start it, set it up] it or did you let someone else initiate it?

How long did you typically do {hobby, recreational activity} once you had started?

Have you tried something new in the past two weeks?

Avolition Rating

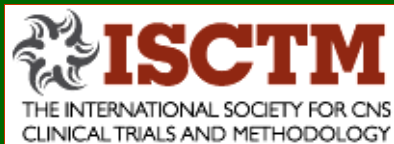
- 0 *No impairment.*** Initiates and persists in hobbies or recreational activities on a regular basis.

- 1 *Very slight deficit .*** Very slight deficit in initiating and persisting. Questionable clinical relevance.

- 2 *Mild deficit.*** Mild deficit in initiating and persisting; may initiate 5-7 times in the past 2 weeks, with moderate persistence.

Avolition Rating

- 3 *Moderate deficit.* Notable deficit in initiating and persisting; may initiate 4-5 activities and/or not persist for very long.
- 4 *Moderately severe deficit.* Significant deficit in initiating and persisting; may 3-4 activities but not persist for very long.
- 5 *Marked deficit.* Obvious lack of initiation and persistence; may initiate only 1-2 activities.
- 6 *Severe deficit.* Nearly total lack of initiation and persistence in activities.



Negative Emotion Experience Interview Probes

What's made you feel bad in the last two weeks?

What's made you feel sad or depressed?

What's made you feel nervous, worried, or scared?

What have you found irritating?

Negative Emotion Experience: Intensity Rating

- 0 *Severe.* Highly intense experience(s) of negative emotions. The experience(s) was devastating ("terrifying," "heartbreaking," "worst thing that ever happened," "horrible," "overwhelming," etc.).
- 1 *Quite severe.* Strong experience of negative emotions ("very bad," "really scary," "very sad").
- 2 *Moderately severe.* Very unpleasant experience ("bad," "frightening," "depressing").

Negative Emotion Experience: Intensity rating

- 3 *Moderate*. Definite experience(s) of negative emotions, but not of great importance or distress to the patient ("bothered me," "didn't like it").
- 4 *Mild deficit*. Mild experience of negative emotions ("mixed feelings," "worse have been better").
- 5 *Marked deficit*. Very mild experience of negative emotions ("not that bad," "okay, I guess").
- 6 *Severe deficit*. No experience(s) of negative emotions in any situation.

Negative Emotion Experience: Frequency rating

- 0 *Unrelenting.* Negative emotions during all or nearly all waking hours.
- 1 *Very common.* Negative emotions most of the time, with a few periods of feeling well or neutral.
- 2 *Usual.* Negative emotions more than half of the time.
- 3 *Half.* Negative emotions about half of waking hours.

Negative Emotion Experience: Frequency rating

- 4 *Less than half*. Frequently experienced negative emotions, but clearly less than half of waking hours.
- 5 *Occasional*. Occasional negative emotions.
- 6 *None*. No negative emotions during the rating period.



Judgment of Cause: Each Symptom

Based on all available information, what is your judgment as to the principal cause of any observed deficit in [symptom]? Choose only one. If you think more than one makes a significant contribution, pick the most important factor.

- Does not apply, all of the ratings are less than 2
- Depression and/or anxiety
- Suspiciousness
- Other hallucinations and/or delusions
- Disorganization
- Medication side effect or a general medical condition
- None of the above

- **Anhedonia: anticipatory & consummatory pleasure**
- **Asociality: quality of social contact**
- **Avolition: initiation & persistence**
- **Experience of negative emotions**
- **Judgment of cause**
- **Total of 22 items**