# AUDITORY PERCEPTUAL TRAIT AND STATE SCALE (APTS)

**User Instructions and Questionnaires** 

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#### Instructions for Interviewers

The APTS consists of 24 items rated in 5-point Likert scales, divided into two sections; the 'state' section is intended to capture current auditory perceptual symptoms experienced in the past 7 days, and the 'trait' section is intended to capture the frequency of auditory perceptual symptoms throughout adulthood, **except** the past two weeks. The past two weeks are excluded from the lifetime trait assessment to have a clear temporal differentiation from the state assessment.

APTS was developed through clinical evaluations and also by reviewing and incorporating several auditory hallucination and auditory perceptual sub-clinical symptom rating instruments. There are a number of scales targeting auditory hallucination in schizophrenia patients, and several scales targeting more subtle, subclinical auditory perceptual anomalies. However, there is no well-established scale that can measure across the full span of subclinical to clinical auditory perceptual disturbance. Furthermore, existing scales describe current or recent level of auditory symptoms rather than longitudinally experienced auditory symptoms. Items in the APTS are intended to cover a wide range of symptoms from quasi-normal to sub-clinical to florid psychotic symptoms in the auditory perceptual domain. All questions were worded into a self-reporting format.

Symptom severity in APTS is based on frequency of occurrence within the respective state or trait temporal window in this self-rating instrument. Subjective rating for intensity of the symptoms is not asked. The responses specify frequency of the individual's experience of the symptom along a Likert scale ranging from 0-4. The anchors are defined for the state and trait scales are listed below.

The anchors for 'trait' measures are non-trivial because the anchors are trying to capture large variations in abnormal perceptual experience over the life time of many individuals using merely five levels. To achieve good reliability on the trait items it is important to carefully explain the instructions to make sure the respondent understand and remember the time period and the anchors.

Each section consists of 12 items. The trait and the state sections should be printed on two separate pages and presented to the respondent one at a time. Give specific instructions on the temporal window each section is intended for, and explain the anchors for the section only. When one section is completed, have the respondent hand back that section, inspect it for completeness, then give the respondent the next section with instruction for the section.

The scale should be administered in a "<u>self-rating under clinical interview environment</u>" format. Treat this as a formal clinical interview. An interviewer should sit with the respondent as if this is a rater-administered interview, and provide instructions reiterating the time course of interest for each part of the instrument. The interviewer should remain in the room as the respondent completes the

scale, but should not directly inspect what the respondent is rating so that symptom rating remains strictly self-report. Raters can explain voluntary questions from the respondent to assist them in understanding the questions, but should not instruct on how to choose the actual rating. These procedures are to maximize consistency in the understanding of the questions and anchors, minimize variability in the style and judgment from interviewers, and ensure the respondent's attentiveness to each question.

(Do not present the face page and the instruction pages to the respondent)

### Auditory Perceptual Trait and State Scale (APTS-T)

Additional header information can be placed here

**Instruction to staff**: Although this is a self-administered scale, it is essential to: 1. Read the instruction to the participant and ensure understanding before the participant fills this out. 2. Make sure the participant fully understands and remembers the meaning of each scale. Alternatively, staff may complete this using interview.

**Instruction to participant**: We sometimes have unusual perceptual experience in our life. For example, hearing your name called but no one was there, or occasionally seeing a shadow and then realizing nothing was there. For some people such experiences can happen more often. The following questions are to describe whether you have any of these experiences, even very briefly in your life time, up until the last two weeks. **Any time in the past in your life is relevant here, except the past two weeks**. We will ask you about any of such experience in the more recent days separately later.

The number scale is a bit complicated. Please carefully read the number scale below before you start.

| 0    | 1                           | 2 | 3   | 4   |
|------|-----------------------------|---|---|---|
| Neve | Experienced once in my life |   | Or experienced frequently and intensely for | Experienced many, many times in a year for almost every year of my adult life |

#### In your life time

| Fill each question out like this   | 0 | 1 | @ | 3 | 4 |  |
|--|---|---|---|---|---|--|
| A1. I have noticed something distorted in the voices or sounds I heard.  | 0 | 1 | 2 | 3 | 4 |  |
| A2. I have the experience of suddenly becoming aware of distant sounds.  | 0 | 1 | 2 | 3 | 4 |  |
| A3. I have heightened sensitivity to sounds or people talking. They seem to come in at once and difficult to shut out. | 0 | 1 | 2 | 3 | 4 |  |
| A4. I sometimes feel noises (like traffic, wind, appliances, speech) have increased intensity or extremely loud.       | 0 | 1 | 2 | 3 | 4 |  |
| A5. I have the experience of mistaken noises for voices.   | 0 | 1 | 2 | 3 | 4 |  |
| Reminder – the questions are about experience in your life time. Also remember what the number scale means.            |   |   |   |   |   |  |
| A6. I had heard crackling or knocking, bells ringing, music, or tapping sounds that are probably not real.             | 0 | 1 | 2 | 3 | 4 |  |
| A7. Hearing my name called but realizing that it must have been my imagination.  | 0 | 1 | 2 | 3 | 4 |  |
| A8. Normal speaking voice sometimes has hidden, additional voice or noise in it.                                       | 0 | 1 | 2 | 3 | 4 |  |
| A9. I have heard a voice speaking my thoughts aloud.   | 0 | 1 | 2 | 3 | 4 |  |
| A10. I have heard sound, whispering or people talking to me, even though no one is actually present.                   | 0 | 1 | 2 | 3 | 4 |  |
| A11. I heard voices or sounds in my head and they bother me.   | 0 | 1 | 2 | 3 | 4 |  |
| A12. I have experiences that I cannot get rid of the voices or sounds in my head even if I try to.                     | 0 | 1 | 2 | 3 | 4 |  |

## Auditory Perceptual Trait and State Scale – State Scale (APTS-S)

#### Additional header information can be placed here

**Instruction**: Now we would like to ask you similar experiences again, only this time about the experiences in the last week. Please describe whether you have any of these experiences, even very briefly. **Only the past 1 week (7 days) is relevant here**. Again, please pay attention to the number scales. They mean slightly different things here.

| 0    | 1           | 2                           | 3                                 | 4                           |
|------|-------------|-----------------------------|-----------------------------------|-----------------------------|
| None | Experienced | Experienced more than once, | Once a day or more, but have long | Frequent, many times a day, |
|      | once        | but less than once a day    | breaks in-between                 | everyday in the past week   |

#### In the past 1 week

| Fill each question out like this   | s: 0 1 <b>2</b> 3 4 |  |  |  |  |
|--|---------------------|--|--|--|--|
| A1. I have noticed something distorted in the voices or sounds I heard.  | 0 1 2 3 4           |  |  |  |  |
| A2. I have the experience of suddenly becoming aware of distant sounds.  | 0 1 2 3 4           |  |  |  |  |
| A3. I have heightened sensitivity to sounds or people talking. They seem to come in at once and difficult to shut out. | 0 1 2 3 4           |  |  |  |  |
| A4. I sometimes feel noises (like traffic, wind, appliances, speech) have increased intensity or extremely loud.       | 0 1 2 3 4           |  |  |  |  |
| A5. I have the experience of mistaken noises for voices.   | 0 1 2 3 4           |  |  |  |  |
| Reminder – the questions are about experience for the last week only. Also remember what the number scale means.       |                     |  |  |  |  |
| A6. I had heard crackling or knocking, bells ringing, music, or tapping sounds that are probably not real.             | 0 1 2 3 4           |  |  |  |  |
| A7. Hearing my name called but realizing that it must have been my imagination.  | 0 1 2 3 4           |  |  |  |  |
| A8. Normal speaking voice sometimes has hidden, additional voice or noise in it.                                       | 0 1 2 3 4           |  |  |  |  |
| A9. I have heard a voice speaking my thoughts aloud.   | 0 1 2 3 4           |  |  |  |  |
| A10. I have heard sound, whispering or people talking to me, even though no one is actually present.                   | 0 1 2 3 4           |  |  |  |  |
| A11. I heard voices or sounds in my head and they bother me.   | 0 1 2 3 4           |  |  |  |  |
| A12. I have experiences that I cannot get rid of the voices or sounds in my head even if I try to.                     | 0 1 2 3 4           |  |  |  |  |