

**POSITIVE AND NEGATIVE SYNDROME SCALE
(PANSS)**

Scoring Procedure

Tick appropriate box for each item

P1. Delusions Beliefs which are unfounded, unrealistic, and idiosyncratic. Basis for rating thought content expressed in the interview and its influence on social relations and behavior.	
1 Absent - Definition does not apply	<input type="checkbox"/>
2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.	<input type="checkbox"/>
3 Mild - Presence of one or two delusions which are vague, uncrystallized, and not tenaciously held. Delusions do not interfere with thinking, social relations, or behavior.	<input type="checkbox"/>
4 Moderate - Presence of either a kaleidoscopic array of poorly formed, unstable delusions or of a few wellformed delusions that occasionally interfere with thinking, social relations, or behavior.	<input type="checkbox"/>
5 Moderate severe - Presence of numerous well-formed delusions that are tenaciously held and occasionally interfere with thinking, social relations, or behavior.	<input type="checkbox"/>
6 Severe - Presence of a stable set of delusions which are crystallized, possibly systematized, tenaciously held, and clearly interfere with thinking, social relations, and behavior.	<input type="checkbox"/>
7 Extreme - Presence of a stable set of delusions which are either highly systematized or very numerous, and which dominate major facets of the patient's life. This frequently results in inappropriate and irresponsible action, which may even jeopardize the safety of the patient or others.	<input type="checkbox"/>

P2. Conceptual disorganization Disorganized process of thinking characterized by disruption of goal-directed sequencing, e.g., circumstantiality, tangentiality, loose associations non sequiturs, gross illogicality, or thought block. Basis for rating: cognitive-verbal processes observed during the course of interview.	
1 Absent - Definition does not apply	<input type="checkbox"/>
2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.	<input type="checkbox"/>
3 Mild - Thinking is circumstantial, tangential, or paralogical. There is some difficulty in directing thoughts toward a goal and some loosening of associations may be evidenced under pressure.	<input type="checkbox"/>
4 Moderate - Able to focus thoughts when communications are brief and structured, but becomes loose or irrelevant when dealing with more complex communications or when under minimal pressure.	<input type="checkbox"/>
5 Moderate severe - Generally has difficulty in organizing thoughts, as evidenced by frequent irrelevances, disconnectedness, or loosening of associations even when not under pressure.	<input type="checkbox"/>
6 Severe - Thinking is seriously derailed and internally inconsistent, resulting in gross irrelevancies and disruption of thought processes, which occur almost constantly.	<input type="checkbox"/>
7 Extreme - Thoughts are disrupted to the point where the patient is incoherent. There is marked loosening of associations, which results in total failure of communication, e.g., "word salad, or mutism.	<input type="checkbox"/>

<p>P3. Hallucinatory behavior Verbal report or behavior indicating perceptions which are not generated by external stimuli. These may occur in the auditory visual, olfactory, or somatic realms. Basis for rating: Verbal report and physical manifestations during the course of interview as well as reports of behavior by primary care workers or family.</p>	
1 Absent - Definition does not apply	<input type="checkbox"/>
2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.	<input type="checkbox"/>
3 Mild - One or two clearly formed but infrequent hallucinations, or else a number of vague abnormal perceptions which do not result in distortions of thinking or behavior.	<input type="checkbox"/>
4 Moderate - Hallucinations occur frequently but not continuously, and the patient's thinking and behavior are affected only to a minor extent.	<input type="checkbox"/>
5 Moderate severe - Hallucinations are frequent, may involve more than one sensory modality, and tend to distort thinking and/or disrupt behavior. Patient may have a delusional interpretation of these experiences and respond to them emotionally and, on occasion, verbally as well.	<input type="checkbox"/>
6 Severe - Hallucinations are present almost continuously, causing major disruption of thinking and behavior. Patient treats these as real perceptions, and functioning is impeded by frequent emotional and verbal responses to them.	<input type="checkbox"/>
7 Extreme - Patient is almost totally preoccupied with hallucinations, which virtually dominate thinking and behavior. Hallucinations are provided a rigid delusional interpretation and provoke verbal and behavioral responses, including obedience to command hallucinations.	<input type="checkbox"/>

<p>P4. Excitement Hyperactivity as reflected in accelerated motor behavior, heightened responsivity to stimuli hypervigilance, or excessive mood lability. Basis for rating: Behavioral manifestations during the course of interview as well as reports of behavior by primary care workers or family.</p>	
1 Absent - Definition does not apply	<input type="checkbox"/>
2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.	<input type="checkbox"/>
3 Mild - Tends to be slightly agitated, hypervigilant, or mildly overaroused throughout the interview, but without distinct episodes of excitement or marked mood lability. Speech may be slightly pressured.	<input type="checkbox"/>
4 Moderate - Agitation or overarousal is clearly evident throughout the interview, affecting speech and general mobility, or episodic outbursts occur sporadically	<input type="checkbox"/>
5 Moderate severe - Significant hyperactivity or frequent outbursts of motor activity are observed, making it difficult for the patient to sit still for longer than several minutes at any given time.	<input type="checkbox"/>
6 Severe - Marked excitement dominates the interview delimits attention, and to some extent affects personal functions such as eating and sleeping.	<input type="checkbox"/>
7 Extreme - Marked excitement seriously interferes in eating and sleeping and makes interpersonal interactions virtually impossible. Acceleration of speech and motor activity may result in incoherence and exhaustion.	<input type="checkbox"/>

P5. Grandiosity

Exaggerated self-opinion and unrealistic convictions of superiority, including delusions of extraordinary abilities, wealth, knowledge, fame, power, and moral righteousness. Basis for rating: thought content expressed in the interview and its influence on behavior.

1 Absent - Definition does not apply

2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.

3 Mild - Some expansiveness or boastfulness is evident, but without clear-cut grandiose delusions.

4 Moderate - Feels distinctly and unrealistically superior to others. Some poorly formed delusions about special status or abilities may be present but are not acted upon.

5 Moderate severe - Clear-cut delusions concerning remarkable abilities, status, or power are expressed and influence attitude but not behavior.

6 Severe - Clear-cut delusions of remarkable superiority involving more than one parameter (wealth, knowledge, fame, etc.) are expressed, notably influence interactions, and may be acted upon.

7 Extreme - Thinking, interactions, and behavior are dominated by multiple delusions of amazing ability, wealth knowledge, fame, power, and/or moral stature; which may take on a bizarre quality.

P6. Suspiciousness/persecution

Unrealistic or exaggerated ideas of persecution, as reflected in guardedness, a distrustful attitude, suspicious hypervigilance, or frank delusions that others mean one harm. Basis for rating: thought content expressed in the interview and its influence on behavior.

1 Absent - Definition does not apply

2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.

3 Mild - Presents a guarded or even openly distrustful attitude, but thoughts, interactions, and behavior are minimally affected.

4 Moderate - Distrustfulness is clearly evident and intrudes on the interview and/or behavior, but there is no evidence of persecutory delusions. Alternatively, there may be indication of loosely formed persecutory delusions, but these do not seem to affect the patient's attitude or interpersonal relations

5 Moderate severe - Patient shows marked distrustfulness, leading to major disruption of interpersonal relations, or else there are clear-cut persecutory delusions that have limited impact on interpersonal relations and behavior.

6 Severe - Clear-cut pervasive delusions of persecution which may be systematized and significantly interfere in interpersonal relations.

7 Extreme - A network of systematized persecutory delusions dominates the patient's thinking, social relations, and behavior.

P7. Hostility

Verbal and nonverbal expressions of anger and resentment, including sarcasm, passive-aggressive behavior, verbal abuse, and assaultiveness. Basis for rating: interpersonal behavior observed during the interview and reports by primary care workers or family.

1 Absent - Definition does not apply

2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.

3 Mild - Indirect or restrained communication of anger such as sarcasm, disrespect, hostile expressions, and occasional irritability.

4 Moderate - Presents an overtly hostile attitude, showing frequent irritability and direct expression of anger or resentment.

5 Moderate severe - Patient is highly irritable and occasionally verbally abusive or threatening.

6 Severe - Uncooperativeness and verbal abuse or threats notably influence the interview and seriously impact upon social relations. Patient may be violent and destructive but is not physically assaultive toward others.

7 Extreme - Marked anger results in extreme uncooperativeness, precluding other interactions, or in episode(s) of physical assault toward others.

POSITIVE AND NEGATIVE SYNDROME SCALE (PANSS)

NEGATIVE SCALE (N)

N1. Blunted affect

Diminished emotional responsiveness as characterized by a reduction in facial expression, modulation of feelings, and communicative gestures. Basis for rating: observation of physical manifestations of affective tone and emotional responsiveness during the course of interview.

1 Absent - Definition does not apply

2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.

3 Mild - Changes in facial expression and communicative gestures seem to be stilted, forced, artificial, or lacking in modulation.

4 Moderate - Reduced range of facial expression and few expressive gestures result in a dull appearance.

5 Moderate severe - Affect is generally ~flat~, with only occasional changes in facial expression and a paucity of communicative gestures.

6 Severe - Marked flatness and deficiency of emotions exhibited most of the time. There may be unmodulated extreme affective discharges, such as excitement, rage, or inappropriate uncontrolled laughter.

7 Extreme - Changes in facial expression and evidence of communicative gestures are virtually absent. Patient seems constantly to show a barren or "wooden" expression.

N2. Emotional withdrawal

Lack of interest in, involvement with, and affective commitment to life's events. Basis for rating: reports of functioning from primary care workers or family and observation of interpersonal behavior during the course of interview.

1 Absent - Definition does not apply

2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.

3 Mild - Usually lacks initiative and occasionally may show deficient interest in surrounding events.

4 Moderate - Patient is generally distanced emotionally from the milieu and its challenges but, with encouragement, can be engaged.

5 Moderate severe - Patient is clearly detached emotionally from persons and events in the milieu, resisting all efforts at engagement. Patient appears distant, docile, and purposeless but can be involved in communication at least briefly and tends to personal needs, sometimes with assistance.

6 Severe - Marked deficiency of interest and emotional commitment results in limited conversation with others and frequent neglect of personal functions, for which the patient requires supervision

7 Extreme - Patient is almost totally withdrawn, uncommunicative, and neglectful of personal needs as a result of profound lack of interest and emotional commitment.

N3. Poor rapport

Lack of interpersonal empathy, openness in conversation, and sense of closeness, interest, or involvement with the interviewer. This is evidenced by interpersonal distancing and reduced verbal and nonverbal communication. Basis for rating: interpersonal behavior during the course of interview.

1 Absent - Definition does not apply

2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.

3 Mild - Conversation is characterized by a stilted strained or artificial tone. It may lack emotional depth or tend to remain on an impersonal, intellectual plane.

4 Moderate - Patient typically is aloof, with interpersonal distance quite evident. Patient may answer questions mechanically, act bored, or express disinterest.

5 Moderate severe - Disinvolvement is obvious and clearly impedes the productivity of the interview. Patient may tend to avoid eye or face contact.

6 Severe - Patient is highly indifferent, with marked interpersonal distance. Answers are perfunctory, and there is little nonverbal evidence of involvement. Eye and face contact are frequently avoided.

7 Extreme - Patient is totally uninvolved with the interviewer. Patient appears to be completely indifferent and consistently avoids verbal and nonverbal interactions during the interview.

N4. Passive/apathetic social withdrawal

Diminished interest and initiative in social interactions due to passivity, apathy, anergy, or avolition. This leads to reduced interpersonal involvement and neglect of activities of daily living. Basis for rating: reports on social behavior from primary care workers or family.

1 Absent - Definition does not apply	<input type="checkbox"/>
2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.	<input type="checkbox"/>
3 Mild - Shows occasional interest in social activities but poor initiative. Usually engages with others only when approached first by them.	<input type="checkbox"/>
4 Moderate - Passively goes along with most social activities but in a disinterested or mechanical way. Tends to recede into the background.	<input type="checkbox"/>
5 Moderate severe - Passively participates in only a minority of activities and shows virtually no interest or initiative. Generally spends little time with others.	<input type="checkbox"/>
6 Severe - Tends to be apathetic and isolated, participating very rarely in social activities and occasionally neglecting personal needs. Has very few spontaneous social contacts.	<input type="checkbox"/>
7 Extreme - Profoundly apathetic, socially isolated, and personally neglectful.	<input type="checkbox"/>

N5. Difficulty in abstract thinking

Impairment in the use of the abstract-symbolic mode of thinking, as evidenced by difficulty in classification, forming generalizations, and proceeding beyond concrete or egocentric thinking in problemsolving tasks. Basis for rating: responses to questions on similarities and proverb interpretation, and use of concrete vs. abstract mode during the course of the interview.

1 Absent - Definition does not apply	<input type="checkbox"/>
2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.	<input type="checkbox"/>
3 Mild - Tends to give literal or personalized interpretations to the more difficult proverbs and may have some problems with concepts that are fairly abstract or remotely related.	<input type="checkbox"/>
4 Moderate - Often utilizes a concrete mode. Has difficulty with most proverbs and some categories. Tends to be distracted by functional aspects and salient features.	<input type="checkbox"/>
5 Moderate severe - Deals primarily in a concrete mode, exhibiting difficulty with most proverbs and many categories.	<input type="checkbox"/>
6 Severe - Unable to grasp the abstract meaning of any proverbs or figurative expressions and can formulate classifications for only the most simple of similarities. Thinking is either vacuous or locked into functional aspects, salient features, and idiosyncratic interpretations.	<input type="checkbox"/>
7 Extreme - Can use only concrete modes of thinking. Shows no comprehension of proverbs, common metaphors or similes, and simple categories. Even salient and functional attributes do not serve as a basis for classification. This rating may apply to those who cannot interact even minimally with the examiner due to marked cognitive impairment.	<input type="checkbox"/>

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N6. Lack of spontaneity and flow of conversation	
Reduction in the normal flow of communication associated with apathy, avolition, defensiveness, or cognitive deficit. This is manifested by diminished fluidity and productivity of the verbal-interactive process. Basis for rating: cognitive-verbal processes observed during the course of interview.	
1 Absent - Definition does not apply	<input type="checkbox"/>
2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.	<input type="checkbox"/>
3 Mild - Conversation shows little initiative. Patient's answers tend to be brief and unembellished, requiring direct and leading questions by the interviewer.	<input type="checkbox"/>
4 Moderate - Conversation lacks free flow and appears uneven or halting. Leading questions are frequently needed to elicit adequate responses and proceed with conversation.	<input type="checkbox"/>
5 Moderate severe - Patient shows a marked lack of spontaneity and openness, replying to the interviewer's questions with only one or two brief sentences.	<input type="checkbox"/>
6 Severe - Patient's responses are limited mainly to a few words or short phrases intended to avoid or curtail communication. (E.g., "I don't know," "I'm not at liberty to say.") Conversation is seriously impaired as a result, and the interview is highly unproductive.	<input type="checkbox"/>
7 Extreme - Verbal output is restricted to, at most, an occasional utterance, making conversation not possible.	<input type="checkbox"/>

POSITIVE AND NEGATIVE SYNDROME SCALE (PANSS)

N7. Stereotyped thinking	
Decreased fluidity, spontaneity, and flexibility of thinking, as evidenced in rigid, repetitious, or barren thought content. Basis for rating: cognitive-verbal processes observed during the interview.	
1 Absent - Definition does not apply	<input type="checkbox"/>
2 Minimal - Questionable pathology; may be at the upper extreme of normal limits.	<input type="checkbox"/>
3 Mild - Some rigidity shown in attitudes or beliefs. Patient may refuse to consider alternative positions or have difficulty in shifting from one idea to another.	<input type="checkbox"/>
4 Moderate - Conversation revolves around a recurrent theme, resulting in difficulty in shifting to a new topic.	<input type="checkbox"/>
5 Moderate severe - Thinking is rigid and repetitious to the point that despite the interviewer's efforts conversation is limited to only two or three dominating topics.	<input type="checkbox"/>
6 Severe - Uncontrolled repetition of demands, statements, ideas, or questions which severely impairs conversation.	<input type="checkbox"/>
7 Extreme - Thinking, behavior, and conversation are dominated by constant repetition of fixed ideas or limited phrases, leading to gross rigidity, inappropriateness, and restrictiveness of patient's communication.	<input type="checkbox"/>