

Bush-Francis Catatonia Rating Scale

Training Manual and Coding Guide

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Background

Catatonia is a psychomotor syndrome with hypo-, hyper-, and parakinetic (*i.e.*, odd or bizarre movements) variants and presents in association with primary mental illness or with medical or neurological conditions. The term psychomotor reflects the abnormal—often quite odd and unusual—relationship between mental states, motor activity, and the context for the behaviors.

Any motoric subtype of catatonia can be complicated by autonomic activation (a state known as malignant catatonia), which can prove fatal. Severe and persistent catatonia can also lead to several other medical complications including thromboembolic disease, decubiti, contractures, aspiration pneumonia, malnutrition, or dehydration. Therefore, prompt identification and management is required for clinical stability and to prevent a range of serious, often-irreversible complications, including death.

The symptoms of catatonia are diverse, so a high degree of clinical suspicion for this condition is required for reliable detection. Additionally, specific features of catatonia may present in a variety of ways, ranging from subtle oddities to extreme hyperactivity. Published in 1996, the Bush-Francis Catatonia Rating Scale (BFCRS) has become the standard instrument for detecting catatonia and grading its severity. However, the past 25 years of experience with this scale has brought to light many questions about what constitutes each specific item, how to differentiate between similar or overlapping items, and how to score specific clinical findings. This training manual is designed to clarify each item and to provide a semi-structured interview that guides the clinician to score the BFCRS.

The clinical assessment of catatonia involves general observation, physical examination, and interventions to elicit specific features. While assessing for catatonia, the clinician should talk as if the patient is fully aware and cognizant of what is being said and being done. Patients with catatonia are often fearful but unable to express this verbally. When administering each portion of the assessment, you may talk the patient through what you are examining to increase their comfort and encourage them to participate as best they can.

Clinical Assessment for BFCRS, Expanded

Part 1: The assessment below reviews the first 14 items of the BFCRS, which constitute the Bush-Francis Catatonia Screening Instrument (BFCSI). We include the full-scale items of gegenhalten and grasp reflex below for efficient sequencing of clinical assessment, though these items should not be scored as part of the BFCSI.

Procedure	Item
Begin the assessment by observing the patient before engaging them in conversation. If it is unclear whether the patient is asleep, attempt to awaken them before scoring items.	
- Observe overall degree of motor activity : <i>Does the patient exhibit excitement or immobility? A painful stimulus may be necessary to evaluate for degree of psychological stupor if they are motionless.</i>	Excitement/immobility
- Observe body for stereotypies and mannerisms : <i>Does the patient make repetitive gestures or do other things in an odd, manneristic fashion?</i>	Stereotypy/mannerism ^{1/2}
- Observe face for grimacing : <i>Does the patient have a contorted facial expression or exaggerated muscle movements?</i>	Grimacing
- Observe eyes for staring and eye contact : <i>Is the gaze fixed or not making eye contact?</i>	Staring/withdrawal ^{1/2}
Engage the patient in conversation.	
- Assess quantity and quality of speech : <i>Is the patient mute or the voice abnormal?</i>	Mutism/mannerism ^{2/2}
- Assess speech content for repetition : <i>Does the patient repeat a phrase/phrases?</i>	Verbigeration
- Assess speech for echoing : <i>Does the patient repeat what they hear?</i>	Echolalia ^{1/2}
During the evaluation, scratch your head in an exaggerated fashion. If the patient is standing, turn in a circle.	
- Observe behavior for mimicry : <i>Does the patient mimic your movement?</i>	Echopraxia ^{2/2}
- Observe body for postures : <i>Is the patient in a bizarre posture or maintaining a mundane posture for an extended period of time?</i>	Posturing ^{1/2}
Say, "Keep your arms relaxed as I examine them." Then, attempt to re-position their arms.	
- Observe body for passively-induced postures : <i>Does the patient maintain new postures?</i>	Catalepsy ^{2/2}
Next, bend/move each arm with alternating lighter and heavier force. Examine lower extremities similarly.	
- Evaluate tone for initial resistance that releases : <i>Is it like a warm candle bending?</i>	Waxy flexibility
- Evaluate tone for rigidity through the arc of movement : <i>Is the tone increased?</i>	Rigidity
- Evaluate tone for resistance proportional to the force applied : <i>Does the tone increase proportional to the applied force?</i>	Gegenhalten*
Apply firm pressure across the patient's palm from the ulnar to the radial side.	
- Evaluate response for grasp reflex : <i>Does the patient's hand close reflexively?</i>	Grasp reflex*
For negativism, evaluate the following:	
- Observe response to attempted exam : <i>Did the patient oppose the arm exam or another element of exam (e.g., passive attempts to open closed eyes)?</i>	Negativism**
- Observe response to instructions : <i>Throughout the assessment, has the patient failed to follow instructions (e.g., "Open your eyes")? Or has the patient done the opposite of what was requested?</i>	
For withdrawal, consult collateral (i.e., chart, nursing, family) to determine the following:	
- Evaluate behavior for withdrawal over the past 48 hr.: <i>Has the patient had minimal oral intake over the past 1–2 days?</i>	Withdrawal ^{2/2}

*Full-scale item (i.e., not part of the Bush-Francis Catatonia Screening Instrument), included for efficient assessment.

**Failure to stop performing another catatonic feature (e.g., staring) on command should NOT be scored as negativism.

Clinical Assessment for BFCRS, Expanded

Part 2: The assessment below covers the remaining items on the full BFCRS to provide a total score.

Procedure	Item
Ask the patient to extend their arm; then say, "Do not let me lift your arm." Try to lift their arm using one finger beneath their hand, applying a gentle force. If the patient does not extend an arm, attempt to lift their arm from its resting position likewise.	
- Evaluate response for mitgehen : <i>Does the arm rise, as though being drawn upward by an unseen force?</i>	Mitgehen
Extend your hand and say, "Shake my hand." After 1–2 seconds, relax and stop shaking.	
- Observe response to instruction to shake your hand : <i>Does the patient persist in shaking your hand after you've stopped shaking?</i>	Automatic obedience ^{1/2}
- Observe movement once they let go of your hand : <i>Do they persist with a shaking motion in the air?</i>	Perseveration ^{1/2}
Say "This time, do not shake my hand" and then extend your hand.	
- Observe behavior for indecision : <i>Does the patient extend their hand partway as though stuck or uncertain? Similarly, throughout the assessment, does the patient ever appear stuck initiating or performing actions?</i>	Ambitendency
Rate the following based on the patient's speech and behaviors throughout the assessment:	
- Review speech content for repetition : <i>Was the patient unable to change subject content from one question to the next (verbal perseveration)? Similarly, has the patient persisted in performing any elicited behavior (motor perseveration)?</i>	Perseveration ^{2/2}
- Review response to instructions : <i>Did the patient obey commands in a reflexive or exaggerated fashion?</i>	Automatic obedience ^{2/2}
- Review behavioral impulsivity : <i>Did the patient exhibit sudden, inappropriate behaviors?</i>	Impulsivity
- Review combativeness : <i>Did the patient strike out at you or others around them?</i>	Combativeness
Obtain most recent vital signs. If the patient appears to have autonomic arousal (e.g., sweating, hyperventilation, ruddy complexion, or oily skin from overactive sebaceous glands), assess vitals during evaluation.	
- Review temperature, blood pressure, heart rate, respiratory rate, sweating : <i>Does the patient have autonomic abnormalities?</i>	Autonomic abnormality

BFCRS Scoring Notes

Timing: The following scale is to be scored over the course of at least 5 min. or the duration of the clinical assessment, if longer. Two exceptions to the 5-min. administration are posturing/cataplexy to differentiate severity scores 2 and 3 and withdrawal, which requires collateral information to determine duration of reduced oral intake or eye contact. It is common practice to score items observed or reported over the prior 24 hours as part of an initial evaluation because these features deserve clinical consideration for diagnosis and management; however, for clarity of reporting and score reliability the score should be specified as one of the following:

- **Interval assessment:** When including items present over a preceding period of time (*e.g.*, 24 hour period) or since the most recent assessment (*e.g.*, 8 or 12 hours for a nursing shift), we recommend that this be clearly documented (*e.g.* “a 24-hour interval BFCRS” or “an 8-hour interval BFCRS”) and reported as such in any publications where this approach has been used.
- **State assessment:** When using this scale to monitor short-term changes in clinical features, especially in response to treatment such as a lorazepam challenge, a cross-sectional approach should be used for initial and follow-up assessments (*i.e.*, only including features identified during a direct, in-person assessment). In such instances, the cross-sectional scoring of the scale should be clearly documented (*e.g.*, “state BFCRS”) and reported as such in any publications where this approach has been used.

Coma and known neurological disease: This scale was not designed to evaluate patients with coma, so its use in this population requires further formal study. Also, where known neurological deficits or symptoms due to neurological disease (*e.g.*, aphasia or rigidity) may be confused with a catatonic finding, these should not be scored on the BFCRS.

Delirium: Based on preliminary evidence on the syndromal overlap between delirium and catatonia, we recommend that catatonia caseness require 4 or more items on the BFCRI present in the context of delirium to optimize sensitivity and specificity (Wilson *Crit Care Med* 2018).

Equivocal features: As a general rule, rate only those items that are clearly present. If uncertain as to the presence of an item, rate the item as 0.

Scoring notes: In the section that follows, we outline the following four elements for each item:

Identification: This describes whether the item is identified on observation, by elicitation by the examiner’s saying or doing something, and/or on physical examination.

Description: This explains the defining feature(s) assessed by each item.

Differentiation: Several features of catatonia can be difficult to differentiate from others, and certain features commonly co-occur with others. Here, closely related symptoms are distinguished. Where it is unclear whether to score a clinical finding as a single item (*e.g.*, immobility) or multiple items (*e.g.*, immobility and negativism), score only the one item that is clear and the equivocal item as 0.

Examples: Many catatonic features can present in a variety of ways. We provide common examples of each item, but no listing can be complete.

Bush-Francis Catatonia Rating Scale Items, Expanded

1. **Excitement:** Extreme hyperactivity, constant motor unrest that is apparently non-purposeful. *Exclude* akathisia or goal-directed aggression.
 0. Absent
 1. Excessive motion, intermittent
 2. Constant motion, hyperkinetic without rest periods
 3. Full-blown catatonic excitement, endless frenzied motor activity

Identification: Observation

Description: Excitement is characterized by excessive, frank motor activity that typically involves the entire body. It is clearly excessive for the context in which it occurs, and the hyperactivity does not appear to accomplish any purpose or achieve a goal (*e.g.*, trying to get someone's attention). It occurs spontaneously without prompting and so is not elicited.

Differentiation:

- **Stereotypy:** Excitement involves most if not the whole body whereas each specific stereotypy is typically restricted to one part of the body (*e.g.*, movements of the arms, the hands or the trunk).
- **Mannerism:** Excitement involves most if not the whole body whereas behavioral mannerisms are typically restricted to one part of the body, especially parts of the body that are used as adjuncts to or to amplify communication (*e.g.*, hands or face).
- **Impulsivity:** Excitement is characterized by increased frequency or constancy of activity over time whereas impulsivity describes the suddenness and inappropriateness of behaviors to context. Impulsivity is also typically sporadic whereas excitement is ongoing.
- **Motor perseveration:** Excitement involves most if not the whole body whereas motor perseveration is restricted to a part of the body.
- **Combativeness:** Excitement describes the spontaneous occurrence of excessive activity whereas combativeness describes unprovoked, non-goal-directed aggression toward others, typically those in the patient's immediate environment.
- **Goal-directed aggression:** Aggression that is directed toward certain persons in particular or done for another specific reason (*e.g.*, revenge) should not be scored as excitement or combativeness.
- **Akathisia:** Akathisia is characterized by an internal "drive to move" and a motoric restlessness that typically affects lower extremities more than upper extremities. Patients are commonly, though not always, aware of an internal "drive" and able to articulate this. Where the motoric activity is consistent with known akathisia, do not score this item.

Examples:

- Walking around, pacing
- Inability to sit still; squirming in chair
- Constant or near-constant movement in bed; tossing and turning

2. **Immobility/stupor:** Extreme hypoactivity, immobile, minimally responsive to stimuli

0. Absent
1. Sits abnormally still, may interact briefly
2. Virtually no interaction with external world
3. Stupor (psychological), non-reactive to painful stimuli

Identification: Observation or elicitation (*e.g.*, administering a painful stimulus for confirmation)

Description: The cardinal feature of immobility is a reduction in the patient's overall level of spontaneous physical activity and interactivity with the external world, that the amount of movement is less than expected based on context. The term stupor should be understood to mean "psychological stupor," not formally a reduced level of arousal (*e.g.*, a Richmond Agitation–Sedation Scale score < 0). Stimuli describes both social stimuli (*e.g.*, the clinician or others around the patient) and environmental stimuli (*e.g.*, painful or otherwise aversive stimuli).

Differentiation:

- **Staring:** Immobility does not imply staring as it may present with several different types of gaze: a blank stare, roving eyes, eyes that track environmental stimuli, eyes that are forcibly closed, *etc.* Staring specifically refers to a predominantly fixed gaze, either straight ahead or blankly fixed on an object in the environment.
- **Posturing/catalepsy:** Immobility refers to diminished activity of the entire body. The behavior of posturing/catalepsy may be differentiated from immobility where it occurs in a single part of the body (*e.g.*, arms or legs), often with preserved movement in other body regions. For example, a patient might walk but hold their arm up with posturing or catalepsy. Additionally, posturing/catalepsy involves muscle tone that resists gravity so as to keep a body part in certain positions; however, immobility may occur in a person lying in bed with normal muscle tone. Immobility and posturing/catalepsy do often co-occur.
- **Rigidity:** Immobility refers to global behavior whereas rigidity refers to increased muscle tone. A person with immobility may move minimally but have flaccid tone when examined, and a person with mild rigidity may move spontaneously and normally.
- **Negativism:** Immobility refers to *observed, spontaneous* reduction in overall interaction with the environment. In comparison, negativism is the *elicited, active* opposition or resistance to the examiner (*e.g.*, resisting attempts to open the eyes or the mouth) or doing the opposite of what is being asked.
- **Withdrawal:** Immobility refers to overall motor activity, whereas withdrawal refers specifically to the absence of oral intake and absence of eye contact. The person with immobility may have preserved oral intake when meals are provided and make eye contact with others. The withdrawn person may move spontaneously, though it is common for withdrawal to present with reduced speed or degree of movement.

Examples:

- Lying in bed motionless despite environmental stimuli.
- May move extremely slowly, as though moving through a viscous substance.

3. **Mutism:** Verbally unresponsive or minimally responsive
0. Absent
 1. Verbally unresponsive to majority of questions; incomprehensible whisper
 2. Speaks less than 20 words/5 min
 3. No speech

Identification: Combination of observation and elicitation on interview

Description: Mutism is characterized by the reduction in the quantity of speech (*i.e.*, number of words spoken) or the reduction in the volume of vocalizations. **Note:** Where a known aphasia may be confused with mutism, this item should not be scored.

Differentiation:

- **Negativism:** Verbal non-response to questions should be scored as mutism, not negativism. Negativism is the resistance to instructions with a motoric or behavioral response or physical attempts to move the patient. In general, failure to stop performing another catatonic feature (as here, mutism) on command should not be scored as negativism.
- **Withdrawal:** Absence or reduction of speech should be scored as mutism. Withdrawal concerns oral intake and eye contact only.
- **Manneristic speech:** Where whispering (voiceless phonation) is incomprehensible, it receives 1 point for mutism. Fluent, comprehensible whispering should be scored as a mannerism of speech. Comprehensible whispering in a patient who speaks less than 20 words in 5 minutes should be scored as both mutism and mannerism.
- **Speech-prompt catatonia:** In this rare subtype of catatonia, the patient provides verbal responses (typically a word or brief phrase) to questions but is otherwise mute. It should be scored as automatic obedience. That is, the patient is offering speech reflexively in response to the examiner's questions.

Examples:

- Mute
- Incomprehensible whispers
- Sluggish speech, often with prolonged speech latency

4. **Staring:** Fixed gaze, little or no visual scanning of environment, decreased blinking
0. Absent
 1. Poor eye contact, repeatedly gazes less than 20 s between shifting of attention; decreased blinking
 2. Gaze held longer than 20 s, occasionally shifts attention
 3. Fixed gaze, non-reactive

Identification: Observation

Description: Staring describes a general lack of appropriate or expected degree of visual interest in the environment. This typically includes lack of spontaneous scanning of the environment or reduced visual pursuit of stimuli presented to the patient.

Differentiation:

- **Negativism:** Staring is assessed as an observational finding with elicitation only to confirm (as when the patient's gaze remains fixed ahead even when being rolled onto their side). Negativism is the opposition to a motor command or doing the opposite of what is being asked. Failure to stop performing another catatonic feature (as here, staring) on command (*e.g.*, "Look at me") should not be scored as negativism.
- **Withdrawal:** When a patient is staring, the directionality may be straight ahead, at the provider, or vacant; however, in withdrawal, there is a persisting lack of eye contact (*e.g.*, as though dejected or may be actively avoiding eye contact).

Examples:

- Staring vacantly ahead
- Maintaining a straight-ahead gaze even when being turned, demonstrating that the gaze is fixed.

5. **Posturing/catalepsy:** Spontaneous maintenance of posture(s), including mundane (e.g. sitting or standing for long periods without reacting)
0. Absent
 1. Less than 1 min
 2. Greater than 1 min, less than 15 min (or the period of exam)
 3. Bizarre posture, or mundane maintained more than 15 min (or the period of exam)

Identification: Observation (for posturing) and elicitation (for catalepsy)

Description: The shared feature in both posturing and catalepsy is the maintenance of a certain physical position against gravity for no apparent reason. Posturing occurs when the patient assumes a posture spontaneously, and catalepsy occurs when a patient can be re-positioned into postures that the patient then maintains. Often, in milder forms, the patient will assume the posture and then the body will slowly slump back down with gravity (e.g., arms coming back down to the sides). Severity is graded based on duration of the finding.

Differentiation:

- **Immobility:** In posturing/catalepsy, the patient exhibits increased resting tone sufficient for certain parts of the body to be held in place against gravity, yet other body parts may be free to move or interact with the environment (e.g., a person walking but with their arms in a bizarre posture). Immobility refers to a global reduction in body movement. Posturing and immobility may overlap, such as with a mundane posture that involves the entire body (e.g., sitting with arms on a table in front of them).
- **Rigidity:** Posturing/catalepsy refers to the maintained position of the patient's body (typically limbs) in space whereas rigidity refers to muscle tone that is identified on physical examination. Very commonly, a patient with posturing will exhibit some degree of increased muscle tone (e.g., rigidity or waxy flexibility) on physical examination. In such cases, both should be scored.
- **Waxy flexibility:** Posturing/catalepsy refers to the position of the patient's body (typically limbs) in space whereas waxy flexibility refers to increased muscle tone at the beginning of passive range of motion on physical examination, which diminishes shortly after movement begins (like bending wax as it warms). Very commonly, a patient with catalepsy will exhibit waxy flexibility on physical examination. In such cases, both should be scored.

Examples:

- Arms held in contorted positions over the head.
- Truncal posturing either hunched over or bent back (i.e., opisthotonus or *arc de cercle*).
- Hands held in front of body against gravity including in a patient whose forearms remain vertical in bed.
- In "psychological pillow," the patient lies in bed with a posture of the head and neck as if there were an invisible pillow underneath.

6. **Grimacing:** Maintenance of odd facial expressions
0. Absent
 1. Less than 10 s
 2. Less than 1 min
 3. Bizarre expression(s) or maintained more than 1 min

Identification: Observation

Description: In essence, grimacing refers to posturing (fixed motor contortions), stereotypies (*e.g.*, repetitive wincing, furrowing of the brow), or mannerisms (*e.g.*, exaggerated blinking or eye opening) of facial muscles. A single feature may be maintained (*e.g.*, a scrunched nose); alternatively, a series of sequential expressions or movements may alternate one after the other.

Differentiation:

- **Posturing/cataplexy, stereotypy, mannerisms:** Grimacing is the only feature that refers to abnormal movements of facial muscles. These other catatonia items should be scored only where non-facial muscles are involved.

Examples:

- Scrunched nose (sometimes called schnauzkrampf [German for “snout cramp”]).
- Repetitive wincing or furrowed brow
- Exaggerated blinking or eye opening

7. **Echopraxia/echolalia:** Mimicking of examiner's movements/speech

0. Absent
1. Occasional
2. Frequent
3. Constant

Identification: Elicited (by environment)

Description: These two features are known as echophenomena. They are characterized by the copying of the examiner's physical movements (echopraxia) or speech (echolalia). When present, the mimicry is spontaneous, serves no apparent purpose and appears automatic. The copying can be partial or intermittent. The patient may also copy persons on the TV or others in the room. Echophenomena may be partial or intermittent.

Differentiation:

- **Automatic obedience:** In echopraxia/echolalia, the copying occurs spontaneously without asking whereas in automatic obedience the clinician explicitly asks the patient to perform an action or provides a social indication that elicits an action (*e.g.*, extends a hand to elicit a hand shake).

Examples of physical movements an examiner can make to elicit echopraxia:

- Scratching one's own head.
- A series of distinctive hand gestures.
- Patting one's own leg.
- The clinician stands and turns in a circle.

8. **Stereotypy:** Repetitive, non-goal-directed motor activity (e.g. finger-play; repeatedly touching, patting or rubbing self); abnormality not inherent in act but in its frequency
0. Absent
 1. Occasional
 2. Frequent
 3. Constant

Identification: Observation

Description: In stereotypy, the patient performs a normal activity repeatedly. The activity is performed in a way that is not abnormal in itself, but its occurrence serves no apparent purpose and is abnormal in its frequency. **Note:** score only stereotyped behaviors, not stereotyped speech, which typically represents verbigeration.

Differentiation:

- **Excitement:** Each specific stereotypy is typically restricted to one part of the body (*e.g.*, movements of the arms, the hands or the trunk) whereas excitement involves most if not the whole body.
- **Mannerism:** Stereotypies are normal behaviors repeated an abnormal number of times whereas mannerisms are variants of behaviors inherently abnormal to context in how they are performed. In general, if a single stereotyped behavior were done in isolation, it would be essentially unremarkable (*e.g.*, tapping the arm of a chair only a few times), but mannerisms are odd or out of place every time they are performed (*e.g.*, a hopping gait).
- **Verbigeration:** For the purposes of scoring, stereotypy should be restricted to behaviors. The repetition of stereotyped phrases in quick succession represents verbigeration.
- **Motor perseveration:** A stereotypy is performed spontaneously (*i.e.*, not induced) and is typically repeated many times. Motor perseveration is a rare finding that is induced (*e.g.*, even after you let go after shaking the patient's hand, their hand continues to make a shaking motion).
- **Speech-prompt catatonia** (*see also under mutism*): Stereotypies are spontaneously enacted whereas in speech-prompt catatonia the response is elicited. The finding of speech-prompt catatonia should be scored as automatic obedience.

Examples:

- Finger-play
- Repeatedly touching, patting or rubbing one's own shirt, chin, leg, etc.
- Rocking while sitting or standing

9. **Mannerisms:** Odd, purposeful movements (hopping or walking tiptoe, saluting passers-by or exaggerated caricatures of mundane movements); abnormality inherent in act itself
0. Absent
 1. Occasional
 2. Frequent
 3. Constant

Identification: Observation

Description: A mannerism is a spontaneous occurrence where the *quality* of a movement or activity is abnormal in context and is idiosyncratic to the person. It generally involves only a part of the body, especially parts of the body that are used either to amplify communication or used as adjuncts to communication (*e.g.*, hands or face). Mannerisms of speech (also manneristic speech) include abnormal inflections, accents, prosody, tone, and the like. **Note:** mannerisms can include behaviors (*e.g.*, an odd walk) or speech (*e.g.*, speaking in an odd accent).

Differentiation:

- **Excitement:** Behavioral mannerisms are typically restricted to one part of the body, especially parts of the body that are used in relation to communication (*e.g.*, hands or face) whereas excitement involves most if not the whole body.
- **Mannerism:** Mannerisms are variants of behaviors inherently abnormal in how they are performed whereas stereotypies are normal behaviors repeated an abnormal number of times. In general, if the stereotyped behavior were done in isolation, it would be essentially unremarkable, but mannerisms are odd every time they are performed in context.
- **Verbigeration:** Manneristic speech describes abnormally delivered speech (*e.g.*, robotic or sing-songy inflections, unusual accents, etc.); however, verbigeration describes the repetition of stereotyped phrases.

Examples:

- Tip-toeing or hopping down a hallway instead of walking.
- Making exaggerated or affected gesticulations when talking.
- Speaking in a robotic, sing-songy or accented voice for no apparent reason.

10. **Verbigeration:** Repetition of phrases or sentences (like a scratched record)

0. Absent
1. Occasional
2. Frequent
3. Constant

Identification: Observation

Description: Verbigeration is characterized by the spontaneous, purposeless repetition of phrases or sentences, as though the clinician is listening to a record with a scratch that plays the same loop repeatedly. In essence, it represents stereotypy of speech.

Differentiation:

- **Verbal perseveration:** In verbigeration, the exact phrase or sentence is being repeated whereas in verbal perseveration a specific theme or topic is being repeated. Verbal perseveration is a common finding in dementia and delirium, and it is often considered evidence of an inability to shift attention (*i.e.*, a form of inattention).
- **Manneristic speech:** Verbigeration describes repetition of a phrase or sentence whereas in manneristic speech the quality of the speech is abnormal.

Examples:

- <<Any phrase that is repeated several times, often in quick succession>>

11. **Rigidity:** Maintenance of a rigid position despite efforts to be moved. *Exclude* if cog-wheeling or tremor present

0. Absent
1. Mild resistance
2. Moderate
3. Severe, cannot be repostured

Identification: Examination

Description: Rigidity refers to increased motor tone throughout the arc of movement, most commonly assessed when the clinician asks the patient to “keep your arm relaxed” and then attempts to move the patient’s arm with alternating lighter and heavier force. Rigidity may be diffuse or involve a specific body part (*e.g.* arms, legs, neck, trunk). It may also be present only in one direction and not the other (*e.g.*, only on passive flexion but not extension). Score this item based on the muscle group with the most severe rigidity identified on exam, and note which muscle group this is for comparison in subsequent assessments. **Note:** known tremor or cog-wheeling (*i.e.*, rigidity in which passive movement elicits ratchet-like movements) should not be scored as rigidity.

Differentiation:

- **Negativism:** Rigidity refers exclusively to an increase in muscular tone that is assessed by physical examination with passive movement whereas negativism is a behavior of opposition to instruction or doing the opposite of an instruction. They may both be present.
- **Posturing/catalepsy:** Rigidity refers to muscle tone as assessed on physical examination whereas posturing/catalepsy refers to the persistent position of the patient’s body in space, generally against gravity. Patients with posturing/catalepsy also commonly have rigidity or waxy flexibility on examination.
- **Waxy flexibility:** Rigidity refers to increased tone through the arc of movement whereas waxy flexibility describes the *initial resistance* that then gives way with continued pressure, as though a wax candle is being bent and becomes increasingly malleable as it warms. This is why severity of rigidity can be scored from 0–3 but waxy flexibility is either present/absent.
- **Gegenhalten** (paratonic rigidity): Rigidity refers to increased tone throughout the arc of movement whereas gegenhalten is a specific type of increased tone where the force opposing passive range of motion is proportional to the force being applied. Different limbs may also exhibit different findings in tone. If gegenhalten is identified in any muscle group, this should be scored.

Examples:

- Attempts to move the patient’s arms yields marked stiffness.
- Attempts to bend a patient’s leg reveals marked stiffness.
- Upon assisting the patient to sit up or turn to the side, their trunk remains rigid.

12. **Negativism:** Apparently motiveless resistance to instructions or attempts to move/examine patients.

Contrary behavior, does exact opposite of instruction.

0. Absent
1. Mild resistance and/or occasionally contrary
2. Moderate resistance and/or frequently contrary
3. Severe resistance and/or continually contrary

Identification: Elicited

Description: Negativism is characterized by either active opposition to (a) a specific instruction regarding movement or (b) attempts to move/examine the patient. Negativism also includes when the patient does the opposite of what is instructed (*e.g.*, looks up when asked to look down; tenses when told to relax). The unifying theme of negativism is the behavioral response that directly opposes the examiner. The response is elicited, active, and without obvious motive.

Differentiation:

- **Note:** When the examiner instructs the patient to stop a feature of catatonia, this should not be scored as negativism. Per **Scoring Notes** for equivocal features above, negativism should be scored only if it is clearly present independent of other catatonia findings. The following examples should not be scored as negativism:
 - Telling a patient with excitement to sit still, with immobility to “sit up in bed,” the staring patient to “follow my fingers with your eyes,” with posturing/catalepsy to “put down your arms,” with grimacing to “relax your face,” with echopraxia/echolalia to “stop copying what I do/say,” with stereotypy to “stop moving your arms,” with manneristic speech to “talk in your normal voice,” with verbigeration to “stop repeating that phrase” or with withdrawal to “eat your lunch” or “look at me.”
 - *Mitgehen*, which involves essentially doing the opposite of the instruction “do not let me lift your arm,” should not be scored as negativism.
- **Immobility:** Negativism is the *elicited, active* opposition or resistance to the examiner (*e.g.*, resisting attempts to open the eyes or the mouth) or doing the opposite of what is being asked; however, immobility refers to an *observed, spontaneous* reduction in overall interaction with the environment.
- **Mutism:** Negativism is the resistance to instructions that ordinarily call for a motoric or behavioral response. Verbal non-response should be scored as mutism.
- **Staring:** Negativism is the opposition to a motor command or doing the opposite of what is being asked whereas staring is assessed as an observational finding with elicitation only to confirm (*e.g.*, the patient’s gaze remains fixed ahead even when being rolled over in bed).
- **Rigidity, gegenhalten, and waxy flexibility:** These describe increased muscle tone whereas negativism describes a behavior.

Examples:

- You attempt to open a person’s eyes, and they shut them forcibly.
- You attempt to roll a patient over in bed, and they actively resist.
- A patient refuses to perform simple actions (*e.g.*, stick out your tongue) but is able to do so. May be accompanied by oppositional, often reflexive comments (“No, I won’t.”).
- You ask the patient to raise their arm, and they lower it.
- Behavior contrary to norms: pulling a door marked “push” or lying sideways in bed.

13. **Waxy flexibility:** During repositioning of patient, patient offers initial resistance before allowing himself to be repositioned, similar to that of a bending candle
0. Absent
 3. Constant

Identification: Examination

Description: Waxy flexibility refers only to whether initial resistance is present that then subsequently releases or lessens with continued application of force. It can be either present or absent; therefore, it is not graded. **Note:** this differs from the definition provided in the DSM-5 of “slight, even resistance to positioning by examiner,” which in the BFCRS would be scored as “mild resistance” under rigidity.

Differentiation:

- **Posturing/catalepsy:** Waxy flexibility refers to increased muscle tone at the beginning of passive range of motion on physical examination, which diminishes shortly after movement begins whereas posturing/catalepsy refers to a maintained position of the patient’s body in space. Very commonly, a patient with catalepsy will exhibit waxy flexibility on physical examination. In such cases, both should be scored.
- **Rigidity:** Waxy flexibility describes the initial resistance that gives way with continued pressure whereas rigidity refers to increased tone throughout the arc of movement. This is why rigidity severity can be scored from 0–3 but waxy flexibility is either present/absent.
- **Gegenhalten:** Waxy flexibility is found at the beginning of passive range of motion whereas in gegenhalten the tone is proportional to the force applied and often prevents full passive range of motion.

Examples:

- The examiner attempts to reposition a patient. The patient initially resists attempts to be repositioned (as though to maintain the prior posture) but then, after no more than a couple of seconds, allows to be repositioned.
- The patient is lying in bed very still, and when the examiner attempts to assess muscle tone in an arm the patient resists the movement as though stiff but then releases or reduces tone to allow the examiner to move the arm.

14. **Withdrawal:** Refusal to eat, drink and/or make eye contact

0. Absent
1. Minimal PO intake/interaction for less than 1 day
2. Minimal PO intake/interaction for more than 1 day
3. No PO intake/interaction for 1 day or more

Identification: Observation and elicitation to confirm

Description: Withdrawal is characterized by absence of oral intake and absence of eye contact. It may be thought of as a corollary to withdrawal in severe depression or failure to thrive. This nearly always requires collateral reports of the patient's intake over more than the past 24 hours preceding the examination; however, it may be tested by placing food or drink in front of the patient. If they consume the food or drink when offered, this should be scored as 0.

Differentiation:

- **Immobility:** Withdrawal refers specifically to the absence of oral intake and/or absence of eye contact whereas immobility refers to overall motor activity. The person with gross immobility may have preserved oral intake when meals are provided, get up to use the restroom appropriately, and make eye contact with others (often prompting observers to see certain instances of catatonia as under willful behavioral control). The withdrawn person may be moving spontaneously and with relatively preserved speed and quality of activity otherwise.
- **Speech:** Withdrawal concerns oral intake and eye contact only. Absence or reduction of speech should be scored as mutism.
- **Staring:** In withdrawal, there is a persisting lack of eye contact (*e.g.*, as though dejected or may be actively avoiding eye contact); however, in staring, the directionality may be straight ahead, at the provider, or vacant

Examples:

- A patient looks at the floor during the evaluation and when you try to make eye contact their eyes dart away from yours.
- Occurs when a patient has not accepted oral intake for an extended period of time, including when food is offered.

15. **Impulsivity:** Patient suddenly engages in inappropriate behavior (e.g. runs down hallway, starts screaming or takes off clothes) without provocation. Afterwards can give no, or only a facile explanation.
0. Absent
 1. Occasional
 2. Frequent
 3. Constant

Identification: Observation

Description: The cardinal feature of impulsivity is its suddenness, inappropriateness (to context), and lack of clear rationale. In impulsivity, the behavior occurs automatically and without apparent forethought. The grades (0–3) refer to the number of discrete impulsive actions. Constant impulsivity is rare and characterized by ceaseless jumping from one impulsive behavior to another, along the lines of “flight of ideas” but applied to behaviors.

Differentiation:

- **Excitement:** Impulsivity focuses on the suddenness and inappropriateness of behaviors whereas excitement describes the duration or frequency of excessive activity. Impulsivity is defined by discrete bursts of behaviors; however, where impulsivity is constant (*e.g.*, performing a continuous series of distinct activities like jumping on the bed, then running in circles, then flicking the lights) this would represent both constant impulsivity (*i.e.*, scored as a 3) and also as excitement.
- **Combativeness:** Impulsivity is a broader item that describes sudden, inappropriate behaviors of all types, which may include aggression toward a range of different non-personal targets, whereas combativeness is restricted to unprovoked, non-goal-directed aggression toward another person. When a patient strikes out only toward other persons (*i.e.*, combativeness), this should be scored only as combativeness and not also as impulsivity.

Examples:

- A patient is seated in conversation and suddenly stands up and starts drumming on the windowsill.
- A patient is lying very still in bed and suddenly darts up in bed, screams, starts bouncing in bed and then suddenly lies back down again as though nothing happened.
- A patient being interviewed in the hallway suddenly starts removing their clothes for no reason.

16. **Automatic obedience:** Exaggerated cooperation with examiner's requests or spontaneous continuation of movement requested.

0. Absent
1. Occasional
2. Frequent
3. Constant

Identification: Elicited

Description: Automatic obedience occurs when a patient obeys instructions without apparent thought, as though the instruction is a command that must be obeyed. Patients often obey suddenly, even when the instruction is one that suggests that they may be subjected to a painful stimulus (*e.g.*, "I need to stick a pin in your tongue; go ahead and stick your tongue out."). Constant automatic obedience describes the phenomenon where a patient continues to obey the last command and will not stop without a subsequent instruction to stop. **Note:** in speech-prompt catatonia, a patient provides a verbal response (typically a word or brief phrase) to questions but is otherwise mute and uncooperative. This should be scored as automatic obedience because the patient offers speech reflexively in response to questions. This represents an automatic, elicited behavior.

Differentiation:

- **Motor perseveration:** Automatic obedience is an elicited behavior and may persist in an active and automatic fashion. Its focus is on being reflexive in reaction to the examiner and also continuing to fulfill a specific elicited behavior, whereas motor perseveration is a discrete movement that occurs when a physical maneuver has been completed but the movement persists (*e.g.*, the examiner shakes the patient's hand and the patient continues to shake his hand even after the hand has been let go). In other words, they are differentiated based on what initiates the behavior: reflexively in response to the examiner versus spontaneous/passive movement.

Examples:

- The examiner extends a hand to the patient, and the patient responds to shake the examiner's hand as if the behavior is a reflexive response. (What may makes this finding especially striking is where it occurs in a patient that is otherwise immobile and not interacting "normally.")
- The patient obeys a series of commands reflexively as though suggestible.
- "I need to stick a pin in your tongue; go ahead and stick your tongue out."

17. **Mitgehen:** “Anglepoise lamp” arm raising in response to light pressure of finger, despite instructions to the contrary.

- 0. Absent
- 3. Present

Identification: Elicited

Description: To elicit mitgehen, tell the patient “Do not let me lift your arm” and then place only light pressure with your finger under their arm or hand. If their arm rises easily, like an anglepoise lamp might, mitgehen is positive. Occasionally, light pressure under the arm will cause the arm to lift all the way up suddenly as though being yanked upward by an invisible force.

Differentiation:

- **Negativism:** The discrete finding of mitgehen, which involves doing the opposite of the instruction provided, should not be scored as negativism. See comments under negativism.

Examples:

- <<Discrete finding.>>

18. **Gegenhalten:** Resistance to passive movement which is proportional to the strength of the stimulus, appears automatic rather than willful.

- 0. Absent
- 3. Present

Identification: Examination

Description: Gegenhalten, also known as paratonic rigidity in neurology texts, is German for “counter-hold.” It describes increased muscle tone in an extremity—typically the arm—in which the tension against passive movement is proportion to the force applied. With gegenhalten, it is as though the resistance in the patient’s limbs occurs reflexively by way of increased muscle tone rather than as a behavioral resistance as in negativism.

Differentiation:

- **Negativism:** Gegenhalten refers to muscle tone in proportion to the force applied, often in one type of muscle group (*e.g.*, elicited on passive forearm extension) whereas negativism is an oppositional behavior. Also, gegenhalten is not typically eliminated by distraction techniques; however, negativism can be inconsistent, intermittent, and vary with body region and muscle group.

Examples:

- <<Discrete finding.>>

19. **Ambitendency:** Patient appears motorically “stuck” in indecisive, hesitant movement.

- 0. Absent
- 3. Present

Identification: Observation or elicited

Description: Ambitendency occurs when a patient appears to be midway, hesitant, or ambivalent about a particular action. They may be stuck at the point of initiation (*e.g.*, beginning to pick up a fork when food is placed in front of them), in the midst of the action (*e.g.*, fork is between the plate and their mouth), or vacillating by moving back and forth as though uncertain (*e.g.*, a seated person starting to stand, sitting back down, starting to stand, and repeating).

Differentiation:

- **Withdrawal:** Ambitendency occurs when the patient appears to be stuck in the midst of performing an action. In ambitendency, partial attempts to feed oneself may be initiated but halted midway; however, withdrawal refers specifically to the lack of oral intake and is characterized by the absence or near absence of attempts to feed oneself.

Examples:

- Extend your hand to the patient and say “Do not shake my hand.” The patient responds by sticking out their hand partway and getting stuck with their hand extended.
- A patient appears unable to pass through a doorway, taking a half-step in and then out, in and then out. Alternatively, they may stop in the doorway, halfway in and halfway out.
- A patient gets “stuck” when trying to feed themselves, put on their glasses, put on their socks, *et al.*

20. **Grasp reflex:** Per neurological examination.

- 0. Absent
- 3. Present

Identification: Examination

Description: To examine for this frontal release sign, the examiner firmly strokes the palmar surface of the patient's hand from the ulnar to the radial side of the palm. If present, the patient's hand reflexively closes, sometimes so tightly that when the examiner raises their hand the patient's arm is lifted up before the examiner's fingers slip out from the hand.

Differentiation:

- This is a distinct clinical finding.

Examples:

- <<Discrete finding.>>

21. **Perseveration:** Repeatedly returns to same topic or persists with movement.

- 0. Absent
- 3. Present

Identification: Observation or elicited

Description: Perseveration may be verbal or motoric. In verbal perseveration, the patient persists in talking about the same idea or theme, seemingly being unable to change topics. Notably, verbal perseveration is fairly common in delirium and dementia, and it is often considered evidence of an inability to shift attention (*i.e.*, a form of inattention). Motor perseveration represents the continuation of a motor action that may have begun spontaneously or that was induced by an interaction with the examiner (*e.g.*, after shaking the patient's hand, the examiner pulls their hand away but the patient continues to make a hand-shaking motion).

Differentiation:

- **Excitement:** Motor perseveration involves only a part of the body whereas excitement involves most if not the whole body.
- **Verbigeration:** Verbal perseveration occurs when a patient returns to the same idea or topic or occasionally provides the same verbal response to a subsequent question (*e.g.*, saying "in the hospital" in answer to the question "Where are we?" and then "in the hospital" again in response to the subsequent questions, "What year is it?" and "What's your name?"). That is, the same response may be given, but it is punctuated by different questions. Verbigeration is characterized by the repetition of an exact phrase or sentence in succession rather than punctuated by subsequent questions or comments by the examiner. Additionally, verbigeration is stereotyped and does not involve repetition of broader themes or topics.
- **Stereotypy:** Motor perseveration involves a transient continuation of an action that was elicited by physical interaction with the examiner or the environment (*i.e.*, the behavioral initiation was stimulus-bound). However, a stereotypy is performed spontaneously (*i.e.*, has no connection to the preceding events) and is typically repeated many times.
- **Automatic obedience:** Induced motor perseverations are initiated based on a physical interaction with the examiner whereas automatic obedience is initiated based on a verbal instruction or another social cue.

Examples:

- Verbal perseveration: A patient perseverates in giving their name to several questions in a row or continues talking about a specific topic (*e.g.*, something in the room, an item of the examiner's clothing, etc.).
- Motor perseveration: After a handshake, the patient continues shaking their hand in the air after the examiner has let go of the patient's hand.

22. **Combativeness:** Usually in an undirected manner, with no, or only a facile explanation afterwards.

0. Absent
1. Occasionally strikes out, low potential for injury
2. Frequently strikes out, moderate potential for injury
3. Serious danger to others

Identification: Observation

Description: Combativeness is characterized by aggression toward others done in an undirected manner (*i.e.*, there is no clear targeted individual; the individual being struck is incidental to the act itself). Combativeness occurs sporadically and is not continuous.

Differentiation:

- **Excitement:** Combativeness describes unprovoked, non-goal-directed aggression toward others, typically those in the patient's immediate environment, whereas excitement describes the spontaneous onset of excessive activity typically involving the entire body.
- **Goal-directed aggression:** Aggression that is directed toward certain persons in particular or done for another specific reason (*e.g.*, revenge) should not be scored as combativeness.
- **Impulsivity:** Combativeness is restricted to unprovoked, non-goal-directed aggression toward others whereas impulsivity is a broader item that describes sudden, inappropriate behaviors of any other type. To prevent double-coding, if all impulsive behaviors qualify as combativeness, the finding should be scored as combativeness only, and not also as impulsivity.

Examples:

- <<Discrete finding.>>

23. **Autonomic abnormality:** Circle: temperature, BP, pulse, respiratory rate, diaphoresis

0. Absent
1. Abnormality of one parameter [exclude pre-existing hypertension]
2. Abnormality of two parameters
3. Abnormality of three or more parameters

Identification: Chart review or during examination

Description: Autonomic abnormality may be assessed during the time of evaluation or be the most recent vitals assessed, ideally within the past hour and since the last catatonia assessment. If scoring a “state BFCRS,” then vital signs should be checked at the time of the examination. Abnormalities of temperature, BP, pulse, or respiratory rate may be too high or too low. **Note:** exclude high blood pressure if consistent with known hypertension if uncontrolled at baseline. However, do **not** exclude in the context of acute illness, as this may represent features of malignant catatonia.

Differentiation:

- This is a distinct clinical finding.

Examples:

- <<Discrete finding.>>

Clinical Assessment for the Bush-Francis Catatonia Screening Instrument

Begin the assessment by observing the patient before engaging them in conversation. If it is unclear whether the patient is asleep, attempt to awaken them before scoring items.	
- Observe overall degree of motor activity	Excitement/Immobility
- Observe body for stereotypies and mannerisms	Stereotypy/Mannerism ^{1/2}
- Observe face for grimacing	Grimacing
- Observe eyes for staring and eye contact	Staring/Withdrawal ^{1/2}
Engage the patient in conversation.	
- Assess quantity and quality of speech	Mutism/Mannerism ^{2/2}
- Assess speech content for repetition	Verbigeration
- Assess speech for echoing	Echolalia ^{1/2}
During the evaluation, scratch your head in an exaggerated fashion. If the patient is standing, turn in a circle.	
- Observe behavior for mimicry	Echopraxia ^{2/2}
- Observe body for postures	Posturing ^{1/2}
Say, "Keep your arms relaxed as I examine them." Then, attempt to re-position their arms	
- Observe body for passively-induced postures	Catalepsy ^{2/2}
Next, bend/move each arm with alternating lighter and heavier force. Examine lower extremities similarly.	
- Evaluate tone for initial resistance that releases	Waxy flexibility
- Evaluate tone for rigidity through the arc of movement	Rigidity
- Evaluate tone for resistance proportional to the force applied	Gegenhalten*
Apply firm pressure across the patient's palm from the ulnar to the radial side.	
- Evaluate response for grasp reflex	Grasp reflex*
For negativism, evaluate the following:	
- Observe response to attempted exam	Negativism**
- Observe response to instructions	
For withdrawal, consult collateral (i.e., chart, nursing, family) to determine the following:	
- Evaluate behavior for withdrawal over the past 48 hr.	Withdrawal ^{2/2}

*Full-scale item (i.e., not part of the Bush-Francis Catatonia Screening Instrument), included for efficient assessment.

**Failure to stop performing another catatonic feature (e.g., staring) on command should NOT be scored as negativism.

Clinical Assessment for the Bush-Francis Catatonia Rating Scale, Remaining Full-scale Items

Ask the patient to extend their arm; then say, "Do not let me lift your arm." Try to lift their arm using one finger beneath their hand, applying a gentle force. If the patient does not extend an arm, attempt to lift their arm from its resting position likewise.	
- Evaluate response for mitgehen	Mitgehen
Extend your hand and say, "Shake my hand." After 1–2 seconds, relax and stop shaking.	
- Observe response to instructions to shake your hand	Automatic obedience
- Observe movement once they let go of your hand	Perseveration ^{1/2}
Say, "This time do not shake my hand" and then extend your hand.	
- Observe behavior for indecision	Ambitendency
Rate the following based on the patient's speech and behaviors throughout the assessment:	
- Review speech content for repetition	Perseveration ^{2/2}
- Review response to instructions	Automatic obedience ^{2/2}
- Review behavioral impulsivity	Impulsivity
- Review combativeness	Combativeness
Obtain most recent vital signs. If patient appears to have autonomic arousal, assess vitals during evaluation.	
- Review temperature, blood pressure, heart rate, respiratory rate, sweating	Autonomic abnormality

Bush-Francis Catatonia Rating Scale

1. Excitement:

Extreme hyperactivity, constant motor unrest which is apparently non-purposeful. Not to be attributed to akathisia or goal-directed agitation.

- 0= Absent
- 1= Excessive motion, intermittent.
- 2= Constant motion, hyperkinetic without rest periods.
- 3= Full-blown catatonic excitement, endless frenzied motor activity.

2. Immobility/ Stupor:

Extreme hypoactivity, immobile, minimally responsive to stimuli

- 0= Absent
- 1= Sits abnormally still, may interact briefly.
- 2= Virtually no interaction with external world.
- 3= Stuporous, non-reactive to painful stimuli.

3. Mutism:

Verbally unresponsive or minimally responsive.

- 0= Absent
- 1= Verbally unresponsive to majority of questions; incomprehensible whisper.
- 2= Speaks less than 20 words/5 minutes.
- 3= No speech.

4. Staring:

Fixed gaze, little or no visual scanning of environment, decreased blinking.

- 0= Absent
- 1= Poor eye contact, repeatedly gazes less than 20 sec between shifting of attention; decreased blinking
- 2= Gaze held longer than 20 sec, occasionally shifts attention.
- 3= Fixed gaze, non-reactive.

5. Posturing/ Catalepsy:

Spontaneous maintenance of posture(s), including mundane (e.g., sitting/standing for long periods without reacting).

- 0= Absent
- 1= Less than one minute.
- 2= Greater than one minute, less than 15 minutes.
- 3= Bizarre posture, or mundane maintained more than 15 min.

6. Grimacing:

Maintenance of odd facial expressions.

- 0= Absent
- 1= Less than 10 sec.
- 2= Less than 1 min.
- 3= Bizarre expression(s) or maintained more than 1 min.

7. Echopraxia/ Echolalia:

Mimicking of examiner's movements/ speech.

- 0= Absent
- 1= Occasional.
- 2= Frequent.
- 3= Constant.

8. Stereotypy:

Repetitive, non-goal-directed motor activity (e.g. finger-play; repeatedly touching, patting or rubbing self); abnormality not inherent in act but in its frequency.

- 0= Absent
- 1= Occasional.
- 2= Frequent.
- 3= Constant.

9. Mannerisms:

Odd, purposeful movements (hopping or walking tiptoe, saluting passersby or exaggerated caricatures of mundane movements); abnormality inherent in act itself.

- 0= Absent
- 1= Occasional.
- 2= Frequent.
- 3= Constant.

10. Verbigeration:

Repetition of phrases or sentences (like a scratched record).

- 0= Absent
- 1= Occasional.
- 2= Frequent, difficult to interrupt.
- 3= Constant.

11. Rigidity:

Maintenance of a rigid position despite efforts to be moved, exclude if cog-wheeling or tremor present.

- 0= Absent
- 1= Mild resistance.
- 2= Moderate.
- 3= Severe, cannot be repositioned.

Patient:

Date:

Time:

Examiner:

- State examination
- Interval examination over ___ hr.

12. Negativism:

Apparently motiveless resistance to instructions or attempts to move/examine patient. Contrary behavior, does exact opposite of instruction.

- 0= Absent
- 1= Mild resistance and/or occasionally contrary.
- 2= Moderate resistance and/or frequently contrary.
- 3= Severe resistance and/or continually contrary.

13. Waxy Flexibility:

During repositioning of patient, patient offers initial resistance before allowing himself to be repositioned, similar to that of a bending candle.

- 0= Absent.
- 3= Present.

14. Withdrawal:

Refusal to eat, drink and/or make eye contact.

- 0= Absent.
- 1= Minimal PO intake/ interaction for less than one day.
- 2= Minimal PO intake/ interaction for more than one day.
- 3= No PO intake/interaction for one day or more.

15. Impulsivity:

Patient suddenly engages in inappropriate behavior (e.g. runs down hallway, starts screaming or takes off clothes) without provocation. Afterwards can give no, or only a facile explanation.

- 0= Absent
- 1= Occasional
- 2= Frequent
- 3= Constant or not redirectable

16. Automatic Obedience:

Exaggerated cooperation with examiner's request or spontaneous continuation of movement requested.

- 0= Absent
- 1= Occasional
- 2= Frequent
- 3= Constant

17. Mitgehen:

"Anglepoise lamp" arm raising in response to light pressure of finger, despite instructions to the contrary.

- 0= Absent
- 3= Present

18. Gegenhalten:

Resistance to passive movement which is proportional to strength of the stimulus, appears automatic rather than wilful.

- 0= Absent
- 3= Present

19. Ambitendency:

Patient appears motorically "stuck" in indecisive, hesitant movement.

- 0= Absent
- 3= Present

20. Grasp Reflex:

Per neurological exam.

- 0= Absent
- 3= Present

21. Perseveration:

Repeatedly returns to same topic or persists with movement.

- 0= Absent
- 3= Present

22. Combativeness:

Usually in an undirected manner, with no, or only a facile explanation afterwards.

- 0= Absent
- 1= Occasionally strikes out, low potential for injury
- 2= Frequently strikes out, moderate potential for injury
- 3= Serious danger to others

23. Autonomic Abnormality:

Circle: temperature, BP, pulse, respiratory rate, diaphoresis.

- 0= Absent
- 1= Abnormality of one parameter [exclude pre-existing hypertension]
- 2= Abnormality of 2 parameters
- 3= Abnormality of 3 or greater parameter

