


# Mental Status Examination (MSE) Tutorial

## Section outline

- 1.1 Introduction
- 1.2 Lecture objectives
- 1.3 What is the Mental State Examination [MSE]?
  - 1.3.1 What MSE is not
  - 1.3.2 MSE definition
  - 1.3.3 Components of MSE
- 1.4 Appearance
- 1.5 Behavior
- 1.6 Speech and Language
- 1.7 Mood and Affect
- 1.8 Thought process/form and content
- 1.9 Perception
- 1.10 Cognition
- 1.11 Insight and judgement
- 1.12 References

### 1.1 Introduction

Welcome to this session on Mental State Examination [MSE]. Mastering MSE is a major goal of this psychiatry rotation. Enjoy!

	<b>1.2 Objectives</b> <ul style="list-style-type: none"><li>● Review major points of MSE<ul style="list-style-type: none"><li>■ Students will be able to:<ol style="list-style-type: none"><li>1. Describe appropriate MSE terminology and the standard structure/features of MSE.</li><li>2. List the various components of MSE and indicate which components of MSE can be derived from observation of the patient and which require direct testing.</li><li>3. Describe a patient's clinical presentation using the appropriate MSE terminology.</li><li>4. Elicit the components of MSE that require direct questioning of the patient.</li><li>5. Demonstrate knowledge and skills required to competently perform MSE.</li></ol></li><li>■ By the end of the rotation students will be able to perform and record a full mental state examination of patients who have a range of major psychiatric conditions.</li></ul></li></ul>
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### 1.3 WHAT IS THE MENTAL STATE EXAMINATION [MSE]?

#### 1.3.1 WHAT MSE IS NOT.

**MSE is not** ■ An intelligence test. **MSE is not** ■ A detailed memory test. **MSE is not** ■ A fully precise measure of cognition, affect, and behavior .

#### 1.3.2 MSE Definition

■ MSE forms part of a full psychiatric assessment alongside history taking. MSE is basically the psychiatric “physical examination”. Unlike other examinations, the MSE is undertaken during the history taking, and involves closely observing the patient for certain signs of psychiatric/mental conditions. Elements can be performed simultaneously alongside the history, or afterwards in an systematic fashion.

■ MSE is a clinical assessment of a patient which reflects both the patient’s subjective report and experience and the clinician’s observations and impressions at the time of the interview. To assess MSE information properly, history including education, cultural and social factors, etc, is needed. It is also important to ascertain what is normal for the patient. For example some people always speak fast! However, MSE is not a series of questions but an evaluation process based on observations and interactions with the patient. Observational and listening skills are used to obtain the information required for MSE. MSE is a method of organizing clinical observations and a systemic documentation of the quality of the mental functioning of a patient at the time of interview.

■ MSE is an organized way of observing and reporting findings from time of contact with patient. MSE reflects a “snapshot” of a person’s psychological functioning at a given point in time. MSE should describe only data observable during interview with patient . If patient was noted or reported to have hallucinated several hours before interview but not during interview, hallucinations should be mentioned in the history of present illness (HPI) or review of symptoms (ROS), whereas in the MSE, note “no hallucinations at this time.”

■ The MSE should be obtained and recorded in a standardized format. The information should help to enable a judgement to be made regarding the presence and severity of any mental illness. MSE is used to establish a baseline, evaluate changes over time, facilitate diagnosis, plan effective care, and evaluate response to treatment.

1.3.3 Components of MSE include:

1. Appearance
2. Behavior . Attitude
3. Speech and Language
4. Mood and Affect
5. Thought process/form and content
  - a) Suicidality and Homicidality
6. Perception
7. Cognition
  - a) Level of Consciousness
  - b) Orientation
  - c) Attention Span
  - d) Memory
  - e) Intellectual Functioning
8. Insight and judgement



	<p><b>In text Question:</b></p> <p>A. Which components of MSE can be derived from observation of the patient?</p> <p>B. Which components of MSE require direct testing?</p>
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	<p><b>Take Note</b>  <b>“ACT MAD”- mnemonic to remember the components of MSE.</b>  <b>MSE COMPONENTS: “ACT MAD”</b>  <b>A</b>ppearance and Behavior  <b>C</b>onversation /Language/Speech.  <b>T</b>houghts  <b>M</b>ood and Affect  <b>A</b>bnormal Perceptions  <b>D</b>ementive functions: Cognition - orientation, concentration, memory and Judgment and Insight.</p>
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1.3.4 Observed/Inquired MSE Components:

- a. Appearance (observed)
- b. Behavior (observed) Attitude (observed)
- c. Speech and Language (observed)
- d. Mood (inquired) and Affect (observed)
- e. Thought process/form and content (observed/inquired)
  - i. Suicidality and Homicidality (inquired)
- f. Perception (observed/inquired)
- g. Cognition
  - i. Level of Consciousness (observed)
  - ii. Orientation (inquired)
  - iii. Attention Span (observed/inquired)
  - iv. Memory (observed/inquired)
  - v. Intellectual Functioning (observed/inquired)
- h. Insight and judgement (observed/inquired)

Summary:

- a) Observational components - Appearance; Behavior; Consciousness; Attitude; Speech; Affect.
- b) Components inquired - Orientation ; Mood; Suicidality; Homicidality.
- c) Components observed and inquired - Thought Process/Form/Content; Insight/Judgment; Attention; Memory.



**Activity:**

**Assessing Mental State**  
 "Looking, Listening & Asking"

- Make up your own **mnemonic** to remember the components of MSE.

**1.4 Appearance** **What do you see?**

- Ethnicity, gender, apparent age, build, posture, self-care, clothes, grooming, hair, nails. Level of consciousness, prominent physical abnormalities, motor activity, abnormal movements, facial expression, signs of anxiety (moist hands, perspiring forehead, tense posture, wide eyes), any unusual features.
- General description: describe pt's appearance & overall physical impression, as reflected by posture, poise & grooming. Common terms to describe appearance-healthy, sickly, ill at ease, old or young looking, disheveled, childlike, bizarre.

**1.5 Behavior - describe the actual behavior**

- Psychomotor activity: generalized slowing of body movements or retardation, hyperactivity, restlessness, aimless, purposeless activity or agitation e.g., hand wringing, tremor, abnormal movements- tics, gestures, mannerisms, stereotyped behavior, rigidity, Hallucinatory gestures,...etc
- Appropriateness of behavior, level of eye contact-poor, good, piercing; level of rapport established. Attitude to examiner-can be described as uncooperative, cooperative, friendly, attentive, interested, frank, seductive, defensive, contemptuous, perplexed, apathetic, hostile, playful, ingratiating, evasive, or guarded
- Socially inappropriate e.g. embarrassing, over-familiar & sexually forward behavior (seen in mania), violence etc....

**1.6 Speech**

- Rate, rhythm, volume, tone, coherence
- Quantity and fluency: Are answers unduly brief or monosyllabic or are they inappropriately prolonged? Does the speech appear pressured? 'Flight of ideas' does patient move quickly between subjects.
- New or made up words (neologisms) or any other abnormal use of language? Logicality. Abnormal associations.
- Is speech appropriate for the situation e.g. does patient answer questions appropriately, is the content of speech appropriate to the situation?

**1.7 Mood and Affect**

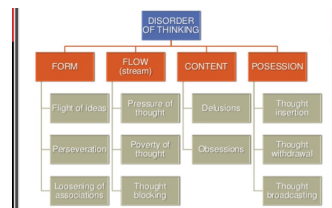
- Affect - 'emotional state of patient at a given moment in time'. Mood - 'patient's emotional state over a long period of time'. Analogy: 'Affect is the weather-observed by others. Sign (current emotional state), whereas mood is the climate- long term feeling state through which all experience are filtered.
- Affect=Objective-emotional state observed. Type: euthymic (normal mood), dysphoric (depressed, irritable), euphoric, Range: full (normal) vs. restricted, blunted or flat, labile. Sign- observe for - euthymic/ depressed/flat/elated/labile. Congruency: appropriateness-does it match mood-(mood congruent vs. mood incongruent). Stability: stable vs. labile
- Mood=Subjective. Prevalent emotional state patient tells you how they feel. Symptom (ask patient)- How has your mood been lately? Often placed in quotes since it is what patient tells you, e.g. "elated, depressed, anxious, sad, angry, irritable." In describing mood, it is also important to report on any associated changes in vegetative functions (energy, appetite, libido, and sleep) and that mood may be further characterized in terms of its stability, reactivity, and duration. Ask about depressed mood e.g. concentration, appetite, energy, feelings of guilt, worry, sleeping patterns, sexual relationships. Ask about consistency of the mood, particularly within course of the day and reactivity (does the mood change in response to external events or circumstances. Ask about self-harm e.g feelings about the future, 'have U ever thought life was not worth living?', thoughts of ending life, any preparations, any previous self-harm/suicide attempts? Ask about elevated mood. Concentration, appetite, sleeping patterns and sexual side of relationship are also important to ask about eg. manic patients often require little sleep and typically have impaired concentration. Also ask 'Is your mood changeable at the moment?' and 'do you think you have any special gifts and talents?'

**1.8 Thought**

- Thought form(process)=The way in which a person puts together ideas and associations. Examples: Goal-directed thinking; formal thought disorder- loosening of associations, derailment, tangentiality, circumstantiality, over-inclusion, concrete thinking, word salad or incoherence, clang associations (rhyming), punning(double meaning), neologism - may occur in psychosis, autism learning disability.

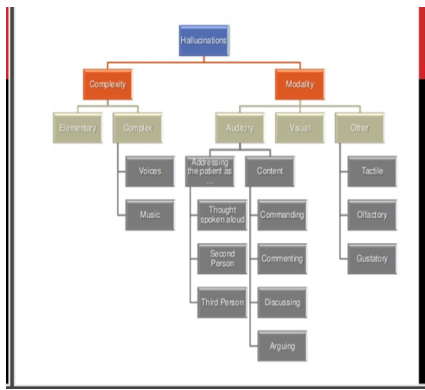


- Thought stream - accelerated tempo of thought-flight of ideas, decelerated tempo of thought-psycho retardation (occurs in depressive illness), circumstantiality, perseveration, echolalia, blocking/inhibition of thought
- Thought content = What a person is actually thinking about.



- a) Delusion: **Fish defines delusion as 'false, unshakable belief, that is out of keeping with patient's social, religious and cultural background'**. Delusion – belief abnormal within cultural context (may be true and vary in intensity therefore not fixed false – check level of conviction, preoccupation and distress). Types: Persecutory/paranoid, grandiose, jealous, somatic, erotic, nihilistic, thought broadcasting, control.
  - i. **Delusional Perception** is a Schneiderian first-rank symptom involving attribution of a delusional meaning, usually in the sense of self-reference to a normally perceived object, without comprehensible reason. Since the perceived objects are not obviously altered, Schneider considered delusional perception to be a disorder of thought, not of perception.
- b) How to probe for delusions: “Have you had the feeling that something odd is going on that you can't explain?”; “Do you feel puzzled by strange happenings that are difficult to account for?”
  - i. Thought withdrawal-“Are your thoughts taken out of your mind?”
  - ii. Thought broadcasting-“Do your thoughts seem to be public, so others know what you are thinking?”
- c) Overvalued-ideas: **deeply held personal convictions that are understandable when the patient's background is known.**
- d) Preoccupations, obsessions, compulsions, phobias, positive, negativistic thinking, hopeless, helpless thinking, suicidal ideation, homicidal ideation, ideas of reference and influence.

### 1.9 Perceptual disturbances



1. Illusions, where the person misinterprets sensory stimuli
2. Derealization-outer environment feels unreal. Depersonalization-unreality sensation concerning oneself
3. Hallucinations:**False perceptions occurring in absence of any stimuli.** Types- auditory, visual, tactile, olfactory, gustatory.
  - a) Ask patients about experience of abnormal perceptions. Often difficult to ask about: Use questions such as: 'I'd like to ask you a couple of questions about some experiences people have but may find difficult to talk about. I ask everyone these questions'. Then questions such as 'Have U ever had experiences of hearing voices when no one was around?' Get exact description & circumstances (timing) of the occurrence of any hallucinatory experience. Assess - what, where, who, how often, how long, distress, coping. Ask patient about reaction to hallucinations.
  - b) How to probe for auditory hallucinations.
    - i. “We ask this question routinely of everyone, because sometimes people under stress seem to hear noises or voices when there is

- ii. “Loud thoughts” – “Do your thoughts seem to sound aloud in your head, almost as if somebody standing near you could hear them?”
- iii. “Thought echo –Does a thought in your mind seem to be repeated over again, like an echo?”
- c) Elicit -
  - i. Content, context, onset, frequency, duration
  - ii. What, where, who, how often, how long, distress, coping

Juma, an 18-year-old man, was seen as a new case in the outpatient clinic. He complained of hearing voices for two months. He appeared in distress. He could not sleep at all these few days, due to his fear about the voices. He has no history of substance abuse and suicide attempt. **Use 10 minutes to elicit auditory hallucination.**

1. Show empathy; acknowledge the patient's anxiety
2. The form of hallucination: voices heard instead of rumination or voices inside head; clear sensorium
3. The content of hallucination: explicitly explore on second person, third person, running commentary, commanding, thought spoken aloud
4. Appraisal of the hallucination: perceived identity of the voices; level of conviction; any delusion
5. The intensity of hallucination: frequency, duration, pattern
6. The emotional distress and behavioural response to the hallucination: focus on risk of self harm, substance abuse and aggression in response to the hallucination
7. Any other hallucinations
8. Insight

### 1.10 Cognitive functions - Insight (pt's degree of awareness & understanding they are ill

- a. [1]. Level of consciousness; [2]. Orientation; [3]. Attention and concentration; [3]. Memory: Immediate, recent, remote; [4]. Language, capacity to read and write; [5]. Fund of knowledge; [6]. Visuospatial skills; [7]. Calculations; [8]. Frontal executive functions; [9]. Abstraction (proverb interpretation). *Methods used include:* Mini-mental state exam (MMSE) and Frontal & parietal lobe functioning tests.

### 1.11 Judgment and insight

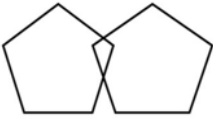
1. Judgment (patient's capability for social judgment). Reliability (estimate of patient's truthfulness).
2. Impulse control (pt's potential danger to self & others). Risk Assessment: Ask straightforward questions. Have you thought about hurting yourself? How would you hurt yourself? Have you ever hurt yourself?
3. Insight-is impaired in psychosis.

- a) **Definition:** Insight is the degree to which an individual believes s/he is unwell. Insight is patient's awareness of his disability and need for help. Does the patient know this is normal/abnormal for them and/or the rest of the world? {Are you ill? Mentally ill? Will you accept treatment? Will you accept admission? Use local & cultural standards rather than universal yardsticks to assess insight in people}. Insight has implications for and impact on patient's life, functioning, and on treatment compliance.
- b) **Grades of insight:**
- No Insight (complete denial of illness)
  - Accept problems but not psychiatric
  - Accept psychiatric problems but unwilling to take care of it.
  - Intellectual insight – aware about the problem but without applying the knowledge to future experiences.
  - Full insight/True emotional insight: Emotional awareness of the motives and feelings within and of the underlying meaning of symptoms, whether the awareness leads to changes in personality and future behavior; openness to new ideas and concepts about self and important people in the person's life.
- c) **Pseudo-insight:** In pseudo-insight the patient merely regurgitates overheard explanations.

**Mini-Mental State Examination (MMSE)**  
Folstein et al : J Psych Res 1975;12:189-98

Western Health

Score	Orientation
5	Year, Season, Month, Date, Day
5	State, City, Suburb, Building, Floor
	Registration
3	Repeat and remember: apple, table, penny
	Attention and Calculation
5	Serial 7's, or spell "WORLD" backwa
	Recall
3	Recall 3 objects above
	Language
2	Name a pencil and a watch
1	Repeat "No ifs, ands or buts"
3	Follow three stage command e.g. take this piece of paper in your right hand, fold it in half, put it on the floor
1	Read and obey the following: "close your eyes"
1	Write a sentence
Footer Text 1	Copy intersecting pentagons



**Mini Mental State Examination :**

• **Staging of Disease by MMSE**

Normal	27-30
Mild	25-26
Mild- Moderate	10-24
Moderate- Severe	6-9
Very Severe	<6



**Group Activity:**

**Group 1: Evaluation of Appearance, Behavior, Mood and Affect**

- Describe how a patient's appearance, behavior, mood and affect are evaluated.
- What are common manifestations of abnormalities in appearance, behavior, mood and affect?
- What questions would you ask a patient to elicit abnormalities of appearance, behavior, mood & affect?
- As a group come up with a role play to demonstrate MSE evaluation of appearance, behaviour, mood and affect.

**Group 1:** Video work: Mental Status Exam Training, part 1: Affect and Mood  
[http://youtu.be/o\\_ziBs7VBU](http://youtu.be/o_ziBs7VBU)

**Group 2: Evaluation of 'Thought Processes or Thought Form' and Speech**

- Describe how a patient's thought processes/form and speech are evaluated.
- What are common manifestations of abnormalities in thought processes/form and speech?
- What questions would you ask to elicit abnormalities of thought processes/form and speech?
- As a group come up with a role play to demonstrate MSE evaluation of thought process/form and speech

**Group 2:** video work: Mental Status Exam Training, part 5. Speech  
<http://youtu.be/mT4mikXkynA>

**Group 3: Evaluation of Cognition** (orientation, concent, memory, abstraction)/ judgment & insight

- Describe how a patient's 'cognition'/ judgment and insight is evaluated
- What are common manifestations of abnormalities in 'cognition'/ judgment and insight ?
- What questions would you ask patient to elicit abnormalities of cognition/judgment and insight ?
- As a group come up with a role play to demonstrate cognition/ judgment & insight MSE evaluation

**Group 3:** Video work: Mental Status Exam Training, part 3. Memory.  
<http://youtu.be/-ojgwpvqnj8>

**Group 4: Evaluation of Thought Content:**

- ① Describe how a patient's 'thought content' is evaluated
- ② What are common manifestations of abnormalities in 'thought content'?
- ③ What questions would you ask patient to elicit abnormalities of thought content?
- ④ As a group come up with a role play to demonstrate MSE evaluation of thought content

**Group 4:** Video work: Mental Status Exam Training, part 2. Thought Process

<http://youtu.be/12kQCYfdqzM>

**Group 5: Evaluation of Perceptions:**

1. Describe how a patient's 'perception' is evaluated
2. What are common manifestations of abnormalities in 'perception' ?
3. What questions would you ask a patient to elicit abnormalities of perception ?
4. As a group come up with a role play to demonstrate MSE evaluation of 'perception'

**Group 5:** video work: Mental Status Exam Training, Part 8. Psychosis <http://youtu.be/WEG6fiRj6OA>



**Take Note**

**Useful Links.**

- 1) Mental State Exam, USMLE review <http://www.youtube.com/watch?v=dO7QxvHLygc>
- 2) Ask Dr Clarke - Mental State Examination <http://www.askdoctoreclarke.com/content/c261.pdf>.
- 3) Newcastle medical school resource. Great for practise for taking MSE [http://www.ncl.ac.uk/nnp/teaching/general/hx\\_mse/index.html](http://www.ncl.ac.uk/nnp/teaching/general/hx_mse/index.html)



**References**

1. The African textbook of psychiatry and mental health by Ndeti et al 2006
2. Kaplan & Sadock's Textbook of Psychiatry, 2004