WEAVE SPRINT · PAPER I

Psychometry, Assessment & Descriptive Psychopathology

The two instruments of the examination: the tests we use to measure the mind, and the language we use to describe it. Band A is the test catalogue: reliability and validity, the intelligence scales and the deviation IQ, the projectives, the objective personality inventories, the neuropsychological batteries, the adaptive and developmental scales, the clinician-rated symptom scales, and the Indian adaptations. Band B is descriptive psychopathology built to full depth on Fish, Sims and Jaspers: the disorders of perception, thought, the self, emotion, memory, consciousness and movement, the delusions and the first-rank symptoms. One complete set of notes, built so you can pick the right test for a question and name a sign precisely.

CONTENTS

- Psychometry and assessment
- Descriptive psychopathology
- Discriminate
- Apply and consolidate

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Psychometry, Assessment & Descriptive Psychopathology

Four sections · 22 topics · one complete notes document

This is a mixed set of notes that pairs the two things every clinical encounter rests on: the formal tools that measure the mind, and the descriptive vocabulary that names what is found in it. The first band is **psychometry and assessment**, a catalogue of psychological tests organised by what each one measures: how a test earns its reliability and validity, the intelligence scales and the deviation IQ with its classification bands, the projective techniques (Rorschach, TAT and the rest), the objective personality inventories (MMPI, 16PF, NEO), the neuropsychological batteries, the adaptive and developmental scales, the clinician-rated symptom scales, and the Indian adaptations that make all of this usable in an Indian clinic. The second band is **descriptive psychopathology**, the phenomenology that Jaspers, Fish and Sims built, split into the domains of mental life: disorders of perception, of thought, of the experience of self, of emotion, of memory, of consciousness and of movement, together with the delusions and the Schneiderian first-rank symptoms. The examinable skill is precision on both fronts: choosing the right test for a referral question, and telling one sign apart from its near-neighbour.

HOW TO USE THESE NOTES

The two bands read differently by design. In the **test catalogue**, every test ends with a **Good to remember** box giving its author, what it measures and how it is scored, so the reference facts sit apart from the reasoning. In **descriptive psychopathology**, every named sign carries a crisp one-line definition, most often in a definition list, because in phenomenology the exam rewards the exact word. Figures declare one axis and code it in colour and shape: **petrol** marks structure and the neutral case, **coral** marks pathology or the point of discrimination, and **marigold** highlights the answer. Two boundaries are worth stating up front: these notes cover the intelligence *tests* while the General and Developmental Psychology notes cover the intelligence *theories* and the mechanism-evolution of hallucination theories; the psychometric reliability and validity here are distinct from the research reliability and validity in the Research Methods, Biostatistics & Epidemiology notes. This is doctor-facing revision, so the full clinical vocabulary is used.

Psychometry and assessment

1 · Orientation: the taxonomy of psychological tests

The General and Developmental Psychology and the Social, Learning & Personality Psychology notes cover the **psychology of the normal mind**: how it learns, remembers, feels, and is measured in the abstract. Paper I now turns to the two working instruments of the clinical examination. This band, Band A, takes up the first instrument, the **test** that measures the mind and puts a number on a construct we cannot see directly. Band B takes up the second instrument, the descriptive language that names what the mind is doing when it goes wrong. Hold the pair in

view: one instrument quantifies, the other describes, and the mature psychiatrist reaches for both.

Why this opens these notes. Examiners love the map before the detail. Before you can defend the Wechsler indices or the Rorschach scoring, you must be able to place any named test into its family and say in one line what that family measures. The taxonomy is the skeleton on which every test in this band hangs, so learn it first and the individual catalogue entries will have somewhere to sit. This is the schema for Band A: a six-family map of **psychometry** that you can redraw from memory.

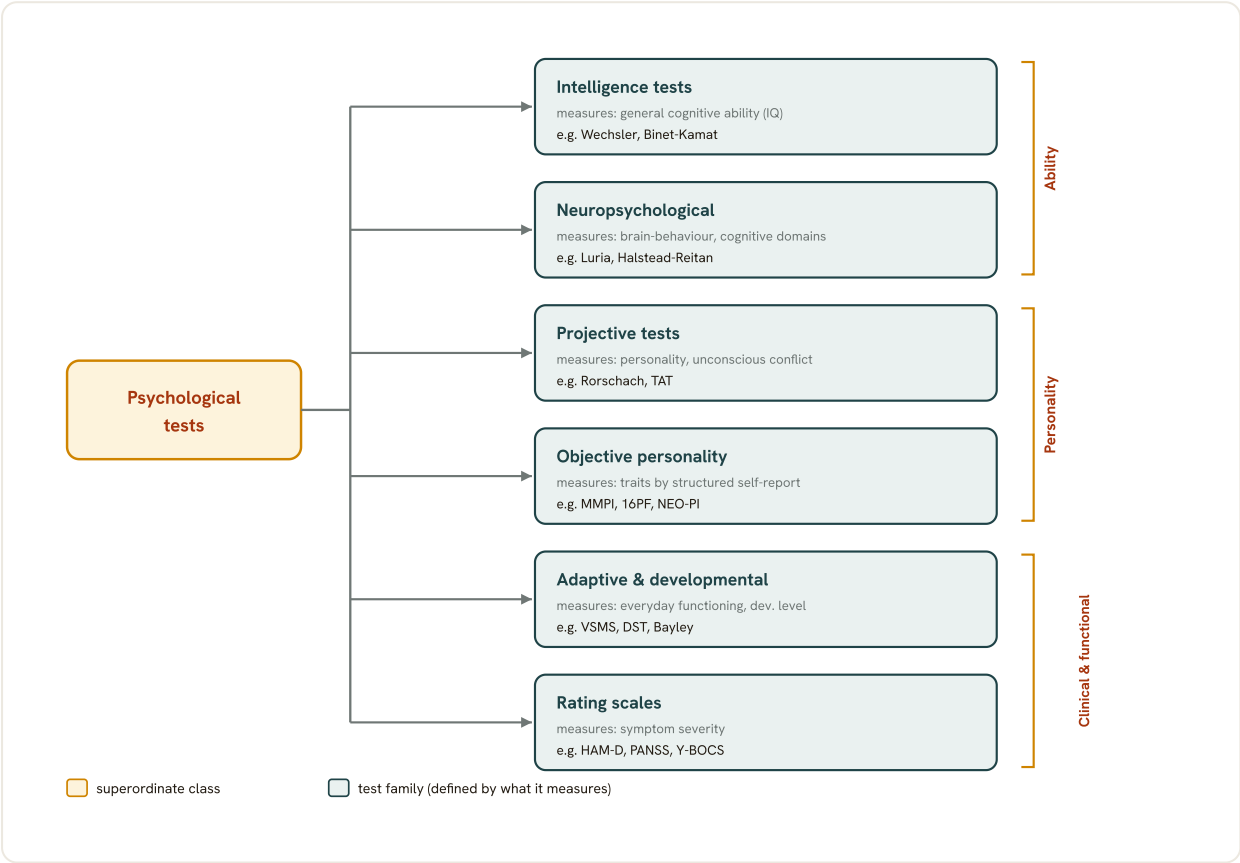


Fig 6.1 The taxonomy of psychological tests. Every test belongs to a family defined by what it measures: the ability tests (intelligence and neuropsychological), the personality tests (projective and objective), and the clinical and functional tests (adaptive-developmental scales and symptom rating scales). Reading a referral question is largely a matter of deciding which family it points to. The families, not the individual instruments, are the unit to learn first.

1.1 What a psychological test is

Definition. A psychological test is an **objective and standardised sample of behaviour**, from which we infer the level of some underlying construct (an ability, a trait, a symptom). The classic phrasing, traceable to Anastasi and repeated across texts, is that a test is a standardised sample of behaviour (Kaplan & Sadock 2024). Two words carry the weight. *Sample*: the test elicits only a slice of behaviour, never the whole person. *Standardised*: administration, scoring, and interpretation follow a fixed procedure against established norms, so that the score means the same thing across testers and occasions.

Psychometry

The science of measuring psychological constructs; the theory and practice of constructing, administering, and interpreting standardised mental tests (Kaplan & Sadock 2024).

Standardisation
Fixing the administration and scoring procedure, and referencing scores to a representative normative sample, so results are comparable.

Norm
The distribution of scores in a defined reference population, against which an individual score is read (percentile, standard score, quotient).

Reliability
The consistency of a test's measurement (test-retest, internal, inter-rater).

Validity
Whether the test measures the construct it claims to (content, criterion, construct validity).

Every catalogue entry in this band is an attempt to hang reliability and validity on a real instrument. A test with poor psychometric properties, however clever its theory, is clinically worthless; structured scales were developed precisely to improve the poor psychometric properties of unstructured clinical judgement (Kaplan & Sadock 2024).

1.2 The test-taxonomy map: six families

The map. Bind each family to a single question, "what does it measure?", and to one anchoring example. Learn this list cold; the rest of these notes is detail poured into these six containers.

Intelligence test
Measures general cognitive ability, expressed as an intelligence quotient (IQ). Anchor: Binet-Kamat, and the Wechsler scales (WAIS for adults, WISC for children).

Projective
Measures personality structure and unconscious conflict by asking the person to impose meaning on an ambiguous stimulus. Anchor: the Rorschach inkblots and the Thematic Apperception Test (TAT).

Objective personality
Measures personality traits and psychopathology through structured, self-report questionnaires with fixed-choice items and empirical scoring. Anchor: MMPI, 16PF, NEO-PI.

Neuropsychological
Measures brain-behaviour relationships across discrete cognitive domains (attention, memory, language, visuospatial, executive function). Anchor: the Luria-Nebraska and Halstead-Reitan batteries.

Adaptive and developmental scales
Measures everyday real-world functioning and developmental level rather than abstract ability. Anchor: Vineland Social Maturity Scale (VSMS), Developmental Screening Test (DST), Bayley Scales.

Rating scale
Measures the severity of a symptom cluster over time, rated by clinician or by patient. Anchor: HAM-D (depression), PANSS (psychosis).

RULE **Name the question, then the family, then the test.** Every test belongs to a family defined by one question - what does it measure - so place the referral before you reach for an instrument.

CLINICAL ANCHOR

The families answer different clinical questions. "How bright is this child?" is an intelligence-test question. "What is the structure of this personality?" is a projective or objective-personality question. "Is this cognitive complaint organic?" is a neuropsychological question. "Can this adult live independently?" is an adaptive-scale question. "Has this depression improved on treatment?" is a rating-scale question. Name the question first, then the family, then the test.

1.3 The intelligence test family

What it measures. General cognitive ability, summarised as an IQ. Population IQ approximates a normal distribution with a mean of 100 and a standard deviation of 15 points (New Oxford Textbook of Psychiatry). An **intelligence test** samples reasoning, comprehension, working memory, and processing speed, typically across separate verbal and performance (or nonverbal) subtests, and yields a global score plus a profile of strengths and weaknesses.

Anchors. The Binet-Kamat Test of Intelligence is the widely used Indian adaptation (Kamat) of the Stanford-Binet, standardised on Indian children. The Wechsler scales split by age: the Wechsler Adult Intelligence Scale (WAIS) and the Wechsler Intelligence Scale for Children (WISC). DSM-5 shifted the definition of intellectual disability so that severity is graded on **adaptive functioning**, not on the IQ number alone; the IQ locates the deficit, but adaptive behaviour grades its severity.

1.4 The projective family

What it measures. Personality organisation and unconscious conflict. The **projective** hypothesis holds that when a stimulus is deliberately ambiguous, the person must draw on their own inner world to give it meaning, and so "projects" their private structure onto the blot or the picture (Kaplan & Sadock 2024). Projective tests are, by design, indirect and unstructured, in contrast to the direct fixed-choice format of objective tests.

Anchors. The Rorschach presents a fixed series of symmetrical inkblots and asks what they might be; responses are coded, not read for content alone. Modern scoring uses the Exner Comprehensive System and, more recently, R-PAS (Rorschach Performance Assessment System), which put the method on a firmer psychometric footing. The Thematic Apperception Test (TAT), developed within Murray's personology, presents ambiguous interpersonal scenes and asks the person to tell a story; the recurring themes are taken to reveal needs and conflicts. (The plates and cards themselves are copyrighted and are described here in words only, never reproduced.)

1.5 The objective personality family

What it measures. Personality traits and psychopathology, through structured self-report. An **objective personality** test uses fixed-choice items (true-false or Likert), empirically or factor-analytically derived scales, and fixed scoring rules, so that interpretation does not depend on the tester's inference in the way a projective does.

Anchors. The MMPI (Minnesota Multiphasic Personality Inventory) is the archetype: an empirically keyed inventory yielding clinical scales plus validity scales that detect response

distortion (the current forms are the MMPI-2, MMPI-2-RF, and MMPI-3). Cattell's 16PF measures sixteen primary personality factors by factor-analytic method. The NEO-PI, now NEO-PI-R, operationalises the Five Factor Model (FFM: neuroticism, extraversion, openness, agreeableness, conscientiousness), which is the dominant trait framework in modern personality science.

COMMON TRAP

Do not confuse the two personality routes. The **projective** and the **objective personality** families both measure personality, but by opposite logic: projectives use ambiguous stimuli and inferential scoring to reach the unconscious; objective tests use structured self-report and fixed scoring to map traits. "Objective" refers to the scoring being standardised and examiner-independent, not to the truth being more objective.

1.6 The neuropsychological family

What it measures. Brain-behaviour relationships. A **neuropsychological** assessment profiles performance across discrete cognitive domains, attention, memory, language, visuospatial ability, and executive function, to detect, localise, and characterise cerebral dysfunction, often where structural imaging is normal (Kaplan & Sadock 2024).

Anchors. The Luria-Nebraska Neuropsychological Battery derives from Luria's qualitative approach, systematised into scored scales. The Halstead-Reitan Battery is the classic fixed, quantitative battery yielding an impairment index. Both aim to answer whether a cognitive complaint reflects organic dysfunction and, if so, which systems are affected.

1.7 The adaptive and developmental family

What it measures. Everyday functioning and developmental level, not abstract ability. **Adaptive** scales quantify how well a person meets the practical demands of daily life (self-care, communication, social participation); developmental scales place an infant or young child on a normative developmental trajectory.

Anchors. The Vineland Social Maturity Scale (VSMS), in India the Malin adaptation, yields a social age and a social quotient from an informant interview and is a mainstay in the assessment of intellectual disability. The Developmental Screening Test (DST) and the Bayley Scales of Infant Development assess the developmental level of infants and young children. This family carries extra weight now that DSM-5 grades intellectual disability by adaptive functioning: the adaptive scale, not the IQ test, sets the severity.

1.8 The rating scale family

What it measures. The severity of a defined symptom cluster, quantified so it can be tracked across time and across patients. A **rating scale** is scored either by a clinician (observer-rated) or by the patient (self-rated), and its value lies in serial measurement: charting response to treatment.

Anchors. The Hamilton Depression Rating Scale (HAM-D) is a clinician-rated measure of depression severity. The Positive and Negative Syndrome Scale (PANSS) is a clinician-rated

measure of symptom severity in schizophrenia. Rating scales are the instruments the DSM-5 itself now advocates as "emerging measures" to improve routine care (Kaplan & Sadock 2024).

1.9 The two axes of classification

Tests can be sorted along two independent axes, and a good answer names both. The first axis is **by what is measured**, which gives the six families above collapsed into three broad purposes: ability (intelligence, neuropsychological), personality (projective, objective), and adaptive or symptom-severity (adaptive/developmental scales, rating scales). The second axis is **by structure**, the format of the instrument, cutting across purpose.

STRUCTURAL CONTRAST	ONE POLE	OTHER POLE
Stimulus and scoring	**Objective: fixed-choice items, standardised scoring**	**Projective: ambiguous stimulus, inferential scoring**
Persons tested at once	Individual: one examiner, one subject	Group: many subjects simultaneously
Task medium	Verbal: language-based items	Performance: manipulative or nonverbal tasks
Timing constraint	Power: no time pressure, difficulty graded	Speed: many easy items against the clock

The structural axis cuts across the content axis: an intelligence test can be individual, verbal or performance, and power-type; an objective personality test is group-administrable and objective.

HOLD THIS

A psychological test is a standardised sample of behaviour, placed by what it measures then how it is structured. Six families (I-PONAR), two axes: content (ability, personality, adaptive) and structure (objective vs projective, individual vs group, verbal vs performance).

MNEMONIC

"I Prefer Only Neat And Reliable tests"

The six families in order: **I**ntelligence, **P**rojective, **O**bjective personality, **N**europsychological, **A**daptive/developmental, **R**ating scales. Carry this master mnemonic through the whole set of notes; every catalogue entry that follows lands in one of these six slots.

PEARL

The taxonomy in one line: a psychological test is a **standardised sample of behaviour**, and every test is placed by asking *what it measures* (ability, personality, adaptive function, or symptom severity) and then *how it is structured* (objective or projective; individual or group; verbal or performance).

GOOD TO REMEMBER

- **Psychometry:** the science of measuring psychological constructs; a psychological test is a standardised sample of behaviour (Anastasi; Kaplan & Sadock 2024).
- **Intelligence test family:** measures general cognitive ability (IQ, mean 100, SD 15); examples Binet-Kamat, Wechsler WAIS (adults) and WISC (children).
- **Projective family:** measures personality and unconscious conflict via ambiguous stimuli and inferential scoring; examples Rorschach (Exner / R-PAS scoring), Thematic Apperception Test (TAT, Murray).
- **Objective personality family:** measures traits and psychopathology via structured self-report and fixed scoring; examples MMPI (validity plus clinical scales), 16PF (Cattell), NEO-PI-R (Five Factor Model).
- **Neuropsychological family:** measures brain-behaviour relationships across cognitive domains; examples Luria-Nebraska, Halstead-Reitan (impairment index).
- **Adaptive and developmental family:** measures everyday functioning and developmental level; examples Vineland Social Maturity Scale (social quotient), Developmental Screening Test (DST), Bayley Scales.
- **Rating scale family:** measures symptom severity over time, clinician or self rated; examples HAM-D (depression), PANSS (schizophrenia).
- **Two axes of classification:** by what is measured (ability vs personality vs adaptive) and by structure (objective vs projective; individual vs group; verbal vs performance).
- **Master mnemonic:** "I Prefer Only Neat And Reliable tests" = Intelligence, Projective, Objective personality, Neuropsychological, Adaptive/developmental, Rating scales.
- **Currency:** Rorschach now scored by Exner / R-PAS; NEO-PI-R operationalises the FFM; DSM-5 grades intellectual disability by adaptive functioning, not the IQ number alone; first-rank symptoms are no longer treated as pathognomonic.

2 · Test construction: reliability, validity, standardisation

This is the grammar of every test in these notes. Before you can catalogue the Wechsler, the MMPI or the Rorschach, you have to know what makes any psychometric instrument trustworthy. The examiner treats **test construction** as a set of properties a test must demonstrate before it can be used in the clinic or the courtroom: it must be standardised, reliable and valid, and it must be practical. Every other test in these notes is scored against these four yardsticks, so this topic is the lens for the whole set.

The single most-tested idea is the relationship between the two central properties. **reliability** is consistency (does the test give the same answer twice?); **validity** is accuracy (does it measure what it claims?). A test can be reliable without being valid, but it can never be valid without first being reliable (Kaplan & Sadock 2024). A crucial boundary to hold: the **reliability** and **validity** taught here are *psychometric* properties of a measurement instrument. They are distinct from the *research* reliability and validity (sensitivity, specificity, internal and external validity of a study design) taught in the Research Methods, Biostatistics & Epidemiology notes. Same words, different domain: keep them in separate drawers.

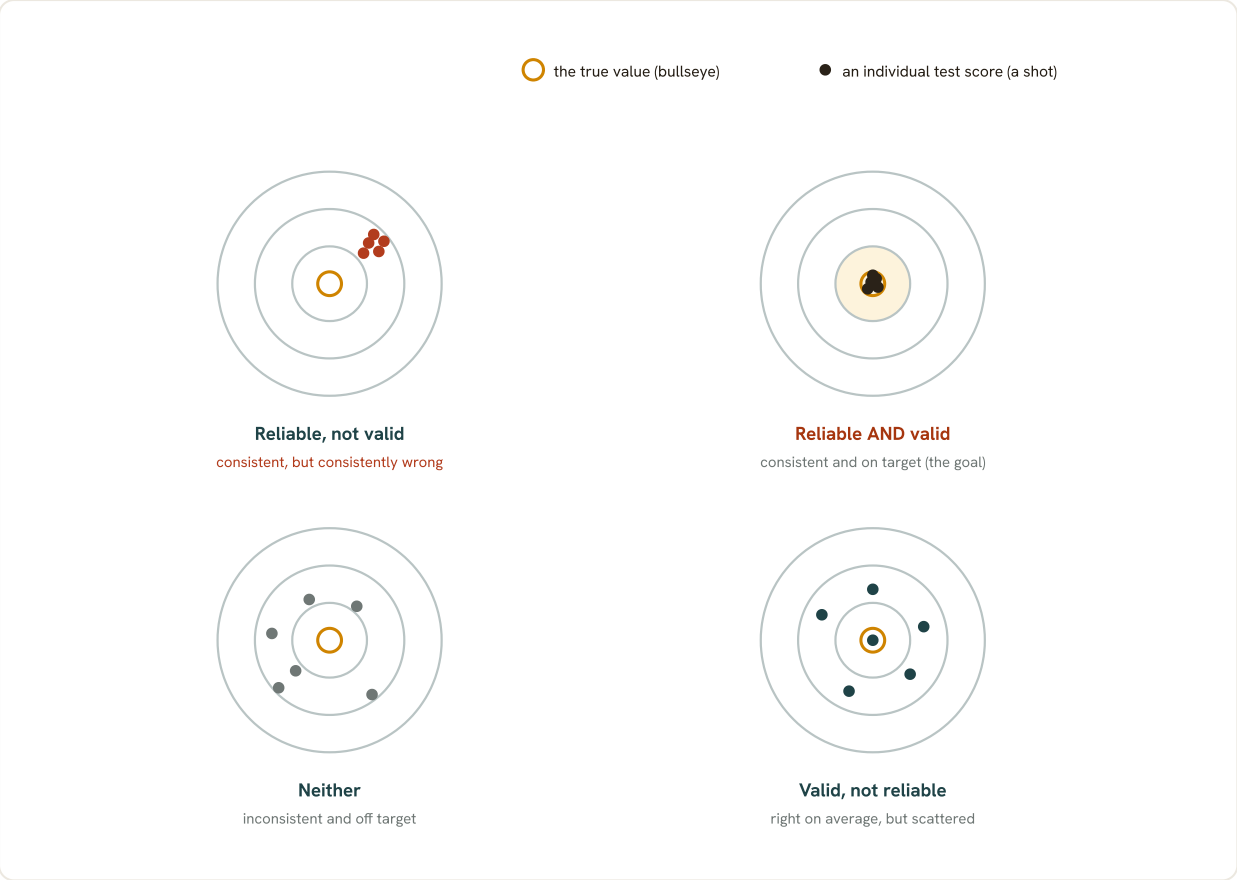


Fig 6.2 Reliability versus validity, the classic marksman analogy. Reliability is how tightly the shots cluster (consistency); validity is whether they land on the bull (accuracy). The two are independent: a test can be reliable but not valid (tight but off target, the dangerous case of a precise wrong answer), valid but not reliable (centred on average but scattered), neither, or both. The one dependency is that validity requires reliability, so a good test must be reliable first, then shown to be valid.

2.1 The four properties of a good test

Standardisation, reliability, validity, practicality. A psychometrically sound test must satisfy four requirements (Kaplan & Sadock 2024; Companion to Psychiatric Studies). **standardisation** (American: **standardization**) means the test is administered and scored in a uniform, fixed way for every examinee, and that a person's raw score is interpreted against **norms** from a representative reference sample. **reliability** is the consistency, or reproducibility, of the scores. **validity** is the degree to which the test actually measures the construct it claims to measure. *Practicality* (utility) is the down-to-earth fourth property: the test must be reasonable in cost, administration time, ease of scoring and acceptability to the patient. A perfectly reliable and valid instrument that takes six hours and a doctorate to score has little clinical utility. Reliability and validity are the two that carry marks; standardisation is their precondition; practicality is what decides bedside use.

2.2 Standardisation: uniform procedure and a reference sample

Two limbs, procedure and norms. **standardisation** has two components (Kaplan & Sadock 2024). The first is *uniform administration and scoring*: the same instructions, materials, time limits, order of items and scoring rules for every examinee, so that any difference in scores reflects the person and not the testing conditions. This is why a standardised test comes with a manual that scripts the examiner. The second is the derivation of **norms**: the test is given to a

large, carefully selected *standardisation (normative) sample* that represents the population the test is meant for, and the distribution of scores in that sample becomes the yardstick against which any individual's raw score is read. An individual's score is meaningless in isolation; it acquires meaning only as a position within the normative distribution.

2.3 Norms and derived scores: percentiles, z-scores, T-scores, standard scores

Turning a raw score into a position. Because a raw score has no inherent meaning, tests convert it into a *derived score* that locates the person on the normal curve (Kaplan & Sadock 2024). A *percentile rank* states the percentage of the reference sample the person scored at or above (a percentile of 84 means the person did better than 84 percent of the normative sample). A *z-score* expresses the raw score as the number of standard deviations above or below the mean (mean 0, standard deviation 1). A *T-score* is a rescaled standard score with a mean of 50 and a standard deviation of 10; it is the currency of the MMPI, where a T-score of 65 or above (1.5 standard deviations up) flags a clinically significant elevation. *Standard scores* more broadly are any transformation onto a fixed mean and standard deviation, the Wechsler IQ scale (mean 100, standard deviation 15) being the best-known example. Norms are almost always stratified: *age norms* are essential wherever performance changes with age (intelligence, memory, and the neuropsychological tests, where a 70-year-old is compared with age peers, not with 20-year-olds), and *education norms* matter because education strongly shapes cognitive test performance (Kaplan & Sadock 2024).

PEARL

The four derived scores are just four ways of saying the same sentence, "how far from average is this person?" Percentile answers in rank, z in raw standard deviations, T on a 50/10 scale, and the Wechsler standard score on a 100/15 scale. Memorise the two clinical anchors: MMPI T-score of 65 is the clinical cut-off, and a Wechsler IQ of 100 is dead average with each 15 points being one standard deviation.

50 / 10	65	100 / 15
T-SCORE MEAN / SD	MMPI CLINICAL CUT-OFF (T)	WECHSLER IQ MEAN / SD

2.4 Reliability: consistency of measurement

Does the test give the same answer twice? reliability is the consistency, stability or reproducibility of test scores (Kaplan & Sadock 2024). It is quantified by a *reliability coefficient*, a correlation running from 0 (no consistency) to 1.0 (perfect consistency); as a rough rule most instruments need a coefficient of about 0.80 or higher to be useful (Kaplan & Sadock 2024). A companion statistic is the *standard error of measurement* (SEM), which uses the reliability coefficient and the test's standard deviation to put a confidence band around any single obtained score: with an SEM of 3, a person scoring 90 today would score within 87 to 93 about 68 percent of the time on a retest, and within 84 to 96 about 95 percent of the time (Kaplan & Sadock 2024). The smaller the SEM, the more reliable the test. There are four ways reliability is estimated, and the examiner expects all four by name.

2.5 The four types of reliability

Temporal, inter-scorer, internal and parallel. Each type answers "consistent across what?" (Kaplan & Sadock 2024).

Test-retest reliability

Temporal stability: the same test given to the same people on two occasions, and the scores correlated. It answers whether the score holds across time. A coefficient of about 0.80 is expected if the two administrations are within roughly two weeks and the trait is stable. The main threat is the *practice (carry-over) effect*.

Inter-rater (inter-scorer) reliability

Agreement between different scorers rating the same performance. It answers whether the score is independent of who marks it, and is critical for any test with judgement in scoring (projectives, structured interviews, clinician rating scales). For categorical judgements it is quantified by *Cohen's kappa*, which corrects agreement for chance.

Internal consistency

Whether all the items measure the same single construct, estimated from one administration. The *split-half* method correlates one half of the test (often odd items) with the other (even items), corrected upward by the *Spearman-Brown formula*. The definitive index is *Cronbach's alpha*, the average of all possible split-half correlations, expressing the mean inter-item correlation; a higher value means a more internally consistent scale.

Parallel (alternate) forms reliability

Two equivalent versions of the same test, built from different items measuring the same construct, are administered and correlated. It answers whether two forms are interchangeable, and is the way to sidestep the practice effect of test-retest. A coefficient of about 0.90 or higher is expected.

2.6 Validity: the test measures what it claims

Accuracy, not mere consistency. **validity** is the degree to which a test measures what it purports to measure (Kaplan & Sadock 2024). A bathroom scale that always reads five kilograms heavy is perfectly reliable but invalid: it is consistent, but consistently wrong. Validity is not a single number but a body of evidence, gathered in four traditional forms of ascending rigour: **face validity**, **content validity**, **criterion validity** (with concurrent and predictive subtypes) and **construct validity** (with convergent and discriminant evidence). The first two are judged by inspection; the second two are established statistically.

2.7 The four types of validity

Face, content, criterion, construct. These run from superficial to deep (Kaplan & Sadock 2024; Companion to Psychiatric Studies).

Face validity

Whether the items *appear*, on the surface and to a lay reader, to measure what the test claims. It is the weakest form, a matter of appearance not evidence; a depression item that asks "do you feel sad?" has high face validity. High face validity aids acceptability but can also make a test easy to fake.

Content validity

Whether the items adequately sample the whole domain of the construct, judged by expert review. A test of depression with content validity covers mood, cognition, and the somatic and vegetative

features, not mood alone. It concerns the representativeness of the item pool, not appearance.

Criterion validity

Whether the test correlates with an external, independent criterion (a gold standard). It has two subtypes by timing. *Concurrent validity*: the test and the criterion are measured at the same time (a new depression scale correlated against a structured diagnostic interview done today). *Predictive validity*: the test predicts a criterion measured in the future (an aptitude test predicting later job performance; a suicide-risk scale predicting later attempts).

Construct validity

Whether the test measures the abstract theoretical construct it targets, the most demanding and encompassing form. It is built from a pattern of evidence: *convergent validity* (the test correlates highly with other measures of the same construct) and *discriminant (divergent) validity* (it does *not* correlate with measures of unrelated constructs). Together these show the test tracks its construct and nothing else.

> **COMMON TRAP**
>
> Do not confuse *discriminant validity* (a construct-validity concept: the test should not correlate with unrelated constructs) with a test's ability to *discriminate between groups* (e.g. depressed vs non-depressed patients), and do not confuse either with the item *discrimination index* in item analysis. Three different "discriminate" ideas at three different levels: the item, the group, and the construct.

2.8 Item analysis: difficulty and discrimination indices

How individual items earn their place. Before a test is finalised, each candidate item is evaluated statistically, a process called **item analysis** (Kaplan & Sadock 2024; Companion to Psychiatric Studies). The *item difficulty index* (p) is the proportion of examinees who answer an item correctly (or endorse it): a value near 1.0 means almost everyone passes it (too easy), near 0 means almost nobody does (too hard); items of moderate difficulty (around 0.5) usually carry the most information and spread people out best. The *item discrimination index* asks how well a single item separates high scorers from low scorers on the test as a whole: a good item is one that high total-scorers tend to get right and low total-scorers tend to get wrong (a positive point-biserial correlation between the item and the total score). An item that everyone passes, or that good and poor overall performers pass equally, discriminates poorly and is dropped. Item analysis is how the item pool is pruned so the finished test is reliable and valid.

2.9 Test bias and item bias (differential item functioning)

When a test is unfair to a subgroup. **test bias** exists when a test systematically over- or under-estimates the true standing of an identifiable group (defined by culture, language, sex, education or socioeconomic status), so that scores mean different things across groups (Kaplan & Sadock 2024). The item-level form is *differential item functioning* (DIF): a single item behaves differently for two groups *matched on the underlying trait*, so that equally able members of the two groups have unequal odds of answering it correctly for reasons unrelated to the construct (a vocabulary item that assumes a culturally specific term is the classic example). Detecting and removing biased items is central to fair test construction, and it is a major reason culture-fair and non-verbal tests were developed. In the Indian setting this is not academic: many Western

instruments must be translated, culturally adapted and re-normed on Indian samples before their scores can be trusted.

INDIA

A Western test cannot simply be handed to an Indian patient. The standard requirement is translation with *back-translation*, cultural adaptation of items, and fresh **standardisation** on a representative Indian sample to generate local **norms**; without local norms an imported test carries built-in **test bias**. This is why Indian adaptations and indigenously developed tests (for intelligence, adaptive behaviour and personality) exist, and why examiners expect you to name re-standardisation as the fix for cross-cultural bias.

2.10 The reliability-validity relationship: the bullseye

Reliable but not valid; valid requires reliable. This is the highest-yield single point of the topic. The two properties are asymmetrically linked: a test *can* be reliable without being valid, but it *cannot* be valid without being reliable (Kaplan & Sadock 2024). The standard teaching device is the target (bullseye) analogy. Imagine four archers, each firing several arrows. *Reliable but not valid*: the arrows land tightly clustered but off to one side, consistent yet wrong (a scale that always reads five kilos heavy). *Neither*: the arrows scatter all over, inconsistent and off-target. *Reliable and valid*: the arrows land tightly clustered on the bullseye, consistent *and* accurate, the goal of test construction. The logic of the asymmetry: reliability sets a ceiling on validity, because a test that cannot even agree with itself has no stable signal to correlate with any external criterion. So reliability is necessary but not sufficient for validity. This is exactly why we establish reliability first and validity second.

RULE **A test can be reliable without being valid, but never valid without first being reliable.** Reliability caps validity, so it is established first.

HOLD THIS

Reliability is consistency; validity is accuracy; validity requires reliability. Four types of each: reliability (test-retest, inter-rater, internal, parallel); validity (face, content, criterion, construct).

MNEMONIC

"Reliable = the same; Valid = the truth."

Reliability asks "same answer twice?" (consistency); validity asks "the right answer?" (accuracy). Pair it with the bullseye: tight cluster off-centre is reliable-not-valid; tight cluster on the bullseye is reliable-and-valid. You cannot hit the bullseye consistently (valid) without first grouping your arrows tightly (reliable).

2.11 Keeping psychometric and research reliability/validity apart

The same two words in two different examinations. Because the identical terms recur in the research-methodology paper, students routinely conflate them, and examiners probe the boundary. In *psychometrics* (this topic), **reliability** means score consistency (test-retest, inter-rater, internal consistency, parallel forms) and **validity** means the test measures its construct

(face, content, criterion, construct). In *research methodology* (covered in the Research Methods, Biostatistics & Epidemiology notes), the same words carry different technical meanings: the reliability and validity of a diagnostic test are expressed through *sensitivity* and *specificity*, and the validity of a *study* splits into internal validity (are the causal inferences sound within the study?) and external validity (do the findings generalise?). Do not import one framework into the other. When a psychometry question says "validity," it wants face/content/criterion/construct; the sensitivity-and-specificity and study-design material belongs to the Research Methods, Biostatistics & Epidemiology notes.

CLINICAL ANCHOR

These are not abstractions. When you read that the MMPI-2 has clinical utility, you are being told it was standardised on a large normative sample, has adequate test-retest and internal consistency reliability, and has criterion and construct validity against independent diagnoses (Kaplan & Sadock 2024). When a rating scale you use in the ward has published "good reliability and validity", it means precisely: raters agree (inter-rater), the scale is internally consistent, and its scores track true symptom severity. The four properties are the questions to ask of any instrument before you trust its number.

GOOD TO REMEMBER

- **Four properties of a good test:** standardisation, reliability, validity, practicality (utility).
- **Standardisation:** uniform administration and scoring + norms from a representative reference sample (age and education norms).
- **Derived scores:** percentile (rank in sample); z-score (mean 0, SD 1); T-score (mean 50, SD 10; MMPI clinical cut-off ~65); Wechsler standard score (mean 100, SD 15).
- **Reliability** = consistency of measurement; reliability coefficient 0 to 1.0, useful if ~0.80+; SEM puts a confidence band around a score.
- **Test-retest reliability:** temporal stability; same test twice, scores correlated; threatened by practice effect.
- **Inter-rater reliability:** agreement between scorers; categorical agreement corrected for chance by Cohen's kappa.
- **Internal consistency:** items measure one construct; split-half (Spearman-Brown corrected) and Cronbach's alpha (mean inter-item correlation).
- **Parallel (alternate) forms reliability:** two equivalent forms correlated; avoids the practice effect; expected ~0.90+.
- **Validity** = the test measures what it claims; body of evidence, not one number.
- **Face validity:** items appear to measure the construct (weakest; appearance only).
- **Content validity:** items adequately sample the whole domain (expert review).
- **Criterion validity:** correlation with an external criterion; concurrent (same time) and predictive (future).
- **Construct validity:** measures the theoretical construct; convergent (correlates with same-construct measures) and discriminant (does not correlate with unrelated ones).
- **Item analysis:** item difficulty index (p, proportion passing) and item discrimination index (separates high from low total-scorers).
- **Test bias / item bias:** systematic unfairness to a subgroup; item-level form is differential item functioning (DIF); fixed by re-standardisation and local norms.
- **Reliability-validity relationship:** a test can be reliable but not valid; validity requires reliability (bullseye analogy; reliability caps validity).
- **Cross-reference:** psychometric reliability/validity (here) are distinct from research reliability/validity (sensitivity, specificity, study internal/external validity) taught in the Research Methods, Biostatistics & Epidemiology notes.

3 · Intelligence tests and the deviation IQ

Intelligence **tests** are the oldest and most psychometrically mature instruments in clinical psychology, and they are the workhorse of any assessment for intellectual disability, developmental delay, or a suspected drop in premorbid ability. This topic is about the *tests* and about how a raw score becomes an IQ. The competing *theories* of what intelligence actually is (Spearman's g, Thurstone's primary abilities, Gardner's multiple intelligences, Sternberg's triarchic model, and the Cattell-Horn-Carroll or CHC hierarchy) belong to the General and Developmental Psychology notes; here we cross-refer to them and do not re-teach them.

The single most examined idea here is the shift from the old **ratio IQ** to the modern **deviation iq**. Examiners love the exact **classification** bands and the intellectual-disability severity ranges, so verify and memorise them cold. A second favourite is the internal architecture of the **wechsler**

scales: which subtests feed which of the four index scores, and how those roll up into the full-scale iq.

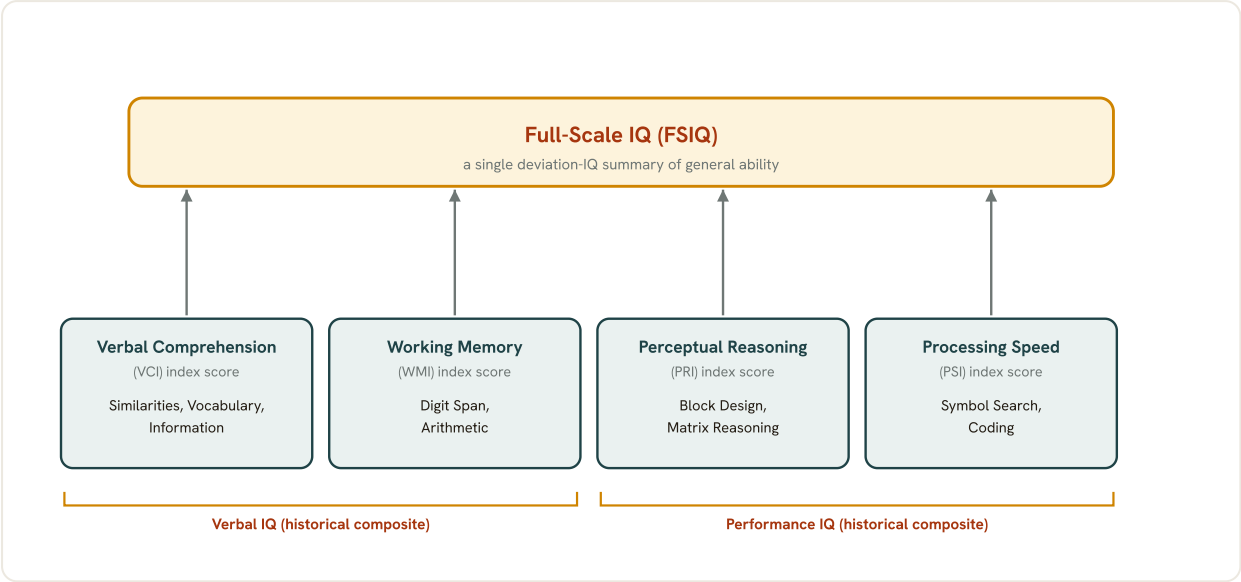


Fig 6.3 Structure of the Wechsler scales (WAIS for adults, WISC for children). Individual subtests aggregate into four index scores (verbal comprehension, working memory, perceptual reasoning, processing speed), which in turn combine into the single Full-Scale IQ. The older Wechsler editions summed the subtests into a Verbal IQ and a Performance IQ instead; the four-index structure is the modern replacement, and a wide split between indices is itself clinically informative.

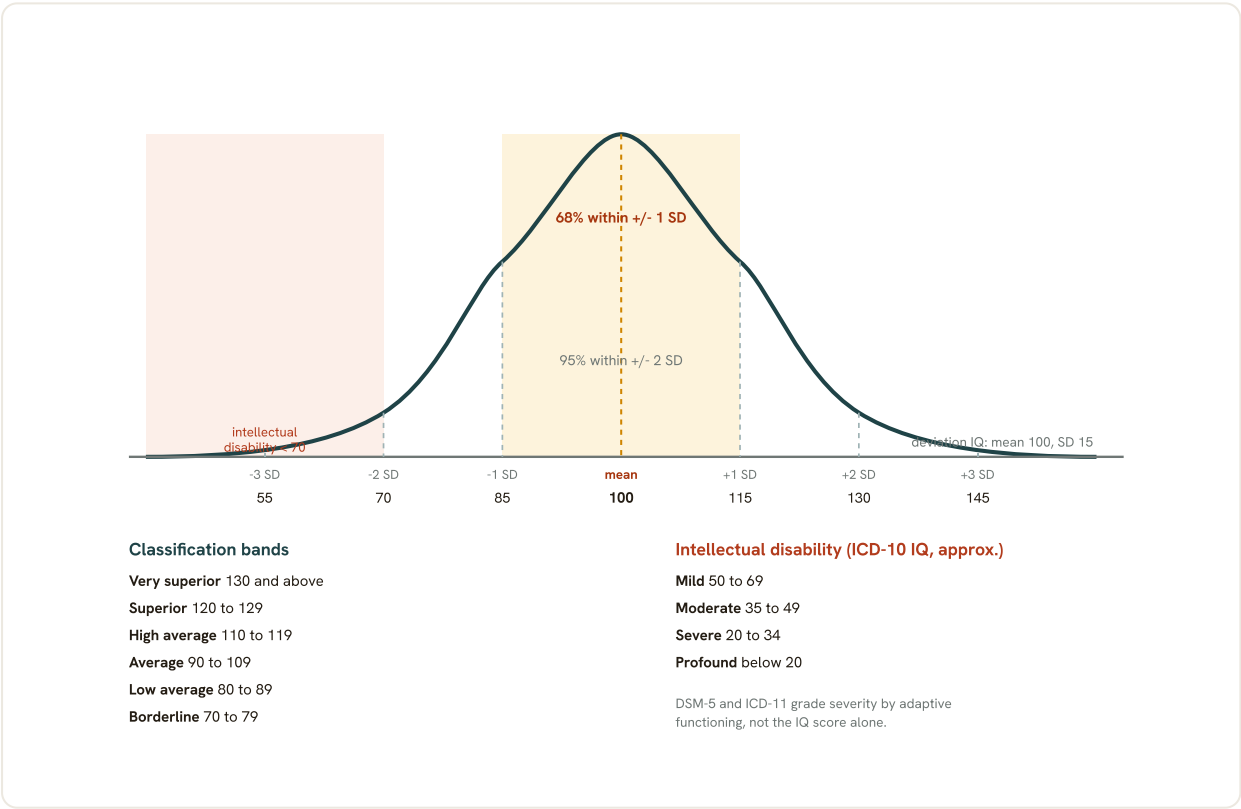


Fig 6.4 The deviation IQ and its classification bands. IQ is scaled as a standard score with a mean of 100 and a standard deviation of 15, so about 68 per cent of people score within one SD (85 to 115) and about 95 per cent within two SD (70 to 130). The bands read off the distribution: average is 90 to 109, and the intellectual-disability range begins below 70. The ICD-10 severity bands are given by approximate IQ, but current systems (DSM-5, ICD-11) grade severity by adaptive functioning rather than the IQ number alone.

3.1 The intelligence quotient: ratio versus deviation

Ratio IQ. The original **intelligence quotient** was a ratio. William Stern proposed dividing mental age by chronological age; Lewis Terman popularised multiplying by 100 to remove the decimal, giving IQ = (mental age / chronological age) x 100. A child of mental age 10 and chronological age 8 scores 125. The ratio worked well in childhood but breaks down in adulthood, because mental age plateaus while chronological age keeps rising, so the ratio drifts spuriously downward after the late teens.

Deviation IQ. David Wechsler solved this by abandoning the ratio for a standard score. The **deviation iq** expresses where an individual sits on the normal distribution of same-age peers, scaled to a mean of 100 and a standard deviation of 15 (New Oxford Textbook of Psychiatry). It is not a quotient at all despite the retained name: it is a normalised z-score rescaled so that average is 100 and one SD is 15 points. This is the IQ used by every modern scale.

> **COMMON TRAP**
> Not every test uses SD 15. The historic Stanford-Binet (Form L-M) used an SD of 16, and Cattell's culture-fair test used SD 24. A "borderline" cut of two SDs therefore lands at 68 on an SD-16 test but at 70 on the modern SD-15 scales. Always ask which SD the norms use before interpreting a score near a cut-off.

RULE **The deviation IQ is a rescaled z-score, not a quotient.** Wechsler abandoned the ratio (mental age over chronological age) because it drifts spuriously downward in adulthood.

3.2 The Stanford-Binet lineage

Binet-Simon (1905). Alfred **binet** and Theodore Simon built the first practical intelligence test in Paris in 1905, commissioned to identify schoolchildren needing special education. It introduced the concept of mental age: a graded ladder of age-normed tasks a child of a given age should be able to pass.

Stanford-Binet (Terman). Lewis Terman at Stanford University revised and re-standardised the scale for American use, publishing the **stanford-binet** in 1916. This is the version that carried Stern's ratio IQ into wide clinical use. The scale is now in its fifth edition (SB5), which has itself moved to a deviation IQ with mean 100 and SD 15 and yields verbal and nonverbal domain scores plus a full-scale composite.

Indian adaptation (Binet-Kamat). The Stanford-Binet was adapted for Indian use as the Binet-**kamat** Test of Intelligence (V. V. Kamat), a locally normed verbal-loaded scale still used in some Indian centres for children (also recorded as the Binet-Simon or Binet-Kamath test).

3.3 The Wechsler family of scales

One design, three age bands. David **wechsler** built a single conceptual instrument spanning the lifespan, split into three age-banded versions. All use the deviation iq (mean 100, SD 15).

WAIS

Wechsler Adult Intelligence Scale; ages 16 to 90 (current edition WAIS-IV, and WAIS-V). The **wais** tradition began with the Wechsler-Bellevue scale of 1939 and is the "gold standard" adult measure (Companion to Psychiatric Studies).

WISC

Wechsler Intelligence Scale for Children; ages roughly 6 to 16. The **wisc** gives a profile of specific verbal and perceptual abilities plus a full-scale IQ.

WPPSI

Wechsler Preschool and Primary Scale of Intelligence; the youngest band, from about 2 years 6 months to 7 years 7 months (Kaplan and Sadock 2024).

3.4 Verbal and performance subtests: the historic dichotomy

The classic split. The original Wechsler design summed a set of subtests into a **verbal** IQ and a **performance** IQ, then combined both into a Full-Scale IQ (Companion to Psychiatric Studies). Verbal subtests (Vocabulary, Similarities, Arithmetic, Digit Span, Information, Comprehension) tap crystallised, language-loaded ability. Performance subtests (Picture Completion, Block Design, Matrix Reasoning, Digit Symbol coding, Picture Arrangement) tap fluid, visuospatial, timed ability. A large verbal-minus-performance discrepancy was traditionally read as a clue to lateralised deficit or to a specific learning disorder, though this interpretation is now used cautiously.

> **CLINICAL ANCHOR**
>
> In a suspected dementia or acquired brain injury, a preserved verbal score with a collapsed performance/processing-speed score is the classic pattern: crystallised knowledge (Vocabulary, Information) is relatively "hold" and resists decline, while timed fluid tasks are "don't-hold" and fall early. The verbal-performance gap is a quick bedside heuristic before formal neuropsychology.

3.5 The four index scores and the full-scale IQ

Modern structure. From WAIS-IV and WISC-IV onward the verbal/performance dichotomy was superseded by four factor-analytically derived **index score** composites, each a standard score with mean 100 and SD 15 (Companion to Psychiatric Studies). They aggregate into the overall **full-scale iq**.

Verbal Comprehension Index (VCI)

Crystallised verbal reasoning and acquired knowledge; core subtests such as Similarities, Vocabulary, Information.

Perceptual Reasoning Index (PRI)

Fluid, nonverbal, visuospatial reasoning; core subtests such as Block Design, Matrix Reasoning, Visual Puzzles. (Called Perceptual Organisation in older editions; Visual Spatial plus Fluid Reasoning in WAIS-V.)

Working Memory Index (WMI)

Attention, mental control, and manipulation of information; Digit Span, Arithmetic, Letter-Number Sequencing.

Processing Speed Index (PSI)

Speed of simple visual scanning and graphomotor output; Coding (Digit Symbol), Symbol Search.

Full-Scale IQ. The full-scale iq is the best single summary of general ability (a proxy for Spearman's g, see the General and Developmental Psychology notes). It is a weighted composite of the index scores. When the four indices scatter widely, clinicians are taught to interpret the individual indices rather than the full-scale iq, because a single global number then masks a clinically important profile.

PEARL

Of the perceptual subtests, Matrix Reasoning has the highest correlation with overall full-scale iq (Companion to Psychiatric Studies), which is why abbreviated screeners like the WASI use Vocabulary plus Block Design plus Matrix Reasoning plus Similarities to estimate FSIQ in about 30 minutes.

3.6 Deviation IQ classification bands

The Wechsler descriptive bands. These are the standard qualitative **classification** labels attached to deviation-iq ranges (mean 100, SD 15). They are among the most commonly asked exact-recall facts in the assessment paper.

DEVIATION IQ RANGE	DESCRIPTIVE CLASSIFICATION
130 and above	Very superior / gifted
120 to 129	Superior
110 to 119	High average
90 to 109	Average
80 to 89	Low average
70 to 79	Borderline
Below 70	Extremely low / intellectual disability range

Standard Wechsler deviation-IQ descriptive bands; the average band 90 to 109 captures roughly the middle 50 percent of the population, and 70 is two standard deviations below the mean.

100	15	70	130
MEAN DEVIATION IQ	ONE STANDARD DEVIATION	2 SD BELOW (ID RANGE BEGINS)	2 SD ABOVE (VERY SUPERIOR)

3.7 Intellectual disability severity: ICD-10 IQ ranges

The four ICD-10 severity levels. Below an IQ of about 70 (two SDs below the mean), ICD-10 subdivides intellectual disability into four severity levels by approximate IQ range. Learn these exact bands.

SEVERITY	APPROXIMATE ICD-10 IQ RANGE	ROUGH MENTAL AGE
mild	**50 to 69**	9 to under 12 years
moderate	**35 to 49**	6 to under 9 years
severe	**20 to 34**	3 to under 6 years
profound	**below 20**	under 3 years

ICD-10 (F70 to F73) intellectual disability severity by approximate IQ; the mental-age figures are the ICD-10 clinical descriptions. Mild covers the large majority of cases.

COMMON TRAP

DSM-5 and ICD-11 no longer set severity by the IQ number. They classify intellectual disability severity by *adaptive functioning* across the conceptual, social, and practical domains, because it is adaptive skill (not the test score) that determines the level of support a person needs. IQ still establishes the diagnosis (roughly two SDs below the mean, about 65 to 75 allowing for measurement error), but severity is graded on adaptive functioning. Do not quote IQ cut-offs as the DSM-5 severity criterion.

HOLD THIS

The IQ locates the deficit; adaptive functioning grades its severity. Deviation IQ (mean 100, SD 15) replaced the ratio IQ; ICD-10 still bands severity by IQ (mild 50-69, moderate 35-49, severe 20-34, profound below 20), but DSM-5 and ICD-11 grade by adaptive function.

3.8 Culture-fair and nonverbal tests

Raven's Progressive Matrices. The best-known culture-fair test is Raven's Progressive Matrices (J. C. Raven, 1938). It is a purely nonverbal test of inductive reasoning and eductive ability: the person completes a visual matrix pattern by choosing the missing piece from options. Because it needs no reading, spoken instructions, or culture-specific knowledge, it is used across language and educational backgrounds and loads heavily on Spearman's g (see the General and Developmental Psychology notes). Versions include Coloured Progressive Matrices (young children and adults with impairment), Standard Progressive Matrices, and Advanced Progressive Matrices (high-ability adults).

Other performance tests. Where language or literacy is a barrier, performance and form-board tests are used: Seguin Form Board, Gesell's Drawing Test, and, in India, Bhatia's Battery of Performance Tests of Intelligence (a widely used indigenous nonverbal battery for Indian populations).

INDIA

For Indian assessment, the go-to instruments are the Binet-Kamat Test (verbal, child), Bhatia's Battery of Performance Tests of Intelligence (nonverbal, for low-literacy and rural populations), Malin's Intelligence Scale for Indian Children (MISIC, an Indian adaptation of the WISC), and the Seguin Form Board (a quick performance screen). Raven's Matrices are also widely used because they are language-free.

3.9 Strengths, limits, and clinical use

Strengths. Modern intelligence tests are the most rigorously standardised, reliable (IQ-scale reliabilities of about 0.88 to 0.97 for the WAIS), and well-normed instruments in psychology, with excellent predictive validity for academic and occupational outcomes.

Limits. A single global IQ can obscure a scattered profile; scores are affected by motivation, sensory or motor impairment, language, education, and test-taking familiarity; the Flynn effect (secular rise in raw scores over decades) means norms date and old norms inflate scores, so a test must be re-normed periodically. Verbal-loaded tests disadvantage those from different linguistic or cultural backgrounds, which is exactly why culture-fair tests such as Raven's exist.

TRAP The Flynn effect means old norms inflate scores, so an outdated test over-estimates IQ; a scale must be periodically re-normed, and a score is only as current as the norms behind it.

MNEMONIC

"VW-PP" ages: Very-young WPPSI, then WISC-child, then WAIS-adult

WPPSI (preschool, ~2.5 to 7) then WISC (child, ~6 to 16) then WAIS (adult, 16+). The three Wechsler bands stack across the lifespan in that order.

GOOD TO REMEMBER

- **Ratio IQ (Stern, Terman):** measures childhood ability as (mental age / chronological age) x 100; scored as that ratio; breaks down in adulthood.
- **Deviation IQ (Wechsler):** measures ability relative to same-age peers; scored as a standard score with mean 100 and SD 15; used by all modern scales.
- **Binet-Simon (Binet and Simon, 1905):** first practical intelligence test; introduced mental age; graded age-normed tasks.
- **Stanford-Binet (Terman, 1916; now SB5):** measures general ability across the lifespan; SB5 scores as deviation IQ (mean 100, SD 15) with verbal and nonverbal domains.
- **Binet-Kamat (V. V. Kamat, India):** measures child intelligence, verbal-loaded; Indian adaptation of the Stanford-Binet, scored as an IQ.
- **WAIS (Wechsler):** measures adult intelligence (16 to 90); scored on four index scores and a full-scale iq (mean 100, SD 15).
- **WISC (Wechsler):** measures child intelligence (~6 to 16); same index-score and full-scale iq scoring.
- **WPPSI (Wechsler):** measures preschool intelligence (~2 yr 6 mo to 7 yr 7 mo); deviation-IQ scoring.
- **Four index scores:** Verbal Comprehension, Perceptual Reasoning, Working Memory, Processing Speed, each mean 100 / SD 15, combining into the full-scale iq.
- **Raven's Progressive Matrices (Raven, 1938):** measures nonverbal inductive reasoning and g; culture-fair, language-free; scored by percentile against norms.
- **Bhatia's Battery / MISIC / Seguin Form Board (India):** measure nonverbal or child intelligence; indigenous or adapted Indian performance tests.
- **Wechsler classification bands:** very superior/gifted 130 and above, superior 120 to 129, high average 110 to 119, average 90 to 109, low average 80 to 89, borderline 70 to 79.
- **ICD-10 intellectual disability by IQ:** mild 50 to 69, moderate 35 to 49, severe 20 to 34, profound below 20.
- **DSM-5 and ICD-11 shift:** intellectual disability severity is now graded by adaptive functioning, not the IQ score alone.

4 · The Rorschach inkblot test

The **rorschach** inkblot test is the archetypal projective test of personality: an ambiguous, unstructured stimulus onto which the examinee is presumed to project fundamental features of their personality organisation and thought process. **Why it matters.** It is the single most examined projective instrument, sits at the centre of the objective-versus-projective divide, and is a favourite viva vehicle for the psychometric reliability-and-validity debate. Exam answers must couple the classic clinical description (Hermann Rorschach, the 10 cards, the two administration phases) with the modern scoring standard (the Exner Comprehensive System, its successor R-PAS) and the honest caveat that its psychometric standing is contested (Kaplan & Sadock 2024).

Frame it as a catalogue entry: who built it and when, what construct it measures, how it is administered, how it is scored, what it is used for clinically, and where it is strong and weak. The **inkblot** is deliberately ambiguous, the projective hypothesis holding that when the stimulus is minimally structured the response is shaped by the respondent's own needs, conflicts and characteristic mode of perceiving reality (Kaplan & Sadock 2024).

4.1 Origin, authorship and what it measures

Author and date. Hermann Rorschach, a Swiss psychiatrist, published the test in his monograph *Psychodiagnostik* in 1921 (Kaplan & Sadock 2024, Tasman 2015); he died the following year, before the method matured. **Construct measured.** A projective assessment of whole-personality organisation, perceptual-associative processing and, clinically, thought process and reality testing, rather than any single narrow trait. It is a broad-band instrument: unlike an objective inventory that indexes one dimension (for example depression), the **rorschach** aims to sample personality as a whole and to expose latent, less consciously controlled aspects that the examinee cannot easily fake, because they do not know how a given response will be scored (Kaplan & Sadock 2024).

4.2 The stimulus material: describing the ten cards without reproducing them

The plates. There are 10 symmetrical **inkblot** cards, produced by dropping ink on paper and folding it so the two halves mirror each other, which is why every blot is bilaterally symmetrical. By convention the cards are labelled with Roman numerals I to X. This note describes them in words only and does not reproduce the copyrighted plates. In composition they divide into three groups.

Achromatic cards (5)

Cards I, IV, V, VI and VII are rendered in black and grey only, with no colour; several are large solid masses that commonly evoke whole-figure percepts such as a bat or a butterfly.

Black-and-red cards (2)

Cards II and III combine black-grey with prominent red detail; the red areas frequently draw colour-based and, on Card III, paired-human-figure responses.

Fully chromatic cards (3)

Cards VIII, IX and X are multicoloured; Card X in particular is broken into many separate coloured elements and tends to pull numerous discrete detail responses.

The 10 blots split 5 achromatic, 2 black-and-red, 3 fully chromatic; described in words only, plates never shown.

4.3 Administration: the free-association phase then the inquiry phase

Administration proceeds in two sequential phases, kept deliberately standardised with minimal examiner interaction so as not to contaminate the response (Kaplan & Sadock 2024).

Free-association (response) phase

Each card is handed over in turn with the open instruction, in effect "What might this be?" The examinee says whatever the blot could be; the examiner records the responses verbatim and notes any rotation of the card. This is also called the response-proper phase.

Inquiry phase

After all 10 cards are done, the examiner goes back through them and asks the examinee to point out where each percept was seen and what about the blot made it look that way. The inquiry supplies the information needed to code location and determinants; it is a clarification, not an invitation to give fresh responses.

Whole administration and scoring typically takes about 1.5 to 2 hours (Kaplan & Sadock 2024).

RULE **Free-association first, inquiry second, and the inquiry only clarifies.** The inquiry codes location and determinants; it never harvests fresh percepts.

4.4 Scoring systems: from Beck and Klopfer to the Exner Comprehensive System

The historical fragmentation. Several rival scoring-and-interpretation systems grew up around the test (K&S counts six), the best known being those of Samuel Beck and Bruno Klopfer, whose incompatible coding conventions long undermined comparability. **The modern standard.** John E. **exner** integrated the defensible elements of the earlier systems into the **exner** Comprehensive System, which became the most widely used and accepted framework and is the version examiners should name as current (Kaplan & Sadock 2024). Scoring yields a structural summary, an elaborate set of ratios and indices computed from the coded responses, and can generate dozens of variables.

4.5 The core scoring dimensions in the Exner Comprehensive System

Every response is coded along several axes. The location says which part of the blot was used, the determinants say what perceptual feature drove the percept, form quality says how well it fits the blot, content says what was seen, and popularity says how ordinary the percept is.

Location: Whole (W)

The response uses the entire blot; high W with good form can indicate integrative, organising capacity.

Location: Common detail (D)

The response uses a commonly selected, obvious sub-area of the blot.

Location: Unusual detail (Dd)

The response uses a small or rarely chosen area; a heavy load of Dd can signal an idiosyncratic, over-particular way of scanning the field.

Determinant: Form (F)

The percept is driven purely by the shape or contour of the blot; the workhorse determinant.

Determinant: Human movement (M)

The percept attributes human-like movement or action; M is linked interpretively to inner life, fantasy and ideation.

Determinant: Colour (C)

The percept is driven by the chromatic colour of the blot; colour determinants are read against form as an index of affect and its regulation.

Determinant: Shading

The percept is driven by the grey-black shading or texture of the blot; shading responses are tied interpretively to anxiety and dysphoric affect.

Form quality

How faithfully the percept matches the actual contour of the area used; good form quality reflects intact reality testing, poor form quality (distorted or arbitrary fit) is a key marker of disturbed perception.

Content

The category of what was seen, coded into classes such as human, animal, anatomy, nature and so on; the spread and any morbid or aggressive content carry interpretive weight.

Popular (P) responses

Percepts given so frequently by the normative population that they are catalogued as popular; a normal number of P responses reflects conventional, shared perception, a paucity suggests the examinee is not seeing the world as most people do.

Five coding axes of the Exner system: location, determinants, form quality, content, popularity.

4.6 R-PAS: the newer successor system

The Rorschach Performance Assessment System (R-PAS), introduced in 2011 by Meyer, Viglione, Mihura, Erard and Erdberg, is the newer successor to the **exner** Comprehensive System. It was built to retain only variables with defensible empirical support, to use internationally normed reference data, and to standardise the number of responses per card (a brief prompt for a second response, and a limit that discourages excessive responding), addressing the older systems' vulnerability to variable response productivity. For exams, cite it as the current evidence-driven refinement while the **exner** system remains the reference point most texts still teach (Kaplan & Sadock 2024).

4.7 Clinical uses and interpretation

Interpretation reads the structural summary as a whole rather than any single response. Its principal clinical yields:

Thought disorder and deviant verbalisation

Bizarre, illogical or contaminated verbalisations during the response phase (for example fusing two incompatible percepts, or reasoning arbitrarily from the blot) are read as formal thought disorder; the test has an established role in indexing disordered thinking, and in India the Rorschach Ink Blot Test is listed among instruments used to assess thought disorder (Clinical Methods in Psychiatry, AIIMS 2024).

Reality testing via form quality

Poor form quality, percepts that do not fit the contour used, is the direct operational marker of impaired reality testing.

Indices suggestive of psychosis

The Exner system carries a composite perceptual-thinking index built from form-quality and special-score variables that is used as a screen suggestive of psychotic-level disturbance; a positive index supports, but does not by itself diagnose, psychosis.

Depression and dysphoria

A depression-related index and a preponderance of shading and morbid content are read as pointing toward depressive affect.

Suicide risk

The system includes a suicide constellation, a cluster of variables interpreted as flagging heightened self-destructive risk that warrants clinical corroboration.

In all cases the finding is a hypothesis to be integrated with history, interview and other data, never a stand-alone diagnosis (Kaplan & Sadock 2024).

4.8 Strengths, limits and the psychometric controversy

Strengths. It is the most widely used and best-researched projective device, with a large interpretive literature; the standardised two-phase administration and the Exner structural summary imposed much-needed rigour; and its indirect, hard-to-fake nature can surface material that self-report inventories miss (Kaplan & Sadock 2024). **Limits and the controversy.** The central caveat is psychometric: the reliability and validity of several Rorschach variables are contested. Critics argue that many indices lack demonstrated validity and that scoring is labour-intensive and examiner-dependent; the debate has been sharp enough that some clinical-psychology programmes dropped formal Rorschach coursework, though many retain it (Kaplan & Sadock 2024). The honest exam position: a rich clinical instrument in experienced hands whose variable-by-variable psychometrics remain uneven, which is exactly what R-PAS was designed to tighten.

CLINICAL ANCHOR

Position the **rorschach** as adjunctive, not diagnostic. It is most defensibly used to generate hypotheses about thought process and reality testing (via poor form quality and deviant verbalisations) that are then cross-checked against the mental-state examination and history. A positive perceptual-thinking or suicide-constellation index prompts closer clinical evaluation; it never substitutes for it.

COMMON TRAP

Do not say the **rorschach** "diagnoses schizophrenia" or "measures IQ". It is a projective personality and thought-process measure, not a diagnostic or intelligence test. Also avoid crediting the modern scoring to Rorschach himself: the coding standard is the **exner** Comprehensive System (with R-PAS the successor), not the 1921 original. And never collapse the two phases: free-association first, inquiry second, and the inquiry only clarifies, it does not harvest new percepts.

MNEMONIC

"LoDeF-CoP" for the Exner coding axes

Location (W, D, Dd), **De**terminants (F, M, C, shading), **F**orm quality, **Co**ntent, **P**opular. Five axes: where they looked, what drove it, how well it fits, what it was, and how ordinary it is.

FEATURE	EXNER COMPREHENSIVE SYSTEM	R-PAS
Author / year	John E. Exner, 1974 onward	**Meyer and colleagues, 2011**
Design goal	Integrate rival systems into one standard	**Keep only empirically supported variables**
Response productivity	Not tightly controlled per card	**Standardised with prompts and a response limit**
Norms	Largely US-based reference data	**International reference data**
Exam status	The system most texts still teach	The current evidence-driven successor

Exner set the modern standard; R-PAS is the newer successor built to tighten its psychometrics.

HOLD THIS

Rorschach 1921, ten symmetrical inkblots, free-association then inquiry, scored on Exner's Comprehensive System (R-PAS the successor). A projective measure of thought process and reality testing, adjunctive only, with contested psychometrics.

GOOD TO REMEMBER

- **Author / year:** Hermann Rorschach, Swiss psychiatrist, *Psychodiagnostik*, 1921.
- **What it measures:** projective personality organisation, perceptual-associative process, and clinically thought process plus reality testing (broad-band, not one trait).
- **The stimulus:** 10 symmetrical inkblot cards, labelled I to X; composition = 5 achromatic (black-grey), 2 black-and-red, 3 fully chromatic. Described in words only, never reproduced.
- **Administration:** free-association (response-proper) phase first, then the inquiry phase (points out where and what made it look so); about 1.5 to 2 hours total.
- **Scoring, modern standard:** the Exner Comprehensive System, superseding the older Beck and Klopfer systems (K&S counts six historical systems).
- **Exner coding axes:** LOCATION (Whole W, common detail D, unusual detail Dd); DETERMINANTS (form F, human movement M, colour C, shading); FORM QUALITY; CONTENT categories; POPULAR responses.
- **Successor system:** R-PAS (Rorschach Performance Assessment System, Meyer et al. 2011), empirically pruned variables, international norms, controlled response count.
- **Clinical uses:** thought disorder and deviant verbalisations; reality testing via form quality; a perceptual-thinking index suggestive of psychosis; depression and suicide-constellation indices; always a hypothesis, integrated with history and interview.
- **Controversy:** contested reliability and validity of several variables; labour-intensive, examiner-dependent scoring; some programmes dropped it, many retain it.
- **Hard rule:** not a diagnostic test, not an intelligence test; adjunctive only.

5 · Projective tests: TAT, SCT, draw-a-person

Where the Rorschach uses inkblots, this family of **projective** tests hands the subject other kinds of ambiguous, unstructured material and watches what gets built from it. The governing idea is the **projective hypothesis**: when a stimulus is deliberately vague and the response space is almost unlimited, the person has nothing external to lean on, so their reply is shaped from within, and unconscious needs, conflicts and personality organisation are read off the material as if it were a screen onto which they are projected (Kaplan & Sadock 2024). Instructions are general, the scoring key is hidden, and the response is broad-band, meaning the whole personality is sampled rather than one narrow trait.

Exam framing. Paper I loves this cluster as a compare-and-list station: name the test, its author and year, what it uses as stimulus, and what is scored. Examiners also probe the projective-versus-objective contrast and the reliability weakness. Treat each test below as a catalogue entry: stimulus, administration, scoring, use, and limits.

5.1 The projective hypothesis and what "projective" means

The core assumption. A **projective** test presents an ambiguous, unstructured stimulus for which there is no correct answer, so the subject must impose structure. That imposed structure, on the

projective hypothesis, reflects fundamental aspects of personality: needs, drives, conflicts and characteristic defences (Kaplan & Sadock 2024). The term traces to psychoanalytic projection but is used descriptively here, not as a claim that projection (the defence) is the only mechanism. Because the subject does not know how responses will be scored, projective techniques are considered harder to fake than self-report inventories.

5.2 Thematic Apperception Test (TAT): stimulus and administration

What it is. The **thematic apperception** test (**tat**; Morgan and Murray, first described 1935; developed at the Harvard Psychological Clinic) is a story-telling projective. The full set is a series of ambiguous black-and-white picture cards depicting people, singly or in groups, in emotionally suggestive but unresolved situations. The classic Card 1 shows a young boy seated before a violin. Card 16 is a blank card. Cards carry age and sex codes so a tailored subset is chosen; a subject is typically shown around 20 cards over two sessions, though shorter clinical administrations of about 10 cards are common. (HARD rule for this note: the cards themselves are copyrighted and are described in words only, never reproduced.)

The task. For each card the subject tells a story: what is happening now, what led up to it, what the figures are thinking and feeling, and how it will end. The dramatic, invented narrative is the raw data.

5.3 TAT scoring and interpretation: needs, press, the hero

Murray's framework. The **tat** is interpreted through Murray's personology. The interpreter identifies the **hero** (the figure the subject identifies with), the hero's **needs** (internal motivational forces such as need for achievement, affiliation, aggression), and the environmental **press** (forces acting on the hero from outside). The clinician tracks recurrent **themes** and **conflicts** across stories, the emotional tone, and how tensions are resolved (Kaplan & Sadock 2024). Formal quantitative systems exist (for example Bellak's scheme and the Defense Mechanisms Manual), but everyday clinical use is largely qualitative and impressionistic, which is exactly why interpreter dependence is a stated weakness.

5.4 Children's Apperception Test (CAT) and other apperception variants

The child analogue. The Children's Apperception Test (**cat**; Bellak, 1949) is the developmental analogue of the **tat** for younger children, classically ages 3 to 10. Its original version replaces human figures with anthropomorphic **animal figures** in familiar situations (feeding, toileting, sibling rivalry), on the assumption that young children project more readily onto animals; a human-figure form (CAT-H) was added later. Related child instruments include the Roberts Apperception Test for Children. The task and interpretive logic mirror the adult **tat**: tell a story, then read needs, conflicts and defences.

CLINICAL ANCHOR

The **tat** earns its keep when self-report is guarded or when object-relational and motivational material is the question, for example probing interpersonal conflict in a personality-disorder assessment. It is a supplement within a battery, never a standalone diagnostic test, and it does not yield a diagnosis.

5.5 Sentence completion tests (SCT): the semi-structured bridge

What it is. A **sentence completion** test (**sct**) presents a series of incomplete sentence stems ("My greatest fear...", "My father...") that the subject finishes with the first response that comes to mind. Because the stem constrains the response, the **sct** is the most direct of the projectives and is often called a **bridge between projective and objective** methods: more structured than the **tat**, less structured than a true-false inventory (Kaplan & Sadock 2024).

Named forms. The best-validated version is the **Rotter Incomplete Sentences Blank** (Rotter and Rafferty, 1950), 40 stems scored on a 7-point scale for degree of conflict or maladjustment to yield an overall adjustment index. The Sacks Sentence Completion Test (SSCT) samples defined attitude areas (family, sex, interpersonal relationships, self-concept). Stem counts vary widely across versions, from under 10 to over 75.

Strengths and limits. Quick, easy to administer and score, and flexible; but it is transparent, so it is easy to fabricate or deceive, and most versions other than Rotter's lack established reliability and validity data.

TRAP The sentence completion test is the most structured, most transparent projective, so it is the easiest to fake; only Rotter's Incomplete Sentences Blank has solid reliability and validity data.

5.6 Draw-a-Person test (Machover): projective figure drawing

What it is. The **draw-a-person** test in its projective form (Machover, 1949) asks the subject to draw a person, then to draw a person of the opposite sex. The drawing is interpreted qualitatively as a body-image projection: placement, size, line quality, omissions, distortions and the treatment of specific features are read for anxiety, conflict and self-concept. This is the interpretive descendant of Goodenough's earlier work, but Machover's use is clinical-projective rather than developmental.

Caveat. Machover-style sign interpretation of the **draw-a-person** has notoriously poor psychometric support; single-sign readings ("large eyes mean paranoia") are not defensible and it survives as a rapport-builder and hypothesis-generator, not as a validated instrument.

5.7 Goodenough-Harris Draw-a-Man and House-Tree-Person

Developmental use. The Goodenough Draw-a-Man test (Florence Goodenough, 1926), revised as the **Goodenough-Harris Drawing Test** (Harris, 1963), scores a child's human-figure drawing for the number of correct body details and proportions to yield a nonverbal estimate of intellectual maturity or mental age. Here the same act of drawing a person is used as a

developmental and screening measure of cognitive maturity, not as a projective probe, a distinction examiners like to test.

House-Tree-Person. The House-Tree-Person test (Buck, 1948) extends the projective drawing idea: the subject draws a house, a tree and a person, each read for aspects of the self and the perceived environment, followed by an inquiry phase.

CLASSIC TRAP The same act of drawing a person is a projective probe in Machover's Draw-a-Person (body image, self-concept) but a developmental estimate of intellectual maturity in the Goodenough-Harris Draw-a-Man - same drawing, opposite purpose.

5.8 Other projective techniques worth naming

Rosenzweig Picture-Frustration Study (P-F Study; Rosenzweig, 1945)

Cartoon strips show one figure frustrating another; the subject supplies the frustrated figure's reply. Scored for direction of aggression (extrapunitive, intropunitive, impunitive) and type of reaction, giving a semi-projective measure of reaction to frustration.

Word-association test

The examiner reads a standard list of stimulus words; the subject gives the first word that comes to mind. Reaction-time delays, blocks and unusual associations flag emotionally charged complexes. Associated with Jung's complex work and the Kent-Rosanoff standardised list.

Object-sorting test (Goldstein-Scheerer)

The subject sorts objects or blocks into groups and explains the principle; concrete, idiosyncratic or overinclusive sorting is used to demonstrate concrete thinking and conceptual (formal thought) disturbance, classically in schizophrenia.

5.9 Projective versus objective tests: the trade-off

The contrast. Objective personality tests (self-report inventories such as the MMPI) use structured items with fixed scoring; **projective** tests use ambiguous stimuli with open scoring. Each buys something at a cost.

DIMENSION	PROJECTIVE TESTS	OBJECTIVE TESTS
Stimulus	Ambiguous, unstructured	Structured, fixed items
Data	**Rich, idiographic, whole-personality**	Narrow, quantified traits
Fakeability	**Harder to fake (scoring hidden)**	Easier to fake or fake-good
Reliability and validity	**Often low; interpreter-dependent**	Generally higher, normed
Scoring	Subjective, needs trained interpreter	Objective, can be automated

Projectives trade psychometric rigour for depth and resistance to faking; objective tests trade richness for reliability.

HOLD THIS

The projective family runs from least to most structured: TAT tells tales, SCT stops at a stem, DAP draws the self. All are broad-band, hard to fake, and low in reliability; all generate hypotheses, none names a diagnosis.

COMMON TRAP

Do not call any projective a "diagnostic test". None of them names a diagnosis; they generate hypotheses about personality and conflict that must be integrated with history and the rest of a battery. Equally, do not conflate the projective **draw-a-person** (Machover) with the developmental Goodenough-Harris Draw-a-Man: same drawing, opposite purpose (personality projection versus cognitive maturity).

MNEMONIC

TAT tells Tales; SCT Stops Short; DAP Draws the self

The **tat** elicits full narrative **tales** (least structured, richest), the **sct** stops the subject at a sentence **stem** (semi-structured bridge), and the **draw-a-person** reads the **self** off a figure drawing. Order of increasing structure: TAT to SCT.

INDIA

Indian residency texts (AIIMS Clinical Methods in Psychiatry 2024) list the Rorschach, **tat**, the Draw-a-Person test (DAPT) and the **sentence completion** test (often the Sacks form, SSCT) as the standard projective battery, and note that formal projective testing is done by a clinical psychologist, not at the bedside by the psychiatrist.

GOOD TO REMEMBER

- **Projective hypothesis:** ambiguous unstructured stimuli let the subject project unconscious needs, conflicts and personality onto the material.
- **Thematic Apperception Test (TAT):** Morgan and Murray, 1935 (Harvard) / measures needs, press, motives and interpersonal conflict via story-telling / scored by identifying the hero, needs, press, recurrent themes and conflicts (Murray's personology).
- **Children's Apperception Test (CAT):** Bellak, 1949 / child analogue of the TAT (ages ~3 to 10) / same needs-and-conflict interpretation, uses animal figures (CAT-A; human form CAT-H).
- **Sentence Completion Test (SCT):** semi-structured stems, a bridge between projective and objective / measures attitudes, conflicts and adjustment / Rotter Incomplete Sentences Blank (Rotter and Rafferty 1950), 40 stems, 7-point conflict scoring, overall adjustment index; Sacks SSCT samples attitude areas.
- **Draw-a-Person (Machover, 1949):** projective figure drawing / measures body image, self-concept, anxiety and conflict / qualitative sign interpretation of the drawn figure (weak psychometrics).
- **Goodenough-Harris Draw-a-Man (Goodenough 1926; Harris 1963):** developmental and screening measure / estimates intellectual maturity / scored by counting correct body details and proportions for a mental-age estimate.
- **House-Tree-Person (Buck, 1948):** projective drawing of house, tree and person / self and perceived environment / qualitative interpretation plus an inquiry phase.
- **Rosenzweig Picture-Frustration Study (Rosenzweig, 1945):** cartoon frustration scenes / reaction to frustration / scored for direction of aggression (extrapunitive, intropunitive, impunitive) and reaction type.
- **Word-association test (Jung; Kent-Rosanoff list):** respond with first word to a stimulus word / detects emotionally charged complexes / scored on reaction time, blocks and atypical associations.
- **Object-sorting test (Goldstein-Scheerer):** sort and explain groupings / conceptual (formal-thought) disturbance / concrete or overinclusive sorting flags concrete thinking, classically in schizophrenia.
- **Projective vs objective:** projectives are rich and harder to fake but low in reliability and interpreter-dependent; objective inventories are reliable and normed but narrow and easier to fake.

6 · Objective personality tests: MMPI, 16PF, NEO

An **objective personality** test is a structured self-report inventory built from a fixed set of items (usually true or false, or a Likert scale), scored by a standardised key against published norms, so that the same protocol yields the same profile in any hands. This is the defining contrast with projective testing: the stimulus is unambiguous, the response format is closed, and the scoring is mechanical, not interpretive. The tests taught here **operationalise** the trait theories of personality you met in the Social, Learning & Personality Psychology notes, translating abstract dimensions (Cattell's source factors, Eysenck's superfactors, the Big Five) into measurable scale scores.

For the exam, master three things per test: **who built it and on what logic** (empirical criterion-keying versus factor analysis), **what construct it measures**, and **how it detects faking**. The MMPI validity scales are the classic answer to the central weakness of self-report, that respondents can distort. Kaplan and Sadock (2024) and the Companion to Psychiatric Studies remain the depth bar.

6.1 What makes a test "objective"

Fixed stimulus, fixed scoring. Objective tests are typically pencil-and-paper (or digital) instruments made of specific items that yield numerical scores and profiles amenable to statistical analysis (Kaplan & Sadock 2024). Because administration and scoring are standardised, inter-rater variance is near zero: two clinicians scoring the same answer sheet get the same T-scores. Reliability and validity are formally established against a normative base, and it is the size and representativeness of those norms that largely determine a test's usefulness. This is the whole appeal, and the whole vulnerability, of the class: rigour bought at the price of relying on what the person is willing to report.

6.2 The MMPI: empirical criterion-keying

Origin and logic. The **mmpi** (Minnesota Multiphasic Personality Inventory) was developed by Starke R. Hathaway and J. Charnley McKinley at the University of Minnesota, the original version published in 1943 (Hathaway & McKinley 1943; Kaplan & Sadock 2024). Its innovation was **empirical criterion-keying**: items were retained on a clinical scale not for face content but because they were answered differently by a criterion group (say, diagnosed depressives) than by normal controls. The test is deliberately descriptive and atheoretical, not derived from psychoanalytic theory. It is a true-or-false questionnaire for persons aged 16 and over, coded into multiple scales. A scoring innovation was the T-score, a standardised metric with mean set at 50 and standard deviation at 10, which let scores be compared across scales; a T-score at or above 65 (MMPI-2) is the usual clinical cut-off.

6.3 MMPI validity scales: detecting response style

The faking detectors. The MMPI's signature contribution is a set of **validity scales** that gauge how the person approached the test before any clinical scale is trusted. The three classical ones:

L (Lie scale)

Items describing minor human faults most people admit; high L means the person claims implausible virtue ("naive" or unsophisticated faking-good).

F (Infrequency)

Items endorsed by fewer than 10 percent of the normative sample; high F suggests over-reporting, random responding, severe pathology, or "faking bad".

K (Correction)

A subtler defensiveness index; detects a guarded, image-managing test-taking set, and a fraction of K is statistically added back to several clinical scales to correct for under-report.

Later forms add F-family scales (Fb, Fp) and consistency indices (VRIN, TRIN). The L, F, K configuration ("validity triangle") is read first: an invalid protocol voids clinical interpretation.

RULE **Read L, F, K before any clinical scale.** An invalid protocol (implausible virtue, over-reporting or defensiveness) voids the whole profile, so the validity triangle comes first.

6.4 MMPI clinical scales and code types

Ten basic clinical scales. The original MMPI carries ten numbered clinical scales, each empirically keyed to a criterion group. Scales are read by number and by two-point **code type** (the two highest scales), for example a 2-7 code (depression plus psychasthenia) suggesting anxious-depressive presentation.

NO.	SCALE	WHAT HIGH SCORES FLAG
1	Hs Hypochondriasis	Bodily preoccupation, somatic complaints
2	D Depression	Dysphoria, pessimism, low morale
3	Hy Hysteria	Conversion tendency, denial, stress-related somatics
4	Pd Psychopathic deviate	Rebelliousness, antisocial traits, poor authority relations
5	Mf Masculinity-femininity	Interest patterns departing from gender-role norms
6	Pa Paranoia	Suspiciousness, sensitivity, ideas of reference
7	Pt Psychasthenia	Anxiety, obsessions, doubt, tension
8	Sc Schizophrenia	Bizarre ideation, alienation, unusual experience
9	Ma Hypomania	Elevated energy, expansive-ness, overactivity
0	Si Social introversion	Withdrawal, shyness, low sociability

The ten clinical scales in order; scales 5 and 0 are non-clinical dimensions, the other eight index symptom domains.

6.5 MMPI-2, the RF and MMPI-3

The modern versions. The MMPI-2 (1989) re-standardised the instrument on a large contemporary US normative sample and added content and supplementary scales while keeping the ten clinical scales for continuity. The MMPI-2-RF (Restructured Form) is a shorter psychometric revision built around Restructured Clinical (RC) scales that strip out a shared "demoralisation" factor. The MMPI-3, the newest edition, brings new norms and updated items (Kaplan & Sadock 2024). All remain heavily used in clinical, forensic, and employment-screening contexts, and the validity indicators carry into every version.

6.6 The 16PF: Cattell's source factors

Factor-analytic architecture. The **16pf** (Sixteen Personality Factor Questionnaire) was devised by Raymond B. Cattell (1905 to 1998) in 1949, on a factor-analytic logic that contrasts sharply with the MMPI's criterion-keying (Kaplan & Sadock 2024). Starting from the **lexical hypothesis** (that every trait important in social life becomes encoded in language), Cattell reduced Allport

and Odbert's roughly 4,000 trait terms to 35 variable clusters, factored them, and derived sixteen primary **source factors** (for example warmth, reasoning, emotional stability, dominance, vigilance, apprehension, tension). These sixteen primaries themselves load onto five second-order "global" factors that broadly anticipate the Big Five. The 16PF measures normal-range personality rather than psychopathology, so it is used in occupational, counselling, and research settings more than in psychiatric diagnosis.

6.7 The NEO-PI-R: operationalising the Big Five

The five-factor instrument. The **neo-pi** (NEO Personality Inventory, current research forms the NEO-PI-R and NEO-PI-3) was built by Paul T. Costa Jr and Robert R. McCrae as the operationalisation of the **five-factor model** (FFM), the Big Five (Costa & McCrae; Kaplan & Sadock 2024). The five domains carry the mnemonic OCEAN: Openness to experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism. Crucially the neo pi is hierarchical: each of the five domains is measured by six specific **facet** scales (thirty facets in total), so Neuroticism decomposes into anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability. This facet-level resolution gives a more detailed personality portrait than a domain score alone and is why the FFM and the neo pi now dominate trait research and inform dimensional models of personality pathology.

> **CLINICAL ANCHOR**
>
> DSM-5's alternative model of personality disorders (Section III) maps disorders onto FFM-derived trait domains, and the PID-5 is its self-report instrument. When an examiner asks how modern classification links to trait psychology, the neo pi and the Big Five are the bridge: categories reframed as extreme standings on continuous dimensions.

6.8 The Eysenck Personality Questionnaire: the PEN model

Three superfactors. Hans Eysenck argued that Cattell's sixteen factors were needlessly complex and non-replicable, and reduced personality to a small number of higher-order dimensions. The **eysenck personality questionnaire** (**epq**), developed by Hans and Sybil Eysenck (Eysenck & Eysenck 1975), measures the **PEN model**: Psychoticism, Extraversion, and Neuroticism, with a Lie scale for response validity. Extraversion and Neuroticism were his original two superfactors (from the earlier EPI); Psychoticism (tough-mindedness, hostility, non-conformity) was added later. Eysenck grounded these biologically, tying introversion to higher cortical arousal and easier conditioning. The epq is a brief, dimensional, heavily biologically-anchored instrument, and its E and N reappear inside the Big Five.

6.9 Criterion-keyed versus factor-analytic construction

Two ways to build a personality test. The exam loves this contrast, because it explains why the MMPI looks and behaves so differently from the 16PF and neo pi.

FEATURE	EMPIRICAL CRITERION-KEYING (MMPI)	FACTOR-ANALYTIC (16PF, NEO, EPQ)
Item selection	Retained if it discriminates a criterion group	**Retained if it loads on a statistical factor**
Guiding aim	Predict clinical group membership	**Describe the structure of normal traits**
Face validity	Often low (item content may seem unrelated)	**Usually high (items obviously tap the trait)**
Typical use	Psychopathology, forensic, screening	**Normal-range description, research, occupational**

The MMPI predicts; the trait inventories describe. Different logic, different clinical niche.

HOLD THIS

The MMPI was built by empirical criterion-keying (it predicts group membership); the 16PF, NEO and EPQ were built by factor analysis (they describe trait structure). The MMPI's validity scales are the answer to the fakeability of all self-report.

6.10 Objective versus projective assessment

Strengths and the fakeability problem. Against projective techniques (Rorschach, TAT), objective tests offer clear advantages: standardised administration, established reliability and validity, representative norms, quantified scores, and objectivity of scoring. Their central weakness is transparency: because items are structured and often obvious, respondents can consciously distort ("fake good" for custody or employment, "fake bad" for compensation or disability). This is precisely the gap the MMPI validity scales close, and why any credible objective inventory now carries validity or consistency indices. Projective tests trade the norms and objectivity away in exchange for being harder to fake and richer on unconscious material, a trade-off the personality-theory discussion in the Social, Learning & Personality Psychology notes frames.

COMMON TRAP

Do not call the 16PF or NEO-PI-R "projective" because they concern personality: they are firmly objective (structured, keyed, normed). Projective means an ambiguous stimulus (inkblot, picture) with an open response. Also do not confuse the MMPI's empirical criterion-keying with factor analysis: the MMPI was NOT built by factor analysis, the 16PF, NEO and EPQ were.

MNEMONIC

"Lie, Frequency, correction" then "OCEAN" and "PEN"

MMPI validity trio in order = **L, F, K**. Big Five (neo pi) domains = **OCEAN** (Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism). Eysenck (epq) = **PEN** (Psychoticism, Extraversion, Neuroticism).

PEARL

Everything reduces to a family tree of extraversion and neuroticism. Eysenck's E and N (epq) are two of Cattell's second-order factors and two of the Big Five domains; the neo pi simply adds Openness, Agreeableness and Conscientiousness. If asked "what unifies the trait inventories", the answer is that they are competing resolutions of the same underlying factor space.

GOOD TO REMEMBER

- **Objective personality test:** structured self-report, fixed items, standardised key, norm-referenced scoring; contrast with projective (ambiguous stimulus, open response).
- **MMPI / MMPI-2 / MMPI-3:** Hathaway and McKinley (1943); measures psychopathology and response style; empirical criterion-keying; scored as T-scores (mean 50, SD 10), clinical cut-off T at or above 65.
- **MMPI validity scales:** L (lie, faking-good), F (infrequency, over-reporting/faking-bad), K (correction, defensiveness); read before clinical scales.
- **MMPI ten clinical scales:** 1 Hypochondriasis, 2 Depression, 3 Hysteria, 4 Psychopathic deviate, 5 Masculinity-femininity, 6 Paranoia, 7 Psychasthenia, 8 Schizophrenia, 9 Hypomania, 0 Social introversion; interpreted by two-point code types.
- **16PF:** Raymond Cattell (1949); measures sixteen normal-range source factors derived by factor analysis (lexical hypothesis); occupational and research use.
- **NEO-PI-R / NEO-PI-3:** Costa and McCrae; operationalises the five-factor model (OCEAN); scored as five domains, each with six facets (thirty facets total).
- **Eysenck Personality Questionnaire (EPQ):** Hans and Sybil Eysenck (1975); measures the PEN dimensions (Psychoticism, Extraversion, Neuroticism) plus a Lie scale; biologically anchored.
- **Construction logic:** MMPI = empirical criterion-keying (predicts group membership, low face validity); 16PF, NEO, EPQ = factor-analytic (describe trait structure, high face validity).
- **Fakeability:** the core limit of objective tests; addressed by validity/consistency scales (the MMPI L, F, K being the exemplar).

7 · Neuropsychological testing

This is where psychometry meets the brain. A **neuropsychological** test is a standardised task whose performance is known to depend on a particular brain structure or pathway, so that a deficit on the task can be read as a statement about the integrity of that system. The discipline studies **brain-behaviour relationships**, and a neuropsychological assessment can be thought of as an elaboration and refinement of the cognitive component of the mental status and neurological examination (Kaplan & Sadock 2024). No single instrument covers the brain; instead a battery samples five cognitive domains: **attention**, **memory**, **language**, **visuospatial function** and **executive function**.

For the examiner this topic sits at the junction of psychometry and organic psychiatry, so it is examined twice: once as a catalogue of named batteries and tests (who built them, what construct each measures, how each is scored), and once as a clinical tool (dementia work-up, traumatic brain injury, lesion localisation, capacity and rehabilitation). Two organising axes run through the whole topic: the *fixed battery versus flexible hypothesis-driven* distinction in approach, and the frontal/executive tests, which carry the most marks because they are the hardest deficits to catch at the bedside.

7.1 The two approaches: fixed batteries versus the flexible, hypothesis-driven method

Standard battery or tailored investigation. Neuropsychological assessment is organised along two philosophies (Kaplan & Sadock 2024). The *fixed (standard) battery* approach administers the same comprehensive, pre-set set of tests to every patient regardless of the referral question; its strength is a uniform, quantitative, normed profile that will not miss an unexpected deficit, and its weakness is length and inefficiency. The **halstead-reitan** battery and the **luria**-Nebraska battery are the two classic fixed batteries. The *flexible, hypothesis-driven* (or process) approach, historically exemplified by **luria** and formalised as the Boston Process Approach by Edith Kaplan, selects and sequences tests to test a specific hypothesis about the patient's complaint, honing in efficiently on the suspected area of impairment and describing the *quality* of errors, not just the score; its shortcoming is that it may overlook an unexpected deficit outside the hypothesis (Kaplan & Sadock 2024). Most modern clinical neuropsychology is flexible-hypothesis-driven, drawing tests from many batteries.

RULE **Diagnose impairment on a pattern consistent with a known condition, never on isolated low scores.** A long battery yields some low scores even in healthy people, read against age and education norms.

7.2 The Halstead-Reitan battery: a fixed battery for organicity

Category Test, Tactual Performance Test, Impairment Index. The **halstead-reitan** Neuropsychological Test Battery (HRNTB) is the prototype fixed battery, assembled by Ward Halstead and extended by Ralph Reitan, with versions for adults and children (Kaplan & Sadock 2024). It is a compilation of tests designed to detect and localise brain damage and to lateralise it. Three components are named repeatedly:

Category Test

A test of abstraction and concept formation: the patient works out an organising principle for sets of stimuli using the examiner's right/wrong feedback. It is regarded as one of the most sensitive single measures of general brain dysfunction in the battery, and, like the Wisconsin, it taps the ability to benefit from feedback and shift strategy (Kaplan & Sadock 2024).

Tactual Performance Test (TPT)

A blindfolded test of visuospatial and tactile-kinaesthetic function: the patient places blocks into a form-board by touch alone, then draws the board from memory. It yields measures of tactile problem-solving, and of incidental memory and localisation (Kaplan & Sadock 2024).

Halstead Impairment Index

The summary score of the battery: the proportion of the core tests on which the patient falls in the brain-damaged range, running from 0.0 (none impaired) to 1.0 (all impaired). A higher index means more pervasive dysfunction; it is the battery's single global organicity figure.

Other HRNTB components (finger tapping, grip strength, the rhythm and speech-sounds perception tests, and double simultaneous stimulation) provide the lateralising and sensory-motor data.

7.3 The Luria-Nebraska Neuropsychological Battery: qualitative Luria, quantified

A fixed battery built on Luria's qualitative approach. The **luria**-Nebraska Neuropsychological Battery (LNNB), developed by Golden and colleagues, took the qualitative, syndrome-analytic bedside method of the Russian neuropsychologist A. R. **luria** and repackaged it as a standardised, quantitatively scored fixed battery (Kaplan & Sadock 2024). It is organised into clinical scales spanning motor, rhythm, tactile, visual, receptive speech, expressive speech, writing, reading, arithmetic, memory and intellectual processes, each generating a score referenced to norms; it thus tries to preserve **luria**'s functional-systems logic while giving the actuarial, normed output that the pure qualitative method lacks. A Children's Revision exists for younger patients.

7.4 Frontal and executive testing: the highest-yield cluster

Why the frontal lobe needs special tests. Executive functions (planning, initiation, self-monitoring, inhibition of inappropriate responses, set-shifting, and control of complex problem-solving) are the most vulnerable to frontal and frontal-subcortical damage and the least reliably caught by a routine mental status examination, so a distinct set of tests targets them (Kaplan & Sadock 2024). A patient can score normally on the MMSE and intelligence testing yet be grossly dysexecutive. The examiner expects the following tests by name and by the specific process each isolates.

7.5 The Wisconsin Card Sorting Test: set-shifting and perseveration

The signature test of frontal set-shifting. The **wisconsin card** Sorting Test (WCST) is the classic measure of set-shifting and cognitive flexibility, functions compromised by frontal lobe damage (Companion to Psychiatric Studies). In the standard version four target cards (one red triangle, two green stars, three yellow crosses, four blue circles) are laid out, and the patient sorts a deck of 128 response cards under them by an unstated rule (colour, form or number), learning the rule only from the examiner's right/wrong feedback. After ten consecutive correct sorts the rule is silently changed and the patient must shift to the new principle (Companion to Psychiatric Studies). Performance is scored as the number of categories achieved and, critically, the percentage of *perseverative errors*, the hallmark of frontal dysfunction, where the patient keeps applying the old rule after it has stopped working. Nelson's modified WCST uses 48 rather than 128 cards to reduce the distress of continuous negative feedback. Schizophrenia patients perform poorly, with reduced dorsolateral prefrontal activation on imaging during the task (Tasman 2015).

HOLD THIS

The Wisconsin Card Sorting Test is the signature test of set-shifting, and perseverative errors are its frontal marker. It is not a memory test - the patient keeps applying a rule after it has stopped working.

7.6 The Stroop test: response inhibition and interference

Naming the ink, not the word. The **stroop** test measures response inhibition and the ability to suppress a prepotent, automatic response, an executive function anchored in frontal control (Companion to Psychiatric Studies). The patient must name the ink colour of a colour word while

the word itself spells a different colour (for example the word printed in green ink); reading the word is automatic and must be inhibited to name the ink, so the *interference* condition is slower and more error-prone than neutral naming. The size of this **stroop** interference effect indexes the integrity of inhibitory control. The paradigm generalises: the *emotional Stroop*, in which emotionally salient words slow colour-naming, is widely used in anxiety research.

7.7 The Trail Making Test: attention and set-shifting in two parts

Part A speed, Part B shifting. The **trail making** test requires rapid and efficient integration of attention, visual scanning and cognitive sequencing (Kaplan & Sadock 2024). It has two parts. *Part A* asks the patient to connect numbered circles (1-2-3...) in order as fast as possible, indexing visual attention, scanning and psychomotor speed. *Part B* requires alternating between numbers and letters (1-A-2-B-3-C...), adding a set-shifting and working-memory load to the same visuomotor task; the B-minus-A difference isolates the executive shifting cost from simple speed. A markedly prolonged or failed Part B is a sensitive, quick sign of executive impairment.

7.8 Verbal fluency and the Frontal Assessment Battery

Generativity and a bedside frontal screen. *Verbal fluency* tests measure the capacity to self-generate words to a rule against the clock, a frontally mediated generative function (Companion to Psychiatric Studies). *Phonemic (letter) fluency*, also called the Controlled Oral Word Association Test (COWAT), asks for as many words as possible beginning with F, A and S, sixty seconds per letter; *semantic (category) fluency* asks for exemplars of a category such as animals. Impaired letter fluency follows left or bilateral frontal damage. The *Frontal Assessment Battery* (FAB), the broader bedside frontal lobe test battery, is a short six-item screen (conceptualisation and similarities, lexical/verbal fluency, motor programming via the Luria hand sequence, conflicting instructions, a go/no-go for inhibitory control, and prehension behaviour) scored out of a maximum of 18, with lower scores indicating greater frontal dysfunction; it is sensitive to frontal lobe damage and useful where a full battery is impractical (Clinical Methods in Psychiatry AIIMS 2024).

EXECUTIVE TEST	CORE PROCESS ISOLATED	KEY SCORE
Wisconsin Card Sorting Test	**Set-shifting; perseveration**	Categories achieved; % perseverative errors
Stroop test	**Response inhibition of a prepotent response**	Interference effect (time/errors)
Trail Making Test A and B	**Attention/speed (A); set-shifting (B)**	Time to complete; B minus A
Verbal fluency (COWAT)	**Generativity/self-activation**	Words in 60 seconds (F, A, S; or a category)
Frontal Assessment Battery	**Global frontal/executive screen**	Total out of 18

The frontal/executive tests, each mapped to the one process it best isolates and its scoring currency.

128	18	0.0-1.0
WCST RESPONSE CARDS (NELSON: 48)	FAB MAXIMUM (LOWER IS WORSE)	HALSTEAD IMPAIRMENT INDEX (HIGHER IS WORSE)

MNEMONIC

"SWIFT" frontal tests: Stroop, Wisconsin, Interference, Fluency, Trails.

Five executive tests to name: **S**troop (inhibition), **W**isconsin card sort (set-shifting/perseveration), **I**nterference is what both Stroop and the emotional Stroop measure, **F**luency (verbal/COWAT, plus the FAB), and **T**rails A and B. If asked for one bedside frontal test, say FAB (out of 18); if asked for the signature perseveration test, say Wisconsin.

7.9 The Bender Gestalt test: visuoconstruction and an organicity screen

Copying nine designs. The **bender** Gestalt test (the Bender Visual-Motor Gestalt Test, Lauretta Bender) asks the patient to copy a set of nine geometric designs, sampling visuoconstruction and visuomotor integration (Clinical Methods in Psychiatry AIIMS 2024). Distortions, rotations, perseveration and integration failures in the reproductions are read as soft signs of organic (especially parietal and constructional) impairment, so historically it served as a quick *organicity screen*; it is also used as a low-stress opening task to build rapport before more demanding testing. A recall administration (drawing the designs from memory) adds a visual-memory element. In modern practice it is a screen and a projective adjunct, not a stand-alone diagnostic instrument.

7.10 Memory testing: the Wechsler Memory Scale

The reference memory battery. The **neuropsychological** assessment of memory is anchored by the Wechsler Memory Scale (WMS), a comprehensive set of subtests measuring attention, encoding, retrieval and recognition of both verbal and visual material, with immediate recall and delayed retention and excellent age-stratified norms up to about age 90 (Kaplan & Sadock 2024). It was co-normed with the Wechsler Adult Intelligence Scale so that memory can be compared directly against intellectual level, which is how a disproportionate memory deficit (as in an amnestic syndrome or early dementia) is demonstrated. Complementary list-learning tests (the California Verbal Learning Test, the Rey Auditory Verbal Learning Test, the Hopkins Verbal Learning Test) dissect encoding versus retrieval, and the Rey-Osterrieth Complex Figure tests non-verbal (visual) memory and construction.

7.11 Clinical uses and Indian batteries

What the referral actually asks. Neuropsychological testing is requested for five broad purposes (Kaplan & Sadock 2024; Clinical Methods in Psychiatry AIIMS 2024): the *dementia work-up* (detecting early impairment, profiling the deficit, and distinguishing dementia from pseudodementia and from normal ageing); *traumatic brain injury* (documenting deficits, guiding return-to-work and medicolegal opinion); *lesion localisation* (a profile of preserved and impaired functions points to frontal, temporal, parietal or lateralised pathology, complementing imaging); *capacity assessment* (financial, testamentary and treatment-decision capacity in the elderly and the brain-injured); and *rehabilitation* (baseline profiling and serial re-testing to track recovery or decline, which is why parallel-form and repeatable batteries exist). A key cautionary principle: because a long battery yields many scores, some low scores occur even in healthy people, so a diagnosis of impairment rests on a *pattern* consistent with a known condition, interpreted against age and education norms, not on isolated abnormal scores (Kaplan & Sadock 2024).

INDIA

Western neuropsychological tests must be adapted and re-normed before use here, and three indigenous batteries are examinable. The *PGI Battery of Brain Dysfunction* (PGI-BBD; Pershad and Verma 1990) gives a global organicity score and comprises five subscales: the PGI Memory Scale, the Bhatia Short Battery, a Verbal Adult Intelligence Scale, the Nahor-Benson test of perceptual acuity, and the Bender Visual Motor Gestalt Test. The *NIMHANS Neuropsychology Battery* (Rao, Subbakrishna and Gopukumar 2004) is a comprehensive, domain-wise Indian battery. The *AIIMS Comprehensive Neuropsychological Battery in Hindi* (Gupta et al 2000) applies **luria**-Nebraska principles with ten basic scales plus secondary scales. The *PGI Memory Scale* is the workhorse memory instrument in Indian practice.

CLINICAL ANCHOR

A 68-year-old man referred for capacity after a stroke might show, on a flexible battery: MMSE 23/30, FAB 9/18, Trail Making Test B unable to complete, and perseverative errors on the Wisconsin Card Sorting Test (a pattern drawn from a real medicolegal report structure). Read together this is a dysexecutive, frontally weighted profile with preserved gross orientation, exactly the picture that supports impaired financial capacity while a bare MMSE would have under-called it. This is why executive tests are added when capacity is the question.

COMMON TRAP

Do not equate the Halstead *Impairment* Index (0.0 to 1.0, proportion of core tests in the brain-damaged range) with a fluency or FAB *score*, and do not call the Wisconsin a memory test: it is set-shifting. Also remember the direction of scoring differs: on the FAB a *lower* score is worse, whereas a *higher* Halstead Impairment Index is worse. And screening tests (MMSE, Bender Gestalt) are not interchangeable with a full neuropsychological battery; they under-call deficits in the educated and over-call them in the poorly schooled.

GOOD TO REMEMBER

- **Two approaches:** fixed (standard) battery (uniform, comprehensive, cannot miss the unexpected but long) versus flexible hypothesis-driven/process approach (Luria, Boston Process Approach of Edith Kaplan; efficient but can miss the unexpected).
- **Halstead-Reitan battery (Halstead 1947; Reitan):** measures presence, severity and lateralisation of brain damage; scored via the *Halstead Impairment Index* (0.0 to 1.0, proportion of core tests in the impaired range). Named components: Category Test, Tactual Performance Test.
- **Category Test:** abstraction/concept formation from feedback; one of the most sensitive single measures of general brain dysfunction in the Halstead-Reitan battery.
- **Tactual Performance Test:** blindfolded form-board placement by touch; scores tactile problem-solving plus incidental memory and localisation.
- **Luria-Nebraska Neuropsychological Battery (Golden, from A. R. Luria):** measures brain dysfunction across motor, tactile, rhythm, speech, reading, writing, arithmetic, memory and intellectual clinical scales; standardised quantitative scores on each scale.
- **Wisconsin Card Sorting Test:** measures set-shifting and cognitive flexibility; 128 cards sorted to an unstated shifting rule; scored as categories achieved and percentage of *perseverative errors* (frontal marker). Nelson modification uses 48 cards.
- **Stroop test (Stroop 1935):** measures response inhibition of a prepotent response; scored as the interference effect (extra time/errors when naming ink colour of an incongruent colour word).
- **Trail Making Test A and B:** measures attention, scanning and psychomotor speed (A) and set-shifting/working memory (B); scored as time to complete, with B minus A isolating the executive shifting cost.
- **Verbal fluency (COWAT):** measures generativity/self-activation; scored as number of words in 60 seconds to letters F, A, S (phonemic) or to a category such as animals (semantic).
- **Frontal Assessment Battery (FAB):** measures global frontal/executive function at the bedside; six subtests; scored out of a maximum of 18 (lower is worse).
- **Bender Gestalt test (Lauretta Bender):** measures visuoconstruction/visuomotor integration; scored by distortions, rotations, integration failures in copying nine designs; classic organicity screen and rapport-builder.
- **Wechsler Memory Scale (WMS):** measures attention, encoding, retrieval and recognition of verbal and visual material, immediate and delayed; age-stratified index scores, co-normed with the WAIS for direct comparison against IQ.
- **Five domains sampled:** attention, memory, language, visuospatial function, executive function.
- **Clinical uses:** dementia work-up, traumatic brain injury, lesion localisation, capacity assessment, rehabilitation (with serial/parallel-form re-testing).
- **Indian batteries:** PGI Battery of Brain Dysfunction (Pershad and Verma 1990; global organicity score, five subscales); NIMHANS Neuropsychology Battery (Rao et al 2004); AIIMS Comprehensive Neuropsychological Battery in Hindi (Gupta et al 2000; Luria-Nebraska principles).
- **Interpretation rule:** diagnose impairment on a *pattern* consistent with a known condition against age/education norms, never on isolated low scores.

8 · Adaptive behaviour and developmental scales

Intelligence testing tells only half the story of a child's functioning. The other half is **adaptive behaviour**: the conceptual, social and practical skills a person actually deploys in everyday life. Since DSM-5, adaptive functioning sits alongside measured IQ as a co-equal, indeed *defining*, axis of intellectual disability, and severity is graded by the adaptive domains rather than by an IQ band alone (Kaplan & Sadock 2024). A parallel family of **developmental scales** extends the same

logic downward to infants and preschoolers who are too young for a formal IQ test: they yield a developmental quotient by comparing observed milestones against age norms. This topic is a high-yield catalogue for Paper I: examiners want author, construct, and scoring for each instrument.

Two derived scores anchor the whole area. A **social quotient (SQ)** is social age divided by chronological age times 100, exactly parallel to the classic ratio IQ (mental age over chronological age). A **developmental quotient (DQ)** is developmental age over chronological age times 100. Both read like an IQ: 100 is average, and a score well below expectation flags delay. Note the required British and American spellings both appear in the literature: "adaptive behaviour" (Shorter Oxford, IPS) and "adaptive behavior" (the Vineland's own American title).

8.1 Adaptive behaviour as a construct

Definition. Adaptive behaviour is the person's ability to meet the responsibilities of social, personal, occupational and interpersonal life appropriate to their age, sociocultural setting and education. It is operationalised across three broad clusters.

Conceptual skills

Language, literacy, money, time, number and self-direction.

Social skills

Interpersonal skills, social responsibility, following rules, gullibility, avoiding victimisation.

Practical skills

Activities of daily living, occupational skills, healthcare, travel, safety and use of money in the real world.

> **CLINICAL ANCHOR**
>
> A diagnosis of intellectual disability requires a deficit in *both* general intellectual functioning *and* adaptive behaviour, with onset in the developmental period (DSM-5). An IQ below 70 alone does not make the diagnosis; equally, IQ near 70 with grossly deficient adaptive skills still counts. Under DSM-5 the severity label (mild to profound) is set by the adaptive domains, not the IQ number.

8.2 Vineland Adaptive Behavior Scales

The vineland (VABS). The modern flagship of adaptive assessment, now in its third edition (Vineland-3, Sparrow, Cicchetti and Saulnier). It is a caregiver or teacher informant instrument, age-normed from birth into late adult life (Kaplan & Sadock 2024).

Format

Semi-structured caregiver interview or rating form; self-report, parent and teacher versions exist.

Domains scored

Four adaptive domains: communication, daily living skills, socialisation, and motor skills (Shorter Oxford, Table 17.6), rolling up to an Adaptive Behavior Composite.

Extra domain

An optional maladaptive behaviour index captures internalising and externalising problems.

Clinical use

Diagnosing and grading intellectual disability, autism spectrum disorder, and tracking developmental progress over time.

PEARL

The vineland is one of the few instruments that spans birth to roughly age 90, which is why it is the reference adaptive scale in both child and adult intellectual-disability work. It is informant-based, so it can be completed even when the patient cannot be tested directly.

8.3 Vineland Social Maturity Scale (VSMS)

The vsms. The direct ancestor of the vineland, devised by Edgar Doll (the original Vineland Social Maturity Scale). It is the Indian workhorse: an informant scale that yields a **social age (SA)** and, from it, a **social quotient (SQ)**. An Indian adaptation (Malin) is a recognised instrument for issuing disability certificates for persons with intellectual disability in India (Clinical Methods in Psychiatry, AIIMS 2024).

Author

Edgar A. Doll (Vineland Training School, New Jersey).

What it measures

Social maturity across areas such as self-help (general, eating, dressing), self-direction, occupation, communication, locomotion and socialisation.

Scoring

Items credited by informant report give a social age; SQ = social age / chronological age times 100.

INDIA

The vsms is heavily used in Indian practice for the disability-certification workup, often paired with a performance IQ test. A worked medico-legal example from the AIIMS Clinical Methods text describes a patient with a mental age of about three years and a social quotient of 20 on VSMS, used to support a finding of incapacity to manage her person and property (AIIMS 2024).

8.4 The developmental screening test (DST, Bharat Raj)

The developmental screening test. The DST is an Indian instrument developed by J. Bharat Raj (NIMHANS). It is a caregiver-report screen that plots achieved milestones against age to yield a developmental age, and from it a developmental quotient. It is popular in Indian child-psychiatry and developmental-paediatric clinics because it is quick, informant-based and locally normed.

Author

J. Bharat Raj (Indian instrument).

What it measures

Overall development from infancy through early childhood, screening for developmental delay.

Scoring

Yields a developmental age; developmental quotient (DQ) = developmental age / chronological age times 100.

COMMON TRAP

Do not confuse the two "DST"s. In this topic DST is the developmental screening test (Bharat Raj). Elsewhere in psychiatry DST means the dexamethasone suppression test, a neuroendocrine probe of the HPA axis. Read the context.

8.5 Denver Developmental Screening Test

The denver (DDST). The most widely known international developmental screen (Frankenburg and Dodds). It screens, rather than diagnoses, sorting children into normal, questionable or abnormal so that delayed children are referred onward.

What it measures

Four sectors: gross motor, fine motor-adaptive, language, and personal-social development.

Age range

Birth to about six and a half years (Shorter Oxford; Indian developmental-milestone charts are modelled on the DDST sectors).

Scoring

Each item is placed as pass, fail or refusal against the age at which most children achieve it; a pattern of delays flags an abnormal screen for further assessment.

8.6 Bayley Scales of Infant Development

The bayley. The gold-standard directly administered developmental assessment for infants and toddlers (Nancy Bayley; now the Bayley Scales of Infant and Toddler Development, currently Bayley-4). Unlike informant screens, a trained assessor elicits and scores the child's own responses (Kaplan & Sadock 2024).

What it measures

Cognitive, language, motor, social-emotional and adaptive-behaviour scales.

Age range

Approximately 16 days to 42 months (Bayley-4, Kaplan & Sadock 2024).

Scoring

Standard tasks scored on mental, motor and behaviour scales, compared with norms; comprehensive developmental quotients / composite indices are derived.

PEARL

Bayley is a performance-based assessment, not a screen: it is used when a rigorous, examiner-administered estimate of infant development is needed (early diagnosis, research, tracking preterm or at-risk infants).

8.7 Gesell Developmental Schedules

The gesell. Arnold Gesell's developmental schedules (Yale Child Study Center) were the foundational normative maps of infant development, and remain a byword for milestone-based assessment. Gesell's data underlie many later schedules.

What it measures

Developmental landmarks across four fields: motor, adaptive, language, and personal-social behaviour.

Age range

Roughly 8 weeks (4 weeks in some editions) to 3.5 years, by direct observation of responses to standard toys and situations (Kaplan & Sadock 2024).

Scoring

Observed behaviour is matched to normative milestones to give a developmental age and a developmental quotient.

A simplified derivative, the Gesell Drawing Test (GDT), asks the child to copy geometric forms of increasing difficulty and gives a rapid rough estimate of mental age; it is used in Indian practice as a quick performance measure (AIIMS 2024).

8.8 Seguin Form Board

The seguin form board. A classic nonverbal performance test (traced to Edouard Seguin, who pioneered educational methods for the intellectually disabled; the Seguin Form Board Test, SFBT). The child fits solid geometric blocks into matching recesses as fast as possible.

What it measures

Visuomotor speed, eye-hand coordination and nonverbal problem-solving; a culture-fair, language-free estimate of intelligence.

Best use

Young children and language-impaired, deaf, or non-verbal individuals, where verbal tests are invalid.

Scoring

Timed: the shortest (best) of three trials is converted, via norms, to an estimate of mental age.

> **CLINICAL ANCHOR**
>
> The seguin form board is the go-to quick nonverbal screen in an Indian intellectual-disability workup when language is a barrier, often alongside the vsms and a Bhatia or Raven's performance measure.

8.9 How DQ and SQ are derived and read

The shared arithmetic. Every ratio quotient in this area follows one template: an age equivalent (mental, social or developmental) is divided by the actual chronological age and multiplied by 100.

QUOTIENT	NUMERATOR	FORMULA	INSTRUMENTS
IQ (ratio)	Mental age	**MA / CA times 100**	Stanford-Binet, Binet-Kamat
Social quotient (SQ)	Social age	**SA / CA times 100**	vsms
Developmental quotient (DQ)	Developmental age	**DA / CA times 100**	dst, gesell, bayley

All three ratio quotients share the same age-over-age arithmetic; only the numerator (the kind of age) differs.

RULE **Every ratio quotient is an age-equivalent over chronological age, times 100.** Only the numerator changes: mental age gives IQ, social age gives SQ, developmental age gives DQ; 100 is average throughout.

Reading the score. A quotient of 100 is average. Because a young child's chronological age is small, a modest lag in age-equivalent produces a proportionally low quotient, so early delay shows up clearly. In intellectual disability, SQ and DQ track roughly with IQ and are used both to support the diagnosis and to grade severity when a full IQ test is impractical.

8.10 Choosing the right tool: screen vs assessment, informant vs performance

Two axes organise the catalogue. First, screen versus full assessment: DDST and DST are screens that sort children for referral, whereas bayley and the vineland are full assessments that quantify functioning. Second, informant-report versus direct performance: vsms, vineland, DST and DDST rely on caregiver report or observation, whereas bayley, gesell and the seguin form board require the child's own elicited performance.

INSTRUMENT	TYPE	SCORE YIELDED	AGE BAND
vineland (VABS-3)	Informant, full assessment	Adaptive Behavior Composite (4 domains)	Birth to ~90 y
vsms	Informant	Social age, SQ	Birth to adulthood
developmental screening test (dst)	Informant screen (India)	Developmental age, DQ	Infancy to early childhood
denver (DDST)	Observation screen	Normal / questionable / abnormal	Birth to ~6.5 y
bayley	Performance, full assessment	Cognitive/motor/language indices, DQ	~16 days to 42 mo
gesell	Observation schedule	Developmental age, DQ	~8 wk to 3.5 y
seguin form board	Nonverbal performance	Mental age (timed)	Young / language-impaired

A single decision grid: pick a screen to triage, a full assessment to quantify, and a nonverbal test when language cannot be used.

HOLD THIS

Adaptive behaviour is now a co-defining axis of intellectual disability, not a supplement. The VSMS gives a social quotient and is the Indian disability-certification workhorse; screens (DST, Denver) triage, full assessments (Bayley, Vineland) quantify.

MNEMONIC

"Very Very Direct Doctors Believe Good Seguin"

vineland, vsms, developmental screening test (dst), denver (DDST), bayley, gesell, seguin: the seven scales of this topic in a single string.

GOOD TO REMEMBER

- **Adaptive behaviour / adaptive behavior:** conceptual, social and practical everyday skills; a co-defining axis of intellectual disability alongside IQ (DSM-5). Both spellings are in use.
- **vineland (VABS-3):** Sparrow, Cicchetti and Saulnier. Measures adaptive functioning in four domains (communication, daily living skills, socialisation, motor skills) plus a maladaptive index. Informant/caregiver interview, birth to ~90 y; yields an Adaptive Behavior Composite.
- **vsms (Vineland Social Maturity Scale):** Edgar Doll. Measures social maturity (self-help, self-direction, occupation, communication, locomotion, socialisation). Scores social age, then SQ = SA / CA times 100. Indian disability-certification workhorse.
- **developmental screening test (dst):** J. Bharat Raj (Indian instrument). Screens overall development; scores a developmental age and DQ = DA / CA times 100.
- **denver (DDST):** Frankenburg and Dodds. Screens gross motor, fine motor-adaptive, language and personal-social sectors; birth to ~6.5 y; scores normal / questionable / abnormal.
- **bayley (Scales of Infant and Toddler Development):** Nancy Bayley. Examiner-administered; cognitive, language, motor, social-emotional and adaptive scales; ~16 days to 42 months; yields developmental indices / DQ.
- **gesell (Developmental Schedules):** Arnold Gesell. Direct observation of motor, adaptive, language and personal-social behaviour; ~8 weeks to 3.5 y; yields developmental age and DQ. Gesell Drawing Test (GDT) is the rapid drawing-copy derivative.
- **seguin (form board):** Edouard Seguin. Nonverbal, timed block-fitting test of visuomotor speed and nonverbal intelligence; for young or language-impaired individuals; best of three trials gives an estimated mental age.
- **Social quotient (SQ):** social age / chronological age times 100.
- **Developmental quotient (DQ):** developmental age / chronological age times 100. Both read like an IQ (100 = average).

9 · Symptom rating scales

A symptom **rating scale** is a standardised instrument that turns a clinical construct (depression, mania, psychosis, obsessions) into a number, so that severity can be quantified, tracked over time, and compared across patients and studies. This topic is a working catalogue organised *by clinical domain*, so that when the exam (or the ward) asks "which scale for this?" you can reach for the right one and say what it measures, who rates it, and roughly how it scores. The point of a rating scale is not diagnosis but the **measurement of severity and change**: it converts the impressionistic "the patient seems a bit better" into a defensible delta on a validated metric (Kaplan & Sadock 2024).

The single most examined distinction here is **clinician-rated** versus **self-rated**. A clinician-rated (observer-rated) scale is scored by a trained rater from a clinical interview and observation; a self-rated scale is a questionnaire the patient completes. Examiners also love the exact "signature" facts of the flagship scales: item counts, the number of items in the two Hamilton depression forms, and which scales are the standard primary outcome measures in drug trials. A fuller rating-scale catalogue (including screening, functional, quality-of-life and paediatric instruments) is developed in a Paper III chapter; here we stay with the core clinician-rated symptom scales by disorder.

9.1 What a rating scale is for: severity, response, remission

Three clinical jobs. A symptom rating scale is used to (1) quantify baseline severity, (2) track change with treatment, and (3) define trial endpoints. In trials, a fixed cut in the total score defines *response* (conventionally a 50 percent reduction from baseline) and a low absolute score defines *remission* (Kaplan & Sadock 2024). This is why the same scales that clinicians use to monitor a patient are also the primary outcome measures of the randomised controlled trials that licensed the drugs.

Scale versus diagnosis. A rating scale measures a construct on a continuum; it does not, by itself, make a categorical diagnosis. A cut-off can be applied to a continuous scale to flag likely caseness (for example an MMSE below 24 suggesting dementia, or a HAM-D above a threshold suggesting a depressive episode), but the diagnosis remains a clinical, criterion-based judgement (Kaplan & Sadock 2024).

9.2 Clinician-rated versus self-rated

Clinician-rated (observer-rated)

A trained clinician scores the item from a semi-structured interview plus observation. Strength: robust where insight is poor (mania, psychosis, cognitive disorders) and it captures observed signs. Cost: rater time, and the need for training to keep inter-rater reliability high. Examples: HAM-D, MADRS, YMRS, BPRS, PANSS, Y-BOCS.

Self-rated (self-report)

The patient completes a questionnaire; quick, cheap, captures the inner experience directly. Cost: depends on insight, literacy and honesty, and is vulnerable to response bias. Examples: Beck Depression Inventory (BDI), PHQ-9, GAD-7.

> **CLINICAL ANCHOR**
>
> The choice tracks insight. For a manic or floridly psychotic patient a self-rated scale is nearly useless (the patient does not experience the elevated mood or the delusion as pathological), so the clinician-rated YMRS or PANSS is used. For an ambulant patient with depression, a self-rated BDI or PHQ-9 can be posted to the waiting room and is a reasonable severity screen; but the trial-grade severity metric remains the clinician-rated HAM-D or MADRS.

RULE **Where insight is poor, use a clinician-rated scale.** Mania and psychosis need observer-rated instruments (YMRS, PANSS) because the patient does not experience the state as pathological.

9.3 Depression: HAM-D, MADRS and the Beck Depression Inventory

Hamilton Depression Rating Scale. The **hamilton** Depression Rating Scale (**ham-d**, also HDRS; Hamilton 1960) is the historic gold-standard clinician-rated depression scale and, for six decades, the most common primary outcome in antidepressant trials. The original published form has 17 items; a widely used extended form adds items to make 21 (Tasman describes it as a 17 to 21 item clinician scale with a strong focus on somatic and neurovegetative symptoms). It is scored by the clinician from interview; higher total means more severe depression. Its criticised feature is exactly that somatic loading, which can inflate scores in the physically ill.

Montgomery-Asberg Depression Rating Scale. The MADRS (**montgomery** and Asberg 1979) is a 10-item clinician-rated depression scale, explicitly designed to be *sensitive to change* and therefore favoured as a trial outcome; it is lighter on somatic items than the HAM-D, which makes it useful when physical illness would otherwise confound a depression score. Each item is rated 0 to 6.

Beck Depression Inventory. For contrast, the Beck Depression Inventory (BDI; Beck, current BDI-II 1996) is the classic *self-rated* depression questionnaire: 21 self-report items, quick, and weighted toward the cognitive symptoms of depression (guilt, worthlessness, pessimism). It is a severity and screening tool, not a diagnostic instrument, and shows the self-rated trade-off: convenient and patient-centred, but dependent on insight and honesty.

> **COMMON TRAP**
>
> Do not conflate the HAM-D and the BDI as interchangeable "depression scales". They differ on the axis examiners test: the HAM-D and MADRS are **clinician-rated** (the standard trial outcome measures), the BDI is **self-rated**. And the two Hamilton forms are 17 and 21 items, not "the 17-item Hamilton" alone.

9.4 Mania: the Young Mania Rating Scale

YMRS. The Young Mania Rating Scale (**ymrs**; Young, Biggs, Ziegler and Meyer 1978) is the standard clinician-rated mania severity scale and the usual primary outcome in acute-mania trials. It has 11 items; seven items are scored 0 to 4 and four items (irritability, speech, thought content, and disruptive-aggressive behaviour) are given double weight and scored 0 to 8, so that harder-to-rate but clinically salient items are not lost. Because manic patients characteristically lack insight, a self-rated mania scale is unreliable, which is precisely why the observer-rated YMRS is the field standard.

9.5 Psychosis: BPRS and PANSS

Brief Psychiatric Rating Scale. The **bprs** (Overall and Gorham 1962) is one of the oldest clinician-rated scales for overall psychiatric symptom severity in psychotic and severe illness. The classic form has 18 items, each rated 1 to 7, covering a broad spread (anxiety, depression, hostility, hallucinatory behaviour, unusual thought content, blunted affect). It is quick and remains widely used to track global change, but it assesses positive and disorganised symptoms far better than it assesses negative symptoms.

Positive and Negative Syndrome Scale. The **panss** (Kay, Fiszbein and Opler 1987) is the modern flagship clinician-rated schizophrenia scale and the standard primary outcome in antipsychotic trials. It has 30 items, each rated 1 to 7, structured into three subscales: a 7-item Positive scale, a 7-item Negative scale, and a 16-item General Psychopathology scale. Its virtue over the BPRS is the explicit, separately scored negative-symptom dimension, which matters because positive and negative symptoms respond differently to treatment.

FEATURE	BPRS	PANSS
Items	18	**30 (7 positive, 7 negative, 16 general)**
Item anchor	1 to 7	1 to 7
Negative symptoms	**poorly captured**	separate 7-item negative subscale
Rating	clinician-rated	clinician-rated
Typical role	quick global severity	**standard antipsychotic-trial outcome**

BPRS versus PANSS: both clinician-rated and anchored 1 to 7, but the PANSS is larger and scores the negative syndrome on its own subscale, which is why it displaced the BPRS as the trial standard in schizophrenia.

17 / 21 HAM-D ITEM FORMS	**11** YMRS ITEMS (4 DOUBLE-WEIGHTED)	**30** PANSS ITEMS (7+7+16)	**0-40** Y-BOCS TOTAL (10 ITEMS)

9.6 Negative and positive symptoms: SANS and SAPS

The Andreasen pair. Before the PANSS folded both dimensions into one instrument, Nancy Andreasen built two dedicated clinician-rated scales for schizophrenia (Andreasen). The **rating scale** pair is the SANS (Scale for the Assessment of Negative Symptoms) and the SAPS (Scale for the Assessment of Positive Symptoms). The SANS rates affective flattening, alogia, avolition-apathy, anhedonia-asociality, and attentional impairment; the SAPS rates hallucinations, delusions, bizarre behaviour, and formal thought disorder. They remain the reference standard specifically for detailed negative-symptom research.

9.7 Obsessive-compulsive disorder: the Y-BOCS

Yale-Brown Obsessive Compulsive Scale. The **y-bocs** (Goodman and colleagues 1989) is the standard clinician-rated OCD severity scale and the primary outcome in OCD trials. It has 10 items (five rating obsessions, five rating compulsions), each scored 0 to 4, giving a total of 0 to 40. Crucially it rates the *severity* of obsessions and compulsions (time occupied, interference, distress, resistance, control) independently of their *content*, which is captured separately on a symptom checklist. That form-over-content design is what makes it usable across the very different symptom pictures of OCD.

9.8 The global scale and the anxiety scale: CGI and HAM-A

Clinical Global Impression. The CGI (Clinical Global Impression; Guy 1976, from the NIMH battery) is the great pragmatic all-rounder: a clinician-rated global judgement independent of any single disorder. It has two brief parts, CGI-Severity (how ill is the patient now, rated 1 = normal to 7 = among the most extremely ill) and CGI-Improvement (how much has the patient changed since baseline, 1 = very much improved to 7 = very much worse). Its simplicity is its strength: it is applied across every disorder and is a near-universal secondary outcome in trials.

Hamilton Anxiety Rating Scale. The HAM-A (Hamilton 1959) is the standard clinician-rated anxiety severity scale, with 14 items covering psychic and somatic anxiety, each rated 0 to 4. It is

the anxiety counterpart to the HAM-D and, like it, is a common trial outcome. Its self-rated primary-care counterpart is the GAD-7.

9.9 Drug-induced movement disorders: AIMS and Simpson-Angus

AIMS. The Abnormal Involuntary Movement Scale (AIMS; NIMH, Guy 1976) is the standard clinician-rated scale for tardive dyskinesia in patients on antipsychotics. It has 12 items, each rated 0 to 4: ten cover the abnormal movements themselves (by body region, plus global severity), and two concern dental status that can mimic dyskinesia. It requires a brief structured motor examination, not just an interview. Mild dyskinetic movements in two body areas, or moderate movements in one, on adequate neuroleptic exposure, suggest tardive dyskinesia (Kaplan & Sadock 2024).

Simpson-Angus Scale. The Simpson-Angus Scale (Simpson and Angus 1970) is the clinician-rated scale for antipsychotic-induced *parkinsonism* and other extrapyramidal side effects. It has 10 items rated 0 to 4, strongly weighted to rigidity, plus one akathisia item; the score is reported as the mean of the items, with about 0.3 as the upper limit of normal, and it correlates with antipsychotic dose (Kaplan & Sadock 2024). Akathisia specifically is more often rated on the dedicated Barnes Akathisia Rating Scale.

> **PEARL**
>
> Remember the movement scales as a triad: AIMS for tardive dyskinesia, Simpson-Angus for drug-induced parkinsonism, and the Barnes Akathisia Rating Scale for akathisia. All three are clinician-rated and all three need you to *examine* the patient, not just ask questions.

9.10 Cognitive screens: MMSE and MoCA

Mini-Mental State Examination. The MMSE (Folstein, Folstein and McHugh 1975) is the classic clinician-administered cognitive screen, scored out of 30, sampling orientation, registration, attention and calculation, recall, language and construction. A score below 24 is the traditional cut suggesting cognitive impairment (Kaplan & Sadock 2024), though education and age shift the threshold. It is a screen for global cognitive impairment, not a diagnostic or a detailed neuropsychological test.

Montreal Cognitive Assessment. The MoCA (Nasreddine and colleagues 2005) is also scored out of 30 but is more sensitive than the MMSE to *mild* cognitive impairment and to executive and visuospatial deficits, because it adds trail-making, clock-drawing, abstraction and more demanding delayed recall. A one-point education adjustment is added for fewer than 12 years of schooling. It is now often preferred where early or subtle impairment is the question.

INDIA

The MMSE and MoCA are language and literacy loaded, so raw Western cut-offs misclassify illiterate or non-English-speaking Indian patients. Validated Indian and vernacular adaptations are used instead, such as the Hindi Mental State Examination (HMSE) and other locally normed cognitive screens; the Addenbrooke's Cognitive Examination (ACE-III) also has Indian-language versions. Always screen cognition in a language the patient is literate in, and apply local norms rather than the standard cut of 24 or 26.

HOLD THIS

A rating scale measures severity and change, not diagnosis. Know the flagship per domain: depression HAM-D/MADRS, mania YMRS, psychosis PANSS, OCD Y-BOCS, cognition MMSE/MoCA (both out of 30, MMSE cut below 24).

MNEMONIC

"Doctors Manage Patients' Obsessive Complaints" → Depression, Mania, Psychosis, OCD, plus the Cognitive and movement screens

Walk the domains in order and name the flagship clinician-rated scale for each: Depression (HAM-D, MADRS), Mania (YMRS), Psychosis (BPRS, PANSS), OCD (Y-BOCS), then the add-ons: global (CGI), anxiety (HAM-A), movement (AIMS, Simpson-Angus), cognition (MMSE, MoCA). Self-rated contrast: BDI for depression.

GOOD TO REMEMBER

- **Clinician-rated vs self-rated:** clinician-rated (HAM-D, MADRS, YMRS, BPRS, PANSS, Y-BOCS) is scored by a trained rater and is robust when insight is poor; self-rated (BDI, PHQ-9, GAD-7) is a patient questionnaire, quick but insight-dependent.
- **HAM-D / HDRS (Hamilton 1960):** rates depression severity; clinician-rated; 17-item and extended 21-item forms; historic trial gold standard, somatically loaded.
- **MADRS (Montgomery & Asberg 1979):** rates depression severity, designed to be sensitive to change; clinician-rated; 10 items each 0 to 6; less somatic than HAM-D.
- **Beck Depression Inventory (Beck; BDI-II 1996):** rates depression severity; self-rated; 21 items; cognitively weighted; screening not diagnostic.
- **YMRS (Young et al 1978):** rates mania severity; clinician-rated; 11 items (four double-weighted); standard acute-mania trial outcome.
- **BPRS (Overall & Gorham 1962):** rates overall psychotic/psychiatric severity; clinician-rated; 18 items each 1 to 7; weak on negative symptoms.
- **PANSS (Kay, Fiszbein & Opler 1987):** rates schizophrenia symptoms; clinician-rated; 30 items each 1 to 7; positive (7), negative (7), general (16) subscales; standard antipsychotic-trial outcome.
- **SANS / SAPS (Andreasen):** rate negative and positive symptoms of schizophrenia respectively; clinician-rated; reference standard for negative-symptom research.
- **Y-BOCS (Goodman et al 1989):** rates OCD severity; clinician-rated; 10 items (5 obsessions, 5 compulsions) each 0 to 4, total 0 to 40; rates severity independent of content.
- **CGI (Guy 1976, NIMH):** global severity and improvement; clinician-rated; CGI-Severity and CGI-Improvement each 1 to 7; disorder-independent, near-universal trial secondary outcome.
- **HAM-A (Hamilton 1959):** rates anxiety severity; clinician-rated; 14 items each 0 to 4; psychic and somatic anxiety; self-rated counterpart GAD-7.
- **AIMS (NIMH, Guy 1976):** rates tardive dyskinesia; clinician-rated with motor exam; 12 items each 0 to 4.
- **Simpson-Angus (Simpson & Angus 1970):** rates antipsychotic-induced parkinsonism/EPS; clinician-rated exam; 10 items each 0 to 4, reported as item mean.
- **Barnes Akathisia Rating Scale:** rates akathisia; clinician-rated; completes the movement-scale triad with AIMS and Simpson-Angus.
- **MMSE (Folstein et al 1975):** screens global cognition; clinician-administered; scored out of 30; traditional impairment cut below 24.
- **MoCA (Nasreddine et al 2005):** screens cognition; clinician-administered; out of 30; more sensitive to mild cognitive impairment; +1 point if under 12 years of schooling.

10 · Indian test adaptations

Every imported Western test carries a hidden assumption: that the person taking it grew up inside the culture, language and schooling the norms were built on. In India that assumption fails, so the standard batteries were not merely translated but **adapted** and re-normed. This topic is the India-context marker for the whole assessment band. It is the single reliable place an examiner can drop a "name the Indian adaptation and who standardised it" question, and it recurs in the ID, disability-certification and neuropsychology sections. Teach each instrument as a catalogue entry: what Western parent it adapts, who built it, the language or population it serves, and where its Indian norms come from.

Why adaptation is not optional. Four forces make a foreign test invalid in an Indian testee, and each is a separable exam point. First, **norms**: a raw score only becomes an IQ or a percentile

against a reference sample, and an American or British sample mis-scores an Indian child. Second, **language**: verbal items translated word-for-word lose difficulty gradation and cultural sense; Indian adaptations rebuild the verbal ladder in Kannada, Marathi, Hindi and other languages. Third, **cultural fairness**: item content (foods, festivals, idioms, pictures) must map onto the testee's world or it measures acculturation, not ability. Fourth, **literacy** and schooling: much of India is rural and non-literate, so performance (non-verbal) tests that do not depend on reading or writing become essential rather than optional (AIIMS Clinical Methods 2024).

INDIA

The through-line for the whole test band: for almost every Western instrument on this exam there is a locally standardised Indian counterpart, and the examiner wants the pair. Intelligence: Stanford-Binet becomes the **binet-kamat** test (BKT); WISC becomes **malin**'s Intelligence Scale for Indian Children (MISIC); Bhatia's Battery of Performance Tests of Intelligence serves illiterate and rural testees. Adaptive/developmental: the Vineland Social Maturity Scale gains an Indian adaptation with **indian norms**, and the Developmental Screening Test (DST) is India's own screener. Neuropsychology: the NIMHANS Neuropsychological Battery, the AIIMS Comprehensive Neuropsychological Battery, the PGI Battery of Brain Dysfunction (PGI-BBD) and the PGI Memory Scale are all Indian-normed.

10.1 Binet-Kamat Test (BKT): the Indian Stanford-Binet

What it adapts. The **binet-kamat** test (**bkt**) is V. V. Kamat's Indian adaptation of the Stanford-Binet (itself the Terman revision of the Binet-Simon scale). Kamat standardised it in the 1930s on Indian children, originally in Kannada and Marathi, giving India its first indigenous individually administered intelligence scale (AIIMS Clinical Methods 2024; also recorded as the Binet-Simon or Binet-Kamat test).

What it measures and how it scores. Like its parent it is a verbally loaded, age-graded scale that yields a mental age and, classically, a ratio IQ = (mental age / chronological age) x 100. Items are arranged by age level; testing runs from a basal age (all items passed) up to a ceiling age (all items failed), and mental age is summed across the ladder. It suits children and lower ability ranges and is still used in some Indian centres, though it is verbal-heavy and therefore language and schooling dependent.

10.2 Malin's Intelligence Scale for Indian Children (MISIC): the Indian WISC

What it adapts. **misic** is **malin**'s Intelligence Scale for Indian Children, Arthur J. Malin's Indian adaptation of the Wechsler Intelligence Scale for Children (WISC). It is the workhorse individual IQ test for Indian children in clinical and disability settings (AIIMS Clinical Methods 2024).

What it measures and how it scores. It preserves the Wechsler architecture: a set of verbal subtests and a set of performance subtests, each yielding scaled scores that combine into a Verbal IQ, a Performance IQ and a Full-Scale IQ (deviation-IQ scoring). AIIMS Clinical Methods notes that its objective subtests, for example the arithmetic and digit-span items, are borrowed for bedside cognitive testing in adults too, which shows how embedded MISIC is in Indian practice.

10.3 Bhatia's Battery of Performance Tests of Intelligence: for illiterate and rural populations

What it adapts and why it matters. Bhatia's Battery of Performance Tests of Intelligence (C. M. Bhatia, 1955) is a purely non-verbal, performance-based intelligence test built specifically so that illiterate, poorly schooled and rural Indian testees can be assessed fairly, because it needs no reading or writing (AIIMS Clinical Methods 2024). It is India's canonical answer to the literacy problem.

What it measures and how it scores. It is administered as a set of performance subtests, classically the Koh's Block Design, the Alexander Pass-Along, the Pattern Drawing, the Immediate Memory (digit span) and the Picture Construction tests. Each is timed and scored, and the summed performance yields an intelligence estimate. Its non-verbal, culture-reduced format is exactly why it also survives as a sub-scale inside the PGI Battery of Brain Dysfunction (as the "Bhatia Short Battery").

RULE **For low-literacy or rural Indian testees, reach for a non-verbal performance test.** Bhatia's Battery, the Seguin Form Board and Raven's Matrices bypass the reading and language barrier that invalidates verbal-loaded scales.

10.4 Vineland Social Maturity Scale: Indian adaptation and Indian norms

What it adapts. The Vineland Social Maturity Scale (VSMS) is Doll's American measure of adaptive behaviour; its Indian adaptation with **indian norms** (A. J. Malin, Nagpur adaptation) is the standard Indian adaptive-behaviour instrument and is central to certifying intellectual disability in India (AIIMS Clinical Methods 2024).

What it measures and how it scores. It is an informant-based interview (parent or caregiver, not the child directly) covering everyday social competence across domains such as self-help, self-direction, occupation, communication, locomotion and socialisation. Scored items across age levels give a **social age**, which divided by chronological age and multiplied by 100 gives a **social quotient** (SQ). Because DSM-5 and modern ID definitions anchor severity to adaptive functioning rather than IQ alone, an adaptive measure like VSMS is now essential, not supplementary.

10.5 Developmental Screening Test (DST, Bharat Raj): India's developmental screener

What it is. The Developmental Screening Test (DST) is Jayanti Bharat Raj's Indian developmental screening instrument, built to give a quick developmental quotient in Indian infants and young children as an indigenous alternative to Western screeners like the Denver Developmental Screening Test.

What it measures and how it scores. It screens developmental attainments from early infancy through childhood, converting the pass pattern into a **developmental age** and a developmental quotient (developmental age / chronological age x 100). It is a screening tool, flagging children who need fuller assessment, not a diagnostic IQ test.

COMMON TRAP

Do not confuse the three quotient families that all look like "age over age times 100": intelligence gives an *IQ* (mental age, from BKT or MISIC), adaptive behaviour gives a *social quotient* (social age, from VSMS), and screening gives a *developmental quotient* (developmental age, from DST). Also, in exams "DST" almost always means the Developmental Screening Test here, not the Dexamethasone Suppression Test from the biology chapter: read the stem.

10.6 NIMHANS Neuropsychological Battery: the Indian normative neuropsychology battery

What it is. The **nimhans neuropsychological** battery (Rao, Subbakrishna and Gopukumar, 2004) is the Indian normative neuropsychology battery developed and standardised at NIMHANS, Bengaluru. The adult form comprises 19 neuropsychological tests, adapted largely from the Halstead-Reitan tradition, with Indian norms for ages 16 to 65 years (AIIMS Clinical Methods 2024).

What it measures and how it scores. It is modular: the clinician selects tests by referral question rather than running all 19. It samples attention and visual search, psychomotor speed and perseveration, working memory, executive and visuospatial planning, block design and object assembly, and verbal memory (its Rey Auditory Verbal Learning Test is a standard verbal-memory measure). There are companion versions: the NIMHANS Neuropsychological Battery for children (Kar et al., 2004, ages 5 to 15, probing frontal, parieto-occipital and temporal function) and the NIMHANS Neuropsychological Battery for Elderly (NNB-E, Tripathi et al., 2013). Each subtest is scored against the Indian norms; deficits are read for localisation and lateralisation.

10.7 AIIMS Comprehensive Neuropsychological Battery

What it is. The AIIMS Comprehensive Neuropsychological Battery in Hindi, adult form (Gupta et al., 2000), applies the principles of the Luria-Nebraska Neuropsychological Battery to an Indian, Hindi-medium population (AIIMS Clinical Methods 2024).

What it measures and how it scores. It contains 160 items organised into ten basic scales plus secondary scales spanning motor, tactile, visual, receptive and expressive speech, reading, writing, arithmetic, memory and intellectual processes, rolling up into left-hemisphere, right-hemisphere and total-score scales. It is used to detect lateralisation (right versus left lesion) and localisation of brain lesions. Indian norms cover ages 15 to 80 years; its length is its main limitation.

10.8 PGI Battery of Brain Dysfunction (PGI-BBD) and the PGI Memory Scale

What it is. The PGI Battery of Brain Dysfunction (Pershad and Verma, 1990) is the Chandigarh (PGIMER) battery for detecting and quantifying organic brain damage in Indian adults (AIIMS Clinical Methods 2024).

What it measures and how it scores. PGI-BBD combines five sub-scales: the PGI Memory Scale, the Bhatia Short Battery, the Verbal Adult Intelligence Scale, the Nahor-Benson test of perceptual acuity and the Bender Visual Motor Gestalt Test. It yields a global dysfunction score built from 19 variables, with norms for ages 20 to 59 years; a cut-off above 20 signifies organic brain damage, which is why it is heavily used in disability certification (for example in traumatic brain

injury). The **PGI Memory Scale** is its embedded memory instrument and is also used standalone: it tests immediate and delayed recall across items such as paired and unpaired associations, logical memory and recognition, and its items (like digit span) are borrowed for bedside memory testing.

CLINICAL ANCHOR

The India disability-certification chain runs through these adaptations. For an intellectual-disability certificate you pair an Indian IQ test (MISIC or BKT) with the VSMS Indian adaptation for adaptive behaviour; for an organicity or head-injury certificate you reach for the PGI-BBD (cut-off above 20) or the NIMHANS Neuropsychological Battery. Knowing which instrument certifies what is the practical, and examinable, payoff of this whole topic.

10.9 The Indian adaptations at a glance

INDIAN TEST	ADAPTS / PARENT	LANGUAGE / POPULATION
Binet-Kamat Test (BKT), V. V. Kamat	**Stanford-Binet**	Kannada, Marathi; Indian children
MISIC, A. J. Malin	**Wechsler WISC**	Indian children; verbal + performance
Bhatia's Battery of Performance Tests, C. M. Bhatia (1955)	**performance/non-verbal intelligence**	**illiterate and rural populations**
VSMS Indian adaptation, A. J. Malin	**Vineland (Doll) adaptive behaviour**	informant-based; Indian norms; ID certification
Developmental Screening Test (DST), Bharat Raj	**developmental screening (cf. Denver DDST)**	Indian infants and young children
NIMHANS Neuropsychological Battery (Rao et al., 2004)	**Halstead-Reitan tradition**	Indian norms, ages 16 to 65
AIIMS Comprehensive Battery (Gupta et al., 2000)	**Luria-Nebraska**	Hindi; ages 15 to 80; 160 items
PGI-BBD and PGI Memory Scale (Pershad and Verma, 1990)	**organicity battery + memory scale**	Indian adults, ages 20 to 59

The India-context pairing table: each Western instrument on the exam has a locally standardised Indian counterpart, and the examiner wants the pair with its author and population.

HOLD THIS

For almost every Western test the examiner wants the Indian pair with its author. Stanford-Binet to Binet-Kamat (Kamat); WISC to MISIC (Malin); adaptive to VSMS Indian norms; organicity to the PGI-BBD (cut-off above 20) or the NIMHANS battery.

GOOD TO REMEMBER

- **Binet-Kamat Test (BKT):** V. V. Kamat's Indian adaptation of the Stanford-Binet; verbal, age-graded; yields mental age and ratio IQ; standardised in Kannada and Marathi for Indian children.
- **MISIC:** A. J. Malin's Intelligence Scale for Indian Children; adapts the Wechsler WISC; verbal and performance subtests giving Verbal, Performance and Full-Scale IQ; workhorse child IQ test in India.
- **Bhatia's Battery of Performance Tests of Intelligence:** C. M. Bhatia (1955); purely non-verbal performance battery (Koh's Block Design, Alexander Pass-Along, Pattern Drawing, Immediate Memory, Picture Construction) for illiterate and rural populations; timed subtests summed to an IQ estimate.
- **VSMS Indian adaptation:** A. J. Malin's Indian adaptation of the Vineland Social Maturity Scale with Indian norms; informant-based adaptive behaviour; social age gives a social quotient (SQ); used for ID certification.
- **Developmental Screening Test (DST):** Bharat Raj; Indian developmental screener for infants and young children; developmental age gives a developmental quotient; a screener, not a diagnostic IQ test.
- **NIMHANS Neuropsychological Battery:** Rao, Subbakrishna and Gopukumar (2004); Indian normative neuropsychology battery from NIMHANS; 19 adult tests from the Halstead-Reitan tradition; norms 16 to 65; modular, scored for localisation and lateralisation; child (Kar et al., 2004) and elderly (NNB-E, 2013) versions exist.
- **AIIMS Comprehensive Neuropsychological Battery:** Gupta et al. (2000); Hindi adult form on Luria-Nebraska principles; 160 items, ten basic scales; detects lateralisation and localisation; Indian norms ages 15 to 80.
- **PGI Battery of Brain Dysfunction (PGI-BBD):** Pershad and Verma (1990); five sub-scales (PGI Memory Scale, Bhatia Short Battery, Verbal Adult Intelligence Scale, Nahor-Benson, Bender-Gestalt); global score from 19 variables; norms 20 to 59; cut-off above 20 signifies organic brain damage; used for disability certification.
- **PGI Memory Scale:** Indian memory instrument (immediate and delayed recall, paired and unpaired associations, logical memory, recognition); used standalone and as the memory sub-scale of PGI-BBD.
- **Why adapt at all:** norms, language, cultural fairness, literacy; a foreign test's norms mis-score an Indian testee, so instruments are re-standardised, re-languaged and, for non-literate testees, made non-verbal.

Descriptive psychopathology

11 · Orientation: descriptive psychopathology and the domains of mental life

Before any diagnosis is named, the psychiatrist must be able to *describe* what is wrong with precision. That skill has a name and a lineage. **Descriptive psychopathology** is the objective, theory-free description of abnormal states of mind, limited to conscious experience and observable behaviour, avoiding preconceived aetiological ideas (Sims 2015, Shorter Oxford 2018). Its aim, in Jaspers's phrase, is to elucidate the essential qualities of morbid mental experiences and so to understand each patient's illness from the inside. It has been called the fundamental professional skill of the psychiatrist, and for the exit examination it is the spine of the whole signs-and-symptoms section: every later topic (perception, thought, self, mood, memory, consciousness, motor) is a chapter within this one framework.

Why this opener matters. Band B of these notes is a map, not a list. This topic lays the map: it fixes the **method** (empathic description, form over content), names the three canonical texts you cite in a viva (jaspers, fish, sims), and gives the domains-of-mental-life scaffold onto which every individual sign hangs. Learn the scaffold once here and the rest of these notes becomes filling in cells.

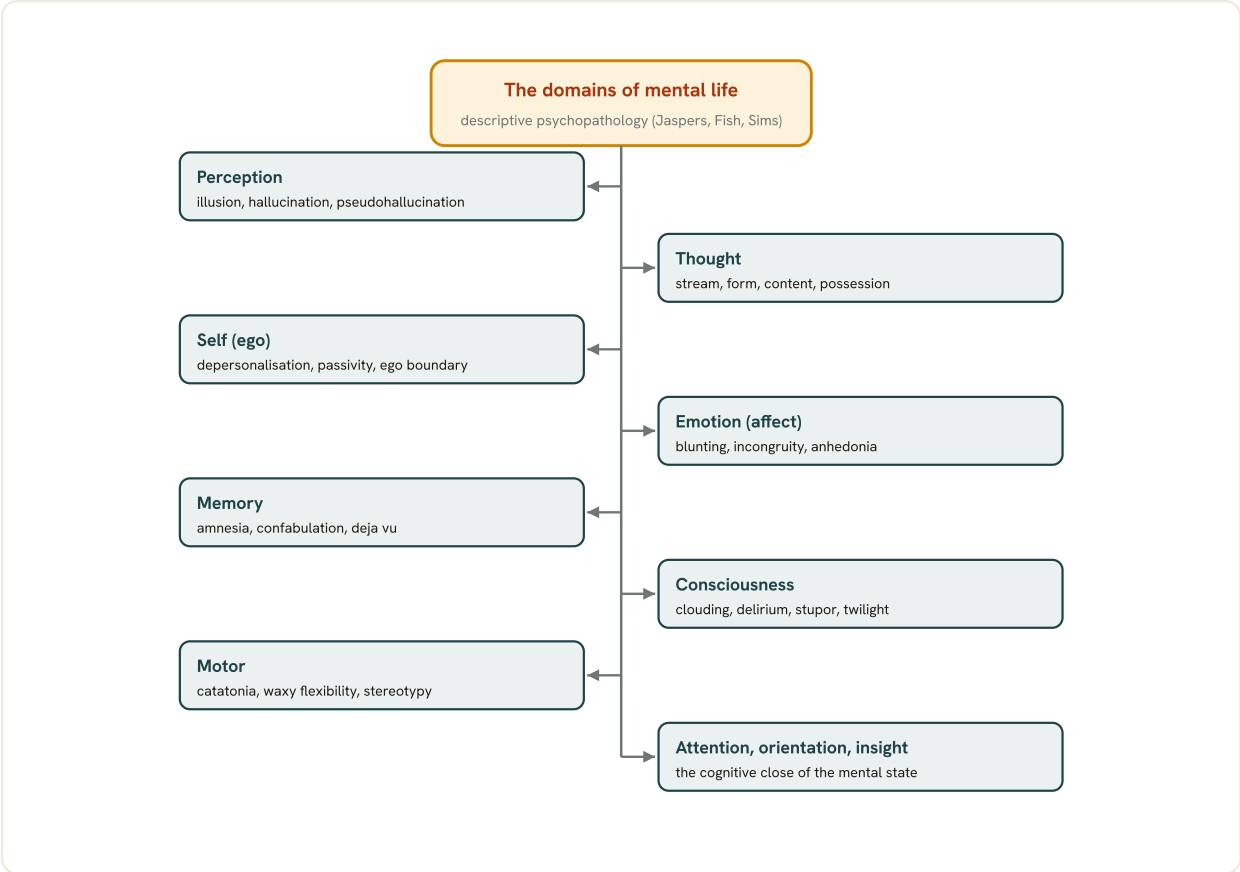


Fig 6.5 The domains of descriptive psychopathology, the map that organises the whole of Band B. Each branch is a domain of mental life with its characteristic disorders; naming a sign precisely means first knowing which domain it belongs to. The delusions and the Schneiderian first-rank symptoms sit within the thought branch and are drawn out separately. Following Jaspers, the aim throughout is to describe the form of an experience before interpreting its content.

11.1 Descriptive psychopathology defined

The definition to memorise. Descriptive psychopathology is the objective description of abnormal states of mind, avoiding as far as possible preconceived ideas or theories, and limited to the description of conscious experiences and observable behaviour (Sims 2015). Two commitments are load-bearing. First, it is *atheoretical*: it describes the phenomenon, it does not explain its cause. Second, it stays with what is *conscious and observable*: it does not appeal to unconscious mechanisms (that is the province of psychoanalytic or experimental psychopathology, not descriptive). This is why a Freudian reading of a persecutory delusion as projection is explanation, not description, and sits outside the descriptive method.

TRAP Reading a persecutory delusion as unconscious projection is explanation (erklaren), not description; descriptive psychopathology stays with conscious, observable experience and appeals to no unconscious mechanism.

11.2 Phenomenology and the two words for the same skill

Phenomenology. In clinical psychiatry, **phenomenology** is used almost synonymously with descriptive psychopathology: the careful study and categorisation of subjective mental experiences as the patient reports them. Strictly the terms are not identical (phenomenology carries additional philosophical meanings from Husserl and from Jaspers's own borrowing, per Berrios 1992), but in exam and ward usage, phenomenology = the description of inner experience, one wing of descriptive psychopathology, the other wing being the observation of behaviour and signs.

11.3 Jaspers, and the method of empathic understanding

Jaspers 1913. Karl Jaspers, psychiatrist and philosopher, published *Allgemeine Psychopathologie* (General Psychopathology) in 1913; it remains the most complete account of the subject (Jaspers 1913, cited in Sims 2015). His central methodological gift was the distinction between two modes of grasping a mental state.

Verstehen (understanding)

Grasping a mental state *from within* by empathy: how one experience meaningfully arises from another (grief follows loss, jealousy follows infidelity). The tool of descriptive psychopathology.

Erklaren (explanation)

Grasping a phenomenon *from without* by causal, natural-science laws (a lesion, a neurotransmitter, a genetic mechanism). The tool of the biological sciences.

A phenomenon that empathy can enter is *understandable*; one that empathy cannot bridge (the primary delusion, the true first-rank symptom) is *un-understandable* and points to process, not development. This verstehen versus erklaren axis is Jaspers's signature and a recurring viva question.

11.4 The clinical distillations: Fish and Sims

From Jaspers to the ward. Jaspers is dense and philosophical; two English texts translated him into daily clinical use, and these are the ones you name.

fish, Clinical Psychopathology

Frank Fish's concise British manual (carried forward by Casey and Kelly, Fish 2007); the standard signs-and-symptoms crib for trainees, tightly organised by domain.

sims, Symptoms in the Mind

Andrew Sims's *Symptoms in the Mind: An Introduction to Descriptive Psychopathology* (Sims 2015); the fuller, more readable exposition, now the reference text most cited in Indian and UK postgraduate exams.

Cite the trio in one breath in a viva: the method is Jaspers, the crib is Fish, the exposition is Sims.

11.5 Form versus content: the central Jasperian rule

The single most examinable distinction. For any abnormal experience, separate its **form** from its **content**.

Form

The *kind* of experience, its structure: is this a hallucination, a delusion, an obsession, a thought that is being withdrawn? The form is what defines the sign and carries diagnostic weight. Phenomenology attends to form.

Content

What the experience is *about*: the theme, its subject matter (persecution by neighbours, guilt over a sin, a voice saying a particular sentence). Content is shaped by culture and biography; it is clinically interesting but does not by itself fix the diagnosis.

Worked example: two patients each believe the neighbours are poisoning them. Same content. If patient A holds it as an unshakeable false belief arising fully formed and un-understandably, the form is a delusion; if patient B has heard a voice announce it, the form is an auditory hallucination with secondary belief. The form differs, and it is the form that guides you. Sims's formulation is the one to quote: descriptive psychopathology is concerned with form, the phenomenologist deliberately brackets the content (Sims 2015).

RULE **Name the form before the content.** The form (hallucination, delusion, obsession) carries the diagnostic weight; the content (its theme) is culture-shaped and does not fix the diagnosis.

COMMON TRAP

Chasing content and missing form. A candidate who lists what the delusion is about, but cannot say whether the experience is a delusion, a hallucination or an overvalued idea, has described nothing diagnostically useful. Always name the form first, then the content.

11.6 Why phenomenology precedes diagnosis

The sign is the unit. Diagnosis in psychiatry is the recognition of a pattern of signs and symptoms. You cannot recognise a pattern you cannot first describe. A precisely elicited sign (a third-person auditory hallucination, thought insertion, a mood-congruent delusion) is the atomic unit of the mental state examination; the diagnosis is the molecule assembled from those atoms against operational criteria. As the New Oxford text puts it, phenomenology precedes diagnosis, reflecting both observed signs and the subjective experience of the person (New Oxford 2020). Precision at the level of the single sign is therefore not pedantry; it is what makes the diagnosis defensible. Reverse the order (decide the diagnosis, then relabel the phenomena to fit) and you confabulate.

11.7 The domains of mental life: the map

The scaffold. Descriptive psychopathology partitions abnormal experience into domains that mirror the structure of the mental state examination. Learn these headings as the master index for the whole set of notes; each expands into its own topic.

disorders of perception

Abnormalities of sensory experience: illusions, hallucinations across modalities, pseudohallucinations, and perceptual distortions.

disorders of thought

Abnormalities of thought stream, form (formal thought disorder), possession (insertion, withdrawal, broadcast) and content (delusions, overvalued ideas, obsessions).

disorders of self
Disturbance of the awareness of one's own existence and boundaries: depersonalisation, derealisation, and the disorders of ego boundary and agency (the Ich-Storungen).

disorders of emotion
Abnormalities of affect and mood: their intensity, quality, congruity, stability and reactivity (blunting, incongruity, lability, anhedonia, elation, depression).

disorders of memory
Abnormalities of registration, retention and recall: the amnesias, confabulation, and the false-recognition phenomena (deja vu, jamais vu).

disorders of consciousness
Abnormalities of the level and clarity of awareness: clouding, delirium, stupor, and the twilight and oneiroid states.

disorders of motor function
Abnormalities of movement and volition, chiefly the catatonic phenomena: stupor, negativism, waxy flexibility, echopraxia, mannerisms and stereotypies.

Two cross-cutting domains complete the map. **Attention and orientation** (the capacity to focus and to know time, place and person) is the substrate the whole examination sits on; a patient disoriented in time cannot give a reliable account of anything else. **Insight and judgement** (awareness of being ill, of the need for treatment, and the ability to act sensibly on that awareness) is graded, not all-or-none, and closes the mental state examination.

MNEMONIC

Please Think Slowly, Every Memory Counts Meaningfully, And Insightfully

Perception, Thought, Self, Emotion, Memory, Consciousness, Motor, then Attention/orientation and Insight/judgement. The seven core "disorders of ..." domains plus the two cross-cutting ones, in mental-state-examination order.

11.8 The domains against the mental state examination

Same map, two uses. The domains are also the running order of the MSE, so learning them once serves both the phenomenology paper and the clinical long case.

DOMAIN	MSE HEADING IT FEEDS	ANCHOR SIGN
disorders of perception	**Perception**	Third-person auditory hallucination
disorders of thought	**Thought (stream, form, content, possession)**	Thought insertion; primary delusion
disorders of self	**Perception / thought (ego boundary)**	Depersonalisation
disorders of emotion	**Mood and affect**	Blunted or incongruous affect

DOMAIN	MSE HEADING IT FEEDS	ANCHOR SIGN
disorders of memory	**Cognition**	Confabulation
disorders of consciousness	**Consciousness / sensorium**	Clouding, delirium
disorders of motor function	**Behaviour and motor**	Waxy flexibility
Attention and orientation	**Cognition**	Disorientation to time
Insight and judgement	**Insight**	Denial of illness

The domains of mental life read top-to-bottom are, near enough, the running order of the mental state examination.

HOLD THIS

The method is Jaspers, the crib is Fish, the exposition is Sims; describe form by empathy, do not explain content by cause. Phenomenology precedes diagnosis: the precisely named sign is the unit of the mental state examination.

PEARL

The domains in one line: perception, thought, self, emotion, memory, consciousness, motor, plus attention/orientation and insight, described by form not content, understood by empathy not explained by cause.

CLINICAL ANCHOR

In a viva, when asked "how would you describe this patient's symptoms", do not lead with a diagnosis. Lead with the method: "I would describe the phenomena in each domain, attending to the form of each experience rather than its content, in the order perception, thought, self, emotion, memory, consciousness and motor." You have then shown you own the framework, which scores before any single sign is named.

INDIA

For the Indian postgraduate exams, Sims's *Symptoms in the Mind* and Fish's *Clinical Psychopathology* are the two most-cited phenomenology texts, and the AIIMS *Clinical Methods in Psychiatry* (2024) reproduces the same Jasperian framework. Content of delusions is often culture-shaped (possession, black magic, the evil eye); describe the form precisely and record the content faithfully without pathologising a culturally normative belief.

GOOD TO REMEMBER

- **Descriptive psychopathology:** objective, theory-free description of abnormal states of mind, limited to conscious experience and observable behaviour (Sims 2015).
- **Phenomenology:** the study and categorisation of subjective mental experience; in clinical use, near-synonymous with descriptive psychopathology.
- **jaspers, General Psychopathology (1913):** the founding text; the method of empathic understanding.
- **Verstehen versus erklaren:** understanding a state from within by empathy versus explaining it from without by cause; understandable versus un-understandable phenomena.
- **fish, Clinical Psychopathology (2007):** the concise British signs-and-symptoms crib, domain-organised.
- **sims, Symptoms in the Mind (2015):** the fuller exposition; the most-cited exam reference.
- **Form:** the kind or structure of an experience (hallucination, delusion, obsession); phenomenology attends to form; form carries diagnostic weight.
- **Content:** what the experience is about (its theme); culture- and biography-shaped; not diagnostic by itself.
- **Phenomenology precedes diagnosis:** a precisely elicited sign is the unit of the mental state examination; the diagnosis is assembled from signs.
- **disorders of perception:** illusions, hallucinations, pseudohallucinations, perceptual distortions.
- **disorders of thought:** stream, form, possession, content (delusions, obsessions, overvalued ideas).
- **disorders of self:** depersonalisation, derealisation, ego-boundary and agency disturbance.
- **disorders of emotion:** intensity, quality, congruity and stability of affect and mood.
- **disorders of memory:** amnesias, confabulation, deja vu and jamais vu.
- **disorders of consciousness:** clouding, delirium, stupor, twilight and oneiroid states.
- **disorders of motor function:** the catatonic phenomena and disorders of volition.
- **Cross-cutting:** attention/orientation (the substrate) and insight/judgement (graded, closes the MSE).

12 · Disorders of perception

Perception is the process by which sensory data reaching the brain are organised and interpreted into a meaningful representation of the outside world; it is more than raw sensation, which is the mere registration of a stimulus at a receptor. The descriptive psychopathology of perception classifies the ways this process goes wrong, and it is a perennial Paper I favourite because the whole subject rewards precise definitions and clean discriminations rather than mechanism. This note gives the **phenomenology** only, in the tradition of Jaspers, Fish and Sims (Jaspers 1913, Fish 2007, Sims 2015): what each abnormality looks like at the level of description, form over content.

Exam framing. The examiner wants three levels kept apart cleanly: a real percept altered (**sensory distortion**), a real stimulus misperceived (**illusion**), and a percept with no stimulus at all (**hallucination**), plus the halfway house of the **pseudohallucination**. The mechanistic theories of hallucination (perceptual-release, aberrant salience, predictive coding) belong to the General and Developmental Psychology notes and are cross-referred there; here the task is to name and define, ideally with a one-line clinical example each. Aetiology and the theories live in the General and Developmental Psychology notes, not here.

Discriminator	Illusion	Hallucination	Pseudo-hallucination
Real external stimulus?	Yes: a real object misperceived	No stimulus	No stimulus
Where perceived	outer objective space	outer objective space	inner subjective space
Reality status	a real percept, misjudged	full force of a true perception	lacks full substantiality
Insight	corrects on closer attention	absent (believed real)	relatively preserved
Typical setting	fear, inattention; organic states	psychosis; organic states	grief, dissociation, hypnagogic

Fig 6.6 Telling perceptual phenomena apart. An illusion is a real external stimulus misperceived; a hallucination is a percept without any stimulus, experienced in outer objective space with the full force of a true perception and without insight; a pseudohallucination arises in inner subjective space, lacks the full substantiality of a true perception, and leaves insight relatively preserved. The two discriminators that carry most of the work are the locus (outer versus inner space) and the reality status.

12.1 The three-level framework and its discriminators

Orientation. Every perceptual abnormality can be placed by asking four questions: is there a real external stimulus, where is the experience located (objective external space versus inner subjective space), does it carry the full substantiality and involuntary force of a true percept, and is insight retained. A **sensory distortion** and an **illusion** both start from a real stimulus; a **hallucination** and a **pseudohallucination** do not. A hallucination sits in external space with full force and insight lost; a pseudohallucination sits in inner subjective space, lacks that substantiality, and insight is relatively preserved (Sims 2015). Hold this scaffold and the named subtypes below slot in without confusion.

RULE **Two discriminators do most of the work: the presence of a real stimulus, and the locus (outer objective versus inner subjective space).** Stimulus separates the illusion; locus separates the hallucination from the pseudohallucination.

12.2 Sensory distortions: a real percept altered

Definition. A **sensory distortion** is a change in the intensity, quality or spatial form of a percept arising from a real external object; the object is correctly identified, but its perceived attributes are altered (Fish 2007).

Hyperaesthesia

Increased intensity of perception: sounds seem unbearably loud, colours vivid; seen in migraine, hangover, some drug states and the heightened arousal of mania and anxiety.

Hypoaesthesia

Decreased intensity of perception: the world seems dull, muffled or grey; seen in delirium, depression (where colours are described as washed out) and clouded consciousness.

Changes in quality

Altered perceived quality, chiefly of colour: chromatopsia, e.g. xanthopsia (yellow vision), chloropsia (green) or erythropsia (red), typically from drugs or toxins such as digitalis or santonin.

Changes in spatial form (dysmegalopsia)

The perceived size or shape of an object is altered. **Micropsia**: objects seem smaller or further away. **Macropsia** (megalopsia): objects seem larger or nearer. Metamorphopsia: objects appear irregular or distorted in shape. Seen in retinal disease, temporal and parietal lesions, migraine (the Alice-in-Wonderland complex) and, rarely, epilepsy.

12.3 Illusions: a real stimulus misperceived

Definition. An **illusion** is a misperception, a false perception, of a real external stimulus, in which the actual object is transformed into a different percept (Sims 2015). Illusions occur in the healthy (a coat on a door mistaken for an intruder in poor light) and are not in themselves pathological; the classical trigger conditions are reduced sensory clarity, inattention and strong affect.

Completion illusion

Depends on inattention: the mind fills in gaps, so misprints are read as the intended word, e.g. "-ook" with the first letter faded is read as "book" when the word was "look". Abolished by attention.

Affect illusion

Arises out of a particular mood state: a bereaved person momentarily "sees" the deceased, or a delirious, frightened patient perceives innocent gestures as threatening.

Pareidolia

Vivid illusions produced without effort, indeed sometimes against will, from ambiguous stimuli, e.g. seeing faces or figures in clouds or in the embers of a fire. Unlike the other two, pareidolia is intensified, not abolished, by attention.

12.4 Hallucinations: definition and modality classification

Definition. A **hallucination** is a percept experienced in the absence of any external stimulus, arising in external objective space, with the full force and substantiality of a true perception, and not subject to conscious manipulation (Jaspers 1913, Fish 2007). It is not a distorted image, not a misperception, and not under voluntary control. Hallucinations are classified first by sensory **modality**.

Auditory (elementary)

Unstructured or rudimentary noises: buzzing, tapping, banging, music, whistling. Common in organic states and early psychosis.

Auditory (second-person)

Voices addressing the patient directly ("you are worthless"). Second-person derogatory or command voices are typical of severe depression; command hallucinations carry risk.

Auditory (third-person)

Voices discussing or arguing about the patient in the third person ("he is a sinner"), or a **running commentary** narrating the patient's actions as they occur. These are Schneiderian first-rank symptoms, classically of schizophrenia.

Visual

From elementary flashes (photopsiae) to fully formed figures and scenes. Prominent, well-formed or Lilliputian visual hallucinations point strongly toward an organic cause: delirium, occipital or temporal lesions, drug intoxication and withdrawal.

Olfactory and gustatory

Hallucinations of smell and taste, often unpleasant (burning rubber, rotten flesh). Raise suspicion of temporal lobe epilepsy (uncinate fits) and other organic disease; also seen in psychotic depression as congruent themes of decay.

Somatic and tactile

Superficial (haptic, on or under the skin), kinaesthetic (of limb movement) and visceral (deep, of the internal organs). **Formication** is the tactile hallucination of insects crawling on or under the skin, classically in cocaine and alcohol-related states ("cocaine bugs") and delirium tremens.

12.5 Special named hallucinations: functional and reflex

Two easily confused stimulus-bound types. Both involve a real stimulus, but the relation differs, and this discrimination is high-yield.

Functional hallucination

A real external stimulus is *necessary* to provoke the hallucination, and the normal perception of that stimulus and the hallucination are experienced *together in the same modality*, e.g. hearing the voice of God only while, and each time, a tap runs or a clock ticks, the running water still heard as running water alongside the voice (Fish 2007). Unlike an illusion, the voice is not an elaboration of the sound; the sound merely triggers a separate hallucination.

Reflex hallucination

A stimulus in one sensory modality triggers a hallucination in a *different* modality, e.g. feeling a cold sensation in the spine on hearing a fingernail scratch a blackboard, or seeing a flash when a bell rings. A pathological cross-modal analogue of synaesthesia.

12.6 Special named hallucinations: extracampine, autoscopy and the physiological types

Extracampine hallucination

A hallucination experienced *outside the limits of the possible sensory field*, e.g. hearing voices talking from another city hundreds of miles away, or seeing a figure standing behind the head, beyond the field of vision. May occur in schizophrenia and in organic and epileptic states; not to be confused with the **extracampine** being merely "distant".

Autoscopy (phantom mirror image)

The experience of seeing oneself and knowing that it is oneself, projected into external space. In *negative* autoscopy the subject looks in a mirror and sees no image; in *internal* autoscopy the subject perceives their own internal organs. Seen in delirium, epilepsy, parietal lesions and dissociative states.

Hypnagogic hallucination

A hallucination (visual, auditory or tactile) occurring while *falling asleep*. A physiological, non-pathological phenomenon in the healthy; when frequent and vivid, part of the narcolepsy tetrad.

Hypnopompic hallucination

The same phenomenon occurring on *waking*. Rarer than hypnagogic; likewise usually of no pathological significance in isolation.

COMMON TRAP

Do not confuse the functional hallucination with the reflex hallucination. In a **functional hallucination** the trigger and the hallucination share the *same* modality and are heard together (tick plus voice, both auditory); in a **reflex hallucination** the trigger is in *one* modality and the hallucination in *another* (sound triggering a bodily sensation). Same modality equals functional; cross modality equals reflex.

12.7 Pseudohallucination: the inner-space percept

Definition (Jaspers). A **pseudohallucination** is a clear and vivid mental image that, although experienced in full consciousness, *lacks the full substantiality of a true perception*, is located in *inner subjective space* rather than external objective space, is known by the subject not to be a real perception, and so leaves insight *relatively preserved* (Jaspers 1913, Sims 2015). It is more vivid and involuntary than ordinary imagery but less concrete and less "real" than a true hallucination, occupying the ground between them.

Two usages, a caution. Kaplan and Sadock note the term is used in two ways: the Jaspersian sense above (perceived within the mind, in inner space), and a looser sense of a hallucination whose reality the patient doubts, for which "partial hallucination" is the better label (Kaplan & Sadock 2024). For the exam, lead with the Jaspers definition. Pseudohallucinations are common in grief, dissociative states and post-traumatic conditions and, unlike true hallucinations, are not by themselves evidence of psychosis.

12.8 Discriminating the four: the summary table

Read down the discriminators. The whole topic reduces to five axes: presence of a real stimulus, locus of the experience, whether it can be controlled, its reality-status, and insight.

AXIS	SENSORY DISTORTION	ILLUSION	PSEUDOHALLUCINATION	HALLUCINATION
Real external stimulus	Yes (percept altered)	Yes (misperceived)	**No**	**No**
Locus	External space	External space	**Inner subjective space**	**External objective space**
Voluntary control	No	No	Involuntary but image-like	No
Reality-status (substantiality)	Real object, altered	Real object, transformed	**Lacks full substantiality**	**Full force of true percept**
Insight	Usually retained	Corrected on attention	**Relatively preserved**	**Typically lost**

The four levels separate cleanly on stimulus, locus, reality-status and insight; the pseudohallucination is the diagnostic pivot between imagery and true hallucination.

HOLD THIS

Illusion = real stimulus misperceived; hallucination = percept without a stimulus, in outer space, full reality, insight lost; pseudohallucination = inner space, lacks full substantiality, insight preserved. A pseudohallucination is not itself evidence of psychosis.

CLINICAL ANCHOR

Modality guides aetiology at the bedside. Third-person and running-commentary auditory voices steer toward schizophrenia; second-person derogatory voices toward severe depression; well-formed visual, olfactory, gustatory and vivid tactile (formication) hallucinations should trigger an *organic* workup (delirium, epilepsy, substance intoxication or withdrawal) before a primary psychotic label. This is descriptive triage, not a diagnosis named to the patient.

PEARL

First-rank auditory hallucinations (third-person voices, running commentary) are *suggestive* of schizophrenia but are **not pathognomonic**: they occur in affective psychosis and organic states, and the modern consensus (reflected in DSM-5 dropping their special weighting) is that they are not diagnostically decisive. Form over content still holds, but form alone does not fix the diagnosis.

MNEMONIC

"FREAK-Hy": the special hallucinations

Functional, **Re**flex, **E**xtracampine, **A**utoscopy, and the physiological **K** (hypnagogic and hypnopompic) plus **Hy**pnopompic, the named non-modality types to rattle off when asked to enumerate special hallucinations.

GOOD TO REMEMBER

- **Perception:** organisation and interpretation of sensory data into a meaningful representation of the world; more than raw sensation.
- **Sensory distortion:** a real percept altered in intensity, quality or spatial form.
- **Hyperaesthesia / hypoaesthesia:** increased / decreased intensity of perception (mania, migraine / delirium, depression).
- **Chromatopsia:** altered colour quality, e.g. xanthopsia (yellow), chloropsia (green), erythropsia (red); usually toxic or drug-induced.
- **Dysmegalopsia:** altered perceived size or shape: micropsia (smaller), macropsia/megalopsia (larger), metamorphopsia (distorted shape).
- **Illusion:** a misperception of a real external stimulus; can be normal.
- **Completion illusion:** gap filled by inattention (misprints read as intended word); abolished by attention.
- **Affect illusion:** misperception driven by mood (bereaved "sees" the deceased).
- **Pareidolia:** effortless vivid illusions from ambiguous stimuli (faces in clouds/fire); intensified by attention.
- **Hallucination:** a percept with no external stimulus, in external space, with full force of a true perception, not controllable; insight typically lost.
- **Auditory (elementary / second-person / third-person / running commentary):** noises / voices to the patient / voices about the patient and narration of actions; third-person and running commentary are Schneiderian first-rank.
- **Visual / olfactory / gustatory hallucinations:** well-formed forms of these raise suspicion of an organic cause (delirium, temporal lobe epilepsy, drugs).
- **Formication:** tactile hallucination of insects on/under the skin ("cocaine bugs"); cocaine, alcohol withdrawal, delirium tremens.
- **Functional hallucination:** a real stimulus is needed and is perceived together with the hallucination in the *same* modality (voice heard as a tap runs).
- **Reflex hallucination:** a stimulus in one modality triggers a hallucination in a *different* modality (sound producing a bodily sensation).
- **Extracampine hallucination:** experienced outside the limits of the possible sensory field (voices from another city; figure behind the head).
- **Autoscopy (phantom mirror image):** seeing oneself, knowing it is oneself; negative and internal variants; organic/dissociative.
- **Hypnagogic / hypnopompic hallucinations:** physiological, on falling asleep / on waking; part of the narcolepsy tetrad; usually non-pathological.
- **Pseudohallucination:** vivid image in inner subjective space, lacking full substantiality, insight relatively preserved (Jaspers); not itself evidence of psychosis.
- **First-rank symptoms:** suggestive of schizophrenia but *not* pathognomonic (occur in affective and organic psychoses; de-weighted in DSM-5).
- **Mechanism note:** theories of hallucination (perceptual-release, aberrant salience, predictive coding) are covered in the General and Developmental Psychology notes, not here.

13 · Disorders of thought

The **disorders of thought** are the descriptive psychopathology of thinking as it is inferred from speech, and they are examined most cleanly when parcelled into four classic headings: disorders of the **stream** (tempo and continuity), of the **form** (the structure and connectedness of thinking), of the **content** (what is being thought), and of the **possession** (the sense of ownership and control of one's own thoughts). This carving is the one used in the classical texts (Fish 2007, Sims

2015) and in Indian teaching (Clinical Methods in Psychiatry, AIIMS 2024), and it is a perennial Paper I favourite because it rewards precise definitions and clean discriminations, not mechanism.

Exam framing. Keep the four axes rigidly apart, because the same clinical phenomenon can be pigeonholed differently by different authors (flight of ideas is a disorder of stream to Fish but of form to some; circumstantiality is placed under stream by Sims). Teach the **description**, not the explanation, form over content, in the tradition of Jaspers, Fish and Sims (Jaspers 1913). Thinking is never observed directly: it is read off speech, so a "thought disorder" is always an inference from disordered language. Delusions, though a disorder of content, are dealt with in the next topic and are only signposted here; the possession disorders are the Schneiderian first-rank symptoms and are cross-referred to the perception and first-rank notes.

13.1 The four-axis framework and how to place any sign

Orientation. Any abnormality of thinking can be located by asking four questions in turn: is the *speed or continuity* of the flow abnormal (stream), is the *logical structure and connectedness* lost (form), is *what* is being thought abnormal (content), or is the patient's *sense of owning and controlling* the thought disturbed (possession). Stream is about tempo and flow, form is about coherence, content is about the ideas themselves, possession is about ego-boundary. Hold this scaffold and the named signs below slot in without confusion. A useful cross-cut, from Andreasen's work on the Scale for the Assessment of Thought, Language and Communication (TLC), divides formal disturbances into *positive* (a wealth of disorganised output: derailment, incoherence, neologisms) and *negative* (impoverished output: poverty of speech and of content) (Andreasen 1979).

13.2 Disorders of the stream: tempo of thought

Definition. Disorders of the stream (or tempo) concern the *rate and pressure* of the flow of thought, either accelerated or slowed, independent of whether the logical links are preserved (Fish 2007).

Flight of ideas

The manic acceleration of thinking: a rapid, pressured stream in which thoughts follow each other by *chance associations*, and where the goal of thinking is repeatedly lost. The direction is set by external distraction and by verbal associations such as assonance, alliteration, rhyme, punning and **clang associations** (word choice governed by sound not meaning). Crucially, the links remain *understandable*: one can often follow, or even reverse, the train (Sims 2015). Seen in mania and hypomania.

Prolixity (ordered flight)

A milder, more ordered variant of flight of ideas seen in hypomania: the stream is over-productive and diffuse but the patient does eventually reach the goal.

Retardation / inhibition of thinking

Slowing of the stream: the train of thought is decelerated, the number of ideas reduced, and the patient experiences difficulty in thinking; seen in depression and in retarded psychomotor states.

Poverty of thought

A reduction in the *amount* of thought, reflected as poverty of speech (brief, unelaborated, monosyllabic replies) or poverty of content (adequate quantity of speech conveying little information); a negative disturbance seen in the negative syndrome of schizophrenia and in depression.

13.3 Disorders of the stream: continuity of thought

Definition. These concern *breaks and repetitions* in the continuity of the flow rather than its speed (Companion to Psychiatric Studies).

Thought block

An *abrupt, complete cessation* of the stream of thought, experienced by the patient as the mind suddenly going blank ("snapping off"), with no thought to replace it; on resuming, the patient often takes up a fresh, unrelated topic. When subjectively distressing and unexplained, it carries weight toward schizophrenia. Distinguish from the ordinary "losing one's thread", which is explicable and recoverable.

Perseveration

Senseless persistence of a word, phrase or idea *beyond the point at which it is relevant*, so that once a subject or word is begun the patient repeatedly returns to it despite a change of question. A pointer to organic brain disease, especially dementia and frontal lesions.

Circumstantiality

Speech that is over-inclusive and indirect, laden with tedious and parenthetical detail, so that reaching the goal idea is greatly delayed; but the goal *is eventually reached*. This is the key discriminator from derailment and from tangentiality, where the goal is never reached. Common in obsessional and epileptic personalities, low intelligence, and, at a non-pathological level, in normal "long-winded" people.

13.4 Disorders of the form: formal thought disorder and its concept

Definition. **Formal thought disorder** denotes a disturbance of the *form* of thought: the loss of the normal structure, logical coherence and connectedness of thinking, the "how" or mechanics of thought rather than its content, which makes conversation hard or impossible to follow and is a cardinal feature of schizophrenia (Companion to Psychiatric Studies, AIIMS 2024). Because thinking is inferred only from language, the terms "thought disorder" and "speech disorder" are sometimes used interchangeably. Healthy thinking has been summarised by the "3 Cs": *constancy*, *clear organisation* and *continuity*; deviation in any is a formal disturbance (AIIMS 2024). Historically several theorists each proposed a core defect, summarised below.

Kraepelin: akataphasia

An early term for the disordered, ungrammatical expression of thought.

Bleuler: loosening of associations

The founding concept: a loosening of the associative threads that normally bind thoughts together, held by Bleuler to be the fundamental disturbance of schizophrenia.

Cameron: asyndesis and overinclusion

Asyndesis is a lack of adequate connections between successive thoughts (a breakdown of the "cementing" links); **overinclusion** is the inability to keep the boundaries of a concept, so that irrelevant material is drawn in.

Goldstein: concrete thinking

Loss of the abstract attitude, so the patient thinks in literal, concrete terms and cannot handle concepts; tested by proverb interpretation and similarities, and seen in schizophrenia and organic states.

Schneider: the five features

Schneider described derailment, substitution, omission, fusion and drivelling as the elementary faults underlying disordered thinking.

13.5 Disorders of the form: the descriptive signs

The named phenomena. These are the signs actually elicited at the bedside, each a way in which the connectedness of speech breaks down (Fish 2007, Sims 2015, Andreasen 1979).

Loosening of associations / derailment

The ideas slip off the track onto another that is obliquely related or wholly unrelated; the "train" of thought leaves the "rails". Meaning is lost gradually over several sentences (contrast word salad, where individual sentences are already meaningless).

Knight's move thinking

A term for a sharp, illogical, oblique transition between ideas, likened to the chess knight that never moves in a straight line; used near-synonymously with severe derailment.

Tangentiality

Replies that veer away from the point and, unlike circumstantiality, *never return* to the goal idea; the answer is obliquely related to the question but never actually answers it.

Word salad (schizophasia, incoherence)

Speech so disordered that it is essentially incomprehensible: words and phrases are strung together with the rules of grammar and syntax ignored, so that even individual sentences carry no meaning.

Neologisms

The invention of genuinely new words with no established meaning (e.g. "tarn-harn"); to be distinguished from *word approximations*, where existing words are used in an idiosyncratic, quasi-logical way ("a menu three times a day" for meals).

Verbigeration

The automatic, stereotyped repetition of words, phrases or sentences "like a scratched record", a verbal stereotypy; differs from echolalia, which repeats another person's words.

Concrete thinking

See Goldstein above: literal, non-abstract interpretation, e.g. giving the literal meaning of a proverb.

Asyndesis

See Cameron above: a lack of the connecting links between one thought and the next.

13.6 Distinguishing the three "goal" disorders

Read down the discriminator column. Circumstantiality, tangentiality and derailment are constantly confused; they separate on two axes, whether the goal is reached and whether the digressions are logically related.

SIGN	REACHES THE GOAL IDEA?	NATURE OF DIGRESSION	TYPICAL SETTING
Circumstantiality	**Yes, eventually (after much detail)**	Over-inclusive but relevant detail	Obsessional / epileptic personality, low IQ
Tangentiality	**No, never returns**	Obliquely related, drifts off	Schizophrenia, organic states
Derailment (loosening)	**No, meaning lost over sentences**	Slips onto unrelated track	Schizophrenia (positive FTD)

The single most reliable discriminator is whether the goal idea is finally reached: only circumstantiality reaches it.

RULE **Does the patient reach the goal?** Circumstantiality reaches it after a long detour; tangentiality and derailment never do - the single cleanest discriminator in the topic.

13.7 Disorders of the content of thought

Definition. Content is *what* the person is thinking; its disorders are the abnormal ideas that dominate the mind, graded by the degree to which they are held with conviction and resisted (Sims 2015). Delusions, the most important, are taught in full in the next topic and are only listed here.

Preoccupations

Ordinary thoughts that recur with abnormal intensity or frequency (worry over illness, somatic preoccupation in depression and anxiety); ego-syntonic and not resisted.

Overvalued idea

A comprehensible, non-delusional belief that comes to dominate the person's life and is pursued with abnormal intensity, but which is not held with true delusional conviction and is not utterly beyond reason (e.g. the litigious querulant, the morbidly jealous, the dysmorphophobic). Sits between a normal belief and a delusion.

Obsessions and compulsions

Obsessions are recurrent, intrusive, unwanted thoughts, images or impulses, recognised as one's own (contrast thought insertion) and as senseless, and actively resisted, generating anxiety; **compulsions** are the repetitive mental or motor acts performed to neutralise them. Ego-dystonic, insight typically retained.

Phobias

Persistent, irrational fears of a specific object or situation, recognised as excessive, leading to avoidance.

Delusions

Fixed, false, unshakeable beliefs out of keeping with the person's culture, held with absolute conviction; the full taxonomy is in the next topic.

13.8 Disorders of the possession of thought

Definition. **Thought possession** is the normal sense that one's thoughts are *one's own* and are *under one's own control*. Its disorders are disturbances of this ownership and boundary: at one pole the obsessional experiences unwanted thoughts as intrusive yet still recognises them as self-generated; at the other, the patient with schizophrenia attributes thoughts to a foreign agency or

feels them stolen or made public. This group, "thought alienation", comprises three named signs of disordered thought possession that are *Schneiderian first-rank symptoms* (cross-refer to the first-rank note): thought insertion, thought withdrawal and thought broadcast.

Thought insertion

The experience that thoughts *not one's own* have been placed into one's mind by an external agency; in thought insertion the key is the loss of the sense of *ownership*, the patient insisting the thoughts are alien, not merely unwanted (distinguishing it from an obsession).

Thought withdrawal

The experience, thought withdrawal, that one's thoughts are being *removed or extracted* from the mind by an external force, often reported together with the sudden emptiness of thought block.

Thought broadcast

In thought broadcast the experience is that one's thoughts *escape the confines of the self* and are known to, or shared with, others (broadcast, diffused), without the patient speaking them aloud; a disorder of thought, to be distinguished from the auditory hallucination of *thought echo* (hearing one's own thoughts spoken aloud).

COMMON TRAP

Do not confuse an **obsession** with **thought insertion**. Both are unwanted intrusive thoughts, but the obsessional patient *knows the thought is his own* (ego-dystonic but self-owned) and resists it, whereas in thought insertion *ownership itself is lost*: the patient is convinced the thought was put there by an outside agency. Ownership retained equals obsession; ownership lost equals thought insertion, a first-rank symptom.

HOLD THIS

Thought disorder splits four ways: stream (tempo), form (coherence), content (the ideas), possession (ownership). Two settling questions - is the goal reached? is ownership retained? - resolve most of the confusions.

13.9 Aetiological pointers and the modern caveat

Description first, then the pattern. The signs are defined descriptively, but each carries a soft aetiological steer worth holding at the bedside (Companion to Psychiatric Studies). Flight of ideas, clang associations and pressure of speech point to mania; poverty of thought and content to negative-syndrome schizophrenia or depression; perseveration, stereotypy and echolalia to organic brain disease; positive formal thought disorder (derailment, incoherence, neologisms) and the possession disorders to schizophrenia. But two cautions are decisive for the exam. First, formal thought disorder is *not specific* to any one diagnosis and overlaps heavily across stream and form. Second, the thought-possession signs, though first-rank, are *not pathognomonic* of schizophrenia: they occur in affective and organic psychoses, and the modern consensus, reflected in DSM-5 dropping the special weighting of first-rank symptoms, is that they are not diagnostically decisive. Form over content still holds as a descriptive discipline, but form alone does not fix the diagnosis.

CLINICAL ANCHOR

At the bedside the four axes map onto four bedside manoeuvres: for *stream*, listen to the rate and continuity of spontaneous speech; for *form*, ask an open question and judge whether you can follow the reply; for *content*, ask directly about worries, obsessions and beliefs; for *possession*, ask "are your thoughts your own, can others read or take them, are thoughts put into your mind?". This is descriptive triage, never a diagnosis named to the patient.

PEARL

The cleanest single discriminator in the whole topic: *does the patient reach the goal?* Circumstantiality reaches it after a long detour; tangentiality and derailment never do. And the cleanest boundary sign: *is ownership of the thought retained?* Yes in obsessions, no in thought insertion. Two questions settle most of the confusions examiners set.

MNEMONIC

"S-F-C-P": Stream, Form, Content, Possession

Four axes in order of increasing "depth" from surface tempo to the ego-boundary: **S**tream (speed and flow: flight of ideas, block, perseveration, circumstantiality), **F**orm (coherence: derailment, word salad, neologisms), **C**ontent (the ideas: overvalued ideas, obsessions, delusions), **P**ossession (ownership: insertion, withdrawal, broadcast).

GOOD TO REMEMBER

- **Disorders of thought:** classified into stream (tempo/continuity), form (coherence), content (the ideas) and possession (ownership/control).
- **Flight of ideas:** pressured accelerated stream, chance associations by rhyme, punning and clang, distractible, but links remain understandable; mania.
- **Prolixity:** ordered flight of ideas of hypomania that eventually reaches the goal.
- **Retardation of thinking:** slowed stream, fewer ideas; depression.
- **Poverty of thought:** reduced amount of thought (poverty of speech / of content); negative schizophrenia, depression.
- **Thought block:** abrupt complete cessation of the stream, mind goes blank ("snapping off"); weight toward schizophrenia.
- **Perseveration:** senseless repetition of a word/idea beyond its relevance; points to organic brain disease.
- **Circumstantiality:** over-inclusive, detour-laden speech that *does* eventually reach the goal idea.
- **Formal thought disorder:** loss of the structure and connectedness of thinking, the "how" of thought; cardinal in schizophrenia.
- **Kraepelin:** akataphasia (disordered, ungrammatical expression of thought).
- **Bleuler:** loosening of associations, the fundamental disturbance of schizophrenia.
- **Cameron:** asyndesis (lack of connecting links) and overinclusion (loss of concept boundaries).
- **Goldstein:** concrete thinking (loss of the abstract attitude).
- **Schneider:** derailment, substitution, omission, fusion, drivelling.
- **Derailment / loosening:** ideas slip off the track; meaning lost over sentences.
- **Knight's move thinking:** sharp illogical oblique transitions, like the chess knight; near-synonym of severe derailment.
- **Tangentiality:** replies that veer off and *never* return to the goal (contrast circumstantiality).
- **Word salad (schizophasia):** incomprehensible speech, syntax ignored, individual sentences meaningless.
- **Neologisms:** genuinely new invented words; distinct from word approximations.
- **Verbigeration:** automatic stereotyped repetition of phrases "like a scratched record"; differs from echolalia.
- **Overvalued idea:** comprehensible non-delusional belief dominating life, held short of delusional conviction.
- **Obsessions / compulsions:** intrusive unwanted self-owned thoughts, resisted, ego-dystonic; neutralising acts.
- **Thought possession:** the sense of owning and controlling one's thoughts; its disorders are thought alienation.
- **Thought insertion:** alien thoughts placed in the mind by an external agency; loss of *ownership* (first-rank).
- **Thought withdrawal:** thoughts extracted from the mind by an external force (first-rank).
- **Thought broadcast:** thoughts escape the self and are known to others; a disorder of thought, not thought echo (first-rank).
- **Andreasen (1979):** TLC scale; positive vs negative formal thought disorder.
- **First-rank caveat:** possession disorders are first-rank but *not* pathognomonic; DSM-5 dropped their special weighting.

14 · Understanding delusions

The delusion is the cardinal disturbance of thought content and, for the phenomenologist, the most examined sign in all of descriptive psychopathology. The exam does not want a lay

definition, it wants the Jaspersian architecture: what makes a belief delusional in **form** rather than in content, how the un-understandable **primary delusion** is separated from the merely secondary one, and how the delusion is discriminated from the **overvalued idea** and the obsession. Ground your description in Jaspers (General Psychopathology, 1913), Fish (Clinical Psychopathology) and Sims (Symptoms in the Mind), the three texts every Indian examiner reaches for.

Describe, do not explain. Jaspers' discipline is to characterise the abnormal experience by its form (a fixed belief held with absolute certainty) and to resist the temptation to explain it by its content (why the patient believes he is persecuted). The whole classification below is a classification of form and origin, not of theme alone.

insight retained, resisted — absolute conviction

Discriminator	Obsession	Overvalued idea	Delusion
Conviction / fixity	recognised as senseless; doubted	strongly held, not absolute	absolute, incorrigible
Resistance	yes, actively resisted	not resisted, accepted	not resisted
Ego relation	ego-dystonic (intrusive, unwanted)	ego-syntonic	ego-syntonic
Insight	preserved	partial	absent
Typically in	OCD	anorexia, dysmorphophobia, morbid jealousy	psychotic disorders

Fig 6.7 Delusion, overvalued idea and obsession compared. Read left to right as a gradient. An obsession is ego-dystonic, resisted, and held with retained insight; a delusion is ego-syntonic, unresisted, held with absolute conviction and no insight; the overvalued idea sits in between, a comprehensible belief held strongly but not with delusional fixity. Insight and resistance fall as conviction rises across the three.

14.1 Definition and the three Jaspersian criteria

Definition. A delusion is a fixed, false belief, held with absolute conviction, out of keeping with the person's social, educational and cultural background, and not amenable to reason or contrary evidence (Sims 2015, Kaplan & Sadock 2024). Jaspers gave three external criteria by which a delusion can be recognised.

Subjective certainty

Held with extraordinary, incorrigible conviction, an absolute subjective certainty far beyond ordinary belief.

Incorrigibility

Not amenable to reason, logic, argument or contrary experience; counter-evidence is re-interpreted rather than accepted.

Impossibility or falsity of content

The content is false, impossible or at least implausible; note this is the weakest criterion, since a delusion may occasionally be true (see the pitfall below).

COMMON TRAP

Falsity is NOT the defining feature. A morbidly jealous man may be delusional even if his wife happens to be unfaithful: the belief is delusional by the disordered mental process that produced it, not by whether it turns out true (Shorter Oxford). The other trap is culture: a belief widely shared within the patient's religious or cultural group is not a delusion, so always ask whether peers hold it.

14.2 The primary versus secondary split (the Jaspersian core)

The distinction is by origin, not theme. Jaspers separated delusions according to whether they can be understood as arising from something else.

primary delusion

Autochthonous (arising from within), it appears suddenly, fully formed, with full conviction and no discernible mental events leading up to it; it is un-understandable, meaning it cannot be derived from mood, personality or another experience. Given great diagnostic weight in schizophrenia.

secondary delusion

Understandable (in Jaspers' sense) as arising out of a preceding morbid experience: a mood state, a hallucination, or a pre-existing delusion. A profoundly depressed woman believes she is worthless; a man who hears accusing voices concludes he is being followed.

Secondary delusions may accumulate and interconnect into a **systematised** delusional system. Primary delusions are recorded only when certainly present, because of their diagnostic force.

RULE **The primary versus secondary split is by origin, not theme.** A primary delusion is un-understandable and autochthonous; a secondary one is understandable as arising from mood, a hallucination or a prior delusion.

14.3 The primary delusional experiences

Not all primary experiences begin as an idea. Jaspers and Schneider described four forms of primary delusional experience; the examiner wants each defined crisply.

delusional mood (Wahnstimmung)

An uncanny, uneasy sense that the world has subtly changed and that something of immense significance is about to be revealed; the patient feels "something sinister is going on but I cannot say what." This delusional atmosphere provides the context from which fully formed delusions crystallise.

delusional perception

A real, normally perceived object is given a private, unwarranted delusional meaning (a curtain drawn, leaves turning yellow, become a signal that he is the chosen one). Schneider's two-memberedness: link one is the normal percept, link two is the delusional significance. A first-rank symptom of schizophrenia.

Sudden delusional idea (autochthonous idea, delusional intuition)

A fully formed delusional belief arrives in a single stage, out of the blue, with no preceding perception, "a bolt from the blue" (distinguished from delusional perception, which has two stages: percept then meaning).

Delusional memory (delusional retrospective falsification)

A delusional significance is attached to a real past event, or an autochthonous delusion is falsely dated to the past so the memory itself is the delusion (Fish).

> **CLINICAL ANCHOR**
>
> A 25-year-old man saw the yellowing leaves of a tree outside his house (a true, normal percept) and was instantly and unshakeably certain this was a signal from God that he alone was the chosen one, with no prior delusional system. That is a textbook delusional perception, not a misinterpretation of a pre-existing belief.

14.4 Delusional perception as a first-rank symptom (and the modern caveat)

First-rank status. Schneider listed delusional perception among the first-rank symptoms of schizophrenia, alongside audible thoughts, voices arguing or commenting, passivity of affect, impulse and volition, somatic passivity, thought insertion, withdrawal and broadcast. It is a disorder of thought, not of perception: the percept is entirely normal, only the meaning is deluded.

> **PEARL**
>
> The currency point examiners reward: first-rank symptoms are NOT pathognomonic of schizophrenia (they occur in mania, psychotic depression and organic states) and neither ICD-11 nor DSM-5 gives them privileged diagnostic weight any longer. Delusional perception remains the phenomenologically purest FRS, but it is a pointer, not proof.

14.5 Delusions classified by content, part one: the affect-linked themes

By theme. Once origin is settled, delusions are catalogued by content. Content carries some diagnostic hint but is defined descriptively.

persecutory (paranoid)

The conviction of being targeted, harassed, cheated, spied on or conspired against; the commonest theme, seen across schizophrenia, affective psychoses and organic states.

Delusion of reference

Events, objects, remarks, gestures or media items (a newspaper article, a stranger's cough) are believed to carry a special personal meaning directed at the patient.

grandiose delusion (expansive)

Inflated belief in one's own power, identity, wealth, talent or special mission; characteristic of mania and of grandiose-type delusional disorder.

Religious delusion

A delusion with religious content (being God, the chosen one, damned); judged delusional only when it exceeds the patient's faith community's shared beliefs.

Delusion of guilt (self-accusation)

Unfounded conviction of having committed a terrible sin or crime deserving punishment; a mood-congruent feature of severe depression.

Nihilistic delusion (Cotard)

Belief that oneself, a body part, others or the world has ceased to exist, is dead, rotting or has no blood or bowels; described by Cotard (1882), typically in severe depression.

14.6 Delusions classified by content, part two: body, love, jealousy, identity, control

Hypochondriacal (somatic) delusion

Fixed false belief of harbouring a serious illness (cancer, AIDS, infestation) despite reassurance; the core of monosymptomatic hypochondriacal psychosis.

Amorous delusion (erotomania, de Clerambault's syndrome)

The unshakeable conviction that another person, usually of higher status, is secretly in love with the patient.

Morbid jealousy (Othello syndrome, delusion of infidelity)

Delusional certainty that the partner is being unfaithful, driving relentless checking and interrogation; carries a real risk of violence.

Capgras delusion (illusion of doubles)

Belief that a familiar person (usually close) has been replaced by an identical impostor or double; a delusional misidentification.

Fregoli delusion

Belief that a familiar persecutor is disguising himself as, or masquerading behind, various strangers the patient meets; the mirror image of Capgras.

Delusions of control and passivity

The patient experiences his own actions, impulses, thoughts or affect as made or controlled by an external agency (passivity phenomena, first-rank symptoms).

> **COMMON TRAP**
>
> Capgras is the double (replacement of the familiar by an impostor); Fregoli is the disguise (a single persecutor hiding inside many strangers). Do not swap them. Both are delusional misidentification syndromes, phenomenological symptoms that can also present as named syndromes.

14.7 The discrimination the exam loves: delusion versus overvalued idea versus obsession

The classic viva triad. An **overvalued idea** (Wernicke 1900, reviewed by McKenna 1984) is a comprehensible, understandable, isolated belief, strongly held with intense affect and pursued beyond the bounds of reason, dominating the person's life, yet not utterly fixed and, crucially, ego-syntonic (the patient does not regard it as senseless and does not resist it). Jaspers held that the overvalued idea differs from a delusion mainly in the level of conviction, and Fish added that the patient with an overvalued idea invariably acts on it, determinedly and repeatedly. The obsession, by contrast, is intrusive, recognised as the patient's own but senseless, ego-dystonic and actively resisted.

FEATURE	DELUSION	OVERVALUED IDEA	OBSESSION
Fixity / conviction	**Absolute, incorrigible**	Strong but not utterly fixed	Doubt present, not fixed
Understandability	Un-understandable (if primary)	**Comprehensible, understandable**	Comprehensible but senseless
Resistance by patient	None	None	**Present, active resistance**
Ego relation	Ego-syntonic	**Ego-syntonic**	Ego-dystonic
Sense of intrusiveness	Absent	Absent	**Present, felt as intrusive**
Insight	Absent	Partial or absent	**Retained (thought is own, senseless)**
Prototype	Persecutory delusion	Anorexia, morbid jealousy	Contamination obsession

The three-way discrimination on fixity, understandability, resistance, ego relation and insight; the diagnostic axis examiners probe most.

HOLD THIS

A delusion is a fixed, false, incorrigible belief out of cultural keeping; falsity is its weakest criterion. The obsession is resisted and ego-dystonic with insight; the overvalued idea is comprehensible and strongly held but not absolutely fixed.

14.8 Mood-congruent versus mood-incongruent delusions

Congruence with prevailing affect. This axis matters for classifying psychotic mood disorder.

Mood-congruent

Content matches the affective state: guilt, nihilism, poverty and hypochondriasis in depression; grandiosity and special powers in mania.

Mood-incongruent

Content is at odds with the mood, for example persecutory or passivity delusions in a euphoric manic patient; their presence carries prognostic and diagnostic weight.

TRAP Mood-incongruent delusional content (a delusion whose theme clashes with the mood) is not the same as incongruity of affect (an emotional display that clashes with the topic) - one is content, the other is expressed affect.

14.9 Bizarre versus non-bizarre delusions

Physical possibility is the axis.

Bizarre delusion

Content is clearly implausible, not understandable to same-culture peers and not derived from ordinary life experience (e.g. one's organs have been removed and replaced without a scar); historically weighted toward schizophrenia.

Non-bizarre delusion

Content, though false, could conceivably occur (being followed, poisoned, deceived by a spouse); the hallmark of delusional disorder.

PEARL

DSM-5 downgraded bizarreness: it removed the old rule that a single bizarre delusion alone met Criterion A for schizophrenia. Inter-rater reliability for judging bizarreness is poor, so lean on the primary versus secondary and delusion versus overvalued idea distinctions, which the examiner scores more reliably.

MNEMONIC

"SII" for the Jaspers triad

Subjective certainty, Incorrigibility, Impossibility (or falsity) of content. For the primary delusional experiences, remember the sequence a patient may pass through: delusional Mood, delusional Perception, sudden delusional Idea, delusional Memory (M-P-I-M).

GOOD TO REMEMBER

- **Delusion (definition):** fixed, false belief, absolute conviction, out of keeping with social and cultural background, not amenable to reason (Jaspers, Sims, K&S).
- **Jaspers' three criteria:** subjective certainty, incorrigibility, impossibility or falsity of content (the last being the weakest).
- **primary delusion:** autochthonous, sudden, fully formed, un-understandable; heavy diagnostic weight in schizophrenia.
- **secondary delusion:** understandable as arising from mood, another experience (hallucination) or a pre-existing delusion; may systematise.
- **delusional mood (Wahnstimmung):** uncanny sense that something significant is about to be revealed; the atmosphere before the delusion crystallises.
- **delusional perception:** real normal percept given a private delusional meaning; Schneider's two-memberedness; a first-rank symptom.
- **Autochthonous (sudden delusional) idea:** fully formed delusion in one stage, "bolt from the blue," no preceding percept.
- **Delusional memory:** delusional meaning attached to a real past event, or delusion falsely dated to the past (Fish).
- **persecutory (paranoid):** conviction of being targeted, harassed or conspired against; commonest theme.
- **Delusion of reference:** ordinary events or remarks carry a special personal meaning aimed at the patient.
- **grandiose delusion:** inflated power, identity, wealth or mission; classic in mania.
- **Religious / guilt / nihilistic:** religious content; unfounded sin deserving punishment; Cotard (1882) belief of non-existence or being dead.
- **Hypochondriacal:** fixed false belief of serious illness despite reassurance.
- **Erotomania (de Clerambault):** conviction a higher-status other secretly loves the patient. **Othello:** delusional infidelity, violence risk.
- **Capgras:** familiar person replaced by an impostor double. **Fregoli:** a persecutor disguised as many strangers.
- **Passivity / control:** actions, impulses, thoughts or affect experienced as externally made; first-rank symptoms.
- **overvalued idea (Wernicke 1900, McKenna 1984):** comprehensible, strongly held, not utterly fixed, ego-syntonic, unresisted, dominates life (anorexia, morbid jealousy).
- **Obsession:** intrusive, recognised as own but senseless, ego-dystonic, resisted, insight retained.
- **Mood congruence:** congruent (guilt, nihilism in depression; grandiosity in mania) versus incongruent (persecution in mania).
- **Bizarre vs non-bizarre:** physically impossible versus conceivable; DSM-5 removed the single-bizarre-delusion shortcut for schizophrenia.
- **Modern caveat:** first-rank symptoms (including delusional perception) are not pathognomonic and lost privileged status in ICD-11 and DSM-5.

15 · Schneiderian first-rank symptoms

The single most examined list in descriptive psychopathology. Kurt **Schneider** (1959), working in the Jaspersian descriptive tradition, proposed a set of **first-rank** symptoms (**symptoms of the first rank**, **Symptome ersten Ranges**) not as a theory of what schizophrenia *is*, but as a pragmatic clinical shortcut: experiences that, when present in the absence of coarse brain disease, let a busy clinician make the diagnosis reliably. He explicitly ranked them above

second-rank symptoms (other hallucinations, perplexity, mood change) and above the affective disorders, so that an organic or schizophrenic picture took precedence over an unmistakable manic or melancholic one (Companion 2010; Sims 2015).

For the exam the two things that must be paired are (1) the crisp list in its classic groups, and (2) the modern caveat. Schneider called them pathognomonic of schizophrenia "except in the presence of coarse brain disease", but they are **not** pathognomonic: they occur in mania and in organic states, and up to a fifth of people with schizophrenia never show any of them (Fish 2007; Kaplan and Sadock 2024). Because of this they have lost their privileged diagnostic status: DSM-5 (2013) removed the rule that a single first-rank symptom sufficed for the A-criterion, and ICD-11 (2022) no longer grants them special weight. Learn them as the highest-yield descriptive vocabulary, not as a diagnostic test.

15.1 What Schneider actually claimed (and the exact caveat)

Pragmatic, not theoretical. Schneider (1959) built the list for reliability, not validity. He wrote that these symptoms are diagnostic of schizophrenia "provided only that there is no question of cerebral disease"; the phrase *coarse brain disease* is the escape clause every examiner wants quoted. He did not believe they revealed a mechanism, only that they were the most characteristic and easily recognised markers available to a clinician at the bedside (Kaplan and Sadock 2024). The three ranks form a hierarchy: first-rank symptoms outrank second-rank symptoms, and both outrank affective symptoms, which is why a Schneiderian diagnostician diagnosed schizophrenia even when florid mood symptoms were present.

RULE **Quote the escape clause: first-rank symptoms point to schizophrenia only "in the absence of coarse brain disease".** Schneider built them for reliability at the bedside, not as a theory of what schizophrenia is.

15.2 Group (a): auditory hallucinations of a special kind

Three specific forms, all auditory. Schneider singled out three verbal auditory hallucinations. These are the ones to define precisely, because "voices" alone is not first-rank.

Thought echo (audible thoughts, Gedankenlautwerden, echo de la pensee)

The patient hears their own thoughts spoken aloud, just before, at the same time as, or immediately after they occur. Example: while washing up, "I thought I must fetch washing powder, and instantly a voice said, I shall go to the market to buy washing powder" (Clinical Methods AIIMS 2024).

Voices arguing or discussing (third person)

Two or more hallucinatory voices discuss or argue about the patient, referring to them in the third person ("he", "she"), as though the patient were absent.

Running commentary

A voice (or voices) gives a running commentary on the patient's actions as they happen: "she is putting salt in excess, she is leaving the food unattended" (Clinical Methods AIIMS 2024).

The discriminator. The form, not the content, is what matters. Third-person and running-commentary voices are first-rank; second-person command hallucinations ("get up and run away") are *not* first-rank, however distressing.

15.3 Group (b): thought alienation

The self-boundary is breached. The unifying experience is loss of the normal sense that one's own thoughts are private and one's own. Cross-refer the thought-disorder topic for fuller treatment; here are the three first-rank members.

Thought insertion

Thoughts that are not the patient's own are experienced as put into their mind by an external agent. The alienness of ownership, not merely the content, is the sign.

Thought withdrawal

The patient experiences thoughts being actively removed or extracted from their mind by an outside force, often felt as a sudden emptying.

Thought broadcast

The patient's thoughts escape and are experienced as accessible to others, as if spoken aloud or transmitted, without any act of speaking. Distinguish from thought echo, which is a hallucination of hearing one's own thoughts, not a leakage to others (Clinical Methods AIIMS 2024).

15.4 Group (c): passivity phenomena (made or influenced experiences)

Volition, impulse, affect and body are hijacked. In **passivity** phenomena the patient experiences their own actions, urges, feelings or bodily sensations as made, imposed or controlled by an external agency: the sense of personal agency (the feeling that "I am the author of this") is lost while the act still occurs. The key words examiners look for are "made" and "as if controlled".

Made act (made volition)

The patient carries out an action but experiences it as not their own; some external agent is felt to be moving them, and they are a passive participant in their own behaviour.

Made impulse (made drive)

An impulse or drive to act is experienced as imposed from outside, so the urge itself is felt to be alien and controlled.

Made affect (made feeling)

Emotions the patient does not own are felt to be produced in them by an external agent: "the feelings are not mine, they are put into me".

Somatic passivity

Bodily sensations (tactile or visceral) are experienced as imposed on the patient by an outside agency, for example a sensation of being irradiated or manipulated from without.

15.5 Group (d): delusional perception

A real percept, an unwarranted delusional meaning. In **delusional perception** a normal, correctly perceived object or event is invested, in a single step, with a highly personal delusional significance that is not logically connected to it: seeing the traffic light turn red and knowing instantly "that means I am the chosen one". Schneider stressed its *two-memberedness* (link one the real perception, link two the abnormal meaning), and Jaspers held it to be *un-understandable*, arising without any mediating inference (Schneider 1959; Jaspers 1913; Sims 2015). It is the only first-rank symptom that is a delusion rather than a hallucination or passivity experience.

15.6 The classic list at a glance

GROUP	FIRST-RANK SYMPTOM	ONE-LINE DESCRIPTION
(a) Special auditory hallucinations	**Thought echo**	Own thoughts heard spoken aloud (audible thoughts, Gedankenlautwerden)
	Voices arguing / discussing	Two or more voices discuss the patient in the third person
	Running commentary	A voice narrates the patient's actions as they happen
(b) Thought alienation	Thought insertion	Alien thoughts put into the mind by an external agent
	Thought withdrawal	Thoughts extracted from the mind by an outside force
	Thought broadcast	Thoughts leak out and are shared with others without speech
(c) Passivity (made) phenomena	**Made act**	Actions experienced as controlled by an external agent
	Made impulse	Urge to act imposed from outside
	Made affect	Emotions felt to be produced by an external agent
	Somatic passivity	Bodily sensations imposed by an outside agency
(d) Delusional perception	Delusional perception	Real percept given an instant, unwarranted delusional meaning

The eleven classic first-rank symptoms in Schneider's four groups; three hallucinatory forms, three thought-alienation experiences, four passivity phenomena, and delusional perception.

HOLD THIS

First-rank symptoms are highly characteristic but not pathognomonic; they are neither necessary nor sufficient for schizophrenia. DSM-5 and ICD-11 removed the single-symptom rule, so learn them as vocabulary, not a diagnostic test.

15.7 Why they are not pathognomonic

They cross diagnostic boundaries. The single most important teaching point. First-rank symptoms are neither necessary nor sufficient for schizophrenia. They occur in affective psychosis: Schneiderian first-rank symptoms have been reported in around 10 to 20% of manic patients, where they are usually short-lived, changing in content within days (Shorter Oxford 2012). They occur in organic states, in psychotic depression, in substance-induced psychosis and in temporal lobe epilepsy. Conversely, up to a fifth of people with schizophrenia never manifest any first-rank symptom (Fish 2007). The International Pilot Study of Schizophrenia (WHO)

confirmed they appear cross-culturally but did not establish specificity (Kaplan and Sadock 2024).

10-20%	~20%
OF MANIC PATIENTS SHOW FRS	OF SCHIZOPHRENIA SHOW NONE

15.8 Loss of special status in DSM-5 and ICD-11

The one-symptom rule is gone. Earlier systems (DSM-III onward, ICD-10) gave first-rank symptoms extra diagnostic weight; ICD-10 allowed a single clear first-rank symptom to satisfy criterion. DSM-5 (2013) abolished this: bizarre delusions and first-rank auditory hallucinations no longer count double, and at least two criterion-A symptoms are now required, one of which must be delusions, hallucinations or disorganised speech. ICD-11 (2022) similarly dropped their privileged position, treating them as one class of core symptom among several. The clinical vocabulary survives; the diagnostic shortcut does not.

COMMON TRAP

First-rank symptoms do not equal schizophrenia. The exam favourite: a manic patient with thought insertion and delusional perception is *not* thereby schizophrenic, because around 10 to 20% of manic patients show first-rank symptoms and up to a fifth of people with schizophrenia show none. First-rank symptoms are highly characteristic descriptive markers, but they are not necessary, not sufficient, and not pathognomonic; the diagnosis rests on the whole picture and course, not on ticking a Schneiderian box. Also do not confuse second-person command hallucinations ("run away") with first-rank third-person or running-commentary voices; commands are not first-rank.

MNEMONIC

A B C D: Auditory, Broadcast-of-thought, Controlled (passivity), Delusional perception

The four Schneiderian groups map to A (the three special auditory hallucinations), B (thought alienation, of which broadcast is the memorable member alongside insertion and withdrawal), C (Controlled = the made or passivity phenomena), and D (delusional perception). Within C, remember the four "made" experiences: made act, made impulse, made affect, and somatic passivity.

GOOD TO REMEMBER

- **Kurt Schneider (1959):** proposed first-rank symptoms as pragmatic, reliable markers of schizophrenia "except in the presence of coarse brain disease"; ranked above second-rank and above affective symptoms.
- **Thought echo (Gedankenlautwerden, audible thoughts):** hearing one's own thoughts spoken aloud, just before, during or after thinking them.
- **Voices arguing / discussing:** two or more voices talk about the patient in the third person.
- **Running commentary:** a voice narrates the patient's actions as they occur.
- **Thought insertion:** alien thoughts placed into the mind by an external agent.
- **Thought withdrawal:** thoughts felt to be removed from the mind by an outside force.
- **Thought broadcast:** one's thoughts escape and become accessible to others without speech.
- **Made act (made volition):** passivity of action, experienced as externally controlled.
- **Made impulse:** an urge to act imposed from outside.
- **Made affect:** emotions felt to be produced by an external agent.
- **Somatic passivity:** bodily sensations imposed by an outside agency.
- **Delusional perception:** a real percept given an instant, unwarranted personal delusional meaning (the only first-rank delusion; Jaspers' two-member analysis).
- **Not pathognomonic:** present in around 10 to 20% of manic patients and in organic states; absent in up to a fifth of people with schizophrenia.
- **DSM-5 (2013) and ICD-11 (2022):** removed the single-first-rank-symptom rule; first-rank symptoms lost their special diagnostic weight.

16 · Disorders of the experience of self

The disorders of self are the psychopathology of the "I". The **disorders of self** (the ego disorders, the **Ich-Storungen**) concern not *what* the patient perceives or believes but the very awareness that experience belongs to a self and that this self is bounded off from the world. Every normal act of consciousness carries an implicit sense of ownership: *I* am thinking this thought, *I* am doing this act, *I* am a single person now and the same person I was yesterday, and there is a boundary between what is inside me and what is outside. Jaspers (1913) in *General Psychopathology* and later Scharfetter (1980) analysed this awareness of the self into distinct dimensions; their disorder gives the ego disorders their exam-relevant structure (Sims 2015; Fish 2007).

For the exam, three things must be held together. First, the definition of the **ego boundary** and its loss as the substrate of passivity and thought alienation. Second, depersonalisation and derealisation as changes in the *quality* of self-awareness that keep their "as if" character and therefore preserve insight, unlike delusion. Third, the Jaspers to Scharfetter dimensions of ego-consciousness with the disorder that maps onto each. Ground the description, not the explanation: as always in descriptive psychopathology it is the form of the experience that is the sign (Jaspers 1913; Sims 2015).

16.1 Awareness of the self and its boundary with the world

The self is normally felt, not inferred. Healthy self-experience has a taken-for-granted, pre-reflective quality: I do not have to work out that a thought is mine or that my body is me, it is simply given. Jaspers (1913) described this immediate ego-consciousness as the background

against which all other experience is set, and Scharfetter (1980) called it the awareness of one's own being (*Ich-Bewusstsein*). The self is also demarcated: there is an experienced membrane between the inner world (thoughts, feelings, will, body) and the outer world of objects and other people. Disorders of self are disturbances of this immediate awareness and of this membrane, and they range from the mild and neurotic (depersonalisation) to the psychotic dissolution of the boundary in schizophrenia (Sims 2015).

16.2 The ego boundary and its loss

The membrane between self and not-self. The **ego boundary** is the experienced line that separates what is self from what is not-self, that marks internal mental events as belonging to me and external percepts as belonging to the world. Paul Federn introduced the concept in the psychoanalytic theory of psychosis, holding that in schizophrenia the ego boundary that ordinarily separates thoughts and feelings from perceptions becomes faulty, so that inner mental content is no longer marked with "ego feeling" as one's own and is experienced instead as external reality (Kaplan and Sadock 2024). When the ego boundary fails, the patient can no longer reliably tell whether an experience arises from within or is imposed from without: this is the common root of thought alienation (insertion, withdrawal, broadcast) and of the passivity phenomena. Schneider spoke of the same clinical picture as a "loss of ego boundaries" (Companion 2010). The loss of the ego boundary is therefore the descriptive substrate that unifies the most characteristic first-rank experiences of schizophrenia.

16.3 Depersonalisation

A change in the awareness of one's own self. **Depersonalisation** (also spelt **depersonalization** in American texts) is an altered, uncanny change in the quality of self-awareness: the patient feels unreal, detached, cut off from their own experience, as though watching themselves from outside or acting like an automaton or robot going through the motions. Feelings feel deadened or absent, actions feel mechanical, the self feels strange and unfamiliar (Sims 2015). The defining feature is the *"as if"* quality: the patient says they feel *as if* they were unreal, *as if* in a dream, *as if* watching themselves, and they retain full insight that this is a subjective change and not literally true. That preserved "as if" awareness is exactly what separates depersonalisation from a nihilistic delusion, in which the patient believes with delusional conviction that they truly do not exist or have no self (Fish 2007).

Depersonalisation (depersonalization)

An "as if" change in the awareness of one's own self: feeling unreal, detached, watching oneself, emotionally deadened, an automaton, with insight preserved.

Emotional numbing (de-affectualisation)

The component in which affect feels flattened or absent, so the patient complains of feeling nothing, not even grief they know they should feel.

Anaesthesia dolorosa psychica

The painful awareness of the loss of feeling itself: distress precisely because emotions cannot be felt.

16.4 Derealisation

The outer world, not the self, feels unreal. **Derealisation** (also spelt **derealization**) is the outward-facing counterpart: the surrounding world feels unreal, flat, two-dimensional, lifeless, artificial or stage-managed, as if made of cardboard or seen through glass. People may look like actors or automata, familiar places feel strange, colours seem dull and the world seems drained of vitality (Sims 2015). Depersonalisation and derealisation are together classically described as the "as-if" phenomena: they very frequently co-occur, both share the preserved "as if" quality and preserved insight, and both are grouped in DSM-5 as depersonalisation-derealisation disorder. They are non-specific, appearing in anxiety and panic (Roth's phobic-anxiety-depersonalisation syndrome), depression, temporal lobe epilepsy, migraine, fatigue and sleep deprivation, dissociative states, and as an SSRI or benzodiazepine withdrawal symptom, and can occur transiently in healthy people (Kaplan and Sadock 2024).

Derealisation (derealization)

An "as if" change in the awareness of the surrounding world: it feels unreal, flat, lifeless, artificial or stage-set, with insight preserved.

Deja vu / jamais vu (adjacent)

Familiarity phenomena often reported alongside derealisation: the unfamiliar felt as familiar (deja vu) or the familiar felt as strange (jamais vu).

16.5 Depersonalisation versus derealisation versus delusion

FEATURE	DEPERSONALISATION	DEREALISATION	NIHILISTIC DELUSION
What feels unreal	The self ("I feel unreal")	The outer world ("the world feels unreal")	Self or world (asserted as fact)
Quality of experience	**"As if" unreal**	**"As if" unreal**	**"Is" unreal (conviction)**
Insight	Preserved	Preserved	Absent
Reality testing	Intact	Intact	Lost
Typical setting	Anxiety, depression, dissociation, fatigue	Same, often with depersonalisation	Psychotic (Cotard's) de-pression, schizophrenia

The "as if" quality with preserved insight is the single discriminator that separates depersonalisation and derealisation from a nihilistic (Cotard) delusion, in which unreality is asserted as fact with delusional conviction.

RULE **The "as if" quality with preserved insight is what keeps depersonalisation and derealisation from being delusions.** "I feel as if I am unreal" (insight kept) is not "I do not exist" (Cotard, insight lost).

16.6 The five dimensions of ego-consciousness (Jaspers and Scharfetter)

Jaspers' four formal characteristics, and Scharfetter's fifth. Jaspers (1913) held that immediate ego-consciousness has *four* formal characteristics: activity, unity at any one moment, continuity of identity over time, and demarcation from the environment. Scharfetter then *added a fifth*, **ego vitality**, the awareness of simply being or existing, which Jaspers had folded inside the awareness of activity. The resulting five, each with a characteristic disorder, are the most examinable single

frame for the disorders of self. Note the exam trap: the fifth dimension is vitality, not a separate "continuity", because continuity of identity over time is already Jaspers' identity aspect (Sims 2015; Fish 2007).

Awareness of vitality (ego-vitality; Scharfetter's addition)

The awareness of simply being alive and existing. Disorder: the conviction of not existing, of being dead or having no body, which is the core experience of the nihilistic (Cotard) delusion, and the deadened quality of severe depersonalisation.

Awareness of activity (ego-activity)

The sense that I am an active agent, that my mental acts and perceptions are my own doing. Disorder: loss of the sense of agency, and the "acting as an automaton" quality of depersonalisation.

Awareness of unity (ego-consistency, coherence)

The awareness that at any one moment I am a single, undivided person. Disorder: the experience of being split or divided, of two selves or a self fragmenting.

Awareness of identity (ego-identity, continuity of identity over time)

The awareness that I am the same person now that I have always been, persisting as one and the same self from moment to moment and across the lifespan. Disorder: the conviction of having become someone or something else, as in metamorphosis or delusional misidentification of the self, and the sense of being a different self before and after a point.

Awareness of demarcation (ego-boundary)

The awareness of a boundary between self and not-self, between inner and outer world. Disorder: loss of the boundary, giving thought insertion, withdrawal, broadcast and the passivity (made) phenomena.

The bridge to the earlier sections. Depersonalisation is chiefly a disorder of the awareness of activity, shading into vitality when the patient feels dead rather than merely unreal; the nihilistic delusion is the full disorder of vitality; and the loss of the ego boundary is the disorder of the awareness of demarcation and is the substrate of passivity and thought alienation. The scheme thus ties the whole topic together.

HOLD THIS

Loss of the ego boundary (the awareness of demarcation) is the descriptive substrate of passivity and thought alienation. Scharfetter's five dimensions - activity, unity, identity, demarcation, continuity - each carry their own disorder.

16.7 Passivity experiences as loss of the self's demarcation

Agency is retained by the act but lost by the self. In **passivity** experiences the patient carries out an action, feels an emotion, has an impulse or registers a bodily sensation, but experiences it as made, imposed or controlled by an external agency: the act still occurs, yet the sense of being its author is gone. Descriptively this is precisely a failure of the awareness of demarcation, a breach of the ego boundary that no longer walls off the self's own volition, affect and body from outside control (Sims 2015; Fish 2007). The passivity phenomena are Schneiderian first-rank symptoms; cross-refer the first-rank topic for their diagnostic weight and the modern caveat that they are not pathognomonic.

Made act (made volition)

An action is performed but experienced as controlled by an external agent; the patient is a passive vehicle of their own behaviour.

Made impulse (made drive)

The urge or drive to act is felt to be imposed from outside and alien to the self.

Made affect (made feeling)

Emotions are experienced as produced in the patient by an external agency: "these feelings are not mine, they are put into me".

Somatic passivity

Bodily or visceral sensations are experienced as imposed by an outside force, for example being irradiated or manipulated from without.

16.8 Where the ego disorders sit clinically

A spectrum from neurotic to psychotic. The disorders of self span a range. At the mild end, depersonalisation and derealisation are non-psychotic, keep their "as if" quality and preserved insight, and occur in anxiety, depression, dissociation, fatigue and healthy people. At the severe end, loss of the ego boundary, the passivity phenomena and thought alienation are psychotic disorders of the awareness of demarcation and are highly characteristic of schizophrenia. Between them, disorders of the awareness of unity, identity and continuity shade from the depersonalised "as if I were two people" into frank delusions of being split, transformed or replaced. Reading a report of unreality, the crucial clinical question is always whether the "as if" quality and insight are preserved (depersonalisation or derealisation) or lost (delusion) (Sims 2015; Fish 2007).

CLINICAL ANCHOR

A young woman with panic attacks says: "During the attacks I feel as if I'm not really here, like I'm watching myself from behind a glass wall, and the room looks flat and fake, like a film set." Two signs are present: depersonalisation (watching herself, feeling unreal) and derealisation (the room flat and fake). Both carry the "as if" quality and she knows the change is in her, not in reality, so insight is intact. This is not psychosis; it is the classic anxiety-linked depersonalisation-derealisation picture, and naming it correctly steers you to anxiety management rather than antipsychotics.

COMMON TRAP

Do not confuse depersonalisation with a nihilistic delusion. The patient who says "I feel *as if* I have no self" and knows it is a feeling has depersonalisation with insight; the patient who states as fact "I have no head, I do not exist, my organs have rotted away" and is convinced of it has a nihilistic (Cotard) delusion. The word "unreal" appears in both; the discriminator is the preserved "as if" quality and insight, not the content. Equally, do not label ordinary loss of the ego boundary as merely "poor concentration": thought insertion, withdrawal and broadcast are disorders of the awareness of demarcation, not of attention.

MNEMONIC

V A C I D: Vitality, Activity, Consistency (unity), Identity, Demarcation

The five dimensions of ego-consciousness, Jaspers' four plus Scharfetter's fifth: awareness of Vitality (being alive at all, Scharfetter's addition), Activity (agency), Consistency or unity (single person now), Identity (same person as always, continuous through time), and Demarcation (the ego boundary). Their disorders, respectively: the nihilistic delusion of not existing; depersonalisation of agency; feeling split; feeling transformed into another; and loss of the boundary giving passivity and thought alienation.

GOOD TO REMEMBER

- **Disorders of self (ego disorders, Ich-Storungen):** disturbances of the immediate awareness that experience belongs to a self and that the self is bounded from the world (Jaspers 1913; Scharfetter 1980).
- **Ego boundary (Federn):** the experienced membrane between self and not-self; its loss un-marks inner events as one's own and is the substrate of passivity and thought alienation (Kaplan and Sadock 2024; Schneider's "loss of ego boundaries").
- **Depersonalisation (depersonalization):** an "as if" change in awareness of one's own self, feeling unreal, detached, watching oneself, an automaton, with insight preserved.
- **Derealisation (derealization):** an "as if" change in awareness of the surrounding world, which feels unreal, flat, lifeless or artificial, with insight preserved.
- **"As if" quality:** the defining feature of depersonalisation and derealisation; preserves insight and separates them from nihilistic (Cotard) delusion, where unreality is asserted as fact.
- **Jaspers (1913):** formal analysis of immediate ego-consciousness in General Psychopathology.
- **Scharfetter (1980) five dimensions:** awareness of activity, of unity, of identity, of demarcation (the boundary), and of continuity of the self, each with its own disorder.
- **Awareness of activity:** sense of agency and vitality; disorder = depersonalisation, the automaton quality.
- **Awareness of unity:** being one person at a moment; disorder = feeling split or divided.
- **Awareness of identity:** being the same person one has always been; disorder = feeling transformed into another.
- **Awareness of demarcation:** the self-world boundary (the ego boundary); disorder = thought insertion, withdrawal, broadcast and passivity.
- **Awareness of continuity:** the self persisting through time; disorder = feeling discontinuous, a broken self.
- **Passivity (made) phenomena:** made act, made impulse, made affect and somatic passivity; loss of the self's demarcation; Schneiderian first-rank but not pathognomonic (cross-refer first-rank).
- **Depersonalisation-derealisation:** the classic "as-if" phenomena; non-specific, seen in anxiety, depression, dissociation, epilepsy, migraine, fatigue and SSRI or benzodiazepine withdrawal; grouped as one disorder in DSM-5.

17 · Disorders of emotion and affect

The **disorders of emotion** are the descriptive psychopathology of feeling: how the range, quality, tone, congruity and stability of a person's emotional life go wrong, read purely at the level of what is observed and reported. This is a genuine Paper I long-essay topic in its own right, distinct from the *theories* of emotion (James-Lange, Cannon-Bard, Schachter-Singer), which belong to the General and Developmental Psychology notes and explain the *mechanism* of

normal emotion. Here the task is Jaspers, Fish and Sims phenomenology: name the abnormality, define it crisply, and give a clinical example, form over content (Jaspers 1913, Fish 2007, Sims 2015).

Exam framing. Examiners reward three things kept clean. First, the vocabulary: **affect** versus **mood** versus emotion, a distinction that anchors the whole answer. Second, the disorders of the *tone or quality* of mood (depression, elation, anxiety, irritability, perplexity, apathy). Third, the disorders of the *expression, congruity and stability* of affect (blunting and flattening, incongruity, lability, and the special signs anhedonia and alexithymia). Weave in the caveat that blunting and incongruity, though characteristic of schizophrenia, are not by themselves pathognomonic and must be judged over the whole interview, not spot-diagnosed (Companion to Psychiatric Studies).

17.1 The vocabulary: affect, mood and emotion

Get the three terms exactly right; the whole answer rests on them. The standard convention (Kaplan & Sadock 2024, Sims 2015) separates the momentary observed expression from the sustained subjective state.

Emotion

The generic term for a complex feeling state with psychic, somatic and behavioural components; a stirred-up condition of the organism. Affect and mood are the two clinical ways of sampling it.

Affect

The *momentary, observed, cross-sectional* emotional expression: the outward, moment-to-moment tone the clinician sees, inferred from face, voice, posture and reactivity during the interview. It is to mood as weather is to climate. Described by quality, range, appropriateness (congruity) and reactivity.

Mood

The *sustained, pervasive, subjective* emotional state, coloured over time and reported by the patient; the emotional climate that persists and biases perception, as against the transient affect. Rated by quality, stability and congruity with thought.

PEARL

Affect is weather (what you see now, cross-sectional, observed); **mood** is climate (what is felt over time, sustained, subjective). The examiner's shorthand test: mood is what the patient tells you, affect is what you observe.

HOLD THIS

Affect is the momentary observed expression; mood is the sustained subjective state; the range runs broad to restricted or constricted to blunted to flat. Blunting and incongruity point to schizophrenia but are never a spot diagnosis.

17.2 Disorders of the quality or tone of mood

Abnormal tone. The commonest disorders are of the *quality* of the prevailing mood: it is pathologically lowered, raised, fearful, irritable, bewildered or empty. Each has a phenomenological signature beyond ordinary sadness or happiness.

Depression (lowering of mood)

A sustained lowering of mood below the normal range, often described by the patient as qualitatively distinct from ordinary unhappiness, with a peculiarly painful quality, and accompanied by pessimism, guilt and loss of drive (Companion to Psychiatric Studies).

Dysphoria

An unpleasant, discontented, low-tinged mood, not amounting to full depression; often mixed with irritability and tension.

Elation and euphoria

Elation is an exaggerated feeling of well-being, cheerfulness and expansiveness, classically in mania, felt by the patient as heightened vitality. **Euphoria** is a milder, more static state of contented well-being out of keeping with circumstances; when neurologically driven and shallow it shades into the fatuous cheerfulness (*moria*) of frontal lesions.

Ecstasy

An intense, exalted feeling of rapture, awe or oceanic bliss, often with a sense of union with the world; seen in temporal-lobe epilepsy and some acute psychoses.

Anxiety and fear

Anxiety is an unpleasant affect of apprehensive expectation, an anticipation of threat without a defined object, with somatic accompaniments (palpitation, tremor, restlessness). **Fear** is the same affect directed at a specific, identified danger. Free-floating anxiety is anxiety unattached to any object.

Irritability

A lowered threshold for anger and annoyance, a readiness to react with hostility to minor provocation; prominent in mania, mixed affective states, depression, organic and personality disorders.

Perplexity

A bewildered, puzzled affect in which the patient feels something strange is happening but cannot grasp what, with lowered brows, slowed gaze and a partly open mouth; seen par excellence in puerperal psychosis and in any acute psychotic or organic state (Companion to Psychiatric Studies).

Apathy

A loss of feeling tone, an emotional indifference and absence of concern in which nothing seems to matter; reduced spontaneous action and speech accompany it. Seen in chronic schizophrenia, frontal and subcortical disease, and severe depression; it shades into avolition.

17.3 Blunting and flattening of affect

Loss of the normal range and depth of emotional expression, characteristic of schizophrenia. This is the single most important negative-symptom disturbance of affect, and the exam prizes the flattening-versus-**blunting** distinction, though the two are often used loosely as synonyms (Companion to Psychiatric Studies, Kaplan & Sadock 2024).

Flattening of affect

A reduction in the *range and depth* of emotional expression, with loss of the subtlety and nuance of moment-to-moment emotional interaction; the face is immobile, the voice monotonous, gestures few. Note that such patients may still be highly aroused physiologically despite the flat display.

Blunting of affect

A *coarsening* of emotion with insensitivity to social context, Kraepelin's loss of the delicacy of emotion. Sims described a woman with schizophrenia who, with obvious relish for the sensational effect, took

her visitors upstairs to view her mother's corpse, dead two days (Sims 2015).

COMMON TRAP

Blunting and flattening carry a strong diagnostic inference (schizophrenia), so the terms must not be used loosely. They should never be a spot diagnosis: judge them across the whole interview, and exclude cultural emotional reserve, a habitually dead-pan personality, dissocial indifference, and above all drug-induced bradykinesia or parkinsonian masking, which mimic flattening (Companion to Psychiatric Studies).

17.4 Restricted and constricted affect

The milder gradations on the range-of-affect spectrum. Below full flattening lie two intermediate degrees, which the examiner expects graded correctly against the normal *broad* or full range (Kaplan & Sadock 2024).

Restricted (constricted) affect

A reduction in the range and intensity of emotional expression that is *less severe than blunting or flattening*: emotion is present and modulated but the amplitude is dampened, the display muted. Kaplan & Sadock define the two terms identically and cross-reference one to the other, so treat them as a single construct and do not grade one as milder than the other.

Broad (full) affect

The normal reference state: a full, appropriately modulated range of emotional expression across the interview. Named only to sit the abnormalities against it.

The full continuum runs: broad (normal) to restricted or constricted to blunted to flat, in order of decreasing range and depth of expression.

17.5 Incongruity of affect

A mismatch between expressed emotion and thought content. This is a discrete sign, not merely reduced affect, and one of the most examined single terms in the topic.

Incongruity of affect

The expressed emotion does not match the thought content or the setting, for example laughing while describing a bereavement, or a patient who, asked about the bandage on her wrist, replied that she had tried to kill herself that morning and burst out laughing (Fish 2007, Companion to Psychiatric Studies). Also called inappropriate or parathymia. Sudden causeless giggling in chronic schizophrenia is the classic instance.

COMMON TRAP

Do not confuse **incongruity of affect** (form) with mood-incongruent *content* of delusions or hallucinations. Incongruity of affect is a mismatch of the emotional *display* with the topic; mood-incongruent psychotic content is a delusion whose theme is out of keeping with the mood (for example grandiose delusions in depression). Assess incongruity circumspectly: inappropriate laughter may equally signal social awkwardness or embarrassment (Companion to Psychiatric Studies).

17.6 Lability of affect, emotional incontinence and la belle indifference

Disorders of the stability and control of affect. Here the fault is not the tone or congruity but the *regulation*: emotion shifts too readily, discharges without control, or is conspicuously absent where it should be present.

Lability of affect

An abnormal instability of affect with rapid, exaggerated shifts from one emotional state to another (for example tears to laughter within minutes), the swings often shallow and readily provoked. Seen in mania, organic and frontal disorders, and delirium. The exact string **lability** denotes this rapid shifting.

Emotional incontinence

A severe, pathological loss of control over emotional *expression*: the patient weeps or laughs uncontrollably with little or no provoking stimulus and cannot check it, the outburst out of proportion to any felt emotion. The hallmark of pseudobulbar palsy and other organic (vascular, degenerative) states; sometimes called pathological (forced) crying or laughing.

La belle indifference

A striking, inappropriate *lack of concern* about a serious symptom or disability, classically described with conversion (functional neurological) disorder: the patient reports a dramatic deficit such as paralysis or blindness with bland unconcern. Its diagnostic value is now regarded as limited and non-specific.

TRAP La belle indifference is not diagnostic of conversion disorder; its specificity is now regarded as limited, so do not use bland unconcern to clinch a functional label.

17.7 Anhedonia

The loss of the capacity to experience pleasure. A cardinal, high-yield sign that straddles the mood disorders and the negative syndrome of schizophrenia.

Anhedonia

The loss or marked decrease of the capacity to experience pleasure, so that activities once enjoyed no longer give satisfaction (DSM-5-TR 2022, Sims 2015). A core symptom of a major depressive episode (loss of interest or pleasure) and one of the recognised negative symptoms of schizophrenia.

Consummatory anhedonia

Reduced pleasure experienced *in* the moment (in-the-moment liking).

Anticipatory anhedonia

Reduced pleasure *anticipated from* a future reward (wanting); research suggests it is anticipatory more than consummatory pleasure that is chiefly impaired in schizophrenia, where the patient may still enjoy an activity in the moment yet fail to seek it out.

CLINICAL ANCHOR

Anhedonia is one of the two gateway symptoms of a major depressive episode (with depressed mood) and one of the five negative-symptom domains of schizophrenia alongside avolition, asociality, affective blunting and alogia (Kaplan & Sadock 2024). Distinguish it from apathy (loss of feeling and motivation broadly) and from alexithymia (difficulty naming feelings): anhedonia is specifically the failure of *pleasure*.

17.8 Alexithymia

A difficulty identifying and describing one's own feelings. Not a psychotic sign but a trait-like disturbance of emotional awareness, coined by Sifneos (1973), that recurs in psychosomatic and personality contexts.

Alexithymia

A difficulty in identifying and describing one's own feelings, distinguishing feelings from bodily sensations of emotional arousal, coupled with an externally oriented, concrete cognitive style and impoverished fantasy life (Sifneos 1973). Literally "no words for mood".

It is associated with somatoform and psychosomatic presentations, substance use, eating disorders and cluster B personality disorders, and is measured by the Toronto Alexithymia Scale. It is a disorder of emotional *insight and articulation*, not of the experience of pleasure (contrast anhedonia) nor of expressed range (contrast blunting).

17.9 Discriminating the negative-affect signs

The exam's favourite confusion set. Four flat-looking or empty-looking states are constantly conflated. Keep the discriminator column in mind.

SIGN	WHAT IS LOST	DOMAIN OF FAULT	CLASSIC SETTING
Blunting / flattening	**Range and depth of emotional *expression***	Affect (display)	Schizophrenia (negative)
Anhedonia	**Capacity to feel *pleasure***	Hedonic experience	Depression; schizophrenia
Apathy	**Feeling tone and *motivation*; nothing matters**	Drive and feeling	Frontal, chronic schizophrenia
Alexithymia	**Ability to *identify and name* feelings**	Emotional insight	Psychosomatic, cluster B

Ask what is lost: expression (blunting), pleasure (anhedonia), motivation and feeling tone (apathy), or the words for feeling (alexithymia).

RULE **For the flat-looking states, ask what is lost.** Expression is blunting, pleasure is anhedonia, motivation and feeling tone is apathy, and the words for feeling is alexithymia.

MNEMONIC

"A FIB LIkes CAKE"

The core affect abnormalities: **A**ffect vs mood, **F**lattening, **I**ncongruity, **B**lunting; **L**ability, **I**ncontinence (emotional); **C**onstriction/restriction, **A**nhedonia, **K**eeps-calm belle indifference, al**E**xithymia. A memory hook, not a classification.

GOOD TO REMEMBER

- **Emotion:** generic stirred-up feeling state with psychic, somatic and behavioural parts.
- **Affect:** the momentary, observed, cross-sectional emotional expression (weather; what you see).
- **Mood:** the sustained, pervasive, subjective emotional state (climate; what the patient reports).
- **Depression:** sustained lowering of mood, often qualitatively distinct from ordinary sadness.
- **Elation / euphoria:** exaggerated well-being and expansiveness (mania) / milder static contentment out of keeping with circumstances.
- **Anxiety vs fear:** apprehension without an object vs apprehension at a specific identified danger.
- **Irritability:** lowered threshold for anger; prominent in mania, mixed states, depression, organic disease.
- **Perplexity:** bewildered puzzled affect, feels something strange is happening; par excellence in puerperal psychosis.
- **Apathy:** loss of feeling tone and concern, nothing matters; frontal and chronic schizophrenia, severe depression.
- **Flattening of affect:** reduced range and depth of emotional expression; schizophrenia (may be aroused underneath).
- **Blunting of affect:** coarsening of emotion and insensitivity to social context (Kraepelin's loss of delicacy).
- **Restricted / constricted affect:** dampened range milder than flattening; continuum broad to restricted or constricted to blunted to flat.
- **Incongruity of affect:** expressed emotion does not match thought content, e.g. laughing while describing a bereavement.
- **Lability of affect:** rapid, exaggerated, shallow shifts between emotional states; mania, organic, delirium.
- **Emotional incontinence:** uncontrollable weeping or laughing with little stimulus; hallmark of pseudobulbar palsy.
- **La belle indifference:** bland unconcern about a serious deficit; classically conversion disorder (low specificity now).
- **Anhedonia:** loss of the capacity to experience pleasure; core to major depression and a schizophrenia negative symptom.
- **Alexithymia:** difficulty identifying and describing one's own feelings (Sifneos 1973); Toronto Alexithymia Scale.
- **Caveat:** blunting and incongruity are characteristic of schizophrenia but not pathognomonic; judge over the whole interview, not by a single glance.

18 · Disorders of memory and of consciousness

This note teaches two neighbouring domains of descriptive psychopathology that examiners love to pair. The **disorders of memory** classify the ways in which registration, retention and recall break down, and the ways in which the *content* of what is recalled becomes distorted. The **disorders of consciousness** classify the ways in which the clear, alert awareness of self and

environment is dimmed, narrowed or fragmented. Both reward the Jasperian discipline of describing form over explanation (Jaspers 1913, Fish 2007, Sims 2015): the task is to name the sign and define it crisply, ideally with a one-line clinical example, not to theorise about mechanism.

Exam framing. Keep the two halves architecturally separate. Under memory, hold apart the loss of memory (the **amnesia**s and the organic amnesic syndrome) from the distortions of recall (the **paramnesia**s, of which **confabulation** is the flagship) and from the rare intensification, **hypermnesia**. Under consciousness, hold apart a change in the *level* of consciousness on the wakefulness continuum (**clouding**, **delirium**, drowsiness, **stupor**, coma) from a change in the *field* of consciousness (the **twilight state** and the **oneiroid** state). The neural basis of memory is developed in the Functional Neuroanatomy & Neurophysiology notes and cross-referred there; Wernicke encephalopathy and the Korsakoff syndrome are developed in full on the organic psychiatry chapter; the acute management of delirium belongs to the emergency psychiatry notes. Here we describe.

18.1 The disorders of memory: the working model

Three processes, three vulnerabilities. Memory is conventionally split into *registration* (encoding of new material), *retention* (storage), and *recall* (retrieval), layered by time-scale into immediate (working) memory, recent (short-term) memory, and remote (long-term) memory (Sims 2015). Bedside testing maps onto this: digit span probes immediate registration, a name-and-address or three-object recall at five minutes probes recent memory and new learning, and autobiographical or general-knowledge questioning probes remote memory. The classic organic profile is a severe deficit of *recent* memory and new learning with immediate memory and, initially, remote memory relatively spared, which is exactly the fingerprint of the organic amnesic syndrome below.

18.2 Amnesia: anterograde and retrograde

Definition. An **amnesia** is a pathological loss of, or gap in, memory. The single most useful division is by the temporal relation of the gap to a causative event, typically a head injury, seizure or other insult (Fish 2007, Sims 2015).

Anterograde amnesia

Loss of memory for events *after* the causative insult: the inability to lay down new memories going forward. In head injury the duration of post-traumatic amnesia (from injury to the return of continuous memory) is a rough index of severity.

Retrograde amnesia

Loss of memory for events *before* the insult, extending back from it. It typically shrinks over time and characteristically obeys Ribot's law, older and better-consolidated memories being the last to go and the first to return.

Lacunar (circumscribed) amnesia

A discrete gap for a bounded period of time, with intact memory on either side; seen after delirium, complex partial seizures and some dissociative states.

18.3 The organic amnesic syndrome (and Korsakoff)

Definition. The *organic amnesic (amnestic) syndrome* is a selective, enduring impairment of recent memory and new learning caused by identifiable brain disease, in *clear consciousness* and without global intellectual decline (ICD-10). The ICD-10 requirements are worth carrying verbatim: recent-memory impairment (anterograde and retrograde amnesia) with defective new learning; preserved immediate recall (normal digit span), attention and consciousness; preserved other intellectual function; and objective evidence of a relevant brain lesion, characteristically of the diencephalic and medial temporal structures (mammillary bodies, fornix, hippocampus, dorsomedial thalamus).

Korsakoff as the prototype. The commonest cause is thiamine deficiency in chronic alcohol dependence: Wernicke encephalopathy is the acute phase and the Korsakoff syndrome the chronic amnesic residue, together the Wernicke-Korsakoff syndrome. Its bedside signature is a dense anterograde amnesia with disorientation to time, relative sparing of remote memory, absent insight, and, in the early phase, **confabulation** filling the memory gap; confabulation tends to fade as the syndrome becomes chronic (Companion to Psychiatric Studies). The neural basis of memory and the full Wernicke-Korsakoff picture are cross-referred to the Functional Neuroanatomy & Neurophysiology notes and the organic psychiatry chapter respectively.

COMMON TRAP

The organic amnesic syndrome is *not* delirium and *not* dementia. It differs from **delirium** by the absence of any disturbance of consciousness or attention, and from dementia by the absence of global intellectual and personality decline. The discriminator to state in the viva is: an isolated, selective memory deficit in a clear sensorium.

HOLD THIS

Split memory into loss (amnesias), distortion (paramnesias, confabulation the flagship) and intensification (hypermnesia); split consciousness into level (clouding to coma) and field (twilight, oneiroid). The organic amnesic syndrome is a selective memory deficit in a clear sensorium.

18.4 Transient global amnesia and psychogenic amnesia

Two abrupt-onset amnesias to contrast. One is organic and self-limiting; one is dissociative and content-selective.

Transient global amnesia

An abrupt, isolated dense anterograde amnesia lasting some hours, in a fully alert middle-aged or older person who remains able to converse and perform complex tasks but repeatedly asks the same orienting questions ("where am I?"). Attributed to transient ischaemia or a spreading-depression-like event in the medial temporal lobes; it resolves within about 24 hours leaving only a permanent gap for the episode, and personal identity is retained throughout (Kaplan & Sadock 2024).

Psychogenic (dissociative) amnesia

A loss of memory, usually retrograde and for emotionally significant autobiographical material, that exceeds ordinary forgetting and is not due to organic disease; classically it spares neutral information

and impersonal skills. Onset follows psychological stress or trauma.

Dissociative fugue

Dissociative amnesia *plus* a purposeful journey away from home or work, often with loss of personal identity and sometimes the assumption of a new one; the person appears outwardly normal to observers during the wandering, with a dense amnesic gap for the episode afterwards (Sims 2015).

> **CLINICAL ANCHOR**
>
> Loss of memory for *personal identity* (one's own name) with preserved capacity to lay down new memories points toward a psychogenic or dissociative amnesia; the organic amnesias, by contrast, spare identity and hit new learning. This is the fastest bedside organic-versus-psychogenic discriminator, though it must be held loosely and corroborated.

18.5 The paramnesias I: confabulation and deja vu / jamais vu

Definition. A *paramnesia* is a distortion of recall in which memory is falsified, rather than simply lost; the material recalled is altered, misplaced in time, or fabricated (Fish 2007, Sims 2015).

Confabulation

The filling of a gap in memory with fabricated or misplaced material that the patient accepts as genuine recollection, without intent to deceive; classically in the Korsakoff syndrome. Fish distinguishes *momentary (provoked)* confabulation, elicited by questioning and drawn from real but displaced memories, from *fantastic (spontaneous)* confabulation, an unprompted flow of grandiose or improbable false memories seen with basal-forebrain and frontal involvement.

Deja vu

A false sense of familiarity: the conviction that a genuinely novel experience has been encountered before ("I have been here already"). A common benign experience in the healthy; when frequent, intense or stereotyped it points toward temporal lobe epilepsy (Kaplan & Sadock 2024). Related variants include deja vecu (already lived through) and deja pense (already thought).

Jamais vu

The converse: a false sense of *un*familiarity, in which a genuinely familiar situation, place or person feels strange and never before encountered. Likewise seen in temporal lobe epilepsy and in dissociative states.

18.6 The paramnesias II: retrospective falsification and delusional memory

Retrospective falsification

The unwitting distortion of a genuine memory as it is recalled, coloured by the person's present mood or beliefs, e.g. a depressed patient recalling a happy past as uniformly bleak, or an anxious one exaggerating past dangers. The event is real; its remembered emotional colouring is falsified.

Delusional memory (retrospective delusion)

The "recollection" of an event that is itself clearly delusional, or a real memory retrospectively invested with delusional significance, e.g. a patient who "remembers" that a teacher slipped LSD into his juice, the memory serving to explain his psychosis (Kaplan & Sadock 2024). A disorder of the content of thought expressed through memory, not a simple mnestic error.

18.7 Hypermnesia

Definition. Hypermnesia is an abnormal intensification or exaggeration of the capacity to recall, in which memories are retrieved with unusual vividness, detail or completeness (Sims 2015). It is described in the heightened arousal of mania and some anxiety states, under hypnosis, in eidetic ("photographic") imagery, in certain savant abilities, and around intensely emotionally charged experiences (the vividness of traumatic and flashbulb memories). It is the mirror image of amnesia and, unlike the paramnesias, is a change in quantity rather than accuracy of recall.

18.8 The disorders of consciousness: level on the wakefulness continuum

Definition. Consciousness is the awareness of the self and of the environment; the disorders of consciousness are described first as a fall in the *level* of that awareness along a continuum from full alertness to coma (Sims 2015, Fish 2007). The states below are graded points on that single dimension.

Clouding of consciousness

The mildest, most important grade: a state ranging from barely perceptible impairment to definite drowsiness, in which the person reacts incompletely to stimuli, with attention, concentration, memory and orientation impaired to varying degrees and thinking muddled, so that events may be misinterpreted. Clouding of consciousness is the *defining feature of delirium* (Shorter Oxford Textbook of Psychiatry).

Delirium

The acute confusional state: an acute, fluctuating disturbance of consciousness and attention with global cognitive impairment, disorientation, perceptual disturbance (illusions, misinterpretations, visual hallucinations), a disturbed sleep-wake cycle and altered psychomotor activity, on an organic basis. Its management is cross-referred to the emergency psychiatry notes.

Drowsiness and somnolence

Pathological sleepiness in which the patient readily lapses into sleep but is rousable to a degree; the related state Fish terms *torpor* couples drowsiness with slow thinking and a narrowed range of perception.

Coma

The deepest grade: unrousable unresponsiveness with no purposeful reaction even to strong (painful) stimuli, gradable by remaining reflex responses and EEG activity (Shorter Oxford Textbook of Psychiatry).

18.9 Stupor: the special case

Definition (the psychiatric usage). In psychiatry, **stupor** is a state of akinesis and mutism, the patient immobile, silent and unresponsive, yet with *relative preservation of consciousness*: the eyes are typically open and follow objects, or if closed are held shut against opening, reflexes are normal and posture is maintained (Shorter Oxford Textbook of Psychiatry). This is a critical and examinable divergence from neurological usage, where "stupor" implies an actual impairment of consciousness intermediate between drowsiness and coma. The psychiatric stupor is a disorder of the expression of consciousness, not necessarily of its level.

TYPE OF STUPOR	SETTING / CAUSE	DISCRIMINATING FEATURES
Organic stupor	Structural or metabolic brain disease (e.g. diencephalic or brainstem lesion, hepatic, hypoglycaemic)	**Consciousness genuinely impaired; neurological signs, abnormal EEG**
Catatonic stupor	Schizophrenia, mood disorder, organic catatonia	**Waxy flexibility, negativism, mutism, posturing; may alternate with excitement**
Depressive stupor	Severe (psychotic) depression, the extreme of retardation	**Preceded by profound retardation and low mood; recall of the period afterwards**
Dissociative stupor	Psychological trauma or conflict	**Follows stress; normal muscle tone and reflexes; no organic cause found**

Four stupors to separate: only organic stupor carries a true impairment of consciousness; the psychiatric stupors preserve it, and the discriminator is context plus the accompanying signs.

CLASSIC TRAP In psychiatry, stupor is akinesis and mutism with consciousness relatively preserved (eyes open, follow objects); in neurology it implies impaired consciousness between drowsiness and coma - the same word, opposite implication for the sensorium.

18.10 The disorders of consciousness: changes in the field

Definition. Beyond a simple dimming of level, consciousness may be *narrowed* or *qualitatively altered*, a change in the *field* rather than the level of awareness (Fish 2007, Sims 2015).

Twilight state

An abnormal state of narrowed but relatively *coherent* consciousness: awareness is constricted to a limited set of ideas and affects, yet the patient may still perform complex, apparently purposeful actions, of which there is subsequent amnesia. Classically seen in epilepsy (postictal and complex partial states), and in dissociative and organic (e.g. anticholinergic) conditions. Emotional outbursts or violent acts may occur during a twilight state (Kaplan & Sadock 2024; Clinical Methods in Psychiatry, AIIMS 2024).

Oneiroid state

A dream-like alteration of consciousness in which vivid, often fantastic scenic (dream-like) imagery unfolds and the patient is partly detached from the real environment while not asleep; primary and secondary process thinking intermingle. If prolonged, an oneiroid state may merge into a twilight state (Shorter Oxford Textbook of Psychiatry; Kaplan & Sadock 2024). Described in catatonic and cycloid psychoses and in some organic and toxic states.

PEARL

Distinguish a change in *level* from a change in *field*. Clouding, drowsiness and coma dim the overall brightness of consciousness; the **twilight state** and the **oneiroid** state leave a preserved brightness but distort its *content and range*, narrowing the field (twilight) or filling it with dream-imagery (oneiroid). The historical Ganser syndrome, with its twilight state, approximate answers (vorbeireden) and clouded consciousness, sits at the boundary of the two (Kaplan & Sadock 2024).

MNEMONIC

Level = "CD-DS-C"; Field = "TO"

The *level* continuum in order of deepening: **C**louding, **D**rowsiness, **D**elirium (as the clinical syndrome of clouding), **S**tupor (psychiatric sense, level preserved), **C**oma. The *field* changes: **T**wilight (narrowed, coherent) and **O**neiroid (dream-like).

GOOD TO REMEMBER

- **Disorders of memory:** split into loss of memory (amnesias, organic amnesic syndrome), distortions of recall (paramnesias), and intensification (hypermnesia).
- **Anterograde amnesia:** loss of memory for events *after* the insult (failure of new learning); post-traumatic amnesia duration indexes head-injury severity.
- **Retrograde amnesia:** loss of memory for events *before* the insult; shrinks with time, obeys Ribot's law (recent memories most vulnerable).
- **Organic amnesic syndrome:** selective recent-memory and new-learning deficit in clear consciousness, no global intellectual loss (ICD-10); diencephalic / medial-temporal lesions.
- **Korsakoff syndrome:** chronic amnesic residue of thiamine deficiency in alcohol dependence; dense anterograde amnesia, disorientation, absent insight, early confabulation (cross-refer the Functional Neuroanatomy & Neurophysiology notes and the organic psychiatry chapter).
- **Transient global amnesia:** abrupt isolated anterograde amnesia for hours in an alert older person, repeated questioning, identity retained, resolves in ~24 h.
- **Psychogenic (dissociative) amnesia:** retrograde loss of emotionally significant autobiographical memory after stress; spares neutral facts and skills.
- **Dissociative fugue:** dissociative amnesia plus purposeful travel and loss of / new personal identity, with amnesia for the episode.
- **Paramnesia:** a distortion (falsification) of recall rather than a loss.
- **Confabulation:** filling a memory gap with fabricated / misplaced material accepted as true, without intent to deceive; classic in Korsakoff; momentary (provoked) vs fantastic (spontaneous) types.
- **Deja vu:** false sense of familiarity with a novel experience; frequent/stereotyped forms suggest temporal lobe epilepsy.
- **Jamais vu:** false sense of unfamiliarity with a genuinely familiar situation; temporal lobe epilepsy, dissociation.
- **Retrospective falsification:** a real memory unwittingly distorted by present mood or belief.
- **Delusional memory:** recollection of a clearly delusional event, or a real memory invested with delusional meaning; a content-of-thought disorder.
- **Hypermnesia:** abnormal intensification of recall (mania, hypnosis, eidetic imagery, flashbulb / traumatic memories); the mirror of amnesia.
- **Disorders of consciousness:** split into change of *level* (wakefulness continuum) and change of *field* (narrowing / qualitative alteration).
- **Clouding of consciousness:** incomplete reaction to stimuli with impaired attention, memory and orientation; the defining feature of delirium.
- **Delirium:** acute, fluctuating clouding with global cognitive impairment and perceptual disturbance on an organic basis (management cross-referred to the delirium and neurocognitive notes).
- **Drowsiness / somnolence (torpor):** pathological rousable sleepiness with slow thinking and narrowed perception.
- **Coma:** unrousable unresponsiveness with no purposeful response to strong stimuli; graded by reflexes and EEG.
- **Stupor (psychiatric):** akinesis and mutism with *relative preservation of consciousness* (eyes open, follow objects); differs from neurological usage (which implies impaired consciousness). Types: organic, catatonic, depressive, dissociative.
- **Twilight state:** narrowed but relatively coherent consciousness with complex purposeful acts and later amnesia; epilepsy, dissociation, organic states.
- **Oneiroid state:** dream-like consciousness with vivid scenic imagery while awake; catatonic / cycloid psychoses, organic-toxic states; may merge into a twilight state if prolonged.

19 · Disorders of movement, and attention, orientation and insight

This note closes the phenomenology by teaching two remaining domains. The **disorders of motor** function are the abnormalities of movement and behaviour that arise from a disordered mind rather than from a primary neurological lesion, with the catatonic syndrome at their centre. Then come the cognitive domains that complete the mental state examination: attention, orientation, insight and judgement. As throughout descriptive psychopathology, the discipline is to name the sign and define it crisply (Fish 2007; Sims 2015).

Exam framing. Catatonia is high-yield and returns as a short note (its clinical features), so learn the signs precisely and be able to separate the abnormal movements from one another. The cognitive close of the mental state, attention, orientation, insight and judgement, is where a candidate loses easy marks by treating insight as all-or-none; the examiner wants it graded. The acute treatment of catatonia (benzodiazepines, ECT) belongs to the emergency psychiatry notes and is cross-referred.

19.1 Catatonia: the syndrome

Definition. **Catatonia** is a syndrome of psychomotor dysregulation in which the normal relationship between will and movement is disturbed, producing a striking combination of motor, volitional and behavioural signs (Kahlbaum 1874; Fish 2007). It was long tied to schizophrenia but is now recognised as transdiagnostic: it complicates mood disorders (especially severe depression and mania) more often than schizophrenia, and it arises from many organic and toxic causes (encephalitis, metabolic derangement, autoimmune disease). It can present as a retarded/stuporous form or an excited form, and the two may alternate. Modern operationalised criteria (DSM-5, and rating instruments such as the Bush-Francis catatonia rating scale) require a threshold number of signs from the list below (Bush and colleagues 1996).

19.2 The catatonic signs

The named signs, each defined. The examiner rewards the ability to define each sign in a line, so hold the list precisely (Fish 2007; Sims 2015).

Stupor

Akinesis and mutism with relative preservation of consciousness (the catatonic stupor; cross-refer the consciousness topic).

Waxy flexibility (cerea flexibilitas)

The limbs, when moved by the examiner, hold their new posture with a smooth, even, plastic resistance, like bending a wax rod; the imposed posture is then maintained.

Catalepsy and posturing

The spontaneous maintenance of an abnormal, often uncomfortable posture for long periods; psychological pillow, in which the head is held raised off the bed as if on a pillow, is the classic example.

Negativism

A motiveless resistance to all instructions or attempts to be moved, and the doing of the opposite of what is asked; a disorder of the will, not simple non-cooperation.

Mutism and automatic obedience

Mutism is a verbal near-absence with no organic cause. Automatic obedience is the opposite pole to negativism: the patient carries out every instruction like an automaton, even harmful ones.

Ambitendency

An alternation between opposite movements arising from a conflict of will, for example repeatedly half-extending and withdrawing the hand when asked to shake hands.

Gegenhalten and mitgehen

Gegenhalten (opposition) is a resistance to passive movement proportional to the force applied; mitgehen (going along) is an excessive, exaggerated movement of a body part in response to the lightest pressure ("anglepoise lamp" sign).

Excitement

The excited form: purposeless, frenzied, agitated motor activity not influenced by external stimuli, which may become a life-threatening malignant catatonia.

COMMON TRAP

Waxy flexibility, negativism and automatic obedience look contradictory but coexist in the same syndrome because all three are disorders of the *will*: catatonia is a dysregulation of volition, so a patient may resist one instruction (negativism) yet passively hold an imposed posture (waxy flexibility) minutes later. Do not expect internal consistency.

19.3 Abnormal movements and behaviours

The repetitive and imitative signs. Beyond the catatonic core, descriptive psychopathology names several disorders of purposeful movement, and the exam turns on telling them apart (Fish 2007; Sims 2015).

Mannerism

An odd, stilted or bizarre *goal-directed* movement or elaboration of a normal action: a stereotyped, theatrical salute instead of an ordinary greeting. The movement has a purpose, but it is performed strangely.

Stereotypy

A repetitive, regular, *non-goal-directed* movement (rocking, rubbing, repeatedly touching an object) carried out uniformly and without evident purpose. Purposelessness is the discriminator from mannerism.

Tic

A sudden, involuntary, rapid, recurrent, non-rhythmic movement or vocalisation, often briefly suppressible, distinct from the catatonic and stereotyped signs.

Echopraxia

The automatic, senseless imitation of another person's *movements*, even when asked not to; its verbal counterpart is echolalia, the imitation of another's speech.

CLINICAL ANCHOR

Catatonic signs are a medical alert, not just a description. Recognising waxy flexibility, mutism, negativism or posturing should prompt a lorazepam challenge and a search for an organic cause, because untreated catatonia risks dehydration, venous thromboembolism and malignant catatonia. The phenomenology is the entry point to a treatable emergency; the acute management is developed on the emergency psychiatry notes.

RULE **Purpose separates mannerism from stereotypy.** A mannerism is an odd but goal-directed movement; a stereotypy is repetitive and non-goal-directed.

19.4 Attention and concentration

Definition. **Attention** is the active direction of consciousness onto a target, and concentration is its sustained maintenance over time (Sims 2015). Disorders include distractibility (attention captured by every passing stimulus, as in mania and delirium), impersistence (inability to sustain attention), and the narrowed, poorly shifted attention of clouded consciousness. At the bedside attention and concentration are tested by digit span (registration and immediate attention), serial sevens or serial threes, and reciting the months of the year in reverse.

19.5 Orientation

Definition. **Orientation** is the awareness of oneself in relation to time, place and person: knowing the date and time, the current location, and the identity of oneself and others. Disorientation, a loss of this awareness, is a cardinal sign of an *organic* disturbance of consciousness (delirium and dementia) and characteristically affects time first, then place, then person. Orientation is closely tied to attention and memory: a patient cannot be oriented if attention or new learning is grossly impaired. Preserved orientation in a floridly psychotic patient points away from an organic confusional state.

19.6 Insight

Definition, and why it is graded. **Insight** is the patient's awareness of their own mental state: that they are ill, that the illness is psychiatric, and that treatment is needed. The examinable point is that insight is not all-or-none but a graded, multidimensional phenomenon. A useful clinical grading runs: complete denial of illness; slight awareness of being ill and needing help but denying it at the same time; awareness of being ill but attributing it to external or physical causes; awareness that the illness is due to something unknown in the self; intellectual insight (admitting illness and that symptoms are due to a disturbance in the self, but without applying this knowledge); and true (emotional) insight, in which the awareness leads to changed behaviour and adherence. David's three-dimensional model (awareness of illness, correct relabelling of symptoms as pathological, and treatment adherence) is the modern operationalisation. Insight has prognostic and medico-legal weight (it bears on capacity and on adherence).

HOLD THIS

Catatonia is a transdiagnostic dysregulation of the will (commoner in mood disorders than schizophrenia), and insight is graded, not all-or-none. David's three dimensions: awareness of illness, relabelling of symptoms, and treatment adherence.

19.7 Judgement

Definition. **Judgement** (also spelt **judgment**) is the capacity to assess a situation correctly and to act sensibly within it, weighing options and consequences. It is assessed by observing the patient's real decisions (social, financial, personal) and, historically, by hypothetical test questions, though these are unreliable. Impaired judgement is prominent in mania (reckless spending, disinhibition), in the frontal-executive syndromes, in intoxication, and in psychosis when actions follow delusional beliefs. Judgement and insight together complete the cognitive close of the mental state examination.

PEARL

Orientation is the fastest bedside organic screen. A patient who is disoriented to time and place, especially with fluctuation and inattention, has an organic disturbance of consciousness (delirium) until proven otherwise, whatever the psychiatric content; a patient with florid hallucinations and delusions but intact orientation and attention is more likely in a primary psychotic state. Test orientation early.

MNEMONIC

Movement: "MSET" and "WooNBAG"

The abnormal movements to separate: **M**annerism (goal-directed, odd), **S**tereotypy (non-goal-directed, repetitive), **E**chopraxia (imitates movement), **T**ic. The catatonic core: **W**axy flexibility, autOmatic obedience, **N**egativism, **B**izarre posturing/catalepsy, **A**mbitendency, **G**egenhalten (with mutism and stupor).

GOOD TO REMEMBER

- **Disorders of motor function:** abnormalities of movement and behaviour of psychological origin; the catatonic syndrome is the core.
- **Catatonia:** a transdiagnostic syndrome of psychomotor and volitional dysregulation (Kahlbaum); commoner in mood disorders than schizophrenia; retarded/stuporous and excited forms.
- **Waxy flexibility (cerea flexibilitas):** limbs hold an imposed posture with smooth plastic resistance.
- **Negativism:** motiveless resistance to instruction, doing the opposite; a disorder of will.
- **Automatic obedience and ambitendency:** automaton-like compliance; alternation between opposite movements from conflict of will.
- **Catalepsy / posturing, gegenhalten, mitgehen:** maintained abnormal posture; force-proportional opposition; exaggerated go-along movement.
- **Mannerism:** odd but *goal-directed* movement; **stereotypy:** repetitive *non-goal-directed* movement (the discriminator is purpose).
- **Echopraxia:** automatic imitation of movement (echolalia = imitation of speech).
- **Attention:** active direction of consciousness (concentration = its maintenance); tested by digit span and serial sevens; distractibility in mania and delirium.
- **Orientation:** awareness of time, place and person; lost first for time; disorientation is a cardinal organic sign.
- **Insight:** awareness of being ill, of the illness being psychiatric, and of needing treatment; graded, not all-or-none (David's three dimensions: awareness, relabelling, adherence).
- **Judgement (judgment):** capacity to assess a situation and act sensibly; impaired in mania, frontal syndromes, intoxication and psychosis.

Discriminate

20 · Discriminate: pick the test, name the sign

The two bands of these notes are examined most often as acts of discrimination: choosing the right instrument for a clinical problem, and separating one phenomenological sign from its near-neighbour. This is the step that turns a catalogue into a usable skill. Read the tables below as decision aids, not lists.

20.1 Band A: choosing the right test for the clinical question

Match the tool to the referral question. A psychological test is chosen to answer a specific **clinical question**, and good **test selection** starts from the **referral question** rather than from a favourite instrument. The table pairs the common questions with the answer to "**which test**", so you can **choose the test** that the problem actually needs.

THE CLINICAL / REFERRAL QUESTION	CHOOSE THE TEST	WHY
Is there intellectual disability, and how severe?	**A Wechsler (WAIS/WISC) or Binet-Kamat intelligence test plus a Vineland/VSMS adaptive measure**	ID needs both a low IQ and a deficit in adaptive behaviour; measure both
Which cognitive domains are impaired after this head injury or in this dementia?	**A neuropsychological battery (Halstead-Reitan or a flexible battery; NIMHANS battery in India)**	Profiles attention, memory, language, visuospatial and executive function domain by domain
What is the personality structure, or is the presentation being feigned?	**The MMPI (with its validity scales) and, for depth, the projectives**	The MMPI validity scales detect faking; the projectives add a dynamic picture
Is this child developing normally?	**A developmental screen (DST, Denver) or a Bayley / Gesell assessment**	Yields a developmental quotient against age norms
How severe is this depression, and is it responding to treatment?	**A symptom rating scale: HAM-D or MADRS (mania YMRS; psychosis PANSS; OCD Y-BOCS)**	Quantifies severity and tracks change over time

Test selection is driven by the referral question: ability, cognitive profile, personality, development or symptom severity each point to a different family of instrument.

20.2 Band B: illusion versus hallucination versus pseudohallucination

The perception triad. The single most tested discrimination in phenomenology separates the **illusion** (a real stimulus misperceived) from the **hallucination** (a percept with no stimulus, in outer objective space, full reality, insight lost) and from the **pseudohallucination** (a percept in inner subjective space, lacking full substantiality, insight relatively preserved). The two discriminators that do most of the work are the presence of a real stimulus and the locus (outer versus inner space).

DISCRIMINATOR	ILLUSION	HALLUCINATION	PSEUDOHALLUCINATION
Real external stimulus	Yes, misperceived	**No**	**No**
Locus	Outer space	Outer objective space	**Inner subjective space**
Reality status	Real object transformed	Full force of a true percept	**Lacks full substantiality**
Insight	Corrects on attention	Absent	**Relatively preserved**

Real stimulus separates the illusion from the other two; the outer-versus-inner locus separates the hallucination from the pseudohallucination.

20.3 Band B: obsession versus overvalued idea versus delusion

The belief triad. The second high-yield discrimination separates the **obsession** (ego-dystonic, resisted, insight retained) from the **overvalued idea** (a comprehensible belief held strongly but not with absolute fixity) from the **delusion** (ego-syntonic, unresisted, held with absolute

conviction and no insight). Read the row for insight and resistance and the answer usually falls out.

DISCRIMINATOR	OBSESSION	OVERVALUED IDEA	DELUSION
Conviction / fixity	Recognised as senseless, doubted	Strong, not absolute	**Absolute, incorrigible**
Resistance	**Actively resisted**	Not resisted	Not resisted
Ego relation	**Ego-dystonic (intrusive)**	Ego-syntonic	Ego-syntonic
Insight	Preserved	Partial	**Absent**
Typically in	OCD	Anorexia, dysmorphophobia, morbid jealousy	Psychotic disorders

Resistance and retained insight mark the obsession; absolute conviction with no insight marks the delusion; the overvalued idea sits in between.

HOLD THIS

Band A discriminates by the referral question; Band B by two triads. Perception: real stimulus and locus separate illusion, hallucination and pseudohallucination. Belief: resistance and insight separate obsession, overvalued idea and delusion.

20.4 The other near-misses worth pre-empting

Three more pairs the exam rewards. A few further discriminations recur across the phenomenology and are worth rehearsing together.

Blunting versus incongruity of affect

Blunting is a *loss of range and depth* of emotional expression; incongruity is emotion that is present but *does not match* the thought content (laughing while describing a bereavement). Both occur in schizophrenia; one is reduced affect, the other mismatched affect.

Delirium versus dementia

Delirium is acute, fluctuating, with clouded consciousness and impaired attention; dementia is chronic, stable or progressive, with a clear sensorium until late. Consciousness and time-course separate them.

Mannerism versus stereotypy

A mannerism is an odd but *goal-directed* movement; a stereotypy is a repetitive *non-goal-directed* movement. Purpose is the discriminator.

COMMON TRAP

The word "unreal" hides three different phenomena. A patient who feels the world is unreal but knows it is a feeling has *derealisation* (insight kept); a patient who has a vivid inner-space voice they know is not a true perception has a *pseudohallucination*; a patient convinced as fact that they do not exist has a *nihilistic delusion*. The content overlaps; the discriminators are the locus and the insight, never the word itself. Likewise "hears voices" is not automatically a hallucination: an illusion elaborates a real sound, a functional hallucination is triggered by one, and a pseudohallucination sits in inner space.

GOOD TO REMEMBER

- **Test selection:** start from the referral question (ability, cognitive profile, personality, development, symptom severity), then choose the test family that answers it.
- **ID work-up:** intelligence test plus an adaptive-behaviour measure (both are required for the diagnosis).
- **Illusion vs hallucination vs pseudohallucination:** real stimulus (illusion only); outer vs inner space (hallucination vs pseudohallucination); insight lost only in the true hallucination.
- **Obsession vs overvalued idea vs delusion:** resisted and ego-dystonic with insight (obsession); absolute conviction, unresisted, no insight (delusion); the overvalued idea is in between.
- **Blunting vs incongruity:** reduced range vs mismatched affect. **Delirium vs dementia:** clouded fluctuating vs clear chronic. **Mannerism vs stereotypy:** goal-directed vs purposeless.

Apply and consolidate

21 · Apply: four assessment and phenomenology vignettes

Four short worked vignettes put these notes to use. Each gives a brief presentation, then the reasoning, then the read. Cover the reasoning and try to reach the answer first; the discriminator that carries each case is the point to internalise.

21.1 A test-selection case

VIGNETTE 1

Case: A 7-year-old boy is referred because he is failing at school and is slow to acquire self-care skills. The paediatrician asks whether he has intellectual disability and, if so, how severe.

Reasoning. Intellectual disability is defined by two things together, significantly subaverage intellectual functioning *and* a deficit in adaptive behaviour, both with childhood onset. A single test cannot answer the referral. The intellectual limb needs an individually administered intelligence test normed for Indian children (the Binet-Kamat test or Malin's MISIC; a Wechsler where appropriate). The adaptive limb needs an adaptive-behaviour measure (the Vineland scales or the VSMS, yielding a social quotient). Severity is then graded, and in current systems (DSM-5, ICD-11) the grading rests on adaptive functioning rather than the IQ score alone.

The read. Choose an intelligence test *and* an adaptive-behaviour scale, not an IQ test alone. Grade severity primarily on adaptive functioning. Add a developmental and sensory work-up to exclude a treatable cause.

21.2 An IQ interpretation

VIGNETTE 2

Case: An adult completes the WAIS. The Verbal Comprehension index is 108, the Perceptual Reasoning index is 71, and the Full-Scale IQ is 88. What does the profile mean?

Reasoning. The deviation IQ has a mean of 100 and a standard deviation of 15, so a Full-Scale IQ of 88 falls in the low-average band (80 to 89), which alone might be read as mild global underfunctioning. But the Full-Scale IQ conceals a large split: verbal comprehension is average (108) while perceptual reasoning is borderline (71), a 37-point gap. When the index scores diverge this much, the Full-Scale IQ is not a meaningful summary of a single ability; the split itself is the finding and points to a selective, often perceptual-organisational or nonverbal, deficit that warrants a neuropsychological work-up.

The read. Do not report the Full-Scale IQ of 88 as "low average and homogeneous". Report the significant verbal-performance split and investigate the low perceptual reasoning index; the pattern, not the single number, carries the clinical meaning.

RULE **When the index scores scatter widely, the Full-Scale IQ stops being a meaningful summary.** The split itself is the finding; report and investigate it rather than the single global number.

21.3 A phenomenology spotter

VIGNETTE 3

Case: A man reports that whenever, and only when, the ceiling fan is running, he hears a clear voice speaking to him through the room; he still hears the fan as a fan at the same time. Name the sign.

Reasoning. There is a real external stimulus (the fan) that is *necessary* to provoke the experience, the stimulus is still perceived normally as itself, and the added percept, the voice, occurs together with it and in the same (auditory) modality. That is not an illusion (the voice is not an elaboration of the fan noise), not an ordinary hallucination (a real stimulus is required), and not a reflex hallucination (which would cross to a different modality). It is a functional hallucination.

The read. Functional hallucination: same modality as the triggering stimulus, both perceived together. Contrast the reflex hallucination, where a stimulus in one modality triggers a hallucination in another.

21.4 A first-rank-symptom read

VIGNETTE 4

Case: A young woman says that when she saw a red car pass in the street, she knew instantly and with total certainty that she had been chosen by God to save the country. She is sure the two are connected. What is the sign, and does it clinch a diagnosis?

Reasoning. A real, normally perceived object (the red car) is given an immediate, self-referential delusional meaning that is not understandable from the perception itself. This is a delusional perception, one of Jaspers' primary delusional experiences and a Schneiderian first-rank symptom. The important second half of the question is diagnostic weight: first-rank symptoms are suggestive of schizophrenia but are *not* pathognomonic (they occur in mania and organic psychoses, and a fifth of people with schizophrenia never show them; Carpenter and colleagues 1973), and DSM-5 and ICD-11 have removed their special diagnostic status.

The read. Delusional perception (a primary delusion and a first-rank symptom). It raises the probability of schizophrenia but does not clinch it; the diagnosis rests on the whole picture and course, not one sign.

HOLD THIS

Two meta-lessons carry every vignette: on the test side, the pattern beats the single number; on the phenomenology side, the named form beats the content, and no single sign clinches a diagnosis.

GOOD TO REMEMBER

- **Vignette 1 (test selection):** intellectual disability needs an intelligence test *and* an adaptive-behaviour scale; grade severity by adaptive function.
- **Vignette 2 (IQ interpretation):** a large verbal-performance / index split makes the Full-Scale IQ misleading; report and investigate the split.
- **Vignette 3 (spotter):** a real stimulus needed, perceived alongside the hallucination in the same modality, is a functional hallucination.
- **Vignette 4 (first-rank):** a real percept given sudden delusional meaning is a delusional perception; first-rank symptoms are suggestive of, but not pathognomonic for, schizophrenia.

22 · Consolidate: mnemonic, retrieval and synthesis

Three devices close these notes: a master mnemonic that chains both bands, a set of answer-free retrieval prompts to test yourself against, and the whole-day synthesis map to redraw from memory. Use them in that order.

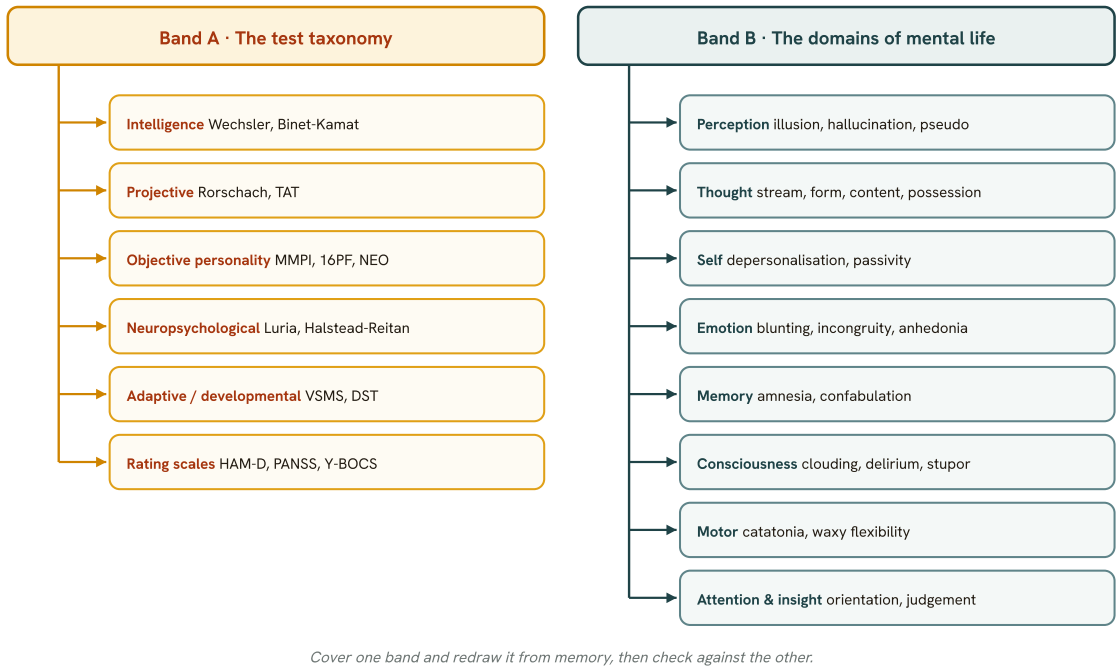


Fig 6.8 The synthesis map. It has two halves that mirror each other: a taxonomy of the tests we use to measure the mind, and a taxonomy of the domains in which the mind can go wrong. Redraw each band from memory, filling in the example instruments on the left and the example signs on the right, then check one against the other. If both columns come back, the material is consolidated.

22.1 The master mnemonic

MNEMONIC

Tests "I-PONAR"; Mind "PT-SEM-CMA"

This **mnemonic** chains the whole set of notes. The **test taxonomy (I-PONAR)**: **I**ntelligence, **P**rojective, **O**bjective personality, **N**europsychological, **A**daptive/developmental, **R**ating scales. The **domains of mental life (PT-SEM-CMA)**: **P**erception, **T**hought (with delusions and the first-rank symptoms), **S**elf, **E**motion, **M**emory, **C**onsciousness, **M**otor, and **A**ttention/orientation/insight. Recall the two strings and every topic in these notes hangs off a letter: the tests you would reach for, and the domains in which the mind can go wrong.

22.2 Retrieval practice

RETRIEVAL PRACTICE, COVER THE ANSWERS

Use these as **active recall** prompts: cover the answers, answer each aloud or on paper, then check. Spaced **retrieval practice** across the two bands is what fixes this material.

1. Name the six families of psychological test and one instrument in each.
2. Distinguish the types of reliability from the types of validity; which one caps the other?
3. What is the mean and standard deviation of the deviation IQ, and where does the intellectual-disability range begin?
4. Describe the two-phase administration of the Rorschach and name the five Exner coding axes.
5. List the MMPI validity scales and say what each detects.
6. Name three frontal or executive neuropsychological tests and what each measures.
7. Which Indian tests adapt the Stanford-Binet and the WISC?
8. Define an illusion, a hallucination and a pseudohallucination on the discriminators of stimulus, locus and insight.
9. Give the four Jaspersian ways thought can be disordered (stream, form, content, possession) with one example of each.
10. Separate a primary from a secondary delusion, and name three primary delusional experiences.
11. List the Schneiderian first-rank symptoms, and state whether they are pathognomonic of schizophrenia.
12. Define depersonalisation and derealisation, and give the feature that keeps them from being delusions.
13. Distinguish blunting from incongruity of affect, and anhedonia from alexithymia.
14. Separate the four types of stupor, and name the two changes in the field of consciousness.
15. Define waxy flexibility, negativism, mannerism and stereotypy, and give the discriminator between mannerism and stereotypy.

22.3 The synthesis map

Redraw these notes in two halves. The final device is the **synthesis map** for these notes, which you should **redraw from memory** on a blank page. It has two mirror halves. On the left, the test-taxonomy band: the six families, each with what it measures and one anchoring instrument. On the right, the domains-of-mental-life band: the eight domains, each with its characteristic signs. Cover one half and reconstruct it from the other, filling in the example instruments on the left and the example signs on the right. If both columns come back cleanly, the material is consolidated; if a branch is blank, that is the topic to revisit. The figure accompanying this section is the map to copy first, then reproduce unaided.

Previously asked

Real long-essay (25-mark) and short-note (10-mark) questions from the psychometry, assessment and descriptive-psychopathology territory, most-recent year shown.

LONG ESSAYS (25 MARKS)

Q Define emotions. Discuss the various theories and the psychopathological presentations related to emotion. MUHS 2017

Q Describe the perceptual processes and the various disorders of perception. MUHS 2014

SHORT NOTES (10 MARKS)

Q Rorschach test. MUHS 2020

Q Indications of various psychiatric disorders on the Rorschach test. MUHS 2020

Q Minnesota Multiphasic Personality Inventory (MMPI). MUHS 2016

Q Rating scales in psychiatry. MUHS 2020

Q Clinical features of catatonia. MUHS 2020

This territory is examined in two recurring ways. On the psychometry side the projectives (the Rorschach above all), the MMPI and the rating scales come as short notes, so prepare each test to give its author, what it measures and how it is scored in a few lines. On the phenomenology side the disorders of perception and the psychopathology of emotion recur as full essays, and catatonia as a short note, so be able to define each sign precisely and place it in its domain. The theories of intelligence, emotion and personality are covered in the General and Developmental Psychology and Social, Learning & Personality Psychology notes; the acute assessment and management of the catatonic or violent patient is developed in the emergency psychiatry chapter; and the fuller catalogue of clinician rating scales is taken up again in the Paper III psychotherapy and assessment notes.

Quick review

The whole picture in one table	
THE TEST TAXONOMY	Every test belongs to a family defined by what it measures: intelligence (ability), projective and objective (personality), neuropsychological (brain-behaviour), adaptive and developmental (functioning), and rating scales (symptom severity). Read a referral by deciding which family it points to.
TEST CONSTRUCTION	A good test is standardised (uniform administration, norms), reliable and valid. Reliability (consistency): test-retest, inter-rater, internal consistency (Cronbach's alpha, split-half). Validity (measures what it claims): face, content, criterion (concurrent, predictive), construct (convergent, discriminant). Item analysis and test bias. Validity requires reliability, not the reverse. Distinct from research reliability and validity, covered in the Research Methods, Biostatistics & Epidemiology notes.
INTELLIGENCE TESTS	Ratio IQ (mental age over chronological age) gave way to the deviation IQ (mean 100, SD 15). The Stanford-Binet lineage and the Wechsler scales (WAIS, WISC): verbal and performance subtests to four index scores to a Full-Scale IQ. Classification bands: average 90 to 109, intellectual disability below 70 (mild, moderate, severe, profound). DSM-5 grades ID by adaptive function. Theories are covered in the General and Developmental Psychology notes.
RORSCHACH	Ten inkblot cards (Hermann Rorschach, 1921); a projective test of personality and thought organisation. Free-association then inquiry; scored on the Exner system by location, determinants, form quality, content and popular responses (R-PAS is the successor). Reliability and validity are contested.
PROJECTIVE TESTS	The projective hypothesis: ambiguous stimuli reveal unconscious material. TAT (Murray, story-telling to ambiguous cards; CAT for children), sentence completion (Rotter), Draw-a-Person (Machover). Rich but low-reliability; the counterpart to the objective inventories.
OBJECTIVE PERSONALITY	Structured self-report with fixed scoring. MMPI (Hathaway and McKinley, empirically keyed; validity scales L, F, K and ten clinical scales), 16PF (Cattell), NEO-PI-R (the Big Five), EPQ (Eysenck's PEN). Operationalise the personality theories from the Social, Learning & Personality Psychology notes; validity scales guard against faking.
NEUROPSYCHOLOGICAL TESTING	Fixed batteries (Halstead-Reitan) versus the flexible, hypothesis-driven approach; the Luria-Nebraska battery. Frontal and executive tests: Wisconsin Card Sorting (set-shifting), Stroop (inhibition), Trail Making A and B, verbal fluency. Bender Gestalt for visuoconstruction. Used in dementia, TBI and localisation.
ADAPTIVE AND DEVELOPMENTAL SCALES	Adaptive behaviour (now central to the ID diagnosis): the Vineland scales and the VSMS (social

The whole picture in one table	
	quotient). Developmental screening and assessment: DST (Bharat Raj), Denver, Bayley, Gesell schedules, Seguin form board. Yield developmental and social quotients.
RATING SCALES	Clinician-rated symptom scales by domain: depression (HAM-D, MADRS), mania (YMRS), psychosis (BPRS, PANSS), OCD (Y-BOCS); global (CGI), movement (AIMS), cognition (MMSE, MoCA). Used to quantify severity and track response in trials and in the clinic.
INDIAN TEST ADAPTATIONS	Intelligence: Binet-Kamat (BKT), Malin's MISIC (Indian WISC), Bhatia's performance battery. Adaptive and developmental: VSMS Indian norms (Malin), DST (Bharat Raj). Neuropsychology: the NIMHANS neuropsychological battery, PGI Battery of Brain Dysfunction and PGI Memory Scale. Adaptation matters for norms, language and literacy.
DESCRIPTIVE PSYCHOPATHOLOGY	The theory-free description of abnormal experience (Jaspers, Fish, Sims). Form (the kind of experience) before content (what it is about). The domains of mental life: perception, thought, self, emotion, memory, consciousness, motor, and attention, orientation and insight. A precise sign is the unit of the mental state examination.
DISORDERS OF PERCEPTION	Sensory distortions (a real percept altered); illusions (a real stimulus misperceived); hallucinations (a percept without a stimulus, in outer space, full reality, no insight) by modality and the special types (functional, reflex, extracampine, autoscopy, hypnagogic); pseudohallucination (inner subjective space, lacks full substantiality, insight retained). Mechanism theories are covered in the General and Developmental Psychology notes.
DISORDERS OF THOUGHT	Stream (flight of ideas, thought block, circumstantiality), form (formal thought disorder: loosening, derailment, knight's-move, neologisms), content (overvalued ideas, obsessions, delusions), and possession (thought insertion, withdrawal, broadcast, the first-rank alienations).
DELUSIONS	A fixed false belief, absolute conviction, incorrigible, out of cultural keeping. Jaspers' primary (autochthonous: delusional mood, delusional perception, sudden idea, delusional memory) versus secondary. Types by content: persecutory, grandiose, referential, nihilistic (Cotard), erotomanic, jealousy, misidentification (Capgras). Delusion versus overvalued idea versus obsession.
FIRST-RANK SYMPTOMS	Schneider's pragmatic markers: thought echo and third-person voices with running commentary; thought insertion, withdrawal, broadcast; passivity of act, impulse, affect and somatic passivity; delusional perception. Not pathognomonic (seen in mania and organic states; absent in some schizophrenia) and stripped of special status in DSM-5 and ICD-11.
DISORDERS OF SELF AND EMOTION	Self: loss of the ego boundary, depersonalisation (the self feels unreal) and derealisation (the world does),

The whole picture in one table	
	the "as if" quality preserving insight; the dimensions of ego-consciousness; passivity. Emotion: distinguish affect, mood and emotion; blunting and flattening, incongruity of affect, lability, anhedonia and alexithymia.
MEMORY AND CONSCIOUSNESS	Memory: anterograde and retrograde amnesia, Korsakoff, transient global amnesia, and the paramnesias (confabulation, deja vu, jamais vu). Consciousness: the level (clouding, delirium, stupor, coma) and the field (twilight and oneiroid states). Cross-refers to the delirium and organic psychiatry chapters.
MOTOR, ATTENTION AND INSIGHT	Motor: catatonia (waxy flexibility, negativism, posturing, stupor, automatic obedience) and abnormal movements (mannerism, stereotypy, echopraxia). Then the cognitive close of the mental state: attention and concentration, orientation, insight (graded, not all-or-none) and judgement.
DISCRIMINATE AND APPLY	Band A: match the clinical or referral question to the right test (query ID to a Wechsler plus a Vineland; cognitive decline to a neuropsychological battery; depression severity to HAM-D or MADRS). Band B: tell illusion from hallucination from pseudohallucination, and obsession from overvalued idea from delusion. Then read four vignettes: a test choice, an IQ interpretation, a phenomenology spotter and a first-rank read.

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These notes are grounded in the standard texts (the source hierarchy below); each test is attributed to its author and each sign to its describing text, and landmark, contested or numeric claims carry a PubMed-verified journal citation. Every PMID here was checked against PubMed this build, and any citation whose identifier did not resolve to the cited paper was corrected or dropped.

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