WEAVE SPRINT · PAPER I

Social, Learning & Personality Psychology

The three arenas of the psychology paper: how people are moved by other people, how behaviour is learned and unlearned, and how the whole person is theorised. Attitudes and conformity and the crowd; conditioning, reinforcement and the therapies built on it; the defences, the object-relations school and the trait, type and humanistic models of personality. One complete set of notes, built so you can tell the paradigms apart and place a case in each.

CONTENTS

- Orientation
- Social psychology
- Learning and behaviour
- Personality and psychodynamic theory
- Special topics
- Discriminate
- Apply and consolidate

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Social, Learning & Personality Psychology

Seven sections · 20 topics · one complete notes document

These notes complete the psychology of the paper by covering the three domains the General and Developmental Psychology notes deliberately held back: the social, the learned and the theorised person. Where the General and Developmental Psychology notes taught the general functions and the developmental theorists, these notes cover **how people act on each other, how behaviour is shaped, and how personality is modelled.** Social psychology comes first (attitudes and their change, attribution and the biases of social thinking, conformity and obedience, prejudice, aggression, the crowd), then learning and behaviour (classical and operant conditioning, Bandura's social learning, and the therapies built directly on them), then the rest of psychodynamic and personality theory (the defences and the Vaillant hierarchy, the object-relations school, and the trait, type, humanistic and positive-psychology models). Freud's models, Adler and Jung are taught in full on the General and Developmental Psychology notes and only cross-referenced here. The examinable skill is discrimination: telling classical from operant from social learning, one personality model from another, and one social bias from the next, then placing a case in the right paradigm.

HOW TO USE THESE NOTES

The theory-heavy topics (attitudes, attribution, the learning paradigms, the personality models) follow the same flow as the General and Developmental Psychology notes: the idea in brief, then the **theories in the order they appeared** (what each fixed, what stayed debated), then the **currently accepted** position, then a **behavioural or neural correlate**, then a worked example. Figures declare one axis and code it in colour and shape: **petrol** marks structure and the neutral case, **coral** marks conflict, pathology or the point of debate, and **marigold** highlights the accepted answer. The boxes marked **Good to remember** gather every named theorist, mechanism and classification in one place, so the reference facts sit apart from the reasoning. One patient-facing note carries through the whole ecosystem: no diagnosis is named to a patient, but this is doctor-facing revision, so the full clinical vocabulary is used.

Orientation

1 · Orientation: the three domains as a map

The General and Developmental Psychology notes gave you the general functions of the mind and the developmental theorists, taught through five competing lenses. This material takes the territory that those lenses opened but did not pay off, and it turns out to be three large domains, each defined by a different **unit of analysis**. The **social** person is moved by the presence, judgement and pressure of *other people*; the **learned** person is behaviour *shaped by consequence and by observation*; the **theorised** person is personality itself, *modelled* by a succession of schools that each claimed to say what a person fundamentally is. Fix these three as a map before any of the detail, because the paper rarely asks you to defend one domain against another; it asks you to

recognise which domain a given experiment, effect or theorist belongs to, and to attach the right name (Kaplan & Sadock 2024).

The exam skill across this whole chapter is placement. An item about a subject who conforms to a unanimous but wrong majority is **social psychology** (Asch); an item about a response that grows or shrinks according to its consequence is **learning** (Skinner); an item asking which trait dimension captures anxiety-proneness is **personality** (neuroticism, in the Big Five). This orientation lays the three domains side by side, binds each to its unit of analysis and its key figures, and marks the two boundaries you must not cross: the psychodynamic *founders* (Freud's topographic and structural models, Adler, Jung) are taught in full on the General and Developmental Psychology notes and are only cross-referenced here, and the psychological *tests* (reliability, validity, the specific instruments) are the Psychometry, Assessment and Descriptive Psychopathology notes. The rest of these notes pays the map off.

1.1 Why three domains, and what each one counts as data

Each domain answers a different question about behaviour. Social psychology asks how the individual is changed by the real, imagined or implied presence of others, so its data are situations and the people in them. Learning and behaviour ask how experience lawfully changes what an organism does, so its data are stimuli, responses and their contingencies. Personality asks what stable internal structure makes one person reliably different from another across situations, so its data are consistencies over time. The same clinical fact sits differently in each: a patient's avoidance of a crowded market is, to social psychology, a matter of anticipated evaluation and the behaviour of the crowd; to learning, a conditioned fear response maintained by negative reinforcement (escape lowers anxiety, so avoidance is strengthened); to personality, an expression of high trait neuroticism and low extraversion. None is wrong; the discipline for the viva is to name the domain the question is pitched at (Kaplan & Sadock 2024; Tasman 2015).

1.2 The three domains as a map

Bind each domain to its unit of analysis and its key figures. This is the schema for the whole chapter: read the domain, hold what it counts as data, and attach the names examiners expect. Read the definitions once now as the index; every later topic is a special case of one of these three.

Social psychology

Unit of analysis: *the individual in the presence of others*. How attitudes form and change, how we explain behaviour (attribution), how the group bends the individual (conformity and obedience), and how intergroup processes produce prejudice, aggression and crowd behaviour. Key figures: Leon Festinger (cognitive dissonance, attitude change), Solomon Asch (conformity to a majority), Stanley Milgram (obedience to authority), Gordon Allport (attitudes, the nature of prejudice). This domain owns the attitudes, attribution, conformity, prejudice, aggression and crowd topics of these notes.

Learning and behaviour

Unit of analysis: *the lawful change in behaviour produced by experience*. Three paradigms: classical (Pavlovian) conditioning of a stimulus to a response, operant (instrumental) conditioning of a behaviour by its consequence, and observational learning by watching a model. Key figures: Ivan

Pavlov (classical conditioning), B. F. Skinner (operant conditioning, building on Thorndike's law of effect), Albert Bandura (observational or social learning). This domain grounds behaviour therapy and underwrites the conditioning topics.

Personality

Unit of analysis: *the stable internal structure that makes a person consistently themselves*. A succession of traditions: the psychodynamic (drives, defences, object relations), the trait (dimensions on which everyone can be scored), the type (discrete categories), the humanistic (the self striving toward growth), and the social-cognitive (person and situation in reciprocal interaction). Named anchors examiners want: the ego defence mechanisms, object relations, and above all the Big Five or Five Factor Model, the modern trait consensus (McCrae & Costa 1990).

> **PEARL**
>
> The three domains in one line: social psychology studies the person *between other people*, learning studies the person *shaped by consequences*, and personality studies the person *as a stable structure*. If you can say whether a claim is about the *situation*, the *contingency*, or the *trait*, you have placed the domain and can go looking for the right name.

1.3 The unit of analysis is the fastest discriminator

When an item could belong to two domains, decide by what it treats as the cause. The three domains overlap at the edges, and the paper exploits this. The reliable test is to ask what the explanation makes the cause of the behaviour. If the cause is *someone else* (a majority, an authority, an outgroup, an audience), it is social psychology. If the cause is a *past pairing or consequence* (a bell that once predicted food, a reward that followed an action, a model who was seen to be reinforced), it is learning. If the cause is a *durable internal disposition* that would show up across many situations, it is personality. The domains also hand off historically: behaviour therapy grew out of the learning domain in the 1950s and 1960s, social-cognitive personality theory borrowed observational learning from Bandura, and social psychology and personality meet in the person-situation debate. Knowing the seams is itself examinable (Kaplan & Sadock 2024).

DOMAIN	UNIT OF ANALYSIS (WHAT CAUSES THE BEHAVIOUR)	SIGNATURE PHENOMENA	KEY FIGURES
Social psychology	**Other people (real, imagined or implied)**	Attitudes and dissonance, attribution, conformity and obedience, prejudice, aggression, the crowd	Festinger, Asch, Milgram, Allport
Learning and behaviour	**Past pairings and consequences**	Classical conditioning, operant conditioning, observational learning	Pavlov, Skinner, Bandura
Personality	**A stable internal disposition**	Defences and object relations, traits, types, the striving self, reciprocal person-situation interaction	Freud (the General and Developmental Psychology notes), the Big Five (McCrae & Costa)

The three domains of these notes on one axis: the fastest discriminator is what each treats as the cause of behaviour. Signature phenomena and figures are paid off in the domain topics; here, hold the parallelism.

RULE **Place the item by its unit of analysis, not its content.** If the cause is other people it is social; if it is a past pairing or consequence it is learning; if it is a durable internal disposition it is personality.

HOLD THIS

Social = the person between others; learning = the person shaped by consequences; personality = the person as a stable structure. Name which of the three a stem is pitched at before reaching for any figure.

1.4 The boundary with the General and Developmental Psychology notes and with Psychometry

Know where each thread starts and stops. This chapter deliberately picks up threads the General and Developmental Psychology notes opened, so keep the cross-references clean and do not re-teach. The *founders* of the psychodynamic tradition are the General and Developmental Psychology notes material: Freud's topographic and structural models, Alfred Adler's individual psychology, and Carl Jung's analytical psychology are taught there in full, and the personality topic here uses them only as the psychodynamic tradition's starting point rather than re-deriving them. In the other direction, the personality domain names the Big Five and the defence mechanisms, but the *measurement* of personality (the NEO inventory, the MMPI, projective tests, and the reliability and validity of any scale) belongs to the Psychometry, Assessment and Descriptive Psychopathology notes. Likewise, learning here is the theory of conditioning; the clinical behaviour therapies that apply it (systematic desensitisation, exposure, token economy) are developed with the treatments. Treat this topic as the index page: when a later claim needs placing, flip back here, decide the domain by its unit of analysis, and then follow the cross-reference to where it is finished (Kaplan & Sadock 2024).

COMMON TRAP

Do not let the personality topic pull you back into re-teaching Freud, Adler and Jung; those are the General and Developmental Psychology notes and are only cross-referenced here. Equally, do not answer a personality-*testing* question (a scale's reliability, an inventory's validity) inside these notes; that is Psychometry. The personality topic here is about the *theories* of what a person is, not the *instruments* that measure it.

1.5 How these notes is wired, and the theory-evolution spine

The theory-heavy topics each run as an evolution of theories. Within each domain, the examinable topics that carry competing theories (attitudes and attitude change, attribution, the three learning paradigms, and the personality-theory topic) are best learned the same way the general functions were on the General and Developmental Psychology notes: the theories in the order they appeared, each stating what it fixed from the last and what it left debated, then the currently accepted position, its behavioural or neural correlate where one exists, and a worked example. So attitude change runs from balance and dissonance theories to the modern dual-process (elaboration-likelihood) account; attribution runs from the naive-scientist models to the recognition of the fundamental attribution error and modern social cognition; the learning paradigms run from Pavlov and Thorndike through Skinner to Bandura and the cognitive turn; and personality runs from the psychodynamic school through trait and type approaches to the humanistic and social-cognitive traditions and the Big Five consensus. Hold that spine now; the domain topics pay it off.

MNEMONIC

SLP: See, Learn, Portray

The three domains of these notes, in teaching order: **S**ocial psychology (how others *See* and move me), **L**earning and behaviour (how I *Learn* from consequence and model), **P**ersonality (how theory *Portrays* the stable self). SLP is the master mnemonic for this chapter: every topic here is a See, a Learn, or a Portray. Under each letter hang the lead names, Festinger-Asch-Milgram-Allport under S, Pavlov-Skinner-Bandura under L, and the psychodynamic-trait-type-humanistic-social-cognitive traditions ending in the Big Five under P.

GOOD TO REMEMBER

- **Social psychology (domain):** unit of analysis = the individual in the presence of others; owns attitudes, attribution, conformity and obedience, prejudice, aggression, the crowd.
- **Leon Festinger (1957):** cognitive dissonance and attitude change; the discomfort of holding an action and a belief that conflict, resolved by changing the attitude.
- **Solomon Asch:** conformity to a unanimous majority even when it is plainly wrong.
- **Stanley Milgram:** obedience to authority; ordinary people administer harm when instructed by a legitimate authority.
- **Gordon Allport:** attitudes and the nature of prejudice.
- **Learning and behaviour (domain):** unit of analysis = the lawful change in behaviour produced by experience; three paradigms below.
- **Ivan Pavlov:** classical (Pavlovian) conditioning; a neutral stimulus paired with a significant one comes to evoke the response.
- **B. F. Skinner:** operant (instrumental) conditioning; behaviour is controlled by its consequences, building on Thorndike's law of effect.
- **Albert Bandura:** observational (social) learning; behaviour acquired by watching a model.
- **Personality (domain):** unit of analysis = the stable internal structure that makes a person consistently themselves; five traditions, psychodynamic, trait, type, humanistic, social-cognitive.
- **Big Five / Five Factor Model (McCrae & Costa 1990):** the trait consensus; extraversion, agreeableness, conscientiousness, neuroticism, openness (mnemonic OCEAN).
- **Cross-references (do not re-teach):** psychodynamic founders (Freud topographic and structural, Adler, Jung) are the General and Developmental Psychology notes; the psychological tests and their reliability and validity are the Psychometry, Assessment and Descriptive Psychopathology notes.

Social psychology

2 · Attitudes, attitude change and cognitive dissonance

How the mind takes a stance, and how that stance is moved. An **attitude** is a learned evaluative disposition toward a person, object or idea, and the psychology of **attitude change** is the study of how such evaluations are formed, resist, and shift. The exam wants this as a chain of theories in the order they appeared: a first structural account of what an attitude is (the tripartite ABC model), the discovery that attitudes and behaviour often diverge (LaPiere), then successive theories of change, the **yale** communication approach, Leon **festinger**'s cognitive-dissonance theory, Bem's rival self-perception account, and finally Petty and Cacioppo's dual-route **elaboration likelihood** model of **persuasion**. Each fixed a limitation of the one before it, and the field settled on a dual-process synthesis that is now the **currently accepted** position.

This matters for psychiatry beyond social-science trivia. Attitude change is the engine of every psychoeducation programme, adherence intervention and public-health campaign; cognitive dissonance is the explicit mechanism of motivational interviewing and of the dissonance-based eating-disorder prevention programmes now in the guidelines (New Oxford Textbook of Psychiatry). Treat the persuasion structure and the dissonance paradigm as the two highest-yield items; treat the numeric details of the classic experiments as standard textbook figures to reproduce, not to over-claim.

2.1 What an attitude is: the tripartite ABC model

Affect, behaviour, cognition. The classic structural definition holds that an attitude has three components, the **ABC model**: an *affective* component (the feelings an object evokes, "I dislike smoking"), a *behavioural* component (the disposition to act, "I avoid smokers"), and a *cognitive* component (the beliefs held about the object, "smoking causes cancer"). An attitude is thus a relatively enduring, learned evaluation that predisposes a person to respond consistently, favourably or unfavourably, toward a class of objects. It is distinguished from a transient *mood* (no object), a *belief* (the cognitive element alone, without the evaluation), and a *value* (a broader, more abstract guiding principle under which many attitudes sit).

2.2 Attitude formation and function

How evaluations are acquired. Attitudes are learned, chiefly through three routes: *classical conditioning* (an object paired repeatedly with positive or negative affect acquires that valence, the basis of advertising and of the "mere exposure" effect, in which familiarity alone breeds liking); *operant conditioning* (attitudes that are rewarded or socially approved are retained); and *social/observational learning* (attitudes modelled by parents, peers and media are copied, Bandura). A complementary *functional* view (Katz) asks what an attitude does for the person: a *knowledge* function (organising a complex world), an *instrumental/utilitarian* function (maximising reward), an *ego-defensive* function (protecting self-esteem, the route by which prejudice can serve a defensive need), and a *value-expressive* function (signalling identity). The function an attitude serves predicts which persuasive appeal will move it.

2.3 The attitude-behaviour gap: LaPiere

Attitudes predict behaviour only weakly. The foundational problem that every later theory had to reckon with is that expressed attitudes and actual behaviour often diverge. Richard LaPiere's classic field study (LaPiere 1934) is the exam anchor: travelling the United States with a young Chinese couple, he found they were refused service at only one of over 250 hotels and restaurants, yet when he later wrote to the same establishments asking whether they would serve Chinese guests, the large majority said they would not. Attitude (expressed prejudice) and behaviour (actual courteous service) were sharply discordant. Later work (Ajzen and Fishbein; the theory of reasoned action and its successor the theory of planned behaviour) reconciled this: attitudes predict behaviour well only when they are *specific* to the behaviour, *strong*, *accessible*, and when perceived social norms and perceived control are added to the model. The gap is not a refutation of attitudes but a specification of when they bite.

> **COMMON TRAP**
>
> Do not read LaPiere as proving attitudes are irrelevant. The correct lesson is that general attitudes poorly predict specific acts, and that behaviour is co-determined by norms and situational constraint. This is exactly why a health campaign that shifts a general attitude ("smoking is bad") may fail to change a specific behaviour unless it also targets intention, norms and perceived control.

2.4 Theory one: the Yale/Hovland persuasion approach

Who says what to whom, through what channel. The first systematic theory of attitude change came from Carl Hovland and colleagues at Yale after the Second World War (the **yale** communication and attitude-change programme). It treated **persuasion** as a message-learning process and dissected it into four classes of variable, the durable exam checklist:

Source

The communicator. Persuasion rises with source *credibility* (expertise and trustworthiness), *attractiveness* and *similarity*. The *sleeper effect* is the Yale finding that a message from a low-credibility source can gain influence over time as the message dissociates from its discredited source.

Message

Its content and structure: one-sided versus two-sided arguments, the strength and order of arguments, and the calibrated use of *fear appeals* (moderate fear paired with a clear coping action persuades; overwhelming fear provokes denial).

Channel

The medium of delivery (face-to-face, print, broadcast), and its match to message complexity.

Audience

Recipient characteristics: prior attitude, intelligence, self-esteem, involvement, and forewarning (which mobilises resistance).

What it fixed and what it left open. The Yale model fixed the absence of any framework by giving a systematic, empirically testable taxonomy of persuasion variables. What it left unexplained was the *internal* process: it described which inputs move attitudes but not the psychological mechanism by which a person changes their own mind, and it could not explain why the same variable (say, an attractive source) sometimes mattered and sometimes did not.

2.5 Theory two: Festinger's cognitive dissonance

The discomfort of holding inconsistent cognitions drives change. Leon Festinger (Festinger 1957, *A Theory of Cognitive Dissonance*, Stanford University Press) proposed that when a person holds two psychologically inconsistent cognitions, or acts in a way discrepant from a held belief or from the view of the self, they experience an aversive state of tension, **cognitive dissonance**, that they are motivated to reduce (Tasman Psychiatry). Because behaviour that has already occurred is usually the fixed element, the cheapest route to consonance is often to change the *attitude* to fit the act. Festinger's originating observation was a doomsday cult whose members, after the predicted apocalypse failed to arrive, did not abandon their belief but *intensified* their proselytising, reducing the dissonance between "I gave up everything for this prophecy" and "the prophecy was false" by recruiting others (Festinger 1957; Tasman Psychiatry). Dissonance is now often reframed as a *self* theory: the discomfort is sharpest when the discrepant act threatens the view of oneself as competent and moral (Aronson et al. 2007, cited in Tasman Psychiatry).

2.6 Festinger: the three classic dissonance paradigms

Induced compliance, effort justification, post-decision. Three experimental paradigms recur in exams and each demonstrates a distinct route by which dissonance shifts an attitude.

Induced compliance (the "one dollar / twenty dollar" study)

Festinger and Carlsmith (1959) had subjects perform a dull task and then paid them either a small or a large sum to tell a waiting person the task was enjoyable. Those paid the *small* sum later rated the task as more genuinely enjoyable than those paid the large sum. The small payment was insufficient external justification for the lie, so dissonance ("I said it was fun, but it was boring") was resolved by internally revising the attitude; the large payment supplied ample external justification, so no dissonance and no attitude change followed. Counter-attitudinal behaviour changes the attitude most when external incentive is minimal.

Effort justification

Aronson and Mills (1959): people who underwent a severe, embarrassing initiation to join a dull group later valued the group more highly than those admitted easily. High effort or suffering for a poor outcome creates dissonance that is resolved by inflating the outcome's worth ("I would not have gone through that for nothing"). This underlies the loyalty produced by harsh hazing and demanding training.

Post-decision dissonance

After a difficult choice between two similar options, the rejected option's attractive features and the chosen option's flaws generate dissonance, which is reduced by *spreading of alternatives*: the chosen option is subsequently rated more highly and the rejected one more poorly. This is why people rationalise a purchase or a career choice after committing to it.

RULE **In induced compliance, the smaller incentive produces the larger attitude change.** Too little external justification for the act forces the person to justify it internally by revising the attitude.

CLINICAL ANCHOR

Cognitive dissonance is the mechanism named inside motivational interviewing: the clinician selectively elicits and reflects the patient's own *change talk* so that the discrepancy between current behaviour (drinking, non-adherence) and a valued goal (health, family, self-respect) becomes salient, and the resulting dissonance is resolved in the direction of change rather than of defending the status quo. It also explains "effort justification" in therapy itself: a patient who has invested heavily in treatment is motivated to value its gains.

2.7 Theory three: Bem's self-perception, the rival account

Attitude inferred from behaviour, no inner tension required. Daryl Bem (1967) offered a behaviourist rival to dissonance. His **self-perception theory** proposes that people often do not consult a pre-existing internal attitude at all; instead, like an outside observer, they *infer* their attitude from watching their own behaviour and the circumstances in which it occurred ("I ate the whole salad, so I must like salad"). Applied to the Festinger and Carlsmith result, the small-payment subject observes "I said the task was fun for only a dollar, so I must actually have found it somewhat fun," with no aversive arousal needed. **What it fixed and what it left open.** Self-perception fixed dissonance theory's untestable reliance on an unobservable inner "tension." The debate was settled empirically rather than by one theory winning: dissonance operates when behaviour is clearly *counter-attitudinal* and produces measurable physiological arousal, whereas self-perception better describes attitude formation in *novel or weakly held* domains where no prior

attitude exists to be contradicted. Both mechanisms are real; they occupy different regions of the same map.

2.8 Theory four: the Elaboration Likelihood Model (central vs peripheral routes)

Two roads to a changed attitude. Richard Petty and John Cacioppo's **elaboration likelihood** model (1986) is the integrative dual-process theory that reconciled the earlier work and remains the framework of choice. It proposes that persuasion travels one of two routes depending on how much a person is *motivated* and *able* to think about (elaborate) the message.

Central route

Engaged when motivation and ability are high (the issue is personally relevant, the person is undistracted and capable). The recipient effortfully scrutinises the *quality of the arguments*. Attitude change by the **central route** is strong, enduring, resistant to counter-persuasion, and predictive of behaviour.

Peripheral route

Engaged when motivation or ability is low (low involvement, distraction, time pressure). The recipient relies on simple *cues* outside the argument's merit, source attractiveness, expert credentials, message length, sheer number of arguments, or the mood of the moment. Attitude change by the **peripheral route** is weaker, more transient, and easily reversed.

FEATURE	CENTRAL ROUTE	PERIPHERAL ROUTE
Trigger	High motivation *and* ability to think	**Low motivation *or* low ability (distraction, low involvement)**
What is processed	Argument quality, effortful scrutiny (elaboration)	**Peripheral cues: source attractiveness/credibility, message length, number of arguments, mood**
Resulting attitude	Strong, enduring, resistant to counter-persuasion, predicts behaviour	**Weak, transient, easily reversed, poor behaviour prediction**
Parallel model	Systematic processing (Chaiken)	Heuristic processing (Chaiken)

The discriminator is the middle two rows: what the recipient actually processes (arguments vs cues) and how durable the resulting attitude is; the trigger is set by motivation and ability.

What it fixed. The ELM explained the previously puzzling inconsistency of the Yale variables: a peripheral cue such as an attractive source persuades only when elaboration is low, whereas under high elaboration argument quality dominates and the cue fades. It absorbed the Yale taxonomy, dissonance and self-perception into a single account of *when* each process operates. Chaiken's parallel heuristic-systematic model makes the same central distinction between systematic (effortful) and heuristic (cue-based) processing.

2.9 Currently accepted position

Dual-process persuasion and constructed, context-sensitive attitudes. The **currently accepted** synthesis is dual-process: attitude change proceeds through a thoughtful, elaboration-heavy central/systematic route or an automatic, cue-driven peripheral/heuristic route, with the

balance set by motivation and cognitive capacity (Petty and Cacioppo 1986). Alongside this, contemporary social cognition treats attitudes not as fixed objects retrieved intact from memory but as *constructed* at the moment of judgement and sensitive to context, framing and momentary accessibility. The field also distinguishes *explicit* attitudes (deliberate, self-reported) from *implicit* attitudes (automatic, activated without intention and measured by reaction-time tasks such as the Implicit Association Test), which can diverge from explicit ones and independently predict spontaneous behaviour.

HOLD THIS

The persuasion arc is Yale to Festinger to Bem to the ELM. External input-output (Yale), then internal-motivation dissonance (Festinger), then a behaviourist rival (Bem's self-perception), resolved into the dual-process ELM (central = argument quality, peripheral = cues).

2.10 Behavioural and neural correlate

Where attitudes predict action, and the neurobiology of dissonance. Behaviourally, the attitude-behaviour link is strongest for accessible, specific, strongly held attitudes, and **implicit attitudes** add predictive power for fast, unmonitored behaviour where explicit attitudes fail. The *neural correlate* of dissonance is beginning to be mapped: functional imaging associates the aversive state of holding inconsistent cognitions, and its resolution, with the *dorsal anterior cingulate cortex* and *anterior insula* (a conflict- and discomfort-detecting network), while the down-regulation of that signal as the attitude is revised engages *dorsolateral prefrontal cortex*; evaluative attitude signals themselves recruit *ventromedial prefrontal cortex* and the amygdala. These localisations are an emerging literature rather than a settled map, so treat them as direction-of-travel, not as fixed exam facts.

2.11 Worked example: a smoking-cessation campaign

The theories applied to one health-behaviour campaign. Take a district anti-smoking campaign and read it through the whole chain. *Attitude structure (ABC):* the target attitude has a cognitive component (beliefs about harm), an affective component (fear, disgust) and a behavioural component (buying, lighting up). *Attitude-behaviour gap:* a poster that shifts the general belief "smoking is harmful" will not, on LaPiere's lesson, change the specific act unless it also targets intention, injunctive norms ("people I respect disapprove") and perceived control (a quit-line, nicotine replacement). *Yale variables:* a credible source (a respected physician), a two-sided message pre-empting the "but my grandfather smoked to ninety" counter-argument, a moderate fear appeal *coupled with* a concrete coping action, delivered through a channel the audience uses. *Dissonance:* rather than lecturing, have smokers publicly argue the case for quitting to younger peers, the dissonance-based, induced-compliance move, so the discrepancy between their advocacy and their own smoking presses toward change; this is exactly the logic of the dissonance-based Body Project used for eating-disorder prevention (New Oxford Textbook of Psychiatry). *ELM routing:* for a highly involved smoker planning to quit, use the central route with strong argument quality for durable change; for a low-involvement teenager, peripheral cues (an admired influencer, vivid imagery) may be the only lever that lands, accepting that such change is more fragile and needs reinforcement.

INDIA

Persuasion variables are culturally weighted. In much of Indian practice, *source* credibility rests heavily on perceived authority and seniority (the treating consultant, the elder, the community leader), and *norms* are family- and community-level rather than individual, so an adherence or public-health message routed through the family and a trusted authority figure often out-performs an individually addressed appeal. Fear appeals on tobacco and alcohol must be paired with a locally reachable coping action, or they default to denial.

MNEMONIC

"ABC of attitudes; Yale asks Who-What-Which-Whom; dissonance = $1 > $20"

ABC: Affective, Behavioural, Cognitive components. **Yale:** Source (who), Message (what), Channel (which medium), Audience (to whom). **Dissonance direction:** the *smaller* incentive ($1) produces the *larger* attitude change, because low external justification forces internal justification. And for the ELM: *Central = think, Peripheral = cues.*

PEARL

The one-line arc for an examiner: the field moved from an external, input-output account of persuasion (Yale) to an internal-motivation account (Festinger's dissonance), met a behaviourist rival (Bem's self-perception), and resolved both into a dual-process model (Petty and Cacioppo's ELM, central versus peripheral) that specifies *when* each earlier mechanism operates. Name that sequence and you have framed the entire topic.

GOOD TO REMEMBER

- **Attitude (ABC model):** a learned evaluative disposition with Affective, Behavioural and Cognitive components.
- **Attitude formation:** classical conditioning, operant conditioning, social/observational learning (Bandura); mere-exposure effect; Katz's functions (knowledge, instrumental, ego-defensive, value-expressive).
- **LaPiere (1934):** Chinese-couple field study; expressed attitude (prejudice) discordant with actual behaviour (service given). The attitude-behaviour gap.
- **Ajzen and Fishbein:** theory of reasoned action / planned behaviour; attitudes predict behaviour via intention, norms and perceived control.
- **Yale / Hovland approach:** persuasion as message-learning; Source, Message, Channel, Audience; sleeper effect; fear-appeal calibration.
- **Festinger (1957):** cognitive dissonance; aversive tension from inconsistent cognitions drives attitude change; doomsday-cult origin; now a self theory (Aronson et al. 2007).
- **Festinger and Carlsmith (1959):** induced compliance, the $1 > $20 study; smaller incentive, larger attitude change.
- **Aronson and Mills (1959):** effort justification; severe initiation raises valuation of the group.
- **Post-decision dissonance:** spreading of alternatives after a hard choice.
- **Bem (1967):** self-perception theory; attitude inferred from own behaviour, no inner tension; rival to dissonance, better for novel/weak attitudes.
- **Petty and Cacioppo (1986):** elaboration likelihood model; central route (argument quality, high elaboration, durable) vs peripheral route (cues, low elaboration, transient); Chaiken's heuristic-systematic parallel.
- **Currently accepted:** dual-process persuasion; attitudes as constructed and context-sensitive; explicit vs implicit attitudes (Implicit Association Test).
- **Neural correlate (emerging):** dissonance signalled by dorsal anterior cingulate cortex and anterior insula; resolution via dorsolateral prefrontal cortex; evaluative attitude signals in ventromedial prefrontal cortex and amygdala.
- **Clinical use:** motivational interviewing exploits dissonance via change talk; dissonance-based prevention (Body Project) for eating disorders (New Oxford).

3 · Attribution theory and social cognition

Two questions, one machinery. **Social cognition** is the umbrella: how we perceive, encode, store, retrieve and use information about people and social situations, running largely on **schemas** (organised knowledge structures for persons, roles and events) and cognitive short-cuts called **heuristics**. **Attribution** is the best-studied slice of it: the process by which people explain the causes of behaviour and events, deciding whether an act sprang from the person (disposition) or from the situation. For the exam this topic is a clean historical spine (Heider to Weiner) that ends in a set of named **attribution biases**, and it is examined both as pure psychology and as the cognitive substrate of depression (attributional style), paranoia (personalising bias) and prejudice (Kaplan & Sadock 2024; Tasman 2015).

The spine runs in strict date order, each theory fixing a gap left by the last: **Heider (1958)** named the person-versus-situation split; **Jones and Davis (1965)** asked when we may read a disposition off a single act; **Kelley (1967)** asked how we combine information across situations; **Weiner (1974)** re-cut attributions along abstract dimensions for achievement and emotion. The

currently accepted position is not a further grand theory but the recognition that these normative models are systematically distorted by predictable errors, the attribution biases, whose neural substrate sits in the social-cognition (mentalizing) network. Because this topic names dated theorists, dimensions and hard classifications of bias, it closes with a good-to-remember box enumerating every one (Kaplan & Sadock 2024; Tasman 2015).

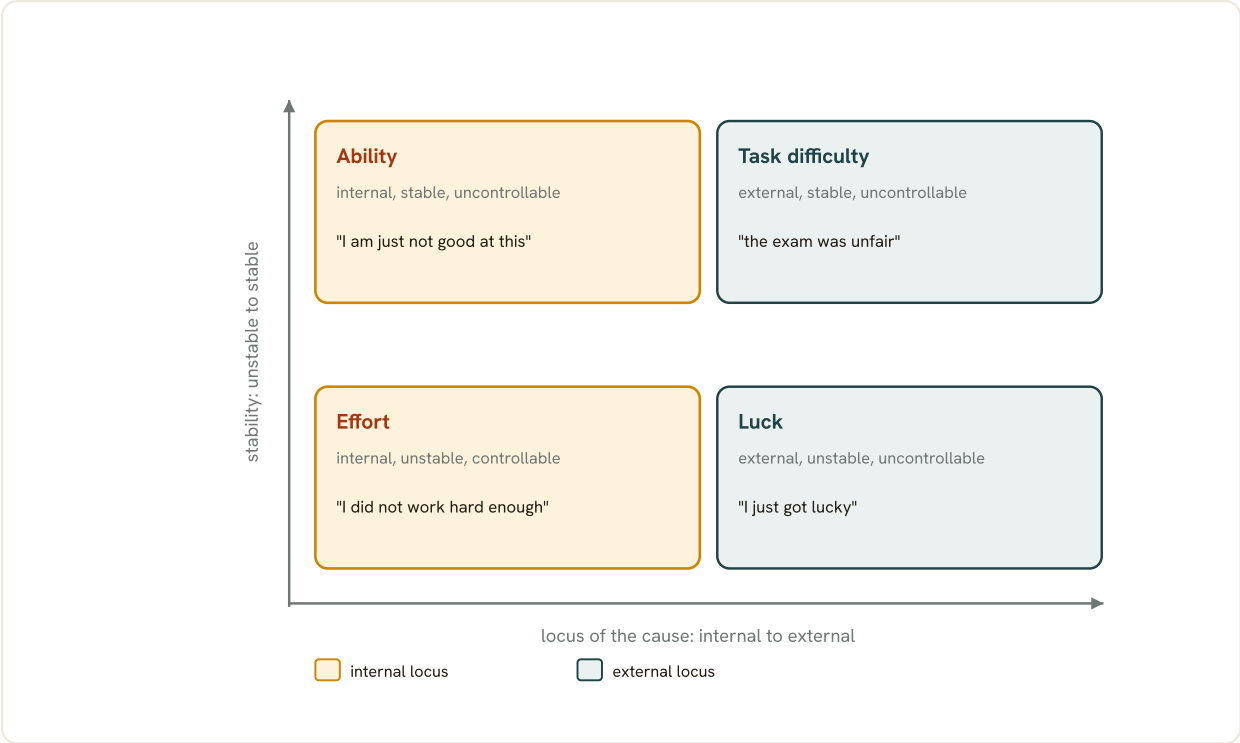


Fig 5.1 Weiner's dimensional model of attribution, shown on two of its axes: whether the cause is inside the person (internal) or outside (external), and whether it is stable or unstable across time. The four classic achievement attributions fall into the cells: ability (internal, stable), effort (internal, unstable), task difficulty (external, stable) and luck (external, unstable). A third axis, controllability, cuts across these: effort is controllable while ability and luck are not, which is why effort attributions carry the most motivational weight. Colour codes the locus: marigold for internal causes, petrol for external.

3.1 Social cognition: the frame the theories live inside

Attribution is one operation within social cognition, so define the frame first. Social cognition is the study of how people make sense of themselves and others: perceiving faces and emotions, inferring intentions and mental states (theory of mind), forming and applying impressions, and choosing behaviour on that basis. It is not a blank-slate computation. Incoming social data is filtered through **schemas**, pre-existing mental templates (a person schema, a role schema, a self-schema, an event schema or *script*) that let us fill gaps and predict, at the cost of stereotyping and confirmation bias. Because full rational analysis of every social act is impossible, the mind leans on **heuristics**, fast rules of thumb (representativeness, availability, anchoring), and on **dual-process** operation: fast, automatic, effortless System 1 judgements versus slow, controlled, effortful System 2 reasoning (Kahneman's framing, the modern default account). Attribution is precisely the schema-and-heuristic-driven machinery we use to answer one recurring social question: *why did that happen?* (Kaplan & Sadock 2024).

3.2 Heider (1958): naive psychology and the person-situation split

The founding move: treat the ordinary person as an intuitive scientist. Fritz Heider's *The Psychology of Interpersonal Relations* (1958) launched attribution theory with the idea of **naive** (or common-sense) **psychology**: everyday people continuously seek the causes of behaviour and do so with an implicit, lay causal theory. Heider's core distinction, which every later model inherits, is between **internal (personal or dispositional)** causes located in the actor (ability, effort, personality, mood) and **external (situational or environmental)** causes located outside the actor (task difficulty, luck, social pressure, circumstance). Heider observed that perceivers tend to see behaviour as flowing from the person and to under-weight the situation, planting the seed of what would later be called **correspondent inference** and the fundamental attribution error. What he left debated: *when* and *how* the perceiver actually decides between the two, which the next theories set out to specify (Heider 1958; Kaplan & Sadock 2024).

3.3 Jones and Davis (1965): correspondent inference theory

What it fixed: it specified when a single act licenses a dispositional inference. Edward Jones and Keith Davis proposed **correspondent inference** theory: an observer makes a *correspondent* inference when they conclude that a behaviour corresponds to a stable underlying disposition (a hostile act means a hostile person). Their contribution was to list the conditions under which such an inference is warranted. It is stronger when the behaviour is *freely chosen* (not coerced), when it produces **non-common effects** (outcomes unique to that choice and not shared by the alternatives, which narrow down the actor's real motive), and when it is *low in social desirability* (unexpected, norm-violating behaviour is more informative about the person than conventional behaviour, since anyone would do the conventional thing). Hedonic relevance (the act affects the perceiver) and personalism (it seems aimed at the perceiver) further strengthen the dispositional reading. What it left debated: it handled inference from a *single* episode but said little about how we integrate information across *many* occasions, which Kelley then addressed (Jones & Davis 1965; Kaplan & Sadock 2024).

3.4 Kelley (1967): the covariation model and causal schemata

What it fixed: it gave a rule for combining information across situations and time. Harold Kelley's **covariation** model treats the lay perceiver as an intuitive statistician who attributes an effect to the cause with which it *covaries*. Given multiple observations, the perceiver weighs three kinds of information:

Consensus

Do *other people* behave the same way toward this stimulus? High consensus (everyone reacts this way) points *away* from the actor, toward the stimulus or situation.

Distinctiveness

Does this actor behave this way *only* toward this stimulus, or toward many stimuli? High distinctiveness (only this stimulus) points toward the stimulus; low distinctiveness (the actor does it to everything) points toward the person.

Consistency

Does the actor behave this way toward this stimulus *across time and settings*? High consistency is a precondition for a confident attribution of either kind; low consistency drives attribution to transient circumstance.

The classic pattern: high consensus + high distinctiveness + high consistency yields an *external (stimulus)* attribution ("the film really is funny, everyone laughs, he laughs only at it, and every time"); low consensus + low distinctiveness + high consistency yields an *internal (person)* attribution ("only he laughs, he laughs at everything, and always, so it is him"). When information is incomplete (a single observation), Kelley proposed that perceivers fall back on stored **causal schemata**: pre-formed beliefs about how causes combine, such as the discounting principle (the role of a given cause is discounted if other plausible causes are present) and the augmentation principle (a cause is upgraded when it produces an effect despite an opposing force). What it left debated: covariation describes the ideal normative computation but not the systematic ways real perceivers deviate from it, nor the emotional consequences of attributions, which Weiner took up (Kelley 1967; Kaplan & Sadock 2024).

RULE **An external (stimulus) attribution needs all three Kelley cues high: consensus, distinctiveness and consistency.** Low consensus plus low distinctiveness plus high consistency points instead to the person.

3.5 Weiner (1974 onward): the dimensional model of achievement attributions

What it fixed: it abstracted attributions into dimensions and linked them to emotion, expectancy and motivation. Bernard Weiner reframed the field for *achievement* situations (success and failure at a task). Rather than cataloguing specific causes (ability, effort, task difficulty, luck), he classified any cause along orthogonal dimensions:

Locus (of causality)

Locus internal versus external: is the cause inside the person (ability, effort) or outside (task difficulty, luck)? Governs self-esteem and pride: internal success feels good, internal failure wounds.

Stability

Stability stable versus unstable: is the cause enduring (ability, task difficulty) or variable (effort, mood, luck)? Governs *expectancy* of future outcomes: a failure attributed to a stable cause predicts continued failure and breeds hopelessness; an unstable cause leaves hope.

Controllability

Controllable versus uncontrollable: could the person have altered the cause (effort is controllable; innate ability and luck are not)? Governs social emotions such as guilt, shame, anger, and pity, and others' willingness to help.

Crossing locus and stability gives Weiner's canonical two-by-two: *ability* (internal, stable), *effort* (internal, unstable), *task difficulty* (external, stable), and *luck* (external, unstable). This model is the bridge from attribution to clinical psychiatry: the *reformulated learned-helplessness* theory of depression (Abramson, Seligman and Teasdale 1978) holds that a depressogenic **attributional style** explains bad events by internal, stable, global causes ("it is me, it always will be, it ruins everything"), directly borrowing Weiner's locus and stability axes (Weiner 1985; Tasman 2015;

Kaplan & Sadock 2024). What it left debated: like its predecessors it is a *normative* account of how attributions should be made and what they cause, which set up the corrective era of documented biases.

3.6 The currently accepted position: attribution is systematically biased

The modern consensus is not a new grand theory but a catalogue of predictable errors. The **currently accepted** view is that the elegant normative models above (correspondent inference, covariation, dimensional analysis) describe an ideal the mind rarely meets: real attribution is fast, motivated and schema-driven, and it deviates in reliable directions. These are the **attribution biases**, and they are the highest-yield part of the topic.

GOOD TO REMEMBER

- **Fundamental attribution error (FAE):** the pervasive tendency, when explaining *others'* behaviour, to over-attribute it to disposition and under-weight the situation (also called correspondence bias; Ross 1977; Gilbert & Malone 1995).
- **Actor-observer asymmetry:** we explain *our own* behaviour situationally ("I snapped because the day was awful") but *others'* behaviour dispositionally ("he snapped because he is aggressive"); driven partly by differing perceptual focus and by richer self-knowledge (Jones & Nisbett 1972).
- **Self-serving bias:** we attribute our *successes* to internal, dispositional causes (ability, effort) and our *failures* to external causes (bad luck, unfair task), protecting self-esteem; its reversal (internal for failure, external for success) marks the depressive attributional style.
- **Just-world bias / hypothesis:** the belief that the world is fair, so people get what they deserve; leads to victim-blaming (Lerner).
- **False-consensus bias:** we over-estimate how far others share our own attitudes, choices and behaviour, treating our own view as the norm (Ross).

BIAS	WHOSE BEHAVIOUR	DIRECTION OF THE ERROR	FUNCTION OR DRIVER
Fundamental attribution error	Other person	**Over-weights disposition, under-weights situation**	Actor is the perceptual figure; automatic dispositional inference
Actor-observer asymmetry	Self vs other	**Self = situational, other = dispositional**	Different visual focus; more knowledge of one's own constraints
Self-serving bias	Self	**Success = internal, failure = external**	Self-esteem protection (motivational)
Just-world bias	Victim / other	**Blames the victim for their misfortune**	Need to believe outcomes are deserved and the world controllable
False-consensus bias	Self projected onto others	**Over-estimates how many share one's view**	Own position is cognitively available as the anchor

The five exam-standard attribution biases: what target they distort, the direction of the distortion, and why it happens (Kaplan & Sadock 2024; Tasman 2015).

HOLD THIS

The spine is Heider to Jones-Davis to Kelley to Weiner, and the modern answer is not a fifth theory but the biases. The reversed self-serving bias (failure read as internal, stable and global) is the depressive signature.

COMMON TRAP

Do not merge the **actor-observer** asymmetry with the **self-serving** bias. Actor-observer is about the *self-versus-other* contrast regardless of outcome (I am situational, you are dispositional). Self-serving is about the *success-versus-failure* contrast within the self (my wins are me, my losses are the world). They can be dissociated: the depressive shows a *reversed* self-serving bias (failure attributed internally, stably and globally) while the actor-observer pattern may persist. The **fundamental attribution error** is specifically about explaining *others*; it is not a self-versus-other contrast on its own.

3.7 Neural correlate: the social-cognition (mentalizing) network

Attribution has a definable neurobiology within the wider social brain. The **neural correlate** of attributing mental states and causes to others is the *mentalizing* or theory-of-mind network, whose reliably implicated nodes are the *medial prefrontal cortex*, the bilateral *temporo-parietal junction* (especially the right TPJ, engaged when representing another's beliefs and intentions), the *posterior superior temporal sulcus* (reading biological motion and gaze), the *precuneus and posterior cingulate*, and the *temporal poles* (social-semantic knowledge). The *amygdala* and *fusiform face area* feed the rapid, affective appraisal of faces and threat that biases attribution before deliberate reasoning engages. In psychiatry these systems are the substrate of the **social cognition** deficits catalogued in schizophrenia (impaired theory of mind, a *personalising* attributional bias that over-attributes negative events to other people rather than to circumstances, and jumping-to-conclusions), and they are the explicit target of Social Cognition and Interaction Training (SCIT) (Roberts, Penn & Combs 2016; Kaplan & Sadock 2024).

3.8 Culture: attribution is not universal

The fundamental attribution error is partly a Western phenomenon. A major qualification to the whole tradition is cross-cultural: people from *individualist* (typically Western) cultures, which foreground the autonomous person, show a stronger dispositional bias and a more robust fundamental attribution error, whereas people from *collectivist* (many East Asian and South Asian) cultures, which foreground the group, relationships and context, attribute behaviour more readily to *situational* and relational causes and show a weaker FAE. The self-serving bias is likewise attenuated, and sometimes a *self-effacing* pattern appears, in collectivist settings where modesty is normative. The lesson for the exam and for Indian practice is that the "fundamental" error is not a fixed feature of human cognition but is shaped by culturally transmitted models of the person (Nisbett and colleagues; Kaplan & Sadock 2024).

INDIA

India is a broadly collectivist, family-embedded context, and this reshapes attribution in the clinic. Distress is often explained through situational, relational and supernatural or karmic frames (family conflict, evil eye, planetary influence, fate) rather than through internal, dispositional or biomedical ones. A clinician who reads a patient's situational explanation as denial, or who imposes a Western dispositional-illness model, will mis-attune. It also predicts a softer fundamental attribution error in how families explain a relative's behaviour: an act is more likely read as caused by circumstances and relationships than by fixed character, which can protect the patient from blame but can also delay recognition of illness.

3.9 Worked example: reading one late arrival five ways

Run one everyday event through the whole apparatus. A colleague, Ravi, arrives thirty minutes late to a meeting you are chairing.

Heider

You immediately sort the cause into internal (Ravi is careless, disorganised) or external (the traffic, a prior emergency). The pull toward the internal reading is Heider's seeded observation.

Jones and Davis

If Ravi *freely* chose to leave home late and lateness is socially undesirable, you make a correspondent inference: he is an unreliable person. If he was ordered to finish another task first (coerced, low choice), the inference weakens.

Kelley (covariation)

You consult three streams. Consensus: do others also arrive late to *your* meetings (high consensus points to your meeting or its timing, an external cause)? Distinctiveness: is Ravi late only to this meeting or to everything (low distinctiveness points to Ravi)? Consistency: is he late to this meeting every week (high consistency licenses a firm attribution)? Low consensus + low distinctiveness + high consistency yields "it is Ravi."

Weiner

If you frame lateness as a performance failure, you locate its cause by **locus** and **stability**: "lazy" (internal, stable) predicts he will always be late and invites anger; "stuck in unusual traffic" (external, unstable) predicts nothing and invites sympathy. Controllability decides whether you feel anger (he could have left earlier) or pity (he could not).

The biases (currently accepted)

The **fundamental attribution error** makes you leap to "Ravi is unreliable" and ignore the flooded road. The **actor-observer** asymmetry means that when *you* were late last week you blamed the traffic, but when Ravi is late you blame Ravi. Had it been *your* lateness excused by traffic and *your* punctuality credited to your discipline, that is the **self-serving** bias. If you assume most people would judge Ravi as harshly as you do, that is false-consensus; if you conclude he "deserves" the reputational cost, that edges toward just-world thinking. In a collectivist frame, a colleague may instead default to "something must have happened at home," a situational reading and a softer FAE.

PEARL

If four things survive into the exam: (1) the *date-ordered spine* Heider (person vs situation) to Jones and Davis (correspondent inference from one act) to Kelley (covariation: consensus, distinctiveness, consistency) to Weiner (locus, stability, controllability); (2) Kelley's rule that *external* attribution needs high consensus + high distinctiveness + high consistency; (3) the five biases, with the *fundamental attribution error* as the flagship and the reversed self-serving bias as the depressive signature; (4) that the FAE is culturally softened in collectivist settings.

MNEMONIC

Kelley = CDC (Consensus, Distinctiveness, Consistency)

The three covariation cues, read like the disease-control acronym so it sticks. Pair it with the external-attribution rule "**all three high** (consensus + distinctiveness + consistency) points **out** to the stimulus." For Weiner, remember the two-by-two by its four cells: **A**bility, **E**ffort, **T**ask difficulty, **L**uck ("AETL"), read as internal-stable, internal-unstable, external-stable, external-unstable.

GOOD TO REMEMBER

- **Social cognition:** how we perceive, store and use social information; runs on schemas, heuristics and dual-process (System 1 automatic / System 2 controlled) cognition.
- **Attribution:** the sub-process of explaining the causes of behaviour, internal (dispositional) versus external (situational).
- **Heider (1958):** naive (common-sense) psychology; person-versus-situation split; seeded correspondent inference and the FAE.
- **Jones and Davis (1965):** correspondent inference theory; a dispositional inference is warranted when behaviour is freely chosen, has non-common effects, and is low in social desirability.
- **Kelley (1967):** covariation model; three cues = consensus, distinctiveness, consistency; external attribution needs all three high; causal schemata with discounting and augmentation principles for incomplete data.
- **Weiner (1974 onward):** dimensional model of achievement attribution; locus (internal/external), stability (stable/unstable), controllability; four cells = ability, effort, task difficulty, luck; locus drives self-esteem, stability drives expectancy, controllability drives social emotion.
- **Attributional style (Abramson, Seligman, Teasdale 1978):** depressogenic style attributes bad events to internal, stable, global causes (reformulated learned helplessness).
- **Fundamental attribution error (Ross 1977):** over-attributing others' behaviour to disposition; also called correspondence bias (Gilbert & Malone 1995).
- **Actor-observer asymmetry (Jones & Nisbett 1972):** self explained situationally, others dispositionally.
- **Self-serving bias:** success internal, failure external (self-esteem protection); reversed in depression.
- **Just-world bias (Lerner):** belief the world is fair, so victims must deserve their fate; drives victim-blaming.
- **False-consensus bias (Ross):** over-estimating how far others share one's own views.
- **Currently accepted:** the normative models are systematically distorted by these biases; attribution is fast, motivated and schema-driven.
- **Neural correlate:** mentalizing (theory-of-mind) network = medial prefrontal cortex, temporo-parietal junction (esp. right TPJ), posterior superior temporal sulcus, precuneus/posterior cingulate, temporal poles; amygdala and fusiform face area for rapid affective appraisal.
- **Clinical link:** personalising attributional bias and theory-of-mind deficits in schizophrenia; target of SCIT.
- **Culture:** individualist cultures show a stronger FAE and self-serving bias; collectivist cultures attribute more situationally and show a weaker FAE (Nisbett).

4 · Group dynamics: conformity, obedience and group processes

Why this matters. Social psychology studies the **typical** forces that govern how the social world shapes behaviour, where clinical psychiatry studies the atypical (Tasman 2015). Its central lesson, running from Sherif through Milgram, is that much of what looks like character is actually **situational**: ordinary people conform, obey and diffuse responsibility when the situation pulls for it. This is the counterweight to the **fundamental attribution error** (over-crediting internal traits), and it is why a psychiatrist reads a patient's behaviour against its social field, not only against personality.

The topic is a reliable exam staple: examiners want the **named experiment** matched to the **named mechanism** (Asch to normative influence, Milgram to the agentic state, Janis to

groupthink, Zajonc to social facilitation). Build the answer as a spine of classic studies in the order they appeared, then close with the currently accepted situationist synthesis and its neural correlate.

4.1 What a group is: norms, roles, cohesion

A **group** is two or more people who interact, are interdependent, share goals and perceive themselves as a unit (a distinction from a mere aggregate, such as a bus queue). Three structural properties organise it and generate all the phenomena below.

Norms

Shared, often implicit rules about how members should behave and think; the reference point people default to when a situation is ambiguous.

Roles

Expected patterns of behaviour attached to a position in the group (leader, scapegoat, guard, prisoner); powerful enough to override individual disposition.

Cohesion

The sum of forces binding members to the group and to one another. Moderate cohesion aids function; excessive cohesion breeds loss of individuality, seen as fusion, contagion and groupthink (Tasman 2015).

Status and communication structure

The hierarchy of prestige and the channels through which information flows; both shape who conforms to whom.

4.2 Conformity, era 1: Sherif and the birth of a norm

Sherif, autokinetic effect (1935). A stationary pinpoint of light in a dark room appears to move (an **autokinetic** illusion). Asked individually how far it moved, people gave idiosyncratic estimates; placed in groups, their estimates **converged on a shared group norm** that then persisted when they were tested alone again. Sherif showed that in a genuinely ambiguous situation a norm is **internalised**, not merely complied with. What it **fixed**: it demonstrated norm *formation* experimentally. What it **left debated**: because the stimulus was ambiguous, it could not tell us whether people would conform against the plain evidence of their own eyes. That question is Asch's.

4.3 Conformity, era 2: Asch and the line-judgement studies

Asch, line-judgement paradigm (1950s). A naive participant judged which of three comparison lines matched a standard, a task with an **unambiguous** correct answer, while a group of confederates unanimously gave the wrong answer on set trials. Roughly a third of naive responses went along with the majority, and about three-quarters of participants conformed at least once, while a control group erred almost never. Asch proved that people will publicly deny plain perceptual evidence under group pressure. Two mechanisms were later separated (Deutsch and Gerard 1955).

Normative influence

Conforming to be liked or accepted and to avoid rejection; produces public compliance without private belief change. Dominant in Asch, where the answer was obvious.

Informational influence

Conforming because others are treated as a source of valid information; produces private acceptance. Dominant in Sherif, where the answer was ambiguous.

Factors that raise conformity: unanimity of the majority; larger majority size up to about three or four, after which it plateaus; higher group cohesion and attractiveness; task difficulty or ambiguity; public rather than private responding; lower individual status or expertise. **Factors that lower it:** a single dissenting ally who breaks unanimity (the strongest single reducer); private or anonymous responding; higher personal competence on the task; and cultural individualism relative to collectivism.

~1/3	~75%	3-4
OF RESPONSES CONFORMED (ASCH)	CONFORMED AT LEAST ONCE	MAJORITY SIZE WHERE EFFECT PLATEAUS

RULE **A single dissenting ally who breaks unanimity is the strongest single reducer of conformity.** It is unanimity, not sheer numbers, that does most of the pressing.

COMMON TRAP

Sherif is *not* the same as Asch. Sherif used an **ambiguous** stimulus and demonstrated **informational** influence with genuine norm internalisation; Asch used an **unambiguous** stimulus and demonstrated **normative** influence with mere public compliance. Examiners deliberately swap the two.

4.4 Obedience: Milgram and the shock experiments

Milgram, obedience to authority (1963 onward; Milgram 1974). Prompted by the trial of Adolf Eichmann and Arendt's thesis that the Holocaust's perpetrators were ordinary bureaucrats rather than sadistic monsters (Tasman 2015), Milgram tested how far ordinary people would go under instruction. A participant, cast as "teacher," was ordered by an experimenter to deliver escalating "electric shocks" to a "learner" (a confederate) for wrong answers. A striking majority continued to the maximum voltage when told to do so by the authority figure, and none of the minority who refused insisted the study be stopped or checked on the victim (Tasman 2015). Obedience is **compliance with a direct order from a perceived authority**, and is distinct from conformity to peers.

Milgram's two explanations (Tasman 2015): first, *conformism* from a lack of a reference point about how to behave in an unfamiliar situation; second, and central, **agentic state** theory. In the agentic state the obedient person redefines himself as an **instrument carrying out another's wishes** and feels minimal personal responsibility for the outcome. A contemporary parallel is **moral disengagement**, documented in prison guards assigned to execution teams (Osofsky, Bandura and Zimbardo 2005).

Situational factors that changed obedience rates: *proximity of the victim* (obedience fell as the learner became more physically present, and fell sharply when the teacher had to press the learner's hand onto a plate); *proximity and presence of the authority* (obedience dropped when the experimenter gave orders by telephone rather than in the room); *legitimacy of the authority* (a prestigious institutional setting raised obedience; an ordinary setting or an ordinary-man "experimenter" lowered it); and the presence of *disobedient peers*, whose defiance freed the participant to refuse. The lineage runs back to the **authoritarian personality** construct (Adorno et al. 1950), which had tried, less successfully, to locate obedience in a trait rather than the situation.

4.5 Roles, deindividuation and the Stanford prison experiment

Zimbardo, Stanford prison experiment (1971). Screened, ordinary young men were randomly assigned to be "guards" or "prisoners" in a simulated prison. Guards rapidly became abusive and prisoners passive and distressed, and the study, planned for two weeks, was halted early. Zimbardo read it as evidence of the **power of situations and assigned roles** to transform behaviour, mediated by **deindividuation**: a loss of individual self-awareness and self-restraint under anonymity, uniforms and group immersion, which lowers accountability and releases behaviour the person would not otherwise show. The same construct underlies the aggression of anonymous crowds.

COMMON TRAP

Modern critique, stated soberly: the Stanford study is now read cautiously. It had **no control condition**, a tiny non-representative sample, and, on later evidence, the experimenter and guards were **coached and led** toward the cruel behaviour rather than it emerging spontaneously; some guard conduct appears to have been demand characteristics and performance. Cite it as a *demonstration and a cautionary tale about roles and situational power*, not as clean experimental proof. Milgram, with its manipulated variables and control comparisons, is the sturdier evidence of situational power.

4.6 Group decision processes: polarisation and groupthink

Groups do not simply average their members' views; they systematically shift them.

Group polarisation

After discussion, a group's decision becomes **more extreme in the direction the members already leaned** (the older "risky shift" is one instance, but caution can be amplified too). Driven by informational influence (hearing more arguments on the favoured side) and normative influence (aligning with the group's valued position).

Groupthink (Janis 1972)

A mode of thinking in **highly cohesive, insulated groups under directive leadership and stress**, where the drive for unanimity overrides realistic appraisal of alternatives, degrading decision quality. Janis drew it from foreign-policy fiascos (the Bay of Pigs is the classic case).

Janis's symptoms of groupthink cluster into three groups: *overestimation of the group* (an illusion of invulnerability; belief in the group's inherent morality); *closed-mindedness* (collective

rationalisation; stereotyping of outgroups and opponents); and *pressure toward uniformity* (self-censorship of doubts; a shared illusion of unanimity; direct pressure on dissenters; and self-appointed **mindguards** who shield the group from discordant information). Antidotes: a designated devil's advocate, leaders withholding their own view early, and inviting outside critique.

4.7 Presence of others: social facilitation and social loafing

Social facilitation (Zajonc 1965). The mere presence of others (as audience or co-actors) raises **arousal**, which strengthens the **dominant response**. The consequence depends on the task: on *easy or well-learned* tasks the dominant response is correct, so performance **improves**; on *difficult or novel* tasks the dominant response is often wrong, so performance **worsens**. This drive-arousal account resolved a century of contradictory audience findings into one rule.

Social loafing. When individual contributions are **pooled and cannot be identified**, people exert less effort than when working alone (the effect first noted in group rope-pulling). It is the near-opposite of facilitation, driven by the same diffusion logic as the bystander effect: identifiability, evaluation and personal accountability all reduce it.

4.8 Minority influence: how the few change the many

Moscovici (1969 onward). Against the majority-centred tradition above, Moscovici showed that a **consistent, confident minority** can convert the majority. The critical variable is **behavioural consistency** over time and across members; a wavering minority has no effect. Minority influence tends to produce **conversion** (genuine, often private and delayed attitude change through informational processing) rather than the surface **compliance** that majorities extract. This is the mechanism behind social innovation and the slow success of dissenting movements.

4.9 Currently accepted position and its neural correlate

The **currently accepted** synthesis is **situationism** tempered by interactionism: behaviour is a joint product of person and situation, but classic social psychology corrected a durable bias by showing how strongly the situation pulls, and how routinely observers underweight it (the fundamental attribution error). Modern work reframes conformity within **social-identity** and self-categorisation theory (people conform to norms of groups they identify with, not to strangers indiscriminately) and within dual-process models separating fast normative alignment from slower informational persuasion.

> HOLD THIS
> **Match each named study to its named mechanism: Asch to normative influence, Milgram to the agentic state, Zimbardo to deindividuation, Janis to groupthink, Zajonc to social facilitation, Moscovici to minority conversion.** Much that looks like character is situation.

Neural correlate. Conformity has a measurable **neurobiology**. When a person's judgement conflicts with the group, activity in the **posterior medial frontal cortex / dorsal anterior cingulate** and **anterior insula** tracks the "social prediction error," the felt cost of deviating; the size of this signal predicts subsequent conforming. Reward circuitry, the **ventral striatum and ventromedial prefrontal cortex**, updates value toward the group's position when one aligns,

giving conformity the signature of reinforcement learning. Obedience and moral disengagement engage reduced **medial prefrontal** self-agency signalling, consistent with the agentic state (the sense of acting as another's instrument). These are localisation claims to verify against a current source before quoting in a viva.

4.10 Worked example and the clinical read

Everyday. A junior doctor on a ward round privately doubts a senior's plan but stays silent (Asch normative pressure and Milgram's legitimate authority), the team's shared confidence hardens into an illusion of unanimity (groupthink), and no one calls the near-miss because "someone senior will have checked" (diffusion of responsibility). The fix is structural: name a devil's advocate, invite the most junior view first, and make each check individually accountable.

CLINICAL ANCHOR

Group phenomena are the working material of **group psychotherapy**: cohesion is a curative factor (Kaplan and Sadock 2024), but the same cohesion can tip into pretend-mode groupthink where patients answer for one another and stop mentalising (Bateman and Fonagy). Ward culture, family systems and treatment teams all show conformity, role capture and diffusion, and the clinician's job is often to restore individual accountability and dissent.

INDIA

In hierarchical, collectivist and family-centred settings, normative conformity and deference to authority (senior clinician, elders, the joint family) run high, which raises both helpful cohesion and the risk of unspoken dissent in consent and treatment decisions. Explicitly soliciting the quietest voice and separating family consensus from the patient's own view is a practical counter to culturally amplified groupthink.

MNEMONIC

SAME ZOO: Groups Just Zap Loafers, Minorities Convert

Sherif (norm formation), **A**sch (conformity), **M**ilgram (obedience), **E**ffect-bystander (Latané and Darley), **Z**imbardo (roles), **ZOO** reminds you these are the caged classics. Then the processes: **G**roup polarisation, **J**anis (groupthink), **Z**ajonc (social facilitation), **L**oafing, **M**oscovici (minority conversion).

GOOD TO REMEMBER

- **Group:** interacting, interdependent, shared-goal unit; structured by norms, roles, cohesion, status.
- **Sherif (1935), autokinetic effect:** ambiguous stimulus, group norm forms and is internalised; informational influence.
- **Asch (1950s), line judgement:** unambiguous stimulus, about a third of responses conform, roughly three-quarters conform at least once; normative influence.
- **Normative vs informational influence (Deutsch and Gerard 1955):** to be accepted (public compliance) vs to be correct (private acceptance).
- **Conformity raisers:** unanimity, majority size to about three, cohesion, ambiguity, public response; single ally is the strongest reducer.
- **Milgram (1974), shock experiments:** majority obey an authority to maximum shock; obedience is compliance with an order, not peer conformity.
- **Agentic state:** obedient person feels an instrument of another's will, minimal own responsibility.
- **Milgram situational factors:** victim proximity, authority proximity and legitimacy, and disobedient peers all move obedience.
- **Authoritarian personality (Adorno et al. 1950):** earlier trait account of blind acceptance of authority, superseded by the situationist reading.
- **Zimbardo (1971), Stanford prison:** roles and situational power; deindividuation; modern critique = no control, coached guards, demand characteristics.
- **Deindividuation:** loss of self-awareness and restraint under anonymity, releasing disinhibited behaviour.
- **Group polarisation:** discussion pushes the group further in its pre-existing direction (risky shift is one case).
- **Groupthink (Janis 1972):** cohesive, insulated, stressed group sacrifices appraisal for unanimity; symptoms = invulnerability, rationalisation, out-group stereotyping, self-censorship, illusion of unanimity, pressure on dissenters, mindguards.
- **Social facilitation (Zajonc 1965):** mere presence raises arousal, boosts easy tasks, impairs hard ones (dominant-response rule).
- **Social loafing:** reduced effort when contributions are pooled and unidentifiable; countered by accountability.
- **Minority influence (Moscovici 1969):** a consistent minority produces conversion (deep, private change), not mere compliance.
- **Bystander effect and diffusion of responsibility (Latané and Darley 1970):** less helping when others are present; belongs with prosocial and aggression behaviour (see the aggression and prosocial behaviour topic), cross-referenced here.
- **Situationism (currently accepted):** behaviour = person plus situation; fundamental attribution error over-weights traits; neural correlate in dorsal anterior cingulate, anterior insula and ventral striatum for conformity.

5 · Prejudice, stereotypes and intergroup relations

Why this sits on the exam spine. Intergroup psychology is the social-psychology chapter that maps directly onto the clinician's daily reality: the **stigma** of mental illness is, mechanically, prejudice applied to a psychiatric out-group. Examiners want the clean triad (thought, feeling, action), the named theories in the order they emerged, and the one intervention with the strongest evidence base behind it (the contact hypothesis). Answer it as an evolution of theories, each fixing the previous one's blind spot, and land it on the stigma application.

The organising move is to separate three things that lay usage blurs. A **stereotype** is a belief, a **prejudice** is a feeling or attitude, and **discrimination** is a behaviour. They correlate but dissociate: a clinician can hold an accurate-seeming stereotype without hostile affect, or feel prejudice yet not discriminate when institutional rules forbid it. Keeping the three levels distinct is what turns a vague answer into a scorable one (Kaplan & Sadock 2024).

5.1 The triad: stereotype, prejudice, discrimination

Three levels, one target group. The cognitive, affective and behavioural components of an intergroup attitude. Allport (1954) framed prejudice as "an antipathy based on a faulty and inflexible generalisation," which already fuses the belief (generalisation) with the feeling (antipathy).

Stereotype (cognitive)

An over-generalised, relatively fixed belief about the attributes of a social group, applied to its members regardless of individual variation. A cognitive schema, and therefore cognitively economical: it lets the perceiver "go beyond the information given." Can be positive or negative in content but is error-prone by construction.

Prejudice (affective attitude)

A pre-judgement, a negative (occasionally positive) attitude and emotional orientation toward a group and its members, held in advance of, and resistant to, disconfirming evidence. The evaluative, feeling-toned layer sitting on the stereotype.

Discrimination (behaviour)

The overt differential treatment (usually unfavourable) of individuals on the basis of their group membership. The behavioural output; the level at which law and institutions intervene.

COMPONENT	PSYCHOLOGICAL LEVEL	EVERYDAY MARKER
Stereotype	**Cognition (belief / schema)**	"People with schizophrenia are unpredictable"
Prejudice	**Affect (attitude / feeling)**	Discomfort, fear or dislike toward that group
Discrimination	**Behaviour (action)**	Refusing to rent a room to a psychiatric patient

The cognition to affect to behaviour spine: stereotype feeds prejudice, prejudice licenses discrimination, but the links are probabilistic, not automatic.

HOLD THIS

Stereotype is a belief (cognition), prejudice is a feeling (affect), discrimination is an act (behaviour). Keeping the three levels apart is what turns a vague answer into a scorable one; the stigma of mental illness is this triad applied to a psychiatric out-group.

5.2 Allport's classic account (1954): the foundational text

Where the field starts. Gordon Allport's *The Nature of Prejudice* (1954) is the origin point examiners expect you to name. He defined prejudice as antipathy from faulty, inflexible generalisation, located its cognitive engine in normal **categorisation** (the mind sorts the social world into groups to save effort, and prejudice is the pathological overreach of this normal

process), and proposed a scale of acting-out from mild to lethal: antilocution (hostile talk), avoidance, discrimination, physical attack, and extermination. His lasting bequest was two-fold: prejudice grows out of ordinary cognition rather than a special pathology, and it can be reduced by structured intergroup contact (the **contact hypothesis**, 5.7). *What it left debated:* Allport described the individual and cognitive roots richly but did not fully explain why prejudice tracks group competition and group identity, which the next theories addressed.

5.3 The authoritarian personality (Adorno, 1950): prejudice as personality

Locating prejudice inside the person. Adorno and colleagues (1950), working in the shadow of fascism and from a psychodynamic frame, argued that prejudice is an expression of a personality type forged by harsh, status-anxious parenting. The **authoritarian** personality shows submission to authority, aggression displaced onto weaker out-groups, rigid conventional thinking and intolerance of ambiguity, indexed by the F-scale (F for fascism). *What it fixed:* it explained the individual differences Allport's cognitive account under-weighted, why some people are far more prejudiced than others in the same culture. *What it left debated:* a personality-only account cannot explain how whole populations shift into or out of prejudice rapidly, or why prejudice appears even among people with no authoritarian traits, which pushed the field toward situational and group-level theories.

5.4 Realistic conflict theory (Sherif): prejudice from competition

Prejudice as rational group interest. Muzafer Sherif's **realistic conflict** theory holds that intergroup hostility arises when groups compete for scarce, mutually exclusive resources; cooperation for shared goals dissolves it. The evidence is the **Robbers Cave** field experiment (1954): two groups of boys at a summer camp, once placed in competition, rapidly developed **in-group** solidarity and **out-group** hostility (name-calling, raids, flag-burning). Crucially, simple contact did not repair it; hostility only fell when the experimenters imposed **superordinate goals**, problems (a broken water supply, a stuck truck) that neither group could solve alone. *What it fixed:* it grounded prejudice in real group dynamics rather than individual pathology, and it foreshadowed the contact conditions. *What it left debated:* Robbers Cave showed competition is *sufficient* for hostility, but later work showed it is not *necessary*, group identity alone can produce bias without any conflict, which social identity theory demonstrated.

5.5 Social identity theory (Tajfel): prejudice from categorisation alone

The minimal condition for bias. Henri Tajfel's **social identity** theory (Tajfel & Turner) argues that people derive part of their self-esteem from the groups they belong to, and therefore favour the in-group to enhance a positive social identity. The decisive evidence is the **minimal-group paradigm**: when participants are sorted into groups on a trivial, arbitrary basis (a coin toss, a preference for one abstract painter), with no history, no contact and no competition, they still allocate more reward to anonymous in-group members. **In-group** favouritism emerges from mere categorisation. The mechanism runs categorisation, then identification, then social comparison, with a drive to see one's own group as positively distinct. *What it fixed:* it proved prejudice does not require competition (fixing the gap RCT left) or an authoritarian personality; a bare "us and them" split suffices. *What it left debated:* it explains the readiness to divide but is often paired with

realistic conflict and cognitive-schema accounts to explain the *content* and *intensity* of specific prejudices.

5.6 Scapegoating: prejudice as displaced frustration

The out-group as a target of convenience. The **scapegoating** account (frustration-aggression tradition, Dollard and colleagues; taken up by Allport) holds that frustration or economic hardship generates aggression that cannot safely be aimed at its true or powerful cause, so it is displaced onto a weaker, visible minority. Historically this fits the correlation between economic downturn and rising hostility toward minorities. It complements rather than competes with the other theories: it supplies a motive (displaced frustration) that categorisation (5.5) and the authoritarian dynamic (5.3) then channel toward a particular out-group.

GOOD TO REMEMBER

- **Allport (1954), *The Nature of Prejudice*:** prejudice = antipathy from faulty, inflexible generalisation; roots in normal categorisation; scale of acting-out (antilocution to extermination); proposed the contact hypothesis.
- **Adorno et al. (1950), authoritarian personality:** prejudice as a personality type (submission, displaced aggression, rigidity), indexed by the F-scale; harsh parenting origin.
- **Sherif, realistic conflict theory / Robbers Cave (1954):** competition for scarce resources drives in-group vs out-group hostility; superordinate goals reduce it.
- **Tajfel & Turner, social identity theory:** in-group favouritism from mere categorisation; minimal-group paradigm; categorise to identify to compare.
- **Scapegoating (frustration-aggression, Dollard et al.):** displaced aggression onto a weaker visible out-group.
- **Pettigrew & Tropp (2006):** meta-analysis of 500+ studies confirming contact reduces prejudice; optimal conditions helpful but not essential.

5.7 Reducing prejudice: the contact hypothesis and Allport's conditions

The currently accepted intervention. The **contact hypothesis**, first set out by Allport (1954), is the position with the strongest evidence and is the **currently accepted** account of prejudice reduction: bringing groups into contact reduces prejudice, but only reliably when the contact meets certain conditions. Allport specified four: **equal status** between the groups within the contact situation, **common (superordinate) goals**, intergroup **cooperation** rather than competition, and **institutional / authority support** (norms and sanction that endorse the contact). Robbers Cave (5.4) is the field demonstration of the goal and cooperation conditions. Without these conditions, mere proximity can entrench hostility rather than dissolve it.

CLASSIC TRAP Post Pettigrew and Tropp (2006), Allport's four conditions are **facilitating and optimising, not strict prerequisites**; contact still reduces prejudice, more weakly, without them, so do not state them as absolute requirements.

MNEMONIC

E C C I

Allport's four contact conditions: **E**qual status, **C**ommon goals, **C**ooperation, **I**nstitutional support.

5.8 The modern evidence: Pettigrew and Tropp (2006)

What the meta-analysis actually showed. Pettigrew and Tropp's (2006) meta-analysis pooled several hundred studies and confirmed that intergroup contact reliably reduces prejudice, with effects generalising beyond the specific individuals met. Their refinement of Allport matters for exams: the four optimal conditions *enhance* the effect but are **not strictly necessary**, contact reduces prejudice even without the full set, and a large part of the effect is mediated by reduced anxiety and increased empathy / perspective-taking rather than by belief change alone. This is the modern, currently accepted picture: contact works, the conditions optimise it, and affect (anxiety, empathy) is a key mediating pathway.

> **COMMON TRAP**
>
> Do not state Allport's four conditions as strict prerequisites for any effect at all. Post Pettigrew and Tropp (2006), the examiner-correct line is that the conditions are *facilitating and optimising*, not absolutely necessary; contact still reduces prejudice, more weakly, without them. Conversely, do not claim "mere contact always helps": Robbers Cave shows unstructured contact under competition can worsen hostility.

5.9 Neural correlate of intergroup bias

The neurobiology of us-and-them. The **neural correlate** of prejudice centres on threat and social-cognition circuitry. The **amygdala** shows differential activation to out-group faces (a rapid, often implicit threat response), modulated by top-down control; the **medial prefrontal cortex** is engaged less when perceiving extreme, dehumanised out-groups (reduced mentalising, the neural signature of failing to attribute a full mind to the other); and the **anterior cingulate cortex** and **dorsolateral prefrontal cortex** support the effortful regulation and override of automatic bias. The reading is dual-process: a fast, amygdala-linked implicit reaction and a slower, prefrontally mediated controlled evaluation, the same fast-versus-controlled architecture that runs through modern social cognition.

5.10 Worked example: the stigma of mental illness as applied prejudice

The clinical application. The **stigma** of mental illness is the textbook clinical instance of the triad (cross-reference the community psychiatry / stigma material). Map it directly: the **stereotype** is the belief that people with mental illness are dangerous, incompetent or to blame; the **prejudice** is the fear and desire for social distance those beliefs generate; the **discrimination** is the concrete harm, denial of housing, employment, insurance and even parity in medical care. Link (2001) and Corrigan's work distinguish *public stigma* (the community's endorsement of the stereotype and resulting discrimination) from *self-stigma* (the patient internalising it, with loss of self-esteem and the "why try" effect that erodes help-seeking and adherence). The anti-stigma toolkit is exactly the intergroup-theory toolkit: education corrects the stereotype, protest challenges discrimination, and structured *contact* with people who have lived experience, framed with equal status and cooperation per Allport, is the most effective single lever, consistent with Pettigrew and Tropp (2006).

CLINICAL ANCHOR

When a discharged patient cannot get a job or a rented room, name the mechanism precisely: that is *discrimination* (behaviour) driven by *prejudice* (affect) built on a *stereotype* (belief). It anchors the anti-stigma plan, and it enforces the system rule that a diagnostic label is never handed to a patient as a bare word, because labelling amplifies self-stigma and the "why try" effect.

INDIA

The Mental Healthcare Act 2017 explicitly prohibits discrimination against persons with mental illness and asserts a right to equality and non-discrimination in treatment and services, translating the discrimination limb of the triad into statutory protection. In practice, marriage-related and family stigma remain dominant drivers of concealment and delayed care in Indian settings.

PEARL

One-line thread for the whole topic: prejudice is a normal cognitive process (categorisation) gone wrong (Allport), sharpened by personality (Adorno), competition (Sherif) and mere group identity (Tajfel), and the one evidence-based cure is optimal-condition contact (Allport's ECCI, validated by Pettigrew and Tropp), which is also the front-line tool against the stigma of mental illness.

6 · Aggression and prosocial behaviour

Two mirror-image questions. Social psychology asks why humans harm each other and why they help each other, and the exam pairs them as two halves of one topic. Both halves are examined the same way: as a **succession of theories**, each fixing a flaw in the one before, converging on a modern integrative account with a named neural substrate. For **aggression** the arc runs from Freud's death instinct and Lorenz's ethology, through the **frustration-aggression** hypothesis and Berkowitz's revision, through Bandura's social learning, to the general aggression model, with serotonin, the amygdala and prefrontal cortex as the biology. For **prosocial** behaviour and **altruism** the arc runs from the puzzle of the unhelpful crowd (the **bystander** effect) to the competing motivational accounts (**empathy-altruism** versus **social exchange**) and the evolutionary accounts (**reciprocity** and kin selection).

The topic matters clinically because these are the mechanisms behind violence risk, impulsive aggression in personality disorder and intermittent explosive disorder, and the diffusion of responsibility that lets a ward or a bystander fail to act in an emergency; the empathy and reciprocity accounts also underpin how the therapeutic and helping relationship works (Kaplan & Sadock 2024; Tasman 2015). Treat the theory sequence below as a system to enumerate: state what each theory added and what it left debated.

6.1 Defining aggression: reactive versus instrumental

Behaviour intended to harm. **Aggression** is behaviour carried out with the intent to harm another who is motivated to avoid it; intent is what separates it from accidental injury (Kaplan & Sadock 2024). The single most useful clinical division is by function. **Reactive (affective, impulsive) aggression** is hot: it is unplanned, arises from frustration, threat or anger, is

accompanied by autonomic arousal, and serves no goal beyond discharge; **instrumental (proactive, predatory) aggression** is cold: it is deliberate, calculated and goal-directed, with low arousal, and is used as a means to an end (Bateman & Fonagy 2016). The distinction maps onto psychopathology: reactive aggression is sensitised by trauma and dominates in impulsive and borderline presentations, whereas planned instrumental aggression is the form that best distinguishes psychopathy from ordinary antisocial behaviour (Bateman & Fonagy 2016). Keep this pair in mind, because the early drive and frustration theories explain reactive aggression well but instrumental aggression poorly.

RULE **The reactive-versus-instrumental split drives management.** Hot, serotonin-linked reactive aggression (borderline, intermittent explosive disorder) responds to SSRIs and skills work; cold instrumental aggression in psychopathy does not, and is a risk-management problem.

6.2 Instinct and ethological theories: Freud and Lorenz

Aggression as an innate drive that must discharge. The earliest accounts treated aggression as a built-in biological force. Sigmund Freud, after the First World War, proposed a death instinct, **Thanatos**, a drive toward destruction that is either turned outward as aggression or inward as self-harm and depression; on this view aggression is an inevitable internal pressure seeking release (Kaplan & Sadock 2024). Konrad Lorenz, from ethology, argued in parallel that aggression is an evolved instinct with survival value (spacing out competitors, establishing dominance hierarchies, defending the young), driven by an accumulating internal energy that is released by an external **releasing stimulus**. Both are **hydraulic** models: pressure builds and must be let out, which gave rise to the (now discredited) idea of **catharsis**, that venting aggression harmlessly lowers it. *What they fixed:* nothing before them; they established aggression as biologically rooted, not merely learned. *What they left debated:* the drive was untestable, the hydraulic energy was never measured, and the catharsis prediction failed empirically (venting tends to increase, not reduce, later aggression). This pushed the field toward a specifiable trigger.

6.3 The frustration-aggression hypothesis: Dollard and Miller

Every frustration breeds aggression. The Yale group, John Dollard, Neal Miller and colleagues, proposed the **frustration-aggression** hypothesis (Dollard, Doob, Miller, Mowrer & Sears 1939), translating the psychoanalytic drive into testable learning-theory terms (Kaplan & Sadock 2024). Its original strong claim was reciprocal: frustration (the blocking of goal-directed behaviour) always produces a readiness for aggression, and all aggression presupposes frustration. It introduced **displacement** (aggression is redirected onto a safer, substitute target when the true source is too powerful or unavailable, the classic account of scapegoating) and **catharsis** as the reduction of the aggressive drive after an aggressive act. *What it fixed:* it gave aggression an identifiable, manipulable cause (frustration) in place of an unmeasurable instinct. *What it left debated:* the strong form was quickly falsified, because frustration often yields not aggression but withdrawal, sadness or renewed effort, and aggression frequently occurs with no frustration at all. Neal Miller himself softened it in 1941 to say frustration produces instigations to a number of responses, of which aggression is only one.

6.4 Berkowitz's cue-arousal reformulation

Frustration produces readiness, cues pull the trigger. Leonard Berkowitz revised the hypothesis into the **cue-arousal** (later cognitive-neoassociation) model (Berkowitz 1989). Frustration, he argued, does not directly produce aggression; it produces **negative affect** and a readiness to aggress, but whether aggression actually occurs depends on the presence of **aggressive cues** in the situation, learned stimuli associated with aggression. His **weapons effect** demonstration showed that the mere presence of a gun in the room increased aggressive responding in provoked participants (Berkowitz & LePage 1967). The mature cognitive-neoassociation account holds that any aversive event (frustration, pain, heat, foul odour), not just goal-blocking, generates negative affect, which automatically primes an associative network of aggression-related feelings, thoughts and motor responses; higher-order appraisal can then amplify or inhibit the impulse. *What it fixed:* it explained why frustration only sometimes leads to aggression (cues and appraisal moderate it) and widened the cause from frustration to all aversive stimulation. *What it left debated:* it still centred on internal affect and said little about how aggressive behaviour is acquired in the first place.

6.5 Social learning of aggression: Bandura and the Bobo doll

Aggression is learned by watching. Albert Bandura's **social learning** theory answered the acquisition question: aggression, like other behaviour, is learned through **observation** and **imitation** of models, and does not require the observer to be reinforced directly (Bandura 1973; cross-referenced in the social-learning topic). In the famous **Bobo doll** experiments, young children who watched an adult model attack an inflatable Bobo doll later reproduced the specific aggressive acts when given access to the doll, while children who had not seen the model did not (Bandura, Ross & Ross 1961); a follow-up showed the effect transferred from a filmed model and even to a live clown (Bandura, Ross & Ross 1963). This was evidence for learning by observation in the absence of direct reinforcement (Companion to Psychiatric Studies). Whether the child then performs the learned aggression depends on **vicarious reinforcement** (seeing the model rewarded raises imitation; seeing the model punished lowers it) and on the child's **self-efficacy** for the act. Optimal conditions for observational learning include a live model, perceived similarity to the model, seeing the model reinforced, and familiarity with the model (Companion to Psychiatric Studies). *What it fixed:* it explained the transmission of aggression across people and generations (family violence, media violence) that instinct and frustration theories could not. *What it left debated:* it needed integration with the affect and arousal mechanisms, which the next model supplied.

6.6 The currently accepted position: the general aggression model

An integrative input-route-outcome framework. The **currently accepted** synthesis is the **general aggression model** (GAM) of Anderson and Bushman (Anderson & Bushman 2002), which folds the earlier theories into one cyclical process rather than replacing them. *Inputs* are of two kinds: **person factors** (trait aggressiveness, sex, beliefs, attitudes, genetic loading) and **situation factors** (provocation, frustration, aggressive cues such as weapons, pain, heat, alcohol). These act through three interacting *internal routes*, the present **cognition** (hostile thoughts and

scripts), **affect** (anger, negative affect, from Berkowitz), and **arousal**. Appraisal and decision processes, immediate and automatic or reappraised and controlled, then yield the *outcome*: a thoughtful or an impulsive action, whose social consequences feed back to update the person's knowledge structures across encounters. GAM thereby contains Berkowitz's affect, Bandura's learned scripts and knowledge structures, and the older arousal notions inside a single loop. *What it fixed:* it unifies previously rival theories and accommodates both reactive and instrumental aggression. *What it leaves debated:* its breadth makes it hard to falsify, and the relative weight of each input remains contested.

6.7 Neurobiology of aggression

The neural correlate: a serotonin-limbic-prefrontal circuit. The **neural correlate** of impulsive aggression is a triad. First, low central **serotonin** (5-HT) function is the most replicated neurochemical correlate: reduced cerebrospinal-fluid 5-HIAA (the main serotonin metabolite) is associated with impulsive aggression, violent suicide attempts and low behavioural inhibition, supporting the model of serotonin as a brake on impulsive aggressive responding (Kaplan & Sadock 2024). Second, the **amygdala** generates the threat-driven reactive aggressive response, and its regulation by the **ventromedial and orbitofrontal prefrontal cortex** is what normally restrains it; reduced prefrontal control over an over-reactive amygdala is the circuit-level signature of reactive aggression, and reduced grey-matter volume has been reported in violent individuals with comorbid psychopathy and antisocial personality disorder (Bateman & Fonagy 2016). Third, **testosterone** correlates modestly with dominance-seeking and aggression, most consistently in interaction with low serotonin and low cortisol rather than as a simple main effect. A well-known gene-environment example is the low-activity **MAOA** variant, which predicts later antisocial and aggressive behaviour chiefly in men who were also maltreated in childhood (Caspi et al. 2002), illustrating that biology sets a threshold that experience then moves.

- **Low serotonin** - the most replicated neurochemical correlate: reduced CSF 5-HIAA marks impulsive aggression, so serotonin acts as a brake.
- **Amygdala under prefrontal control** - the amygdala drives the reactive aggressive response; reduced ventromedial/orbitofrontal restraint is the circuit signature of reactive aggression.
- **MAOA x maltreatment (Caspi 2002)** - the low-activity MAOA variant predicts later aggression chiefly in men maltreated in childhood: biology sets a threshold, experience moves it.

CLINICAL ANCHOR

The reactive versus instrumental split drives management. Reactive, serotonin-linked impulsive aggression (borderline personality disorder, intermittent explosive disorder) responds to SSRIs, mood stabilisers and skills-based work on arousal and appraisal; cold instrumental aggression in psychopathy does not respond to these and is a risk-management, not a pharmacological, problem (Kaplan & Sadock 2024; Bateman & Fonagy 2016). Note also that the catharsis idea, that letting a patient vent anger discharges it, is empirically wrong and is not a therapeutic technique.

6.8 Prosocial behaviour and the bystander effect

Why a crowd fails to help. **Prosocial** behaviour is voluntary action intended to benefit another; **altruism** is the special case of prosocial behaviour motivated by concern for the other rather

than for self-gain. The founding finding is the **bystander** effect: an individual is significantly less likely to help a person in need when other potential helpers are present, because the responsibility to act is distributed across everyone present, termed **diffusion of responsibility** (Latané & Darley 1970; Tasman 2015). Prompted by the 1964 Kitty Genovese case, Latané and Darley showed experimentally that help becomes slower and less likely as group size rises. The effect operates through three social-cognitive processes: *diffusion of responsibility* (each onlooker feels less personally obliged), **pluralistic ignorance** (each reads the inaction of others as a signal that no emergency exists), and *evaluation apprehension* (fear of intervening wrongly and being judged). The lesson, carried into resuscitation training, is to defeat diffusion by assigning responsibility to one named person.

6.9 The bystander decision tree

Five sequential yes-or-no steps to helping. Latané and Darley modelled helping as a **decision tree**: help occurs only if the bystander clears every step, and a no at any step ends the process (Latané & Darley 1970).

STEP	THE QUESTION	WHAT BLOCKS A "YES" (FAILURE MODE)
1. Notice	Do I notice something is happening?	**Distraction, hurry, self-absorption**
2. Interpret	Is this an emergency?	**Pluralistic ignorance: others look calm, so I under-read it**
3. Responsibility	Is it my responsibility to act?	**Diffusion of responsibility across the crowd**
4. Decide how	Do I know what to do?	**Lack of competence or knowledge of the right action**
5. Act	Do I implement help?	**Evaluation apprehension, fear of danger or cost**

Each stage is a filter; the more people present, the more likely the process stalls at steps 2 and 3, which is the bystander effect.

6.10 Why we help: empathy-altruism versus egoistic accounts

Is helping ever truly selfless? Once someone decides to help, the debate is about motive. Two families of theory compete. The **empathy-altruism** hypothesis (Batson) holds that feeling genuine *empathic concern* for a sufferer produces truly altruistic motivation, a desire to relieve the other's distress as an end in itself, not to relieve one's own; Batson's experiments dissociated the two by making escape easy, showing that high-empathy participants still helped even when they could walk away, which a purely selfish account cannot explain (Batson 1991). Against this stand the **egoistic** accounts, which argue all helping ultimately serves the self. The **negative-state relief** model (Cialdini) proposes that witnessing distress makes the observer feel bad and that helping is a way to repair one's own mood, so the real goal is self-soothing. The **social exchange** account frames helping as a cost-benefit transaction: we help when the rewards (reciprocation, social approval, relief of distress, self-esteem) outweigh the costs, so apparent altruism is

disguised self-interest. The debate is not fully resolved, but the empathy-altruism evidence is generally taken to show that genuinely other-directed motivation exists alongside egoistic motives.

6.11 The evolutionary accounts: reciprocity and kin selection

How can selfish genes build a helper? Evolutionary biology explains the paradox that costly helping persists. Two mechanisms do most of the work (Kaplan & Sadock 2024). **Kin selection** (William Hamilton) shows that a gene causing an individual to sacrifice for relatives can spread because relatives carry copies of that gene: Hamilton's rule states an altruistic act is favoured when $C < B \times r$, the cost to the actor is less than the benefit to the recipient times the coefficient of relatedness (r = **0.5** for a parent, child or full sibling), a concept captured by **inclusive fitness**. It explains parental sacrifice and why one would risk more for two siblings or eight cousins than for one. **Reciprocity**, or reciprocal altruism (Robert Trivers), explains helping between *non-kin*: I help you now because you are likely to help me later, an exchange that pays off when repeated interactions allow cheaters to be detected and excluded, modelled by the **prisoner's dilemma** (Trivers 1971; Kaplan & Sadock 2024). On this view social emotions are the enforcement machinery of reciprocity: gratitude and friendship reward cooperators, while anger, guilt and the urge to punish defectors police cheating (Kaplan & Sadock 2024). Together, kin selection and reciprocity supply the ultimate (evolutionary) explanation, while empathy and social exchange supply the proximate (psychological) one.

HOLD THIS

Catharsis is empirically false: venting tends to raise, not lower, later aggression. The examinable current model of aggression is Berkowitz's (frustration is one aversive input creating a readiness that cues and appraisal then shape), folded into the general aggression model.

TRAP Batson's empathy-altruism argues **for** genuinely other-directed helping; negative-state relief and social exchange are the egoistic rebuttals, not versions of it.

6.12 Worked example

One scene, every theory. A junior doctor is jostled and insulted by an intoxicated relative in a crowded casualty. His flash of anger and impulse to shove back is *reactive aggression*, primed by the aversive provocation (Berkowitz's negative affect) and the aggressive cues around him, gated by his prefrontal control over the amygdalar threat response; that he learned to keep his hands down comes partly from having modelled senior colleagues who de-escalate (Bandura). Moments later the relative collapses. The dozen onlookers freeze: each reads the others' stillness as evidence it is not serious (pluralistic ignorance) and assumes someone else will act (diffusion of responsibility), the *bystander* effect. The doctor overrides it by pointing at one nurse and saying "you, call the code," collapsing diffusion onto a named person. Whether he then feels genuine *empathic concern* for the patient (empathy-altruism) or is partly relieving his own distress (negative-state relief) and expecting professional credit (social exchange) is the motive debate, but the deep reason a species evolved to help a stranger at all traces to *reciprocity* and, for his own child at home, to *kin selection*.

COMMON TRAP

Do not confuse the two aggression subtypes with the two theory families: reactive aggression is not the same as the frustration-aggression theory, and instrumental aggression is not social learning. Also, the frustration-aggression hypothesis in its original strong form (frustration always causes aggression, all aggression follows frustration) is *wrong*; the examinable current form is Berkowitz's, where frustration is one aversive input producing a readiness that cues and appraisal then shape. And empathy-altruism is Batson's claim *for* genuine altruism; negative-state relief and social exchange are the egoistic rebuttals, not versions of it.

MNEMONIC

"NIRA-DA" for the bystander decision tree

Notice, **I**nterpret as emergency, take **R**esponsibility, decide how to **A**ct, then **DA**re to do it. Five sequential gates; a single "no" ends the sequence and no help is given.

INDIA

Diffusion of responsibility is a live problem in Indian public spaces: crowded roads and railway platforms where accident victims are watched but not helped are the bystander effect in the field. The Supreme Court's Good Samaritan guidelines (2016) were designed precisely to remove the cost side of the helping decision, protecting a helper from legal and procedural harassment so that steps 4 and 5 of the decision tree become easier to clear.

GOOD TO REMEMBER

- **Freud (Thanatos):** death instinct, aggression as an innate drive turned outward or inward.
- **Lorenz (ethology):** aggression an evolved instinct with an accumulating energy released by a releasing stimulus; hydraulic model.
- **Catharsis idea:** venting lowers aggression; empirically false (venting tends to increase it).
- **Dollard & Miller et al. 1939 (frustration-aggression):** frustration always breeds aggression; introduced displacement and scapegoating. Strong form falsified.
- **Miller 1941:** softened it, frustration instigates several responses, aggression being one.
- **Berkowitz (cue-arousal / cognitive-neoassociation):** frustration and any aversive event create negative affect and readiness; aggressive cues (the weapons effect, Berkowitz & LePage 1967) release it.
- **Bandura (social learning):** Bobo doll (1961; filmed and live-clown versions 1963), learning by observation and imitation without direct reinforcement; vicarious reinforcement governs performance.
- **Anderson & Bushman 2002 (general aggression model):** currently accepted; person and situation inputs act via cognition, affect and arousal, through appraisal, to a thoughtful or impulsive outcome, then feed back.
- **Reactive vs instrumental aggression:** hot, impulsive, frustration-driven (borderline, IED) versus cold, planned, goal-directed (psychopathy).
- **Neurobiology:** low serotonin (reduced CSF 5-HIAA) disinhibits impulsive aggression; amygdala drives reactive aggression under ventromedial/orbitofrontal control; testosterone modestly linked; low-activity MAOA x childhood maltreatment (Caspi 2002).
- **Latané & Darley 1970 (bystander effect):** help less likely as onlookers increase; diffusion of responsibility, pluralistic ignorance, evaluation apprehension; five-step decision tree.
- **Batson (empathy-altruism):** empathic concern produces genuinely altruistic motivation (helping persists even when escape is easy).
- **Cialdini (negative-state relief):** egoistic; helping repairs the helper's own bad mood.
- **Social exchange / reciprocity:** helping is a cost-benefit transaction; apparent altruism serves the self.
- **Trivers 1971 (reciprocal altruism):** helping non-kin because of expected later return; modelled by the prisoner's dilemma; social emotions enforce it.
- **Hamilton (kin selection):** altruism to relatives favoured when $C < B \times r$ ($r = 0.5$ for parent/child/sibling); inclusive fitness.

7 · Crowd and mob psychology

What happens to the individual mind when it is dissolved into a crowd. A **crowd** is a large, temporary, co-present gathering of people; a **mob** is a crowd that has turned to intense, often aggressive, collective action. The psychology of the crowd asks a single durable question: does a person in a crowd lose their individual judgement and become swept along by the mass, or do crowds behave in a patterned, meaningful way that reflects who the people in them are? The exam wants this as a chain of theories in the order they appeared: Gustave **le bon**'s original account of the crowd as a primitive collective mind, the mid-century theory of **deindividuation**, Turner and Killian's **emergent-norm** theory, and finally Reicher's **social identity** model, which is the modern corrective. Each theory fixed a limitation of the one before it.

This matters clinically and forensically, not as social-science trivia. Crowd dynamics underlie **mass psychogenic illness** (epidemic hysteria), the panic and crush injuries of stampedes, and the

behaviour of riots, all of which a psychiatrist may be asked to explain in a medico-legal report or a public-health inquiry (Companion to Psychiatric Studies). Treat the four-theory sequence and the Le Bon-to-Reicher shift as the highest-yield items; treat mass hysteria as the clinical anchor.

7.1 Defining the crowd, the mob and collective behaviour

A vocabulary before the theories. *Collective behaviour* is the umbrella term for the relatively spontaneous, unstructured action of people responding together to a common situation. Within it, a *crowd* is defined by physical co-presence and a shared focus of attention; a *mob* is an emotionally aroused crowd acting toward a target (a lynch mob, a riot); a *panic* is a crowd in flight from a perceived threat. Two mechanisms recur across every theory and are worth fixing first: *suggestibility*, the readiness to accept and act on ideas or emotions coming from others without critical appraisal, and *contagion*, the rapid, seemingly automatic spread of an emotion or behaviour through a gathering. Le Bon put both at the centre; the later theories progressively reinterpreted them.

7.2 Theory one: Le Bon and the group mind (1895)

The crowd as a single primitive organism. Gustave Le Bon's *The Crowd: A Study of the Popular Mind* (Le Bon 1895) is the founding text and the classic exam anchor. Writing in the wake of the French revolutionary crowds, he argued that when individuals gather, a *collective* or **group mind** forms and the person is transformed. Three mechanisms drive this:

Anonymity

Submerged in the crowd and feeling unidentifiable, the individual loses the sense of personal responsibility that normally restrains conduct, and yields to instincts they would otherwise control.

Contagion

Emotions, ideas and acts spread through the crowd like an infection, each person imitating the next, so that feeling and behaviour sweep through the mass with little resistance.

Suggestibility

The crowd enters a hypnotic, quasi-trance state in which critical faculties are suspended; the person becomes highly open to suggestion and is driven by the images and slogans put before them.

The result, in Le Bon's picture, is a crowd that is impulsive, irritable, intellectually inferior to its members, prone to extremes of emotion, and morally regressed to a "primitive" level: the individual "descends several rungs on the ladder of civilisation." **What it fixed and what it left debated.** Le Bon fixed the absence of any theory by naming the phenomenon and giving it mechanisms, and his account was enormously influential on later thinking about propaganda and on Freud's group psychology. What it left debated, and what every later theory attacked, was its assumption that the crowd is uniformly irrational, mindless and homogeneous, that it destroys the individual's identity rather than expressing it, and its politically loaded contempt for the "masses."

7.3 Theory two: deindividuation (Festinger, Zimbardo, Diener)

Anonymity and lost self-awareness lower restraint. The mid-twentieth-century response kept Le Bon's core insight that the crowd loosens restraint but recast it in the testable language of

experimental social psychology as **deindividuation**. Festinger, Pepitone and Newcomb (1952) coined the term for a state in which people in a group are not seen or attended to as individuals, which reduces inner restraints and increases behaviour that would ordinarily be inhibited. Philip Zimbardo (1969) systematised the antecedents: anonymity, diffusion of responsibility, large group size, arousal and altered states all reduce self-observation and evaluation-apprehension, releasing impulsive, often antisocial action; in his study, hooded, unidentifiable participants delivered more apparent shocks than clearly identified ones. Ed Diener (1976, 1980) sharpened the mechanism to *reduced self-awareness*: it is the loss of *private* self-focus, of attention to one's own standards, that de-regulates behaviour, not mere anonymity to others. A widely cited naturalistic illustration is that anonymity-promoting conditions such as darkness and disguise are associated with more disinhibited behaviour, for example the finding that trick-or-treating children were more likely to steal extra sweets when anonymous and in a group than when alone and identified (Diener et al. 1976).

What it fixed and what it left debated. Deindividuation fixed Le Bon's untestable "group mind" by replacing it with measurable variables (anonymity, group size, self-awareness) that could be manipulated in the laboratory. What it left debated is that anonymity does not reliably produce *antisocial* behaviour at all: anonymous, deindividuated crowds sometimes become more generous, more helpful or more conformist to a peaceful norm, which a theory of pure restraint-loss cannot explain. The direction of behaviour, not just its intensity, needed a theory.

7.4 Theory three: emergent-norm theory (Turner and Killian)

Crowds are not norm-less; they build a new norm on the spot. Ralph Turner and Lewis Killian's **emergent-norm** theory (Turner and Killian, *Collective Behavior*, 1957) rejected the idea that crowds are uniform and driven by contagion. In the ambiguous, unstructured situation a crowd faces, no existing rule tells people how to act; a few distinctive individuals then behave in a salient way (for example, throwing the first stone or beginning to flee), their conduct is taken as defining "what people here are doing," and it crystallises into a *new, situation-specific norm* that the rest feel pressure to follow. The crowd only *appears* unanimous and contagious; in reality members differ in motive, and it is normative social pressure and the desire not to deviate visibly, not hypnotic contagion, that produces the observed uniformity. **What it fixed and what it left debated.** Emergent-norm theory fixed the assumption of mindlessness: crowd action is now rational and norm-governed, just governed by a norm that emerged in the moment rather than one brought in from outside. What it left debated is *where the new norm comes from* and why particular crowds converge on particular norms, hostile in one case, festive in another; the theory describes the process of norm formation but not its content, and it still treats the crowd as a set of strangers negotiating from scratch.

7.5 Theory four: the social identity model (Reicher), the modern corrective

Crowds act on a shared social identity, not on lost identity. Stephen Reicher's **social identity** model of crowd behaviour (Reicher 1984, building on Tajfel and Turner's social identity and self-categorisation theory) is the decisive correction to Le Bon and the position the field now holds. Its central claim inverts Le Bon: in a crowd the person does not *lose* identity but *shifts* from

personal identity to a shared *social* identity, categorising the self as a member of the relevant group ("we, the protesters"; "we, the fans"). Behaviour then becomes not random or de-regulated but *patterned by the norms and values of that group identity*. This explains what deindividuation could not: crowds are selective, not indiscriminate. In Reicher's analysis of the 1980 St Pauls riot in Bristol, the crowd's violence was bounded and targeted, directed at police and symbols of the state and confined to the neighbourhood, not a blind orgy of destruction, precisely because it expressed a specific community identity and its grievances. The later *elaborated social identity model* (ESIM, Reicher, Stott, Drury) adds that crowd conflict is often *generated by the interaction* with an out-group such as the police: indiscriminate, heavy-handed control that treats a whole peaceful crowd as hostile can create a new, oppositional shared identity and escalate disorder that did not initially exist. **What it fixed.** The social identity model fixed the deepest error in the whole tradition, the equation of "crowd" with "irrational" and "identity-less." It shows crowd behaviour to be socially meaningful, group-normed and, crucially, shaped by how the crowd is policed, which is why it now underpins evidence-based public-order policing.

7.6 Currently accepted position

The social identity account, with deindividuation demoted to a special case. The **currently accepted** position is that crowd behaviour is not the loss of the rational individual to a primitive group mind but the shift to a shared social identity whose norms then guide conduct (Reicher; Reicher, Stott and Drury). Le Bon's contagion is reinterpreted: what looks like automatic emotional spread is the rapid, mutual recognition and enactment of a common in-group norm among people who now categorise themselves together. Deindividuation is retained only in a limited, reinterpreted form, the SIDE model (Social Identity model of Deindividuation Effects, Reicher, Spears and Postmes), which holds that anonymity in a group does not abolish norms but *strengthens adherence to the salient group norm* by making personal individuality less salient than group membership. The through-line is decisive: crowds are norm-governed and identity-driven, not mindless.

HOLD THIS

The crowd sequence rescues the crowd's rationality: Le Bon (group mind) to deindividuation to emergent-norm to Reicher's social identity model. In a crowd the person does not lose identity but shifts from personal to shared social identity, and behaviour follows that group's norms.

7.7 Neural and behavioural correlate

Where restraint and self-monitoring live. There is no single "crowd centre," but the mechanisms the theories describe map onto known systems. The reduced self-monitoring and behavioural disinhibition of deindividuation are consistent with attenuated engagement of the *medial and lateral prefrontal cortex*, the substrate of self-referential processing and of top-down inhibitory control over prosocial norms; reduced private self-awareness is, in effect, reduced recruitment of these self-monitoring circuits. Emotional contagion, the rapid spread of affect through a crowd, is linked to fast, automatic *affect-sharing and mirroring processes* (limbic structures including the amygdala and the anterior insula, and the human mirror-neuron system), which transmit fear and

arousal person-to-person below the level of deliberation. Social categorisation, the engine of the social identity model, engages the same *medial prefrontal and temporoparietal* "social brain" regions that distinguish in-group from out-group. The behavioural correlate at the level of the crowd is the crush dynamics of a panicking mass: as density rises, individual locomotion is overridden by physical coupling between bodies, producing turbulent, wave-like "crowd quakes" in which people are injured by compressive asphyxiation rather than by trampling.

TRAP Do not label every stampede death "mass panic": most are **physical crush and compressive asphyxia at critical density**, and survivors usually behaved cooperatively until physically overwhelmed.

CLINICAL ANCHOR

Mass psychogenic illness (epidemic or mass hysteria). This is contagious dissociative or conversion phenomena spreading rapidly through a group under conditions of shared anxiety, with no organic cause found (Companion to Psychiatric Studies). It classically strikes closed, stressed institutions, most often schools, where fainting, dizziness, breathlessness or non-epileptic collapse spread from person to person, typically along lines of sight and friendship. A famous, still-debated example is the 1955 outbreak among nurses at the Royal Free Hospital during a polio epidemic, read by some as atypical infection and by others as mass hysteria (McEvedy and Beard 1970, cited in Companion to Psychiatric Studies). The clinical task is a careful differential from a genuine toxic or infectious outbreak: mass psychogenic illness shows rapid onset and remission, spread by sight and sound rather than by a plausible physical vector, a preponderance of subjective symptoms with normal investigations, and often an index case with a visible acute symptom. Management is calm separation of affected individuals, avoidance of dramatic medical spectacle that amplifies suggestion, credible reassurance, and correcting the anxiety-laden rumour that feeds it.

INDIA

Crowd crush at mass religious gatherings and festivals is a recurring public-health problem in India, where enormous congregations converge on constrained spaces (narrow temple approaches, riverbank ghats, festival grounds). Fatal stampedes at such events illustrate the crowd-dynamics point exactly: deaths are overwhelmingly from progressive crowd compression and asphyxia at critical density, often triggered by a rumour, a sudden surge toward a darshan or a blocked exit, not by generalised "panic" in the Le Bon sense. The psychiatric and forensic contribution is to resist the lazy "mass panic" narrative and point instead to identifiable failures of crowd management, density control, flow direction, communication, and to the behavioural finding that people in crushes typically continue cooperative, help-seeking behaviour until physically overwhelmed. Mass psychogenic illness outbreaks in Indian residential schools and factories are also periodically reported and follow the same anxiety-and-suggestion pattern.

COMMON TRAP

Do not present Le Bon as the correct modern account. In an exam, name Le Bon (1895) as the historically foundational but now-superseded theory, and be explicit that the contemporary consensus is the social identity model (Reicher): crowds are not mindless, contagion-driven and identity-less, they act on a shared social identity and its norms. A second trap: do not equate every crowd death with "panic." Most stampede fatalities are physical crush and compressive asphyxia at high density, and survivors usually behaved cooperatively; the label "mass panic" is often a post-hoc misattribution.

MNEMONIC

Le Bon's Dogs Emerge Social

The four theories in the order they appeared: **Le Bon** (group mind, 1895), **D**eindividuation (Festinger, Zimbardo, Diener), **E**mergent-norm (Turner and Killian), **S**ocial identity (Reicher, the modern corrective). Read the sequence as a steady rescue of the crowd's rationality: from a primitive group mind, to lost restraint, to a norm built on the spot, to a shared identity that was there all along.

GOOD TO REMEMBER

- **Le Bon (1895), *The Crowd*:** first theory; anonymity + contagion + suggestibility create a primitive, irrational "group mind" and loss of individual responsibility. Now superseded.
- **Deindividuation (Festinger, Pepitone and Newcomb 1952; coined the term):** group immersion reduces inner restraints and inhibited behaviour is released.
- **Zimbardo (1969):** anonymity, diffusion of responsibility, group size and arousal drive deindividuated, disinhibited action.
- **Diener (1976, 1980):** the core mechanism is reduced *private self-awareness*, not mere anonymity to others.
- **Emergent-norm theory (Turner and Killian 1957):** in ambiguous situations crowds create a new, situation-specific norm; uniformity comes from normative pressure, not contagion.
- **Social identity model (Reicher 1984):** in a crowd the person shifts from personal to shared *social* identity; behaviour is patterned by group norms, not lost. The modern corrective to Le Bon.
- **ESIM (Reicher, Stott, Drury):** crowd conflict is often generated by out-group (police) action; indiscriminate control creates oppositional identity and escalates disorder.
- **SIDE model (Reicher, Spears, Postmes):** anonymity in a group strengthens adherence to the salient group norm rather than abolishing norms.
- **Contagion:** rapid automatic spread of emotion/behaviour through a gathering; reinterpreted by modern theory as mutual enactment of a shared in-group norm.
- **Mass psychogenic illness / epidemic (mass) hysteria:** contagious dissociative-conversion symptoms in an anxious group with no organic cause; classic in schools; Royal Free Hospital 1955 (McEvedy and Beard 1970).
- **Currently accepted position:** social identity account (Reicher, Stott, Drury); deindividuation retained only as the reinterpreted SIDE effect.
- **Stampede mechanism:** deaths are from crowd compression and asphyxia at critical density ("crowd quakes"), not from Le Bon-style mass panic.

Learning and behaviour

8 · Classical conditioning

The oldest theory in learning, still the model of fear. **Classical conditioning** (also called Pavlovian or respondent conditioning) is the associative process by which a neutral stimulus, through repeated pairing with a biologically significant event, comes itself to elicit an anticipatory response. It is the first of the two great learning paradigms (the other being operant/instrumental conditioning) and the one the exam ties most tightly to psychopathology: conditioned fear is the working model of phobia, conditioned nausea is the model of anticipatory vomiting in chemotherapy, and conditioned cue reactivity is the model of relapse in addiction (cross-refer SUD). For a CORE answer you must trace the theory in date order, from Pavlov's reflex physiology, through Watson and Rayner's demonstration that human emotion obeys the same law, to the modern cognitive turn (Rescorla and Wagner) that redefined conditioning as prediction rather than mere pairing (Kaplan & Sadock 2024; Tasman 2015).

The spine runs in strict historical order, each stage fixing what the last left open: **Pavlov (1927)** gave the reflex vocabulary (US, UR, CS, CR) and the four core phenomena (acquisition, extinction, spontaneous recovery, generalisation); **Watson and Rayner (1920)** proved the law applied to human fear (Little Albert) and launched the behaviourist manifesto; the mid-century **timing analysis** specified how the CS and US must be arranged in time; and the **Rescorla and Wagner (1972)** model overturned the naive idea that contiguity alone is enough, recasting learning as driven by surprise and contingency, with **preparedness** (Seligman; the Garcia effect) adding an evolutionary constraint. The **currently accepted** view is that classical conditioning is prediction-error learning under biological constraint, and its clearest **neural correlate** is amygdala-based fear conditioning with prefrontal control of extinction. Because this topic names dated theorists, defined phenomena and a hard timing classification, it closes with a good-to-remember box enumerating every one (Kaplan & Sadock 2024).

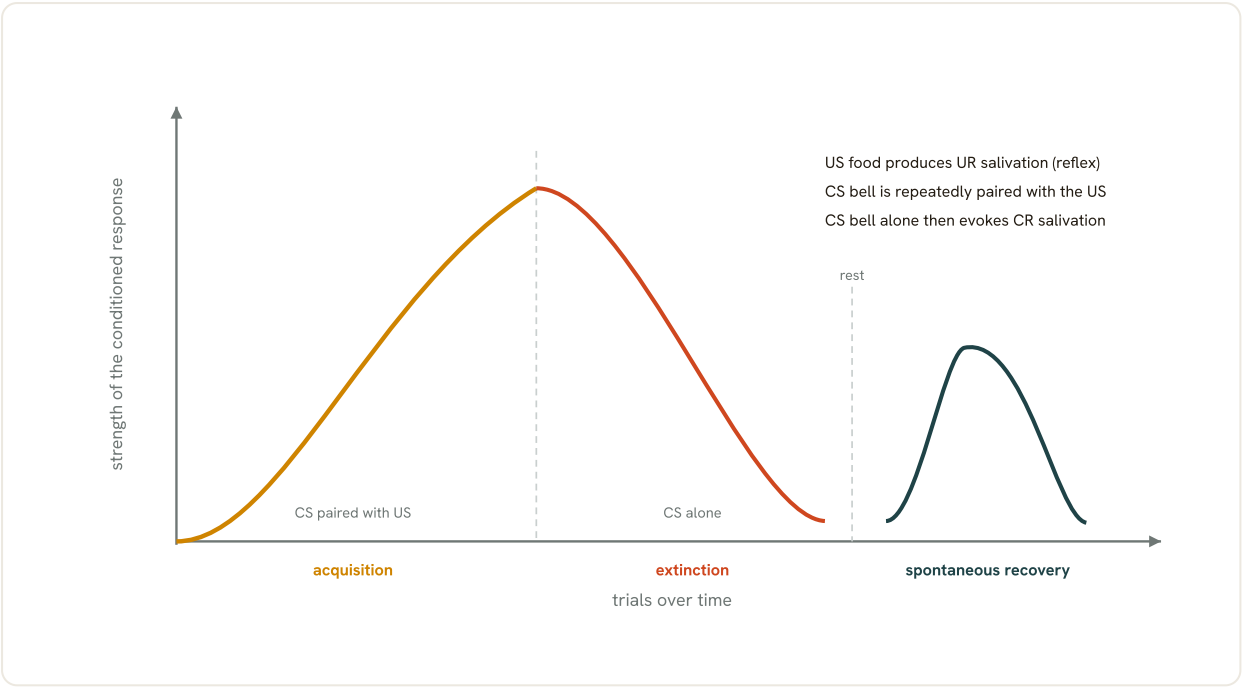


Fig 5.2 The course of classical conditioning. During acquisition the conditioned stimulus (the bell) is repeatedly paired with the unconditioned stimulus (food), and the conditioned response grows to an asymptote. Presenting the conditioned stimulus alone produces extinction, a fall in the response. After a rest the response returns, weaker, as spontaneous recovery, showing that extinction suppresses rather than erases the learning. The unconditioned stimulus and response are the inborn reflex; the conditioned stimulus and response are what the animal learns.

8.1 Pavlov (1927): the reflex vocabulary

The founding move: an automatic reflex can be transferred to an arbitrary signal. The Russian physiologist Ivan Pavlov, working in the reflex tradition, rang a bell and then gave a dog food; after a few pairings the dog salivated to the bell alone, anticipating the food (Kaplan & Sadock 2024). The events are named so the paradigm applies anywhere:

Unconditioned stimulus (US, UCS)

The stimulus that *unconditionally* elicits a response before any learning: the food.

Unconditioned response (UR, UCR)

The innate, reflexive response to the US: salivation to food.

Neutral stimulus (NS)

A stimulus that initially elicits no relevant response: the bell before pairing.

Conditioned stimulus (CS)

The former neutral stimulus *after* pairing, which now elicits the response conditional on the CS to US pairing: the bell.

Conditioned response (CR)

The learned, anticipatory response to the CS: salivation to the bell (usually weaker than the UR).

Read the arithmetic once and it never confuses: US produces UR by nature; NS produces nothing; pair NS with US repeatedly; the NS becomes a CS and now produces a CR. What Pavlov left open was *why* pairing sometimes works and sometimes does not, which the twentieth-century revisions answered (Tasman 2015).

8.2 The four core phenomena of Pavlovian learning

Every classical-conditioning answer must name these four. They are examined as pure psychology and as the mechanics of exposure therapy.

Acquisition

Acquisition is the initial learning phase in which the CR is established and strengthened over successive CS to US pairings; it is faster when the US is intense or salient and when the CS is novel.

Extinction

Extinction is the weakening and eventual disappearance of the CR when the CS is presented repeatedly *without* the US. It does not erase the original learning; it lays down new "the CS is safe" learning on top of it. Extinction is the theoretical engine of exposure therapy (Kaplan & Sadock 2024).

Spontaneous recovery

After extinction and a rest interval, presenting the CS again elicits the CR in diminished strength, proving the original association was not destroyed. Clinically it is the model for the return of a treated phobia after a symptom-free gap.

Stimulus generalisation and discrimination

Generalisation is the spread of the CR to stimuli resembling the CS (a child bitten by a spaniel fears all dogs). *Discrimination* is the complementary narrowing: the organism learns to respond only to the exact CS and not to similar stimuli, achieved by pairing the true CS with the US while presenting similar stimuli without it.

A fifth, higher-order (second-order) conditioning, extends the reach of a CS: once a CS reliably elicits a CR, pairing a *new* neutral stimulus with that established CS (with no US present) makes the new stimulus a CR-eliciting signal in its own right, which is how conditioned fear can spread to cues never once paired with the original trauma (Kaplan & Sadock 2024).

8.3 Watson and Rayner (1920): Little Albert and the behaviourist manifesto

What it fixed: it proved human emotion obeys Pavlov's law, not just canine salivation. John B. Watson, who had declared in his 1913 behaviourist manifesto that psychology should study only observable behaviour and treat consciousness as outside its scope, set out with Rosalie Rayner to show that a human emotion could be conditioned. In the **Little Albert** experiment (1920) an eleven-month-old infant was shown a white rat (initially neutral, even pleasant) while a steel bar was struck loudly behind his head (the US, producing the UR of startle and fear). After a few pairings the rat alone (now the CS) elicited crying and withdrawal (the CR of conditioned fear). Crucially the fear *generalised* to a rabbit, a dog, a fur coat and a Santa Claus mask, demonstrating stimulus generalisation of a conditioned emotion (Kaplan & Sadock 2024). Watson thereby claimed emotions are built by conditioning, not inherited fully formed, the empirical anchor of his environmentalist manifesto ("give me a dozen healthy infants..."). The complementary case, *Peter* (deconditioned of an animal fear by pairing a caged rabbit, moved gradually closer, with a favourite food), is the historical seed of systematic desensitisation (Kaplan & Sadock 2024). What it left debated: *which* arrangements of CS and US in time actually produce learning, and why some pairings fail, taken up next.

CLINICAL ANCHOR

Little Albert is the textbook model of specific phobia: a neutral object becomes a fear cue by pairing with an aversive event, then generalises. The mirror image, Peter, is the model of exposure-based cure. Both together make the two-line clinical story the exam wants: fear is conditioned in and extinguished out.

8.4 The timing of CS and US: delay, trace, simultaneous, backward

What it fixed: it specified the temporal arrangement that makes conditioning strong or absent. Because the CS works by *predicting* the US, its onset must precede the US for good learning. The four classic arrangements, in descending order of effectiveness, are a high-yield MCQ:

PARADIGM	TEMPORAL ARRANGEMENT	STRENGTH OF CONDITIONING
Delay conditioning	CS begins, then continues (overlaps) until the US is delivered	**Strongest; the standard optimal arrangement**
Trace conditioning	CS begins and *ends*, then a gap (trace interval), then the US	Weaker; must hold a memory trace of the CS across the gap
Simultaneous conditioning	CS and US presented at the same instant	Poor; the CS predicts nothing new
Backward conditioning	US precedes the CS (CS comes after)	**Weakest, often inhibitory; the CS signals the US is over**

The four Pavlovian timing paradigms ordered by efficacy: delay is best, backward is worst, and the rule is that the CS must come before and predict the US (Kaplan & Sadock 2024).

RULE **The CS must come before and predict the US.** Efficacy runs delay > trace > simultaneous > backward, with backward (US first) often inhibitory because the CS then signals the US is over.

8.5 Rescorla and Wagner (1972): conditioning is prediction, not contiguity

What it fixed: it replaced "pairing causes learning" with "surprise causes learning". Research from the late 1960s showed that a CS to US pairing does *not* guarantee conditioning. Two findings forced the change. In **blocking** (Kamin), if one CS already reliably predicts the US, a second CS added to it acquires little conditioning, because it carries no new information. In the *contingency* experiments (Rescorla), the organism treats the CS as a signal only when the US is *more probable* in the presence of the CS than in its absence; if the US occurs equally often with and without the CS, no conditioning develops despite many pairings. The lesson is that **contingency** (predictive relationship), not mere **contiguity** (co-occurrence), drives learning (Kaplan & Sadock 2024). The *Rescorla-Wagner model* made this formal: the change in a CS's associative strength on any trial is proportional to the discrepancy between the US that *actually* occurs and the US already *predicted* by all cues present, that is, the **prediction error** (or surprise). A fully predicted US drives no further learning (error is zero); an unexpected US drives strong learning; a US smaller than predicted drives inhibitory learning. This "learning is driven by prediction error" idea is the direct ancestor of the dopaminergic reward-prediction-error account

in modern computational psychiatry. What it left debated: *which* CS to US associations form easily and which resist, answered by preparedness (Kaplan & Sadock 2024).

HOLD THIS

Conditioning is driven by contingency (prediction), not mere contiguity (co-occurrence). A fully predicted US drives no further learning; surprise does, which is why blocking occurs and why classical conditioning is now read as prediction-error learning under biological constraint.

8.6 Preparedness: Seligman, taste aversion and the Garcia effect

What it fixed: not all pairings are equal; evolution biases which associations form. The Rescorla-Wagner era treated the CS and US as interchangeable, but Seligman's concept of **preparedness** (1971) holds that organisms are biologically *prepared* to associate certain CS to US combinations far more readily than others, because those associations were adaptive over evolutionary time. The decisive evidence is *conditioned taste aversion*, the *Garcia effect* (Garcia and Koelling): a rat that becomes ill hours after tasting a novel flavour will avoid that flavour thereafter, and this learning violates the ordinary rules, because it forms after a *single* trial and across a delay of hours between CS (taste) and US (nausea) that would abolish any normal Pavlovian pairing. Critically, tastes are readily associated with *illness* but not with shock, whereas audio-visual cues are readily associated with *shock* but not illness (belongingness). Preparedness explains why human phobias cluster on evolutionarily threatening objects (snakes, spiders, heights, blood) rather than on modern dangers (electric sockets, cars) that are as often paired with pain (Kaplan & Sadock 2024).

CLINICAL ANCHOR

The Garcia effect is the direct model of *anticipatory nausea and vomiting* in chemotherapy: the clinic, the smell of the infusion suite or a particular food eaten before a cycle becomes a CS that elicits nausea (CR) before the cytotoxic drug (US) is even given. Single-trial, delay-bridging taste-aversion learning is exactly why patients develop food aversions after one bad cycle.

8.7 The currently accepted position and its neural correlate

Conditioning is prediction-error learning under biological constraint, and fear conditioning has a mapped circuit. The **currently accepted** synthesis keeps Pavlov's phenomena but reinterprets them: acquisition is the accrual of associative strength driven by prediction error; extinction is *new inhibitory learning* (not erasure), which is why the response returns as spontaneous recovery, renewal (context change) and reinstatement; and preparedness sets which associations form. The **neural correlate** is best defined for conditioned fear: the *amygdala*, specifically the basolateral complex, is where CS and US converge and the fear memory is stored, with the central nucleus driving the autonomic and behavioural fear output; the *hippocampus* encodes the context (essential for context-dependent renewal); and the *ventromedial prefrontal cortex* drives extinction learning and top-down inhibition of the amygdala (the LeDoux and Milad-Quirk circuitry). Extinction being new learning rather than unlearning is precisely why exposure therapy relapses when the patient leaves the treatment context, and why extinction is

now augmented pharmacologically (for example D-cycloserine facilitating NMDA-dependent extinction consolidation) (Kaplan & Sadock 2024; Stahl 2021).

PEARL

Extinction is not forgetting. The CR that "disappeared" in the clinic can come back three ways: *spontaneous recovery* (time passes), *renewal* (the CS is met in a new context) and *reinstatement* (the US is encountered again). This single fact explains post-exposure phobia relapse, and it is the highest-value clinical pearl of the whole topic.

8.8 Clinical yield: phobia, chemotherapy nausea, addiction cue reactivity

Three disorders, one mechanism. Classical conditioning is examinable chiefly as the substrate of three clinical phenomena (Kaplan & Sadock 2024; New Oxford Textbook 2020):

Conditioned fear to phobia

A neutral object paired with an aversive event becomes a fear CS, generalises, and is maintained by avoidance (which prevents extinction). Treatment is extinction by graded exposure.

Conditioned nausea in chemotherapy

Anticipatory nausea and vomiting is a prepared, taste-aversion-like CR to clinic cues; treatable by behavioural desensitisation and by minimising cue salience.

Cue reactivity in addiction

Drug-paired cues (paraphernalia, places, people, the sight of a needle) become CSs that, via Pavlovian conditioning, elicit conditioned craving, autonomic arousal and conditioned compensatory (tolerance-like) responses, driving relapse. Cue-exposure therapy attempts extinction; the renewal effect explains why extinction in a clinic often fails to transfer to the street (cross-refer SUD).

8.9 Worked example: the dental phobia, read through the whole apparatus

Run one everyday fear through every term. A man tenses and feels his knees weaken merely on entering the waiting room of a dentist he is visiting for a routine cleaning (Tasman 2015).

Acquisition

A previous painful procedure (the US) elicited a fear-and-pain response (the UR). The dentist's office, paired with that pain, became a CS.

Conditioned response

Now the office alone (CS) elicits fear (the CR): sweating, weak knees, dread, before any drilling.

Generalisation

The fear spreads: the smell of antiseptic, the sound of a drill next door, even a white coat can now trigger it.

Higher-order conditioning

The appointment-reminder text, paired only with the already-feared office and never with pain, itself starts to trigger dread.

Preparedness

Pain-linked cues condition readily and fast; a single bad extraction can establish the phobia, echoing prepared, few-trial fear learning.

Extinction and its limits

Repeated painless visits (CS without US) extinguish the fear. But after a year's gap the dread can return (*spontaneous recovery*), or reappear at a *new* clinic (*renewal*), because extinction added a "safe" meaning without deleting the "dangerous" one.

Neural correlate

The office-fear association is held in the basolateral amygdala; the return of fear in a new clinic reflects hippocampal context coding; successful exposure depends on ventromedial prefrontal cortex driving extinction over the amygdala.

COMMON TRAP

Do not confuse classical with operant conditioning. In *classical* conditioning a *stimulus* comes to elicit an involuntary, reflexive response (the response is *elicited* by an antecedent CS: salivation, fear, nausea). In *operant* conditioning a *voluntary behaviour* is strengthened or weakened by its *consequences* (reinforcement or punishment). A second frequent slip: "extinction" means different things in the two paradigms only superficially; in both it is the decline of the response when the maintaining event (the US, or the reinforcer) is withheld, but in neither does it erase the original learning.

MNEMONIC

Timing efficacy: "Delay Dominates, Backward is Broken" (D > T > S > B)

Delay (overlapping CS) is strongest, then Trace (gap), then Simultaneous, then Backward (weakest, often inhibitory). The single rule underneath: the CS must come **before** and **predict** the US. For the reflex terms, remember the US to UR pair is *unlearned* (both begin with the natural reflex) and the CS to CR pair is *conditional* on training.

INDIA

Cue-reactivity conditioning is directly usable in Indian addiction practice, where alcohol and tobacco (including gutka and khaini) dependence is highly cue-bound: the tea-shop, the after-meal ritual, the paan corner and specific companions act as powerful CSs for craving. Relapse-prevention counselling that identifies and plans around these conditioned cues (a behavioural, low-cost intervention) fits resource-limited settings well, and the renewal effect warns that skills learned in an inpatient de-addiction ward may not transfer home unless practised in the patient's own high-risk contexts.

GOOD TO REMEMBER

- **Classical (Pavlovian, respondent) conditioning:** a neutral stimulus paired with a US comes to elicit an anticipatory CR; the model of conditioned fear, nausea and craving.
- **Pavlov (1927):** reflex vocabulary (US, UR, CS, CR) and the core phenomena; the dog-bell-salivation paradigm.
- **US / UR:** unconditioned (unlearned) stimulus and its innate reflex response (food to salivation).
- **CS / CR:** conditioned (learned) stimulus and its trained response (bell to salivation); the CR is usually weaker than the UR.
- **Acquisition:** the initial phase of learning and strengthening the CR over CS to US pairings.
- **Extinction:** decline of the CR when the CS is repeatedly presented without the US; new inhibitory learning, not erasure; basis of exposure therapy.
- **Spontaneous recovery:** reappearance of an extinguished CR (diminished) after a rest interval; proves the original learning survives.
- **Stimulus generalisation / discrimination:** spread of the CR to similar stimuli / learned narrowing to the exact CS.
- **Higher-order (second-order) conditioning:** a new neutral stimulus paired with an established CS becomes CR-eliciting without the US.
- **Watson and Rayner (1920), Little Albert:** conditioned fear of a white rat (US = loud noise) that generalised; empirical anchor of the behaviourist manifesto (Watson 1913).
- **Timing paradigms:** delay (strongest) > trace > simultaneous > backward (weakest); CS must precede and predict the US.
- **Rescorla-Wagner (1972):** learning is driven by prediction error (surprise); explains blocking; contingency, not mere contiguity, produces conditioning.
- **Blocking (Kamin):** a CS that predicts nothing new (a second cue already predicts the US) acquires little conditioning.
- **Preparedness (Seligman 1971):** organisms are biologically biased toward some CS to US associations; explains the object-selectivity of phobias.
- **Garcia effect / conditioned taste aversion:** single-trial, long-delay taste-to-illness learning; belongingness (taste with illness, not shock); model of chemotherapy anticipatory nausea.
- **Neural correlate:** basolateral amygdala stores the fear CS to US association; hippocampus codes context (renewal); ventromedial prefrontal cortex drives extinction.

9 · Operant conditioning and reinforcement schedules

Learning by consequence, and the timetables that shape it. Where classical conditioning is about associations between stimuli, **operant conditioning** (also called instrumental conditioning) is about how the consequences of a voluntary action change the future probability of that action. A behaviour that operates on the environment is an **operant**; if its consequence strengthens it, the consequence is a **reinforcement**, and if the consequence weakens it, the consequence is a **punishment**. The exam wants this as an evolutionary sequence of ideas: Thorndike's law of effect from the puzzle box, Skinner's formalisation of the operant and the four-cell reinforcement-versus-punishment matrix, the derived techniques (shaping, chaining, extinction, stimulus control), the four schedules of reinforcement with their signature response patterns, and the modern reward-learning synthesis anchored to dopamine.

This is one of the highest-yield theory blocks in the behavioural-science paper because the whole of behaviour therapy, applied behaviour analysis, token economies and contingency management

is built on it (Kaplan & Sadock 2024). Treat the four-cell matrix and the four schedules as the two must-reproduce items; the clinical arm (token economy, contingency management) is developed in the behaviour-therapy topic and is only cross-referenced here.

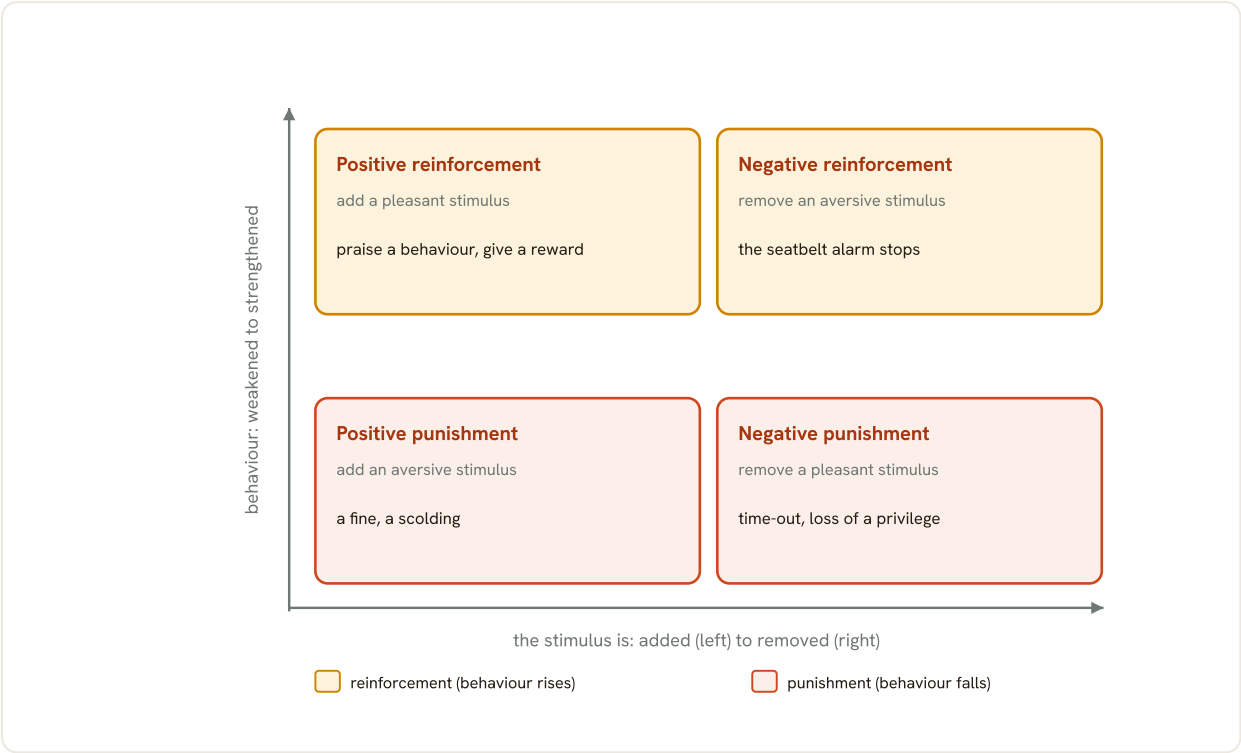


Fig 5.3 The operant matrix. "Positive" and "negative" mean the stimulus is added or removed, not good or bad; "reinforcement" and "punishment" mean the behaviour is strengthened or weakened. Reading the two axes gives the four operations: positive reinforcement (add a pleasant stimulus), negative reinforcement (remove an aversive one), positive punishment (add an aversive one) and negative punishment (remove a pleasant one). The commonest exam trap is confusing negative reinforcement, which strengthens behaviour, with punishment, which weakens it.

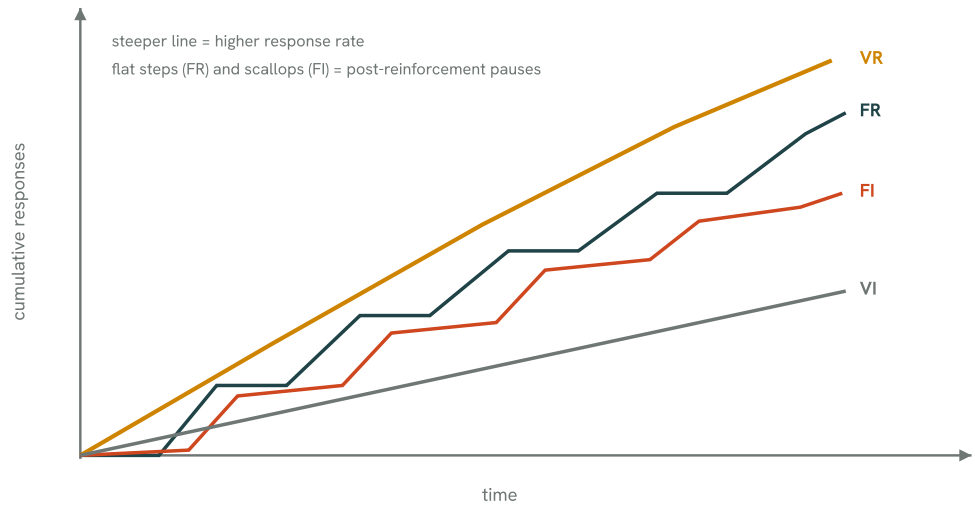


Fig 5.4 The four schedules of reinforcement as cumulative-response curves. Ratio schedules (reinforce after a number of responses) drive higher rates than interval schedules (reinforce the first response after a time). Variable schedules produce steady responding, while fixed schedules produce a pause after each reinforcement: the fixed-ratio step and the fixed-interval scallop. The variable-ratio schedule (VR) gives the highest, steadiest rate and the greatest resistance to extinction, which is why it is the schedule of gambling.

9.1 Definition: the operant and the law of consequences

A behaviour controlled by its consequences, not by an antecedent trigger. The defining contrast with Pavlovian learning is that a respondent is *elicited* and controlled by an antecedent stimulus, whereas an **operant** is *emitted* and controlled by its consequences (Kaplan & Sadock 2024). A rat is not compelled to press a lever the way it is compelled to salivate to food; it presses because pressing has been followed by a reinforcer, and if the reinforcer is withdrawn the pressing stops. Clinically this distinction is the first fork in any behavioural analysis: if a child acts out in class, the clinician asks whether the behaviour is a respondent (change its antecedents) or an operant (change its consequences) before intervening (Kaplan & Sadock 2024).

9.2 Theory one: Thorndike's law of effect (the puzzle box)

The first systematic account, from a hungry cat in a box. Edward Thorndike (1874 to 1949) placed a hungry cat in a "puzzle box" from which it could escape to food by operating a latch (Thorndike 1913, cited in Tasman Psychiatry). At first the cat unlatched the door only by accident; on being replaced it escaped progressively faster, until it operated the latch immediately. From this Thorndike derived the **law of effect**: a response followed by a satisfying consequence is strengthened (stamped in) and one followed by an annoying consequence is weakened (Kaplan & Sadock 2024). **What it fixed and what it left debated.** The law of effect fixed the absence of any mechanism for goal-directed learning, giving a lawful relation between action and outcome. What it left debated was the internal process: Thorndike's "stamping in" was a blunt strengthening metaphor with no account of what the animal actually learned, a gap the later action-outcome view had to fill.

9.3 Theory two: Skinner formalises the operant

The free operant and the experimental analysis of behaviour. In the late 1930s B. F. Skinner (Skinner 1938) enclosed a rat in a chamber (the operant chamber, popularly the "Skinner box") with a lever it was free to press repeatedly whenever it "wanted," earning a food pellet each time (Kaplan & Sadock 2024). This "free operant" arrangement, unlike Thorndike's discrete escape trials, let response *rate* be measured continuously and made behaviour a lawful function of its scheduled consequences. Skinner held that operant principles, reinforcement, punishment, extinction and stimulus control, could in principle explain virtually all human behaviour (Skinner 1938, cited in Tasman Psychiatry), and it was the specific application of these principles that became *applied behavioural analysis* and the engine of the 1950s to 1960s behaviour-therapy movement (Kaplan & Sadock 2024).

9.4 The core four-cell matrix: reinforcement versus punishment

Two questions: is a stimulus added or removed, and does the behaviour strengthen or weaken. The single most examined structure in this topic is the two-by-two matrix built from crossing *add versus remove* a stimulus with *strengthen versus weaken* the behaviour. "Positive" and "negative" here mean added and removed (like arithmetic signs), *not* pleasant and unpleasant; "reinforcement" always strengthens and "punishment" always weakens.

Positive reinforcement

An appetitive stimulus is *added* after the behaviour, strengthening it. A child praised for tidying their room tidies more (Tasman Psychiatry).

Negative reinforcement

An aversive stimulus is *removed* or avoided by the behaviour, strengthening it. A student studies to avoid failing; taking a painkiller removes pain and so is reinforced. Note it *increases* behaviour and is not punishment.

Positive punishment

An aversive stimulus is *added* after the behaviour, weakening it. A reprimand added after talking back.

Negative punishment

An appetitive stimulus is *removed* after the behaviour, weakening it. The classic form is *time-out from reinforcement* and the loss of privileges or a fine (Kaplan & Sadock 2024).

	STIMULUS ADDED (POSITIVE)	STIMULUS REMOVED (NEGATIVE)
Behaviour strengthened	Positive reinforcement (add appetitive: praise, food)	**Negative reinforcement (remove aversive: escape, avoidance)**
Behaviour weakened	Positive punishment (add aversive: reprimand, shock)	**Negative punishment (remove appetitive: time-out, fine)**

The columns are the discriminator most candidates get wrong: the sign is about adding versus removing a stimulus, never about the stimulus being nice or nasty. Negative reinforcement increases behaviour; punishment decreases it.

HOLD THIS

Positive/negative = a stimulus added or removed; reinforcement/punishment = behaviour up or down. Decode the two words independently, and never call negative reinforcement (which increases behaviour) a punishment.

COMMON TRAP

Negative reinforcement is *not* punishment. Both "negatives" involve removal, but negative reinforcement removes an *aversive* stimulus and so *increases* behaviour, whereas negative punishment removes an *appetitive* stimulus and so *decreases* it. The second trap: punishment suppresses a behaviour only temporarily and teaches no alternative, so a reprimanded child may suppress the urge to talk back yet learn no better way to communicate, or may even escalate if the scolding is the only attention (a positive reinforcer) on offer (Tasman Psychiatry).

9.5 Primary versus secondary (conditioned) reinforcers

Innately rewarding versus reward by association. A *primary reinforcer* is biologically based and rewarding without prior learning: food, water, warmth, nurturance (Tasman Psychiatry). A *secondary* or *conditioned reinforcer* has no intrinsic value and becomes reinforcing only by being paired with a primary reinforcer: money, praise, a grade, and the tokens of a token economy (Kaplan & Sadock 2024). A lollipop reinforces a child by primary means; a word of praise reinforces by conditioned means (Tasman Psychiatry). A *generalised* conditioned reinforcer such as money is one paired with many different primaries, which is why it reinforces so broadly. This is the conceptual basis of the token economy, developed in the behaviour-therapy topic.

9.6 The Premack principle

A high-probability behaviour reinforces a low-probability one. Rather than testing reinforcers by trial and error, the **Premack principle** (David Premack) predicts them from preference: if you rank a person's freely chosen activities by time spent, access to a *more-preferred* activity will reinforce a *less-preferred* one (Kaplan & Sadock 2024). For a child who prefers pinball to candy, pinball reinforces candy-eating; for one with the reverse preference, candy reinforces pinball. In everyday form this is "grandma's rule," first you eat your vegetables, then you get dessert. The refinement is that even a low-preference activity can reinforce a higher one if the person has been deprived of it below baseline (the response-deprivation account) (Kaplan & Sadock 2024).

9.7 Shaping by successive approximation, and chaining

Building a behaviour that never occurs spontaneously. **Shaping** is the operant technique of reaching a behavioural goal in stepwise fashion by selectively reinforcing closer and closer approximations to the desired behaviour (Kaplan & Sadock 2024). To teach a rat to press a high lever, you first reinforce facing it, then approaching, then touching, then pressing, raising the criterion at each step. Clinically a physician's praise for each successive step of a health-promoting change shapes a durable lifestyle change (Tasman Psychiatry). *Chaining* is the linked cousin: a complex sequence is built by joining individual responses, each response producing the discriminative stimulus for the next and the terminal reinforcer maintaining the whole chain (as in teaching a multi-step self-care routine, often taught in reverse as backward chaining).

9.8 Extinction and the extinction burst

Withhold the reinforcer and the behaviour declines, but not smoothly. *Extinction* is the decline of an operant when its reinforcer is no longer delivered (Kaplan & Sadock 2024): a tantrum maintained by parental attention fades when attention is consistently withheld. The clinically vital caveat is the *extinction burst*, a transient *increase* in the frequency, intensity and variability of the behaviour immediately after reinforcement stops, before it declines. Parents who relent during the burst inadvertently reinforce a louder tantrum on a leaner schedule. Extinction does not erase the original learning: *spontaneous recovery*, *renewal*, *reinstatement*, *rapid reacquisition* and *resurgence* (return of an old behaviour when a replacement is itself extinguished) all show the learning is suppressed and context-bound, not destroyed (Kaplan & Sadock 2024). This is exactly why exposure gains relapse and why relapse-prevention work matters.

9.9 Discriminative stimuli and stimulus control

When behaviour comes under the control of a signal. A *discriminative stimulus* (S-D) is a cue in whose presence a response is reinforced; behaviour that reliably occurs in its presence and not its absence is said to be under *stimulus control* (Kaplan & Sadock 2024). Stimulus control is learned by *discrimination*, distinguishing two similar stimuli because one signals reinforcement and the other does not: a child learns to leave class when the school bell rings but not when a telephone rings (Tasman Psychiatry). Its complement is *generalisation*, responding to stimuli resembling the trained S-D. Clinically, stimulus-control procedures are the backbone of insomnia treatment (the bed becomes a discriminative stimulus for sleep, not for lying awake) and of trigger management in addiction.

9.10 Continuous versus partial reinforcement

Every response, or only some. Under a *continuous* reinforcement schedule every target response is reinforced; this produces the fastest acquisition of a new behaviour. Under a *partial* (intermittent) schedule only some responses are reinforced, which produces slower acquisition but far greater persistence. In the natural world few actions are reinforced every time, so partial schedules are the rule (Kaplan & Sadock 2024). The best practice is therefore to acquire a new behaviour on continuous reinforcement, then thin to a partial schedule to maintain it.

9.11 The four schedules of reinforcement and their response patterns

Ratio versus interval, crossed with fixed versus variable. Partial schedules are classified on two axes: whether reinforcement depends on the *number* of responses (ratio) or on *time* elapsed (interval), and whether the requirement is *fixed* (constant) or *variable* (averages a value but varies trial to trial) (Kaplan & Sadock 2024). Ratio schedules tie reinforcement directly to work done and so drive higher response rates than interval schedules.

Fixed ratio (FR)

Every nth response is reinforced (FR-10 reinforces every 10th). High steady rate with a brief *post-reinforcement pause* after each delivery. Everyday form: piece-rate pay, one reward per fixed quota.

Variable ratio (VR)

Reinforcement after an *average* number of responses that varies unpredictably. Produces the *highest, steadiest response rate and the greatest resistance to extinction* of all four; this is the gambling / slot-

machine schedule, because the next pull might always be the payoff (Kaplan & Sadock 2024).

Fixed interval (FI)

The first response after a fixed time (say 60 seconds) is reinforced. Produces the classic *fixed-interval scallop*: responding nearly stops just after reinforcement, then accelerates as the interval's end approaches. Everyday form: cramming that intensifies as a scheduled exam nears.

Variable interval (VI)

The first response after an *average, varying* interval is reinforced. Produces a low but very steady, extinction-resistant rate. Everyday form: repeatedly checking email, since a new message becomes available at unpredictable times (Kaplan & Sadock 2024).

SCHEDULE	REINFORCED WHEN	RESPONSE PATTERN	EVERYDAY EXAMPLE
Fixed ratio (FR)	After a set number of responses	High rate, post-reinforcement pause	Piece-rate pay
Variable ratio (VR)	After an average, varying number	**Highest rate, most resistant to extinction (the gambling schedule)**	Slot machine
Fixed interval (FI)	First response after a set time	**Scalloped: pause then acceleration toward interval's end**	Cramming before a dated exam
Variable interval (VI)	First response after an average, varying time	Low but steady, extinction-resistant	Checking email for new messages

Discriminators: ratio schedules out-rate interval schedules (reinforcement tracks work); variable schedules out-persist fixed ones (unpredictability blocks the "just been reinforced" pause). Variable ratio is the peak on both counts.

RULE **Ratio out-rates, variable out-lasts, so the variable-ratio schedule wins on both: the highest, most extinction-resistant rate.** It is the gambling schedule; FI gives the scallop.

9.12 The partial-reinforcement extinction effect

Intermittently reinforced behaviour resists extinction longest. The *partial-reinforcement extinction effect* (PREE) is the paradoxical finding that a behaviour reinforced only intermittently persists *longer* when all reinforcement is withdrawn than one that had been continuously reinforced (Kaplan & Sadock 2024). It is paradoxical because the more sparsely rewarded behaviour is the more durable one. One account is that partial reinforcement trains responding *through* non-reward and frustration, so a run of unrewarded responses does not signal "extinction has begun." This is the mechanistic reason variable-ratio behaviours like gambling are so hard to extinguish, and why a tantrum a parent reinforces only occasionally (giving in "just this once") becomes especially entrenched.

TRAP The partial-reinforcement extinction effect is counter-intuitive: **intermittently reinforced behaviour resists extinction longer than continuously reinforced behaviour**, so the more sparsely rewarded habit is the more durable one.

9.13 Escape and avoidance learning; two-factor theory

Both are negative reinforcement, but avoidance is subtler. In *escape* learning the response terminates an aversive event already present (leaving a noisy room stops the noise). In *avoidance* learning the response prevents an aversive event that has not yet occurred, which raises a puzzle: how can the non-occurrence of something reinforce? Mowrer's *two-factor (two-process) theory* answers it by combining both learning types: first, Pavlovian conditioning makes a warning cue elicit fear; second, the avoidance response is negatively reinforced by the *reduction of that conditioned fear* (Kaplan & Sadock 2024). This is the standard learning model of the anxiety disorders: the obsessive-compulsive patient washes to reduce contamination anxiety, the agoraphobic stays home to escape fear of panic-associated places, and the person with bulimia vomits to reduce learned post-meal anxiety, each avoidance response reinforced by fear reduction and thereby maintained (Kaplan & Sadock 2024). Because the feared outcome is prevented, the belief that it would have happened is never disconfirmed, which is precisely why exposure with response prevention is the treatment.

> **CLINICAL ANCHOR**
>
> The negative-reinforcement trap runs through psychiatry. Compulsions, safety behaviours, avoidance in PTSD, and much substance use are maintained because the behaviour removes an aversive internal state (anxiety, craving, withdrawal), which reinforces it and blocks new learning. The therapeutic move, exposure with response prevention, deliberately breaks the negative-reinforcement contingency so the feared consequence can be disconfirmed and the fear extinguished.

9.14 Currently accepted position: reward learning as action-outcome association

From "stamping in" to a computational reward-learning account. The **currently accepted** view has moved beyond Thorndike's mechanical strengthening. The modern synthesis holds that the organism learns an *action to outcome* association (much as Pavlovian learning is stimulus to outcome), and that reinforcers act less as automatic "stampers" than as guides and motivators of goal-directed behaviour (Kaplan & Sadock 2024; Bouton 2016). A second consensus is the goal-directed versus habitual distinction: early instrumental behaviour is goal-directed and sensitive to the value of its outcome, whereas heavily overtrained behaviour becomes an outcome-insensitive *habit*, a shift central to modern models of compulsion and addiction. The quantitative law of effect (the matching law) further specifies that a behaviour's rate depends not only on its own reinforcement but on the reinforcement available for all competing behaviours, which is why enriching a young person's environment with alternative reinforcers lowers the rate of a maladaptive one (Kaplan & Sadock 2024).

9.15 Neural correlate: the dopamine reward-prediction-error system

Where reinforcement is computed in the brain. The *neural correlate* of operant reinforcement is the midbrain dopamine system. Phasic firing of dopamine neurons in the *ventral tegmental area* and *substantia nigra pars compacta*, projecting to the *ventral striatum (nucleus accumbens)* and prefrontal cortex, encodes a *reward prediction error*: dopamine rises when an outcome is better than predicted, is unchanged when it is exactly as predicted, and dips when it is worse than

predicted (Schultz 2016). This teaching signal is the biological implementation of the law of effect and explains why unpredictable schedules are so potent: a variable-ratio payoff is by design a persistent source of positive prediction error, which is the neurobiology behind gambling's grip and the dopaminergic reward pathway's central role in every substance use disorder. The goal-directed-to-habitual transition maps onto a shift from ventral (accumbens) to dorsolateral striatal control.

9.16 Worked example: an outpatient with alcohol dependence

The whole apparatus applied to one patient. A man drinks each evening. *Operant analysis:* drinking is an operant maintained by *negative reinforcement*, it removes the aversive states of anxiety and mounting withdrawal, and by *positive reinforcement*, the euphoriant and social rewards. *Discriminative stimuli:* the pub, payday and certain company are S-D cues that occasion drinking; stimulus-control work removes or re-signals them. *Schedule:* the intoxication reward arrives on a rich, near-continuous schedule, whereas the harms are delayed and intermittent, so present reinforcement dominates. *Extinction and its burst:* early abstinence brings a surge in craving and drink-seeking (an extinction burst) before decline, which must be anticipated so a lapse is not read as failure. *Shaping and Premack:* abstinence is built by reinforcing successive approximations (a dry evening, then a dry week), and higher-probability healthy activities are arranged to reinforce lower-probability recovery tasks. *Neural:* the alcohol cue drives a dopaminergic prediction-error spike in the ventral striatum, and over years control shifts toward dorsal-striatal habit, which is why willpower alone fails. The formal clinical delivery of these contingencies, contingency management and token systems, is developed in the behaviour-therapy topic.

MNEMONIC

"Positive = ADD, Negative = REMOVE; Reinforce = UP, Punish = DOWN. Schedules: VR is king."

For the matrix, decode the two words independently: the first word is whether a stimulus is added (positive) or removed (negative); the second is whether behaviour goes up (reinforcement) or down (punishment). For the schedules, remember **"Ratio out-rates, Variable out-lasts"**: ratio schedules give higher rates, variable schedules give more persistence, so *variable ratio* wins on both, the gambling schedule. For the patterns: **FI = scallop, VR = gambling.**

INDIA

Operant contingencies are culturally and economically loaded. In Indian family systems the most powerful reinforcers are frequently social and relational (parental approval, community standing) rather than material, so a behavioural plan routed through the family reinforcement network usually out-performs an individually addressed token scheme. In gambling and alcohol work, the variable-ratio structure of local betting and the ready, near-continuous availability of alcohol in many settings are the contingency realities any plan must plan around.

PEARL

The one-line arc for an examiner: Thorndike's law of effect (behaviour is selected by its consequences) was formalised by Skinner into the operant and the reinforcement-punishment matrix, elaborated into the techniques (shaping, extinction, stimulus control) and the four schedules (with variable ratio the most powerful), and is now understood as action-outcome reward learning implemented by the dopamine reward-prediction-error signal. Negative reinforcement, not punishment, is the thread that ties compulsions, avoidance and addiction together in the clinic.

GOOD TO REMEMBER

- **Operant conditioning:** behaviour changed by its consequences; the operant is emitted and controlled by consequences, unlike the elicited respondent.
- **Thorndike (1874 to 1949), law of effect (1913):** puzzle-box cats; satisfying consequences stamp a response in, annoying ones stamp it out.
- **Skinner (1938):** the free operant, operant chamber ("Skinner box"), and the experimental analysis of behaviour; founder of the reinforcement-schedule framework.
- **Positive reinforcement:** add appetitive stimulus, behaviour increases (praise, food).
- **Negative reinforcement:** remove/avoid aversive stimulus, behaviour increases (escape, avoidance); NOT punishment.
- **Positive punishment:** add aversive stimulus, behaviour decreases (reprimand, shock).
- **Negative punishment:** remove appetitive stimulus, behaviour decreases (time-out, fine).
- **Primary vs secondary reinforcer:** primary = innately rewarding (food, water); secondary/conditioned = rewarding by pairing (money, praise, tokens).
- **Premack principle (David Premack):** access to a more-preferred behaviour reinforces a less-preferred one ("grandma's rule").
- **Shaping:** reinforcing successive approximations to a target behaviour; chaining links responses into a sequence.
- **Extinction:** withholding reinforcement declines the behaviour; extinction burst = transient surge first; learning suppressed, not erased (spontaneous recovery, renewal, resurgence).
- **Discriminative stimulus / stimulus control:** a cue signalling reinforcement gains control of the behaviour; learned by discrimination, opposed by generalisation.
- **Fixed ratio (FR):** every nth response; high rate with post-reinforcement pause.
- **Variable ratio (VR):** average varying number; highest rate, most resistant to extinction; the gambling schedule.
- **Fixed interval (FI):** first response after a set time; the "scallop" (pause then acceleration).
- **Variable interval (VI):** first response after an average varying time; low but steady, extinction-resistant.
- **Continuous vs partial; PREE:** partial (intermittent) reinforcement resists extinction longer than continuous, the partial-reinforcement extinction effect.
- **Escape vs avoidance; two-factor theory (Mowrer):** Pavlovian fear plus operant fear-reduction; the learning model of anxiety disorders and compulsions.
- **Neural correlate:** dopamine reward-prediction-error signal (VTA/SNc to ventral striatum), Schultz 2016; goal-directed to habitual shift = ventral to dorsal striatum.

10 · Social learning theory (Bandura)

How behaviour is learned by watching, not only by doing. **Social learning** theory, developed by Albert Bandura at Stanford, is the bridge between the older behaviourism of Watson and

Skinner and the cognitive psychology that followed. Its central claim is that people acquire behaviour, emotions and attitudes by **observational learning**, watching a model and its consequences, without ever needing direct reinforcement of their own. Bandura integrated the principles of classical and operant conditioning with observational learning to formulate the tenets of the theory (Kaplan & Sadock 2024), and in doing so placed *cognition*, thoughts, images, beliefs and expectations, at the centre of learning. For the exam, treat this as the pivot on which twentieth-century learning theory turns: the move from **radical behaviourism**, which refused to study the unobservable mind, to the *social-cognitive* account in which expectancies mediate every learned response.

The clinical reach is large and directly examinable. Bandura's work is one of the three pillars of the 1960s cognitive revolution (with Beck and Ellis), it supplies the theoretical basis for modelling and participant-modelling treatments, and its later concept of **self-efficacy** underpins cognitive behaviour therapy, graded exposure and essentially every behaviour-change intervention now in use (Kaplan & Sadock 2024). Follow the standard arc: define the theory, walk the era in the order it appeared (radical behaviourism, then Rotter and Bandura's social learning, then Bandura's mature social-cognitive theory with reciprocal determinism and self-efficacy), state the currently accepted position, name its behavioural and neural correlate, and close with a worked clinical example.

10.1 What social learning theory claims

Learning through observation, mediated by cognition. Social learning theory (later renamed by Bandura himself as *social-cognitive theory*) holds that most human behaviour is learned by observing others and the consequences their behaviour brings, then reproducing or inhibiting it accordingly. Through observational learning, the process of observing the actions and reactions of others can effect a change in an individual's behaviour without that individual needing direct experience of the situation (Kaplan & Sadock 2024). The theory keeps the conditioning laws of the behaviourists but adds an indispensable cognitive layer: what is stored is not a reflex but a symbolic *representation* of the modelled act and an *expectancy* about its likely outcome. This is why it is classed as a *social-cognitive* rather than a purely behavioural theory.

10.2 The starting point: radical behaviourism and its limit

The mind ruled out of court. The theory Bandura reacted against was **radical behaviourism**. Steeped in the tradition of Watson, radical behaviourists eschewed the study of cognition, holding that thought processes were mentalistic constructs not observable or verifiable by others and therefore outside science; directly changing behaviour was held to change the associated thoughts and feelings, so direct access to thoughts was deemed unnecessary (Kaplan & Sadock 2024). **What it left debated.** Its fatal gap was that it could not explain learning that occurs with no direct reinforcement of the learner at all, a child acquiring a whole complex behaviour merely by watching an adult, or a fear caught from a frightened parent. It also had no account of the obvious fact that the same reinforcement produces different learning in different people, because it refused to admit the mediating cognitions (expectancies, beliefs) that make the difference. Bandura's theory was built precisely to close that gap.

10.3 Rotter's social learning theory: expectancy and locus of control

The first cognitive amendment to reinforcement. Julian Rotter (1916 to 2014) offered an early version of social learning theory that first inserted cognition into the reinforcement account. Rotter proposed that human behaviour is guided not only by the actual history of reinforcement but also by plans, goals and *expectations* of success: a person performs a behaviour if they believe it is likely to lead to a valued goal (Kaplan & Sadock 2024). From this he derived **locus of control**: individuals with a history of success develop a generalised expectancy that they can control their lives (an *internal* locus of control), whereas those whose efforts have generally failed come to believe outcomes are a matter of luck or the decisions of powerful others (an *external* locus of control). **What it fixed and left open.** Rotter fixed behaviourism's silence on expectancy, showing that subjective probability of reward, not just reward history, drives behaviour. What he left for Bandura was the *mechanism of acquisition*: Rotter explained why we choose an act, but not how a novel behaviour is learned in the first place without ever performing it.

10.4 Bandura's observational learning and modelling

Acquisition without performance. Bandura's decisive addition was **modelling**: a novel behaviour can be acquired in full simply by observing a model perform it, before the observer has ever enacted or been reinforced for it. This is *observational* or *vicarious* learning, and it explains the transmission of language, skills, social conventions, fears and aggression far more economically than trial-and-error conditioning could. Bandura distinguished *acquisition* (learning the behaviour, which happens on observation) from *performance* (whether it is later enacted, which depends on expected consequences), a distinction the behaviourists could not draw. The Companion to Psychiatric Studies lists the empirically established optimum conditions for observational learning: *live modelling*, *perceived similarity* between observer and model, *seeing the model receive reinforcement*, and *familiarity* with the model (Companion to Psychiatric Studies).

10.5 The four subprocesses of observational learning

Attention, retention, reproduction, motivation. Bandura specified that observational learning proceeds through four component subprocesses, each of which must succeed for a modelled behaviour to be learned and shown. This is a classic exam list.

Attention

The observer must attend to the model and perceive the relevant features of the behaviour. Attention is raised by model salience, prestige, perceived similarity to the self, and the observer's own arousal and interest.

Retention

The observed behaviour must be encoded and stored as a symbolic (imaginal or verbal) representation in memory, so it can be recalled later in the model's absence. Rehearsal strengthens retention.

Reproduction (motor reproduction)

The observer must be physically and cognitively capable of converting the stored representation into action, comparing their own performance against the remembered model and refining it.

Motivation (motivational processes)

Even a fully acquired behaviour is performed only if the observer is motivated to do so. Motivation is supplied by anticipated consequences: direct reinforcement, *vicarious* reinforcement (seeing the model rewarded), and self-reinforcement.

10.6 Vicarious reinforcement and vicarious punishment

Consequences that fall on the model steer the observer. A cornerstone of the theory is that reinforcement need not fall on the learner. In **vicarious** reinforcement, seeing a model rewarded for a behaviour increases the observer's likelihood of performing it; in vicarious punishment, seeing a model punished decreases it. The individual thus learns not only on the basis of their own experience but also through vicarious reinforcement from the observation of others (Kaplan & Sadock 2024). This mechanism preserves the acquisition-performance distinction: watching a model be punished does not erase the observer's *learning* of the behaviour, it merely suppresses its *performance*, which reappears if the incentive changes. Vicarious reinforcement is the cognitive engine that lets the four subprocesses translate observation into action.

10.7 The Bobo doll experiments

Aggression transmitted by modelling. The empirical anchor of the theory is the Bobo doll series (Bandura, Ross and Ross 1961). Bandura produced a film of one of his students attacking an inflatable toy, a Bobo doll, and showed it to young children; when the children were subsequently given access to the doll, they copied the student's behaviour and attacked the doll (Companion to Psychiatric Studies). In a more striking extension, the experiment was repeated using a *live* clown instead of the doll (Bandura et al. 1963), and again the children copied the aggressive actions and struck the live clown after watching the film (Companion to Psychiatric Studies). The findings gave scientific legitimacy to the social learning perspective (Kaplan & Sadock 2024) by demonstrating learning of a complex behaviour, physical aggression, purely by observation, in the complete absence of any direct reinforcement of the child. Bandura's demonstration of modelling effects in the 1960s is the reason concern over depicted violence in television, film, social media and video games is framed in observational-learning terms (Kaplan & Sadock 2024).

> **COMMON TRAP**
>
> Do not say the Bobo doll study proves aggression is simply "imitated." Its precise and examinable point is that a complex behaviour was *acquired by observation with no direct reinforcement of the child*, refuting the radical-behaviourist requirement that the learner be reinforced. Note also that later variants manipulated *vicarious* consequences (models rewarded, punished, or neither): children who saw the model punished showed less spontaneous aggression, yet reproduced it when later offered an incentive, proving the behaviour had been *learned* though not *performed*.

10.8 Reciprocal determinism

Person, behaviour and environment interact both ways. Bandura's mature social-cognitive theory replaced the behaviourists' one-way causal arrow (environment shapes behaviour) with **reciprocal determinism**: the person (cognitions, expectancies, self-efficacy beliefs), their behaviour, and the environment operate as three factors that continuously and mutually

influence one another. The environment shapes behaviour, but behaviour also selects and alters the environment, and both are filtered through and act upon the person's cognitions. K&S illustrate the interaction directly: the same observed event, a peer being teased by a class bully, is learned differently depending on the child (an inhibited child thinks "that could happen to me" and withdraws in anxiety; a rambunctious child focuses on the bully and imitates the aggression), and the environment's response to each child's reaction then feeds back to reinforce or extinguish it (Kaplan & Sadock 2024). Reciprocal determinism is what makes the theory *interactionist* rather than environmentally deterministic.

10.9 Self-efficacy: definition and the four sources

The belief in one's own capability to execute a behaviour. Bandura's most influential single concept is **self-efficacy**: a person's belief in their capability to organise and execute the actions needed to manage a given situation or attain a goal. It is not global self-esteem but a task-specific and situation-specific judgement of "can I do this?" In the social-cognitive account of personality, the generalised sense of self-efficacy is treated as the *central individual-difference variable*: people are characterised primarily by their beliefs in their ability to control their lives, because those beliefs powerfully determine the effort they invest in adapting to their surroundings (Kaplan & Sadock 2024). Bandura held that efficacy beliefs are built from four sources, in descending order of potency.

Mastery experience (performance accomplishment)

The most powerful source: succeeding at the task oneself. Repeated personal success raises efficacy; repeated failure, especially early, lowers it. This is why graded, success-yielding exposure is the strongest efficacy-builder in therapy.

Vicarious experience (modelling)

Seeing similar others succeed ("if they can do it, so can I") raises efficacy, most strongly when the model is perceived as similar to the self. The direct clinical link to observational learning.

Verbal (social) persuasion

Being credibly encouraged or persuaded that one is capable. Weaker and more fragile than the first two, but it can raise the effort a person is willing to try.

Physiological and affective state

The person reads their own bodily and emotional arousal as information: a pounding heart and dread are interpreted as evidence of incapacity, so reducing arousal (or reappraising it) raises efficacy. Explains why calming physiology aids performance.

RULE **Mastery experience is the most powerful source of self-efficacy.** This is why graded, success-yielding exposure, not reassurance, is the strongest efficacy-builder in therapy.

10.10 Self-efficacy and self-perpetuating maladaptive behaviour

Why low efficacy is self-confirming. Low self-efficacy is not merely a symptom; in Bandura's account it is a cause that maintains disorder. Individuals who lack a strong sense of self-efficacy in social situations avoid them, and as a consequence fail to learn the social skills that would have enhanced their confidence, so self-defeating behaviours that look irrational from outside are

understandable within the dynamics of learning (Kaplan & Sadock 2024). The avoidance protects the low efficacy belief from disconfirmation, a vicious cycle that maps precisely onto the maintenance model of the anxiety disorders and social phobia. Raising self-efficacy, chiefly through mastery experiences delivered as graded exposure, breaks the loop.

10.11 Currently accepted position

Social-cognitive theory as the settled synthesis. The **currently accepted** position is Bandura's mature *social-cognitive theory*: behaviour is learned through observation and direct experience, is mediated throughout by cognitive processes (symbolic representation, outcome expectancies and self-efficacy beliefs), and is co-determined by the reciprocal interaction of person, behaviour and environment. Social-cognitive approaches are among the most influential frameworks in current personality and behaviour-change research (Kaplan & Sadock 2024). All contemporary cognitive behaviour therapy protocols rest on the principles of social learning theory (Kaplan & Sadock 2024): the radical-behaviourist prohibition on studying cognition has been fully abandoned, and the "cognitive turn" Bandura, Beck and Ellis initiated in the 1960s is now orthodox. The concept has also generalised, with later theorists (for example Hazel Markus's "possible selves") extending social learning from specific behaviours to whole identities (Kaplan & Sadock 2024).

HOLD THIS

Bandura's move is acquisition without direct reinforcement: behaviour is learned by watching a model (Bobo doll), through four subprocesses and vicarious reinforcement, and organised around self-efficacy. Learning (acquisition) is distinct from doing (performance).

10.12 Behavioural and neural correlate

Where modelling lives in the brain. Behaviourally, observational learning is expressed as imitation, vicarious conditioning (acquiring a conditioned emotional response by watching another's), and the graded rise in performance and persistence that tracks rising self-efficacy. The candidate *neural correlate* of imitation and action-observation is the *mirror neuron system*, first described in macaque premotor cortex and, in humans, mapped to a network centred on the *inferior frontal gyrus / ventral premotor cortex* and the *inferior parietal lobule*, which discharges both when an action is performed and when the same action is observed, providing a plausible substrate for learning by watching. Vicarious emotional learning (learning fear by observing another's fear) recruits the same fear circuitry as direct conditioning, notably the *amygdala*. These localisations are an active and still-debated literature (the behavioural specificity of "mirror" responses in humans remains contested), so treat them as the direction of travel rather than as fixed exam facts.

10.13 Worked clinical example: modelling and self-efficacy in a specific phobia

The theory applied to a dog phobia. Take a child with a specific phobia of dogs. *Origin (observational learning):* the fear may never have involved a bite; it can be caught by observing a frightened parent recoil from dogs (vicarious emotional learning), which is why phobias run in families. *Reciprocal determinism:* the child's fear cognition drives avoidance (behaviour), which shrinks their exposure to friendly dogs (environment), which prevents disconfirmation and

entrenches the fear, each factor feeding the others. *Self-efficacy:* the child holds a low efficacy belief, "I cannot cope near a dog." *Treatment built from the theory:* Bandura's own participant modelling is the prototype, the therapist first *models* calm approach to the dog (vicarious experience), often using a peer model similar to the child to maximise perceived similarity, then guides the child through *graded mastery experiences* of approaching and touching the dog, the most potent efficacy source, while keeping arousal low so the child does not read their own racing heart as proof of danger (physiological state) and offering credible encouragement (verbal persuasion). Rising self-efficacy and repeated non-catastrophic outcomes extinguish the avoidance. This is exactly the logic of graded exposure in modern CBT, and it is drawn straight from social learning theory (Kaplan & Sadock 2024).

CLINICAL ANCHOR

Self-efficacy is the concept that ties Bandura to everyday psychiatric practice. Graded exposure works chiefly by delivering *mastery experiences*; participant modelling adds *vicarious experience*; the therapeutic relationship supplies *verbal persuasion*; and arousal-reduction skills address the *physiological state*. When an intervention "builds confidence," the mechanism you should name in an exam is a rise in task-specific self-efficacy across Bandura's four sources.

INDIA

Observational learning is culturally weighted toward high-status and familiar models. In much Indian practice, adherence and health behaviours shift most when the model is a trusted elder, senior clinician or community figure the patient perceives as similar and authoritative, satisfying Bandura's "perceived similarity," "prestige" and "familiarity" conditions at once. Peer-modelling and family-inclusive demonstrations therefore often outperform individually delivered instruction.

MNEMONIC

Subprocesses "A RRM"; efficacy sources "My Very Persuasive Physiology"

A-R-R-M = the four observational-learning subprocesses in order: *A*ttention, *R*etention, *R*eproduction, *M*otivation. **My Very Persuasive Physiology** = the four self-efficacy sources in descending potency: *M*astery experience, *V*icarious experience, verbal *P*ersuasion, *P*hysiological/affective state.

PEARL

The one-line arc for an examiner: learning theory moved from radical behaviourism (mind excluded) to Rotter's expectancy-and-locus-of-control amendment, then to Bandura's social learning, in which behaviour is acquired by observation (Bobo doll) through four subprocesses and vicarious reinforcement, governed by reciprocal determinism, and organised around self-efficacy (four sources), the whole now the "social-cognitive" theory that underpins CBT and exposure. Name that sequence and the "cognitive turn" and you have framed the topic.

GOOD TO REMEMBER

- **Albert Bandura:** founder of social learning / social-cognitive theory; integrated classical and operant conditioning with observational learning at Stanford.
- **Observational (vicarious) learning:** behaviour acquired by watching a model and its consequences, with no direct reinforcement of the learner.
- **Four subprocesses (A-R-R-M):** Attention, Retention, Reproduction (motor), Motivation.
- **Optimum conditions for observational learning:** live modelling, perceived similarity, seeing the model reinforced, familiarity with the model (Companion to Psychiatric Studies).
- **Vicarious reinforcement / punishment:** consequences falling on the model raise or suppress the observer's performance; learning persists even when performance is suppressed (acquisition vs performance).
- **Bobo doll (Bandura, Ross & Ross 1961):** children copied filmed aggression toward the inflatable doll; live-clown replication (Bandura et al. 1963). Aggression transmitted by modelling without direct reinforcement.
- **Reciprocal determinism:** person (cognition), behaviour and environment continuously and mutually interact; interactionist, not environmentally deterministic.
- **Self-efficacy:** task-specific belief in one's capability to execute a behaviour; the central individual-difference variable in social-cognitive personality theory (Kaplan & Sadock 2024).
- **Four sources of self-efficacy (descending potency):** mastery experience, vicarious experience (modelling), verbal persuasion, physiological/affective state.
- **Julian Rotter (1916 to 2014):** early social learning theory; behaviour guided by expectancy of a valued goal; internal vs external locus of control.
- **Radical behaviourism (Watson tradition):** excluded cognition as unobservable; Bandura's "cognitive turn" (with Beck and Ellis, 1960s) overturned it.
- **Currently accepted:** social-cognitive theory; all contemporary CBT protocols rest on social learning theory principles (Kaplan & Sadock 2024).
- **Neural correlate (debated):** mirror neuron system, inferior frontal gyrus / ventral premotor cortex and inferior parietal lobule for action observation; amygdala for vicarious fear learning.
- **Clinical reach:** participant modelling and graded exposure build self-efficacy chiefly via mastery experiences; underpins behaviour change generally.

11 · Learning applied to behaviour therapy, ABA and learned helplessness

The learning paradigms are not just theory; they are the therapies. Everything built in the classical and operant topics converges here: the three learning paradigms (respondent, operant, social/observational) each generated a family of clinical techniques, and one paradigm applied to a natural experiment generated a whole model of depression. This is the topic that ties the behavioural-science paper to the clinical papers. The examiner wants you to be able to walk from a learning principle to the named therapy it produced, and back again: from **reciprocal inhibition** to **systematic desensitisation**, from operant reinforcement to the **token economy** and **applied behaviour analysis**, from Pavlovian-plus-operant fear to **exposure** and **flooding**, and from uncontrollable aversive events to **learned helplessness** as a model of depression.

Behaviour therapy is defined as the systematic application of principles derived from learning theory to the modification of maladaptive behaviour (Kaplan & Sadock 2024). The field arose in the 1950s, in three centres almost at once, out of dissatisfaction with the length and unfalsifiability of psychoanalysis: the United States (Skinner and the operant tradition), South

Africa (Wolpe), and the United Kingdom (Eysenck and Rachman) (Kaplan & Sadock 2024; Tasman Psychiatry). The standard way to organise the many techniques is by their parent paradigm, which is exactly how this topic is built, followed by the learned-helplessness thread and its attributional reformulation.

11.1 Definition and the three-wave frame

Behaviour therapy as applied learning theory, developing in three waves. Behaviour therapy treats maladaptive behaviour as learned, and therefore as unlearnable by the same principles, without any requirement to uncover unconscious conflict (Kaplan & Sadock 2024). The historical scaffold examiners like is the three-wave model (Kaplan & Sadock 2024). The *first wave* (1950s to 1960s) was pure classical-and-operant behaviour therapy: systematic desensitisation, exposure, aversion, token economies. The *second wave* (1970s onward) added cognition, growing out of Bandura's social learning theory into cognitive behaviour therapy (Beck, Ellis); it is the dominant system worldwide today. The *third wave* (from the 1990s) added acceptance, mindfulness and values (DBT, ACT), and emerged in part from Jacobson's finding that behavioural activation alone matched full CBT for depression. This topic covers the behavioural (first-wave) engine and its direct descendants.

11.2 From classical conditioning: reciprocal inhibition and systematic desensitisation (Wolpe 1958)

The first named behaviour therapy, built on counterconditioning. Joseph Wolpe, a South African psychiatrist frustrated by psychoanalysis, published *Psychotherapy by Reciprocal Inhibition* (Wolpe 1958). **Reciprocal inhibition** is the principle that two physiologically antagonistic states cannot be held at once: if a response incompatible with anxiety (deep relaxation) is evoked in the presence of an anxiety-provoking stimulus, the bond between that stimulus and anxiety is weakened (Companion to Psychiatric Studies; Kaplan & Sadock 2024). **Systematic desensitisation** operationalises this in three components (Kaplan & Sadock 2024): (1) training in a competing response, usually progressive deep muscle relaxation; (2) construction of an *anxiety hierarchy*, a graded list of feared situations rated by subjective units of distress (SUDS) from least to most frightening; and (3) graded pairing, in which the relaxed patient imagines each hierarchy item in ascending order, moving up only when the current item no longer evokes anxiety. **What it fixed and what it left debated.** It fixed the slowness and indirectness of insight therapy for phobias, giving a rapid, replicable, testable method. What it left debated was its *mechanism*: Wolpe attributed the effect to counterconditioning (reciprocal inhibition), but later work suggested the relaxation and the hierarchy may be inessential and that plain habituation and extinction through exposure do most of the work, a debate the exposure therapies settled.

11.3 From classical conditioning: exposure, flooding and implosion

Confront the fear directly and let the anxiety extinguish. **Exposure** therapy rests on the premise that fear, acquired by associative learning, is eliminated by systematic contact with the feared object, event or situation until the conditioned anxiety habituates and extinguishes (Kaplan & Sadock 2024). It can be graded (as in in-vivo desensitisation) or intensive. In **flooding**,

the patient is exposed immediately to the feared stimulus at full strength, without relaxation, and stays until anxiety peaks and falls; the imaginal, catastrophically-vivid variant is *implosion (implosive therapy)* (Kaplan & Sadock 2024). Exposure is almost always paired with *response prevention*, blocking the escape and avoidance and other anxiety-reducing rituals so that the feared consequence can be disconfirmed; exposure and response prevention (ERP) is the treatment of choice for obsessive-compulsive disorder (Kaplan & Sadock 2024). Distinguish *within-session* extinction (anxiety falling during one exposure) from *between-session* extinction (peak anxiety and time-to-settle both falling across sessions); the second predicts durable gain.
What it fixed. Exposure fixed the mechanistic ambiguity of desensitisation by showing the graded hierarchy and relaxation are helpful but not necessary: extinction through contact is the active ingredient, and this is the currently accepted account of how anxiety-focused behaviour therapy works.

11.4 From classical conditioning: aversion therapy and cue exposure

Two opposite uses of the conditioned stimulus. **Aversion** therapy pairs an unwanted appetitive behaviour with an unpleasant stimulus so that the behaviour itself comes to elicit discomfort. Historically it used a subthreshold electric shock or an emetic such as apomorphine paired with alcohol, and the covert form, *covert sensitisation*, pairs the imagined behaviour with an imagined aversive scene. Its use has narrowed sharply on both efficacy and ethical grounds, but it remains an examinable technique (in alcohol dependence, some paraphilias historically). *Cue exposure* is the mirror-image application in addiction: the patient is repeatedly exposed to drug- or alcohol-associated cues while consumption is prevented, so the conditioned craving response to those cues extinguishes (Stahl, Substance Use). Both are classical-conditioning techniques; aversion builds a new conditioned aversion, cue exposure extinguishes an existing conditioned craving.

GOOD TO REMEMBER

- **Reciprocal inhibition (Wolpe 1958):** relaxation, an anxiety-antagonistic state, weakens the stimulus-anxiety bond; the basis of systematic desensitisation.
- **Systematic desensitisation:** relaxation training + graded anxiety hierarchy (SUDS) + graded imaginal/in-vivo pairing; classical-conditioning (counterconditioning) technique.
- **Exposure:** systematic contact with the feared stimulus until anxiety habituates and extinguishes; graded or intensive.
- **Flooding / implosion:** immediate full-strength exposure without relaxation; implosion is its imaginal variant; usually with response prevention (ERP for OCD).
- **Aversion therapy:** pairs an unwanted behaviour with an aversive stimulus (shock, apomorphine); covert sensitisation is the imaginal form.
- **Cue exposure:** extinguishes conditioned craving by exposing to drug cues while blocking use (addiction).

TECHNIQUE	PARENT PARADIGM	MECHANISM	SIGNATURE USE
Systematic desensitisation	Classical	**Reciprocal inhibition / counterconditioning + graded hierarchy**	Specific phobia

TECHNIQUE	PARENT PARADIGM	MECHANISM	SIGNATURE USE
Exposure / flooding / implosion	Classical	**Habituation and extinction of conditioned fear (with response prevention)**	OCD, phobias, PTSD
Aversion / covert sensitisation	Classical	Conditioning a new aversion to the behaviour	Alcohol dependence, some paraphilias
Cue exposure	Classical	Extinction of conditioned craving	Substance use disorders
Token economy	Operant	Secondary (conditioned) reinforcement	Chronic inpatient wards
Contingency management	Operant	**Positive reinforcement of a verified target (abstinence)**	Substance use disorders
Shaping / differential reinforcement	Operant	Reinforcing successive approximations / other behaviour (DRO)	Autism, intellectual disability
Time-out / response cost	Operant	Negative punishment (removing an appetitive stimulus)	Child behaviour programmes
Modelling / skills training	Social learning	**Observational learning (Bandura)**	Social skills, assertiveness
Behavioural activation	Operant / social	Restoring response-contingent positive reinforcement	Depression

The whole of behaviour therapy sorted by its parent learning paradigm. The discriminator columns are the mechanism: classical techniques act on stimulus-response bonds (counterconditioning, extinction), operant techniques act on consequences (reinforcement, punishment), social-learning techniques act by observation.

RULE **Name a behaviour therapy by its parent paradigm and its mechanism.** Classical acts on stimulus-response bonds (desensitisation, exposure); operant acts on consequences (token economy, contingency management, ABA); social learning acts by observation (modelling, skills training).

11.5 From operant conditioning: the token economy

A whole-ward contingency system built on secondary reinforcers. The **token economy** is a structured programme in which patients earn tokens (a generalised secondary reinforcer) for performing specified target behaviours, later exchanging them for backup reinforcers such as privileges or goods (Kaplan & Sadock 2024; Companion to Psychiatric Studies). Its logic is pure operant: the token has no intrinsic value but, by pairing with many backup rewards, becomes a generalised conditioned reinforcer that can be delivered immediately and precisely. Ted Ayllon and Nathan Azrin established the first comprehensive token economy at Anna State Hospital, Illinois, producing marked improvements in the targeted behaviour of chronic inpatients with severe mental illness (Kaplan & Sadock 2024). The historical antecedent examiners cite is

Alexander Maconochie's early-19th-century points system for prisoners at Norfolk Island (Kaplan & Sadock 2024). Token economies flourished on chronic wards and in residential and school settings, though their use has declined with deinstitutionalisation.

11.6 From operant conditioning: contingency management, shaping and differential reinforcement

Reinforcing verified target behaviour, one approximation at a time. *Contingency management* is the systematic delivery of a positive reinforcer (a voucher, prize or privilege) contingent on an objectively verified target behaviour, most classically a clean urine drug screen in substance use disorder treatment (Kaplan & Sadock 2024; Stahl, Substance Use); it is among the most robustly evidenced psychosocial treatments in addiction. *Shaping* reaches a behaviour that never occurs spontaneously by reinforcing successive approximations to it, the operant backbone of teaching self-care and language in intellectual disability. *Differential reinforcement* reduces an unwanted behaviour not by punishing it but by reinforcing an alternative: *differential reinforcement of other behaviour* (DRO) reinforces the absence of the problem behaviour, and *differential reinforcement of an incompatible behaviour* (DRI) reinforces a response that cannot co-occur with it (Tasman Psychiatry; Kaplan & Sadock 2024). These are the constructive alternatives to punishment across child and developmental work.

11.7 From operant conditioning: time-out and response cost (the punishment-side techniques)

Reducing behaviour by removing an appetitive stimulus. Both are forms of *negative punishment*. *Time-out* (time-out from positive reinforcement) removes the person from the reinforcing environment for a brief period contingent on the problem behaviour, so the behaviour no longer accesses reinforcement (Kaplan & Sadock 2024). *Response cost* removes a specified quantity of an already-held reinforcer (tokens, points, privileges) contingent on the behaviour, and is often built into a token economy. Because punishment suppresses without teaching an alternative, best practice pairs these with a differential-reinforcement procedure that builds the desired behaviour at the same time.

11.8 Applied behaviour analysis (ABA): the systematic clinical application of operant principles

Functional analysis, the ABC chain, and its use in autism and intellectual disability. **Applied behaviour analysis** (**ABA**) is the systematic application of operant learning principles to socially significant behaviour, and it is the umbrella under which shaping, differential reinforcement, chaining and the rest are clinically deployed (New Oxford Textbook of Psychiatry). Its engine is the *functional analysis*: rather than treat a behaviour as a fixed trait, ABA analyses the *ABC chain*, the **antecedent**, the **behaviour**, and the **consequence** that maintains it (Kaplan & Sadock 2024, "the ABCs of therapy"). A functional analysis typically resolves a challenging behaviour into one of a small set of maintaining functions: escape or avoidance of a demand, attention-seeking, tangible access to a wanted item or activity, and automatic or sensory reinforcement (Oxford Handbook of DBT). Once the function is known, the treatment follows from it: an escape-maintained behaviour is treated differently from an attention-maintained one. ABA is the best-evidenced psychosocial intervention for the core deficits and challenging behaviours of autism spectrum disorder and intellectual disability, where it is used to build communication, self-care and social skills and to reduce self-injury and aggression (New Oxford Textbook of Psychiatry).

The child-psychiatry detail of autism and intellectual-disability management is developed in Paper III (child).

11.9 From social learning: modelling, skills training and behavioural activation

Learning by observation, and re-engaging with reinforcing activity. Albert Bandura's social learning theory holds that behaviour is acquired not only by direct conditioning but by *observational learning*, watching a model perform a behaviour and experience its consequences (Kaplan & Sadock 2024). Its clinical arm is *modelling* and *social skills training*: the therapist demonstrates a target behaviour (assertiveness, a social response), the patient rehearses it with feedback and reinforcement, and it is generalised to real settings; participant modelling, in which the patient performs the feared action alongside the model, is a potent phobia treatment. *Behavioural activation* (BA) is the depression-specific technique that treats low mood as, in part, a state of reduced response-contingent positive reinforcement (drawing on Lewinsohn's reinforcement model of depression); it systematically schedules and grades pleasant and mastery activities to restore that reinforcement (Kaplan & Sadock 2024). BA is examinable because Jacobson's component analysis and Dimidjian and colleagues' 2006 trial showed BA alone matched full CBT and antidepressant medication for severe depression, which helped launch the third wave.

11.10 Learned helplessness: Seligman's shuttle-box experiments

Uncontrollable aversive events produce passivity. **Learned helplessness** is the paradigm through which learning theory generated a model of depression. Working with dogs, Martin **Seligman** and colleagues exposed animals to inescapable electric shock; when later placed in a shuttle-box where a simple response (jumping a barrier) would let them escape, these animals failed to learn to escape and passively endured the shock, whereas animals given escapable shock, or none, learned readily (Seligman 1975; Kaplan & Sadock 2024; Tasman Psychiatry). Seligman argued the crucial variable was not the shock but its *uncontrollability*: the animals had learned that outcomes were independent of their responses, and this learned expectation of uncontrollability generalised into motivational, cognitive and emotional deficits (reduced initiation of action, failure to learn that responding now works, and blunted affect). He proposed **learned helplessness**, defined as the belief that it is futile to initiate personal action to reverse aversive circumstances, as an experiential analogue of human depression (Kaplan & Sadock 2024).

11.11 The attributional reformulation (Abramson, Seligman and Teasdale 1978)

What fixed the original model: it is not helplessness itself but how you explain it. The original animal model could not explain why, faced with the same uncontrollable event, some people become depressed and others do not, nor why human depression involves self-blame. The *attributional (cognitive) reformulation* (Abramson, Seligman & Teasdale 1978) fixed this by inserting a cognitive step: what matters is the *causal attribution* a person makes for the uncontrollable event, their characteristic *attributional (explanatory) style* (Tasman Psychiatry). The depressogenic style attributes bad events along three dimensions: *internal* ("it is my fault") rather than external, *stable* ("it will last forever") rather than unstable, and *global* ("it will affect

everything") rather than specific (Tasman Psychiatry; Kaplan & Sadock 2024). Internal attributions explain the loss of self-esteem, stable ones the chronicity, and global ones the pervasiveness of depressive symptoms. This was later extended into the *hopelessness theory* of depression (Abramson, Metalsky & Alloy 1989), in which a stable and global attributional style, plus a negative event, generates hopelessness, a proximal sufficient cause of a hopelessness subtype of depression. This reformulation is what made learned helplessness a genuinely cognitive model and the bridge to Beck's cognitive theory.

HOLD THIS

The depressogenic attributional style for bad events is internal, stable and global (I See Grief). Internal drives low self-esteem, stable drives chronicity, global drives pervasiveness; for positive events the depressive style is the reverse.

11.12 Currently accepted position and the neural correlate

From learned helplessness to learned passivity, with a mapped circuit. The **currently accepted** position, argued by Maier and Seligman on the paradigm's fiftieth anniversary, actually inverts the original interpretation: passivity in the face of prolonged aversive events is the animal's *default, unlearned* response, and what is genuinely *learned* is the *detection of control*, which then inhibits that default passivity. In other words, the organism does not learn to be helpless; it fails to learn that it has control. The *neural correlate* is now well specified in this reformulation: prolonged uncontrollable stress activates the *dorsal raphe nucleus* serotonergic system, driving passivity and anxiety, while the *ventromedial prefrontal cortex* detects the presence of behavioural control and, when control is present, inhibits the dorsal raphe response (Maier & Seligman 2016). The broader neurobiology of learned helplessness implicates the same stress systems central to depression, the hypothalamic-pituitary-adrenal axis and forebrain serotonergic and dopaminergic circuits sensitised by early-life and chronic stress (Tasman Psychiatry). This dovetails with the wider mood-disorder correlates developed in the mood disorders notes.

11.13 Learned helplessness as a model of depression

Why the paradigm earns its place in psychiatry. Learned helplessness sits alongside Beck's cognitive model and Lewinsohn's reinforcement model as one of the three great learning-and-cognition models of depression (Kaplan & Sadock 2024). Its explanatory yield is real: it accounts for the passivity, motivational deficit and low hostility seen in some depressed patients; the reformulated version accounts for the self-blame, chronicity and pervasiveness through the internal-stable-global attributional triad; and it makes a testable therapeutic prediction, that changing expectations of uncontrollability and modifying attributional style should relieve depression, which is precisely what cognitive therapy sets out to do (Kaplan & Sadock 2024). Its role reaches beyond depression to a general disposition relevant to post-traumatic stress disorder, chronic pain and states of social powerlessness (Kaplan & Sadock 2024). The standard caveat is that the leap from animal analogue and self-report inventory to clinical depression must be made cautiously, and that recent work implicates genetic vulnerability in how readily helpless behaviour is learned (Kaplan & Sadock 2024).

11.14 Worked example: a patient with panic disorder and agoraphobia

The learning-to-therapy chain applied to one presentation. A woman develops panic attacks and begins avoiding buses and crowded markets. *Classical arm:* the market has become a conditioned stimulus for panic; the behavioural analysis identifies the antecedent cue (crowds), the behaviour (fleeing), and the consequence (immediate anxiety relief) that negatively reinforces the avoidance. *The therapy that follows:* a graded anxiety hierarchy is built (from imagining a quiet shop to standing in a crowded market at peak hour, rated by SUDS), and either systematic desensitisation (relaxation paired with each step) or, more efficiently, graded in-vivo exposure with response prevention is used, so she stays in each situation until anxiety habituates and the catastrophic prediction is disconfirmed. *Operant arm:* her partner's reassurance and permission to leave were positively reinforcing the avoidance, so a contingency is arranged to reinforce staying, not fleeing. *Social-learning arm:* the therapist models entering the feared setting first (participant modelling). *Learned-helplessness arm:* if she has come to believe her panic is uncontrollable and to attribute it internally, stably and globally ("I am broken, this will never change, it ruins everything"), the cognitive work targets exactly that attributional style, restoring a sense of control, which is the learned-helplessness reformulation put to clinical use.

CLINICAL ANCHOR

When you name a behaviour therapy in an exam or on a ward round, say which paradigm it comes from and what it does mechanistically. "Systematic desensitisation, a classical-conditioning technique working by reciprocal inhibition and graded exposure." "Contingency management, an operant technique reinforcing verified abstinence." "Behavioural activation, restoring response-contingent positive reinforcement in depression." The examiner is testing whether you can move between the principle and the technique, not whether you can list therapies.

COMMON TRAP

Do not confuse the two intensive exposures. *Flooding* is real-life or imaginal full-strength exposure; *implosion* is specifically the imaginal, deliberately-exaggerated form. And systematic desensitisation is *graded* and paired with relaxation (counterconditioning), whereas flooding is *ungraded* and deliberately without relaxation (extinction). A second trap: in the attributional reformulation the depressogenic style is internal-stable-global for *negative* events; for positive events the depressive style is the reverse (external-unstable-specific), a symmetry examiners like to probe.

MNEMONIC

"I See Grief" for the depressogenic attributional style: Internal, Stable, Global.

The three attributional dimensions that make learned helplessness depressogenic for bad events are **I**nternal (my fault), **S**table (permanent), **G**lobal (affects everything): I-S-G, "I See Grief". Internal drives low self-esteem, Stable drives chronicity, Global drives pervasiveness. For the techniques, sort by paradigm: classical = desensitisation/exposure/aversion/cue; operant = token economy/contingency management/ABA/time-out; social = modelling/skills/behavioural activation.

INDIA

ABA and structured behavioural programmes for autism and intellectual disability are resource-intensive and unevenly available across Indian settings, so parent-mediated behavioural training, which teaches caregivers to run the antecedent-behaviour-consequence analysis and deliver reinforcement at home, is often the pragmatic backbone rather than clinic-delivered one-to-one ABA. In addiction work, contingency management fits Indian de-addiction settings well because its reinforcers can be modest and locally meaningful, and cue exposure maps onto the culturally specific drinking and substance cues a plan must address.

PEARL

The one-line arc for an examiner: the three learning paradigms each became a therapy family, classical conditioning gave systematic desensitisation (Wolpe, reciprocal inhibition), exposure and flooding, aversion and cue exposure; operant conditioning gave the token economy (Ayllon and Azrin), contingency management, shaping and differential reinforcement, and applied behaviour analysis with its functional analysis of the antecedent-behaviour-consequence chain for autism and intellectual disability; and social learning gave modelling, skills training and behavioural activation. Learned helplessness (Seligman) turned uncontrollable aversive events into a model of depression, and its attributional reformulation (Abramson, Seligman and Teasdale 1978, internal-stable-global) made it cognitive and the bridge to CBT.

GOOD TO REMEMBER

- **Behaviour therapy:** systematic application of learning theory to modify maladaptive behaviour; arose 1950s (Skinner, Wolpe, Eysenck/Rachman); three-wave model (behavioural, cognitive, acceptance-based).
- **Wolpe (1958), *Psychotherapy by Reciprocal Inhibition*:** reciprocal inhibition (relaxation inhibits anxiety) underlies systematic desensitisation.
- **Systematic desensitisation:** relaxation + graded anxiety hierarchy (SUDS) + graded pairing; classical/counterconditioning; for specific phobia.
- **Exposure:** contact with the feared stimulus until anxiety habituates/extinguishes; within-session vs between-session extinction.
- **Flooding / implosion:** immediate full-strength exposure without relaxation; implosion = imaginal exaggerated form; with response prevention (ERP for OCD).
- **Aversion therapy:** pair unwanted behaviour with aversive stimulus (apomorphine, shock); covert sensitisation = imaginal.
- **Cue exposure:** extinguishes conditioned craving in addiction.
- **Token economy (Ayllon & Azrin, Anna State Hospital):** operant; tokens as generalised secondary reinforcers exchanged for backups; antecedent = Maconochie.
- **Contingency management:** operant; positive reinforcement of verified target (clean urine screen) in substance use disorder.
- **Shaping / differential reinforcement:** reinforce successive approximations / reinforce other (DRO) or incompatible (DRI) behaviour.
- **Time-out / response cost:** negative punishment (removing an appetitive stimulus).
- **Applied behaviour analysis (ABA):** systematic operant application; functional analysis of the ABC (antecedent-behaviour-consequence) chain; four functions (escape/avoidance, attention, tangible, sensory); best-evidenced for autism and intellectual disability (Paper III child).
- **Modelling / skills training (Bandura):** social-learning technique via observational learning; participant modelling for phobias.
- **Behavioural activation (Jacobson; Dimidjian 2006):** restores response-contingent positive reinforcement in depression (Lewinsohn roots).
- **Learned helplessness (Seligman 1975):** inescapable shock in dogs, shuttle-box; uncontrollability produces passivity; belief that action is futile; a model of depression.
- **Attributional reformulation (Abramson, Seligman & Teasdale 1978):** depressogenic explanatory style for bad events = internal, stable, global; extended to hopelessness theory (Abramson, Metalsky & Alloy 1989).
- **Currently accepted (Maier & Seligman 2016):** passivity is the default; control-detection is what is learned; neural correlate = ventromedial prefrontal cortex detecting control inhibits the dorsal raphe serotonergic passivity response.

Personality and psychodynamic theory

12 · Meyer, Rank and the wider psychodynamic map

The depth-psychology map, and the two figures these notes owns. Classical **depth psychology** radiates from three primary schools: Sigmund Freud's **psychoanalysis**, Alfred Adler's individual psychology, and Carl Jung's analytical psychology. All three, together with their apparatus (the **topographic model** of conscious, preconscious and unconscious; the **structural model** of id, ego and **superego**; and the great defections of Adler and Jung) are taught in full on the General and Developmental Psychology notes and are only named and cross-referenced here.

What these notes adds is the pair of Paper-1 scientists who sit at the edges of that map and are examinable in their own right: Adolf Meyer, whose **psychobiology** is the American holistic-formulation tradition that anticipated the modern biopsychosocial model, and Otto Rank, the analyst whose **birth trauma** and **will therapy** broke from Freud and seeded humanistic and existential practice.

The exam framing is precise. Freud, Adler and Jung are General and Developmental Psychology items; do not re-teach them here. Meyer and Rank are the two names these notes must deliver, each as a short evolution-of-ideas: what each figure took from the psychoanalytic mainstream, what he replaced, and what survives in contemporary practice. Meyer feeds directly into formulation and nosology; Rank feeds into the humanistic and existential therapies. The neo-Freudian relationalists (Horney, Sullivan, Fromm) are named at the end only as a bridge into the object-relations and interpersonal topic developed next.

12.1 The three primary schools: named, and referred to the General and Developmental Psychology notes

Freud, Adler, Jung, taught in full elsewhere. The organising spine of depth psychology is three schools, each with its own founder, its own account of the unconscious, and its own therapeutic aim.

Psychoanalysis (Freud)

The parent school. Its models of mind are the **topographic model** (conscious, preconscious, unconscious) and the later **structural model** (id, ego, **superego**); its engine is intrapsychic conflict, drive and defence, with the Oedipus complex central. Taught in full on **the General and Developmental Psychology notes**.

Individual psychology (Adler)

The first major defection. Replaces libido as prime mover with striving for superiority to compensate for inferiority; emphasises social interest, the family constellation and the unified goal-directed self. Cross-referenced to **the General and Developmental Psychology notes**.

Analytical psychology (Jung)

The second defection. Adds the collective unconscious, archetypes, the persona and shadow, individuation, and the introversion-extraversion typology. Cross-referenced to **the General and Developmental Psychology notes**.

Everything below is the delta these notes add: two Paper-1 scientists whom the General and Developmental Psychology notes does not cover.

TRAP Do not re-teach Freud, Adler and Jung here: they are cross-referenced only. The two examinable figures in this topic are **Meyer (psychobiology) and Rank (birth trauma)**.

12.2 Adolf Meyer: the man and the idea of psychobiology

The whole organism reacting to its life. Adolf Meyer (1866 to 1950), Swiss-born and Baltimore-based, was the dominant figure in early twentieth-century American psychiatry, directing the Henry Phipps Psychiatric Clinic at Johns Hopkins (New Oxford Textbook of Psychiatry). His system, **psychobiology**, treated the person as a single biological unit,

maintaining internal and external equilibrium while coping with new situations, and understood mental disorder not as a discrete brain lesion nor as a purely intrapsychic drama but as a maladaptive *reaction of the whole organism* to its life circumstances (The Psychotherapy Guidebook). Meyer was influenced by Hughlings Jackson's levels of nervous integration and by American pragmatism (James, Dewey), giving the system a concrete, optimistic, anti-dogmatic character that deliberately avoided the metapsychological speculation of the European schools.

12.3 Meyer's ergasiology: reaction-types instead of one-word diagnoses

Ergasia: behaviour as work of the organism. Dissatisfied with the reductive one-word diagnoses of Kraepelinian nosology, Meyer classified disorders as *reaction-types*, patterned maladaptive responses of the person to circumstance rather than fixed disease entities. In the 1920s he coined *ergasia* (from Greek *ergon*, work) for behaviour and mental activity as a whole, and its plural *ergasias* for specific behavioural units, the vocabulary now labelled **ergasiology**. Organic brain reactions were "anergasia", toxic psychoses "dysergasia", and so on (The Psychotherapy Guidebook). The idiosyncratic ergasia terms were never adopted into formal nomenclature, but the underlying *reaction* concept was: it entered American classification directly, so that DSM-I (1952), strongly shaped by Meyer's views, described conditions as "reactions" (for example schizophrenic reaction, manic-depressive reaction) rather than as diseases (Shorter Oxford Textbook of Psychiatry).

12.4 Meyer's method: the life chart, distributive analysis and habit training

Plot the life, then re-train the habits. Meyer's clinical signature is the **life chart**: the psychiatrist plots the patient's life on a single time-line from birth to the present, penciling in major life events alongside the onset and worsening of illness, so that recurrent associations between circumstance and symptom become visible (Kaplan & Sadock 2024). The biographical data gathered this way were then worked through by *distributive analysis* (the patient examines the components of the problem and their relative weight) and *distributive synthesis* (reconstructing healthier patterns), with therapy proceeding as *habit training*, the modification of unhealthy adaptations through guidance, re-education and direction, engaging the healthier part of the patient's own ego. Meyer held this approach especially valuable for psychotic patients, and he was an early architect of the mental-hygiene and community-care movements alongside Clifford Beers (The Psychotherapy Guidebook).

CLINICAL ANCHOR

Meyer's life chart is the direct ancestor of the timeline every trainee draws in a formulation: the longitudinal plotting of stressors, episodes and treatments to expose temporal patterns. His reaction-type view is the seed of the modern *biopsychosocial* formulation, illness read as the whole person's maladaptive reaction to biological, psychological and social forces rather than as an isolated diagnosis. When you write "onset followed the loss of employment and coincided with sleep disruption", you are doing Meyerian psychobiology.

12.5 Otto Rank: the birth trauma

Separation from the mother as the root of anxiety. Otto Rank (1884 to 1939), one of Freud's closest early collaborators, made his decisive move in *The Trauma of Birth* (1924). He took Freud's own passing idea that the violent physical separation of birth is the prototype of anxiety and made it the *central* source, arguing that all later anxiety re-enacts the primal **birth trauma** (Kaplan & Sadock 2024; Wolberg). Two opposed strivings follow from it: an impulse to return to the womb and restore prenatal security (expressed as dependent, clinging attachment), and an impulse for rebirth and independence (expressed as the will to separate and individuate). Rank named the two poles of this conflict the *life fear* (the dread that asserting one's separateness and creativity will isolate one from others) and the *death fear* (the dread of losing one's individuality by being absorbed into another). This relocation of the origin of anxiety from the Oedipal, father-centred conflict to the *pre-Oedipal*, mother-centred separation is Rank's core contribution and the point on which he parted from Freud.

12.6 Rank's will therapy and his influence downstream

Mobilise the will in the present relationship. Rank's therapeutic system, set out in *Will Therapy* (1936), abandoned the archaeological search for buried content and made the therapeutic *relationship in the present* the curative agent (Wolberg). Therapy is patient-centred and active: the analyst mobilises the patient's constructive "creative will impulse" toward self-direction and self-realisation, and studies the patient's reactions to the inevitable *separation* at the end of treatment as the working-through of the birth-derived conflict between union and autonomy. Insight and unconscious content are secondary to the corrective relational experience. With Ferenczi and Stekel, Rank thereby pioneered short-term, flexible, active psychotherapy. His influence runs forward on two lines: Carl Rogers absorbed Rank's philosophy of self-realisation and the patient-centred stance into humanistic *client-centred therapy*, and Rank's emphasis on will, separation, isolation and the confrontation with individuality prefigured the *existential* therapies (Wolberg). His functional-casework legacy also shaped American social work through Jessie Taft and Virginia Robinson.

> **COMMON TRAP**
>
> Do not attribute the concept of the "birth trauma" to Freud, and do not confuse Rank's *will therapy* with Adler's will-to-power or with the later existentialists' terms. Rank is Paper-1 examinable as a distinct figure: birth trauma (1924), will therapy (1936), pre-Oedipal focus, break from Freud, influence on humanistic and existential therapy. Also keep Rank's *birth trauma* (a psychodynamic construct about separation anxiety) separate from Stanislav Grof's later "birth matrices" and from any obstetric use of the phrase.

12.7 Meyer versus Rank: two ways off the Freudian main line

Same era, opposite exits. Both men worked at the edge of psychoanalysis in the same decades, but they left it in opposite directions: Meyer outward toward biology, society and pragmatic formulation, Rank inward toward the pre-Oedipal relationship and the will. The table fixes the discriminators.

FEATURE	ADOLF MEYER (PSYCHOBIOLOGY)	OTTO RANK (WILL THERAPY)
Core construct	**Mental illness as a maladaptive *reaction* of the whole organism**	**Anxiety rooted in the *birth trauma*; life fear versus death fear**
Break point from Freud	Rejected metapsychology for holistic, pragmatic biography; not a pupil-defector but a parallel American tradition	Moved the origin of anxiety from Oedipal to *pre-Oedipal* separation; formal break from Freud
Signature method	The *life chart*, distributive analysis and synthesis, habit training	Active, patient-centred *will therapy*; the present relationship and its ending are curative
Unit of classification	Reaction-types; the *ergasia* vocabulary (ergasiology)	Personality as normal, neurotic, or creative-artist types
Enduring influence	American nosology (DSM-I "reactions"); the biopsychosocial formulation; community psychiatry	Rogerian client-centred therapy; existential therapy; short-term dynamic therapy; functional social work

The two discriminator rows are the core construct (organism-level reaction versus birth-trauma separation anxiety) and the enduring influence (formulation and nosology versus humanistic and existential therapy).

12.8 Currently accepted position and its correlate

Meyer survives as method, Rank as lineage. Neither man's system is practised intact, but each is metabolised into current thinking. The **currently accepted** descendant of Meyer's psychobiology is the *biopsychosocial* model (Engel, 1977) and the longitudinal case formulation, both routine in contemporary training; Meyer's specific ergasia nomenclature is obsolete, but the "reaction/adjustment" logic persists in categories such as adjustment disorder and in the whole-person emphasis of formulation. Rank's system likewise survives not as a standalone therapy but as an acknowledged root of the humanistic and existential traditions and of brief dynamic therapy. The *neural correlate* is meaningful chiefly for the underlying constructs rather than the schools: separation-related distress, Rank's territory, maps onto a well-characterised separation-distress circuitry involving the *amygdala*, *anterior cingulate cortex* and periaqueductal grey and the oxytocin and endogenous-opioid attachment systems (a neurobiology developed with the attachment material in the General and Developmental Psychology notes), while Meyer's stressor-to-illness reaction is the same stress-response neurobiology (HPA axis, amygdala, hippocampus, prefrontal cortex) that his life chart set out to make visible clinically.

HOLD THIS

Meyer survives as method (the biopsychosocial formulation and the DSM-I "reactions"); Rank survives as lineage (root of humanistic, existential and brief dynamic therapy). Neither system is practised intact today.

12.9 Worked example: one patient, read through both lenses

A first manic episode after migration and job loss. Take a young adult presenting with a first manic episode some months after moving city for work and then losing the job. *Through Meyer:* draw the life chart, the migration, the isolation, the sleep disruption and the job loss plotted

against symptom onset, so the episode is formulated as the whole organism's maladaptive reaction to a cluster of stressors on a biological diathesis, and the plan targets habit re-training (sleep, routine, re-employment) alongside medication, the biopsychosocial formulation in action. *Through Rank:* the same migration is a concrete *separation*, reviving the birth-derived tension between the pull toward dependent security (returning home, clinging) and the push toward independent individuation (the reason for leaving), and the "life fear" of standing alone is live material; a Rankian-descended, relationship-focused brief therapy would work with the patient's will and with the meaning of separation rather than excavate childhood content. The two readings are complementary, not rival: Meyer organises the formulation, Rank supplies one lens on its psychological content.

PEARL

The fastest way to hold these two apart in the exam: *Meyer = the chart* (biography plotted, whole-organism reactions, feeds nosology and formulation), *Rank = the birth* (birth trauma, pre-Oedipal separation, will therapy, feeds humanistic and existential therapy). Freud, Adler and Jung are on **the General and Developmental Psychology notes**; if a Paper-1 stem names Meyer or Rank, it is testing exactly the deltas above.

GOOD TO REMEMBER

- **Three primary schools (the General and Developmental Psychology notes):** psychoanalysis (Freud), individual psychology (Adler), analytical psychology (Jung), named here, taught in full on the General and Developmental Psychology notes.
- **Topographic model:** conscious, preconscious, unconscious (Freud, the General and Developmental Psychology notes).
- **Structural model:** id, ego, superego (Freud, the General and Developmental Psychology notes).
- **Adolf Meyer (1866 to 1950):** founder of psychobiology; person as a biological unit; illness as a maladaptive reaction of the whole organism.
- **Ergasiology / ergasia:** Meyer's reaction-type vocabulary (anergasia, dysergasia); never entered formal nomenclature.
- **Life chart:** Meyer's biographical time-line of life events against illness onset; ancestor of the modern formulation timeline.
- **Distributive analysis and synthesis; habit training:** Meyer's therapeutic method.
- **Meyer's nosological legacy:** shaped DSM-I (1952) "reaction" terminology; precursor of the biopsychosocial model and community psychiatry.
- **Otto Rank (1884 to 1939):** Freud collaborator who broke away; pre-Oedipal, mother-centred focus.
- **Birth trauma (The Trauma of Birth, 1924):** Rank's relocation of the root of anxiety to the primal separation at birth; life fear versus death fear.
- **Will therapy (Will Therapy, 1936):** Rank's active, patient-centred, present-relationship therapy; mobilises the creative will; separation at termination is curative.
- **Rank's influence:** Rogerian client-centred (humanistic) therapy, existential therapy, short-term dynamic therapy, functional social work.
- **Neo-Freudian bridge:** Horney, Sullivan, Fromm, the relational/interpersonal turn developed in the object-relations topic next.

13 · Defence mechanisms and the Vaillant hierarchy

A **defence mechanism** is an automatic, unconscious mental process the ego uses to protect against the anxiety generated by intrapsychic conflict, unacceptable impulses, and external stressors (Kaplan & Sadock 2024). The concept is Freudian in origin but was first catalogued and systematised by **Anna Freud** in *The Ego and the Mechanisms of Defence* (1936), which moved the defences from scattered clinical observations into a coherent list. The examiner's favoured organising frame, and the one that carries the most marks, is **George Vaillant**'s arrangement of the defences into a maturity **hierarchy**: from the most pathological (psychotic) up through immature and neurotic to the most adaptive (mature). The same American spelling, defense mechanism, appears throughout the US texts and the DSM.

Why it matters. Defences are not inherently pathological. They are part of normal development and everyone uses the whole range, but the *habitual predominant level* a person deploys under stress is diagnostically and prognostically informative. The immature cluster (splitting, projective identification) anchors the borderline and other severe personality disorders, while the mature cluster predicts good long-term outcome. Learn the four tiers, one crisp definition and one clinical example each, and the disorder anchors, and this topic is essentially closed.

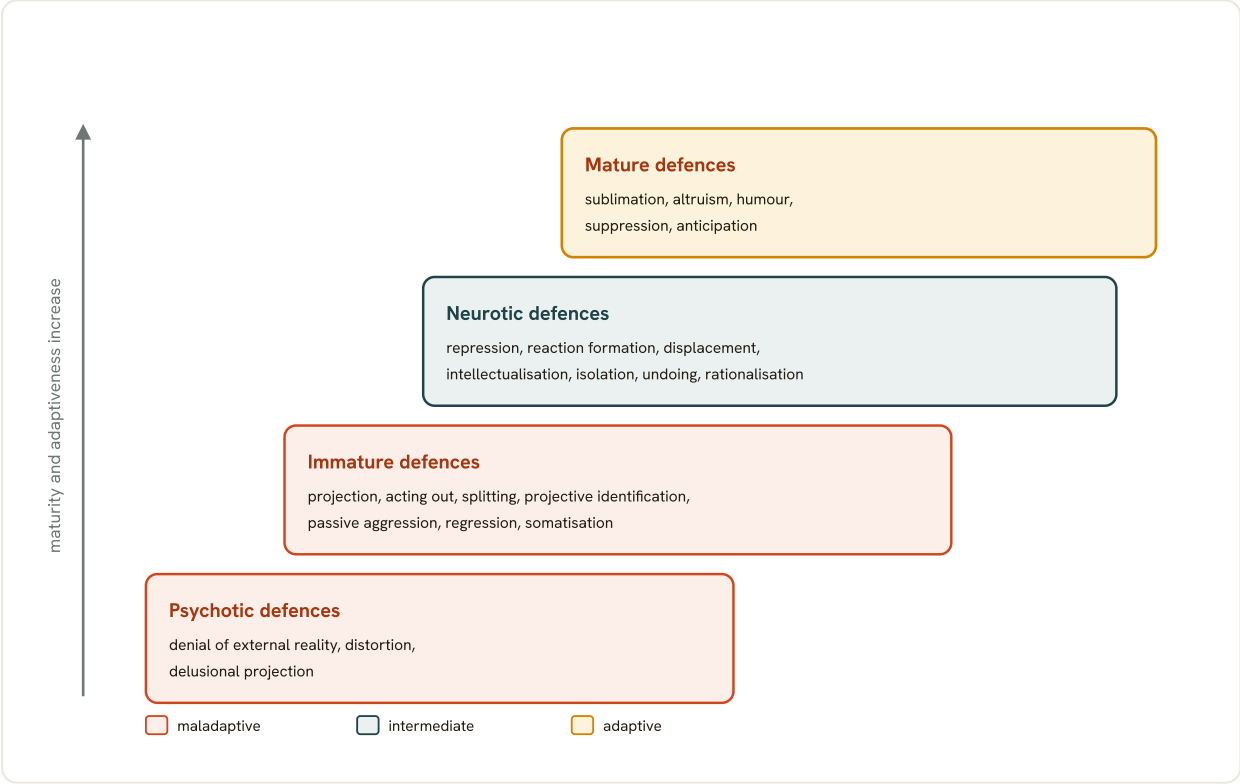


Fig 5.5 Vaillant's hierarchy of defence mechanisms, arranged from the least to the most adaptive. Psychotic defences deny or remake external reality; immature defences externalise conflict onto others; neurotic defences keep the conflict internal and out of awareness; mature defences channel it into something useful or tolerable. The same person uses defences from several levels, but the habitual level predicts functioning and outcome, a finding from Vaillant's long Grant Study cohort. Splitting and projective identification at the immature level are the exam's signature borderline defences.

13.1 Definition and the three founding ideas

The core definition. Defence mechanisms are automatic, unconscious psychological processes, both cognitive and emotional, that protect against anxiety arising from internal conflict or external threat (Kaplan & Sadock 2024). Three features are exam-worthy: they operate *outside awareness* (this separates a defence from a conscious coping strategy), they *distort or exclude* some aspect of internal or external reality to reduce unpleasure, and they change the relationship between the self and the object (Vaillant & Vaillant 1998). Anna Freud's 1936 monograph is the systematising text; her father Sigmund Freud had described repression as the foundational defence, and Melanie Klein later elaborated the earliest, most primitive defences (splitting, projective identification, projection) as characteristic of the paranoid-schizoid position of infancy.

13.2 The evolution of the classification, and the currently accepted frame

From a flat list to a maturity gradient. Anna Freud (1936) gave a flat catalogue of about ten defences with no ordering. The advance that the exam rewards is **Vaillant**'s reconceptualisation of the defences as a developmental *hierarchy of affect regulators*: more sophisticated, more effective defensive strategies emerge across adolescence and adulthood, and a person's defensive level can be scored empirically (Vaillant 1993, *The Wisdom of the Ego*). This fixed the previous scheme's silence on adaptiveness: it tells you which defences are healthy and which are pathological, and it made defence a *measurable* variable in longitudinal research rather than a purely interpretive one. The **currently accepted** operationalisation is Vaillant's four-tier model (psychotic, immature, neurotic, mature), whose adaptiveness ranking DSM-IV carried forward in the more finely graded seven-level *Defensive Functioning Scale* in its appendix. Its *neural correlate* is not a single structure: the automaticity of defence maps onto implicit procedural memory systems that deal with unpleasant affect outside awareness (Gabbard), and the regulation of affect that defences perform is subserved by prefrontal (especially ventromedial and dorsolateral) modulation of limbic structures, notably the amygdala. Mature suppression, for example, recruits deliberate prefrontal control over amygdala-driven affect, whereas psychotic-level denial reflects a failure of reality-testing networks. Name the systems, not a single locus.

HOLD THIS

Vaillant ranks the defences by maturity: psychotic, immature, neurotic, mature. Everyone uses the whole range; the habitual predominant level under stress is what is diagnostic and prognostic, and mature defences predicted better outcomes in the Grant Study.

CLINICAL ANCHOR

Defensive level is part of the psychodynamic formulation and of the mental state's assessment of insight and coping. On the ward, a patient who idealises the morning nurse and vilifies the evening nurse (splitting) signals a borderline-level organisation; a patient who channels grief over a terminal diagnosis into meticulous advance-care planning (anticipation) signals mature functioning and a better prognosis.

13.3 Level 1: Psychotic defences

Psychotic level. These are the most primitive defences, marked by a frank break with reality-testing. They are normal in early childhood and in dreams, but in an adult they signify psychosis. The three classic **psychotic defense** mechanisms:

Denial (of external reality)

Refusal to accept an intolerable external fact, abolishing its very perception. Example: a man with an obvious hemiplegia after a stroke insists nothing is wrong with his arm (anosognosia).

Distortion

Grossly reshaping external reality to fit inner need, including wish-fulfilling delusions and hallucinations. Example: a patient reworks a hostile world into a grandiose belief that he is a chosen prophet.

Delusional projection

Externalising one's own unacceptable impulses as frank persecutory delusions. Example: a patient's own aggressive impulses are experienced as a neighbour's plot to poison him.

13.4 Level 2: Immature defences

Immature level. Common in adolescence, in severe depression, and centrally in the personality disorders. Reality-testing is intact, but the defences are socially undesirable and often externalise distress onto others. This tier includes the Kleinian primitive defences.

Projection

Attributing one's own unacceptable feelings or impulses to another person. Example: a man who resents his wife accuses her of hating him. Core defence of paranoid personality disorder.

Acting out

Discharging an unconscious wish or conflict directly through action rather than reflection, to avoid feeling it. Example: a bereaved adolescent starts fights instead of grieving.

Splitting

Keeping contradictory images of self and others (all-good vs all-bad) rigidly apart because they cannot be integrated. Example: idealising the ward team on Monday and condemning them as cruel on Tuesday. The primary defence of borderline personality disorder (Kaplan & Sadock 2024).

Projective identification

Projecting a part of the self into another, then unconsciously pressuring that person to actually feel or enact it, so the projection is confirmed. Example: a patient projects rage into the therapist and behaves so provocatively that the therapist genuinely becomes angry. Hallmark of borderline organisation; strong driver of countertransference.

Passive aggression

Expressing hostility indirectly through non-compliance, procrastination, or inefficiency. Example: an angry trainee agrees to a task then quietly never completes it.

Regression

Retreating to an earlier developmental level of functioning under stress. Example: a hospitalised adult becomes clingy and demands to be fed.

Somatisation

Converting intrapsychic conflict into bodily symptoms and preoccupation. Example: unexpressed marital distress presents as recurrent unexplained abdominal pain.

Schizoid fantasy

Retreating into an inner world of imagination to resolve conflict and avoid intimacy. Example: a lonely person substitutes an elaborate fantasy life for real relationships (schizoid personality).

13.5 Level 3: Neurotic defences

Neurotic level. Common in everyone under stress and prominent in the neurotic disorders (anxiety, obsessive-compulsive, dissociative, and conversion presentations). They alter the internal experience of a conflict rather than distorting external reality; they are largely private and cause the person, not others, the difficulty.

Repression

The foundational neurotic defence: unconsciously barring an unacceptable idea or feeling from awareness. Example: a woman has no memory of a childhood assault. Distinguish from conscious suppression (mature).

Reaction formation

Transforming an unacceptable impulse into its exact opposite. Example: a person with unconscious hostility becomes exaggeratedly solicitous. Generates obsessive-compulsive personality traits.

Displacement

Redirecting an affect from its true object onto a safer substitute. Example: a man berated by his boss goes home and shouts at his child. Underlies phobia formation in psychodynamic theory.

Intellectualisation

Managing a threatening feeling by engaging with it only in abstract, theoretical terms. Example: a newly diagnosed patient discusses cancer statistics at length but shows no emotion.

Isolation of affect

Separating an idea from the feeling attached to it, so the idea stays in consciousness stripped of emotion. Example: an OCD patient recounts an aggressive intrusive thought flatly, with no distress.

Undoing

Performing an act (often ritualistic) that magically cancels or atones for an unacceptable thought or impulse. Example: a compulsion to wash repeatedly to undo a feared harm. Generates OCD compulsions.

Rationalisation

Offering a plausible, reassuring, but false reason for behaviour whose true motive is unacceptable. Example: a rejected candidate decides the job was beneath him.

Dissociation

A temporary drastic modification of one's sense of identity or consciousness to avoid emotional distress. Example: a person derealises during an assault and later has amnesia for it.

13.6 Level 4: Mature defences

Mature level. The most adaptive tier, characteristic of healthy adults. Mature defences integrate conflicting motives, optimise gratification, and are experienced by others as virtues. They are the

residues that become stable, partly conscious coping styles and mature character traits (Kaplan & Sadock 2024). The five classic **mature defense** mechanisms:

Sublimation

Channelling an unacceptable impulse into a socially valued activity, keeping the aim's energy while altering its object. Example: aggressive drive redirected into competitive surgery or contact sport.

Altruism

Meeting one's own needs vicariously through constructive service to others. Example: a bereaved parent founds a support charity.

Humour

Expressing a distressing feeling openly without discomfort to self or others, giving perspective without denial. Example: a patient jokes gently about his own illness to ease a tense consultation.

Suppression

The conscious or semiconscious decision to postpone attention to a conflict or impulse. Example: a doctor deliberately sets aside personal worry to finish a night shift, then returns to it. The one deliberate defence; contrast with unconscious repression.

Anticipation

Realistic planning for future inner discomfort, rehearsing the affect in advance. Example: rehearsing likely feelings before a difficult conversation, so the emotion is manageable when it arrives.

13.7 Vaillant's Grant Study: the outcome data

The empirical payoff. Vaillant's evidence base was the **Grant Study**, the roughly 60-year prospective longitudinal follow-up of an initially healthy cohort of Harvard undergraduates (Vaillant 1995), part of the Harvard Study of Adult Development. Rating each man's habitual defensive style, Vaillant found that predominant use of *mature* defences (sublimation, altruism, humour, suppression, anticipation) predicted better outcomes across the board: mental and physical health, career and income success, marital stability, and life satisfaction. Predominant *immature* defences predicted the reverse. Two exam-relevant conclusions follow: defensive maturity is not fixed but can advance across the lifespan, and it is one of the stronger psychosocial predictors of successful ageing, independent of the childhood social class the men started from.

13.8 Disorder anchors: which defence flags which condition

The high-yield associations. Examiners test defences most often through their disorder pairings. The table collects the ones that recur in questions.

DEFENCE	VAILLANT LEVEL	CLASSIC DISORDER ASSOCIATION
Splitting	Immature	**Borderline personality disorder (primary defence)**
Projective identification	Immature	**Borderline organisation; drives countertransference**
Projection	Immature	**Paranoid personality disorder; paranoid states**
Schizoid fantasy	Immature	Schizoid personality disorder
Isolation of affect, undoing	Neurotic	**Obsessive-compulsive disorder (compulsions)**
Reaction formation	Neurotic	Obsessive-compulsive personality traits
Displacement	Neurotic	**Phobia formation**
Repression, dissociation	Neurotic	Dissociative and conversion disorders
Denial, distortion, delusional projection	Psychotic	**Psychotic disorders; acute mania (denial)**

The pairings that generate single-best-answer questions: splitting to borderline, projection to paranoid, isolation and undoing to OCD, displacement to phobia.

RULE **Only psychotic-level defences abolish reality-testing.** If a stem preserves reality-testing, the answer is never denial of external reality, distortion or delusional projection.

COMMON TRAP

Do not confuse **suppression** with **repression**. Suppression is *conscious and deliberate* (a mature defence, the only one that is intentional); repression is *unconscious* (a neurotic defence). A stem describing a person who "decided to put the worry out of mind until the exam was over" is suppression, not repression. Likewise, **projection** (immature: attributing your feeling to another) is not **projective identification** (immature: making the other actually feel it).

PEARL

Reality-testing is the fault line between the top and bottom of the ladder. Only the *psychotic* defences abolish reality-testing (denial of external reality, distortion, delusional projection). Every immature, neurotic, and mature defence leaves reality-testing intact and distorts only the internal experience. If a stem preserves reality-testing, the answer is never a psychotic-level defence.

MNEMONIC

Some Adults Have Sensible Anticipation

The five **mature** defences: **S**ublimation, **A**ltruism, **H**umour, **S**uppression, **A**nticipation. These are the ones the Grant Study tied to good outcome, so if a question asks for the "healthiest" defence in a list, pick from this five.

INDIA

Indian teaching frames the defences through their psychodynamic disorder models: isolation of affect, undoing, and displacement generating OCD symptoms; projection generating paranoid presentations; splitting as the borderline defence. For theory-paper answers, pair each defence with its disorder model rather than listing defences in isolation.

GOOD TO REMEMBER

- **Defence mechanism:** automatic unconscious ego process that reduces anxiety from conflict or external threat (Kaplan & Sadock 2024).
- **Anna Freud (1936):** systematised the defences in *The Ego and the Mechanisms of Defence*.
- **George Vaillant (1993):** arranged defences into a four-tier maturity hierarchy of affect regulators; basis of DSM-IV Defensive Functioning Scale.
- **Psychotic defences:** denial of external reality, distortion, delusional projection (reality-testing lost).
- **Immature defences:** projection, acting out, splitting, projective identification, passive aggression, regression, somatisation, schizoid fantasy.
- **Neurotic defences:** repression, reaction formation, displacement, intellectualisation, isolation of affect, undoing, rationalisation, dissociation.
- **Mature defences:** sublimation, altruism, humour, suppression, anticipation (SAHSA).
- **Splitting and projective identification:** primary defences of borderline personality disorder.
- **Projection:** defence of paranoid personality disorder / paranoid states.
- **Isolation of affect and undoing:** defences behind OCD compulsions; displacement behind phobia.
- **Suppression vs repression:** suppression is conscious and mature; repression is unconscious and neurotic.
- **Grant Study (Vaillant 1995):** ~60-year Harvard cohort; predominant mature defences predicted better health, relationships, and successful ageing.

14 · Object relations and the neo-Freudians

The relational turn in psychoanalysis, and the school Paper 1 tests most. After Freud, one large branch of psychoanalysis stopped asking "how does the drive discharge?" and started asking "whose face is the drive reaching for?". That shift is **object relations** theory: the mind is built not out of drives seeking pleasure but out of internalised relationships, the residues of early experience with caregivers laid down as **internal objects** that then govern how the person loves, hates and perceives others for life. Alongside it a looser group, the **neo-Freudian** analysts, kept Freud's method but replaced his biological drive with culture, interpersonal reality and social forces. This topic is high-yield: examiners pair a theorist with a signature concept (Klein and the positions, Winnicott and the transitional object, Fairbairn and object-seeking libido, Kohut and the selfobject, Kernberg and levels of organisation) and they trace the line from these ideas into the borderline-personality therapies now used in the clinic.

The exam framing follows a clean lineage. Melanie Klein opens the object-relations school by turning Freud's drives inward into a world of good and bad internal objects; the British Independent school (Fairbairn, Winnicott, Balint) makes relationship, not drive, the prime

mover; Kohut and Kernberg carry the school into the modern understanding of narcissism and borderline pathology; and Horney, Sullivan and Fromm run in parallel as the socio-cultural neo-Freudians. Mahler (separation-individuation), Adler and Jung belong to the General and Developmental Psychology notes and are only cross-referenced here. Structure below is the standard evolution-of-theories spine: definition, then each theorist in the order the ideas appeared and what each fixed from the last, then the currently accepted synthesis, its neural correlate, and a worked clinical example.

14.1 What "object relations" means

The object is a person, held inside the mind. In psychoanalytic usage the *object* is the target of a drive or a relationship, in practice a person or part of a person (Freud's original term). Object relations theory holds that the infant internalises early relationships as **internal objects**, mental representations of self and other bound together by an affect, and that these internalised self-object-affect units, not the vicissitudes of libido, are the fundamental structures of personality and psychopathology (Kaplan & Sadock 2024). The clinical corollary is that neurosis and character pathology are disturbances in the internal object world, and that the treatment relationship works by offering a new relational experience that can revise those internal objects.

14.2 Melanie Klein: the two positions and the internal object world

Klein turns the drives inward into a world of good and bad objects. Melanie Klein founded the object-relations tradition by taking Freud's late instinct theory, above all the death instinct, and relocating the action into the infant's earliest months (Kaplan & Sadock 2024). Driven to expel intolerable destructive impulses, the infant projects them outward, so the first relationships are with *part-objects*, the gratifying *good breast* and the depriving, persecutory *bad breast*, not yet combined into a whole mother. Klein described two developmental configurations she called *positions* (recurring modes of experience, not one-off stages).

Paranoid-schizoid position

The earliest mode (roughly the first months). The object is split into an all-good and an all-bad part-object; the dominant anxiety is *persecutory* (fear that the bad object will attack and annihilate the self); the dominant defence is **splitting** together with projection and idealisation. "Schizoid" names the splitting; "paranoid" names the persecutory dread.

Depressive position

The later mode (from around weaning, but revisited lifelong). The infant recognises that the good and bad breast are one whole mother, and that its own aggression has been aimed at the very object it loves and needs. The anxiety shifts from persecution to *guilt and concern*; the developmental work is mourning, reparation and tolerating ambivalence. Reaching and holding the depressive position is, for Klein, the hallmark of psychic maturity.

Two further Kleinian concepts are examinable in their own right. **Projective identification** (elaborated by Klein and extended by Wilfred Bion) is a process in which the subject splits off a part of the self, projects it into another person, and then unconsciously pressures that person to feel and behave in line with the projection, so it is at once a defence, a primitive communication and an interpersonal manoeuvre (Kaplan & Sadock 2024). Bion added the *container-contained*

metaphor: the mother (or analyst) absorbs, detoxifies and returns the projected distress in tolerable form for re-internalisation. Klein is regularly criticised for reading all aggression as the death instinct and for dating complex structures such as the superego implausibly early, but her achievement (the internal object world, the two positions, splitting, projective identification) is the foundation of the whole school.

TRAP Klein's **depressive position is a developmental achievement** (whole-object relating, guilt, reparation), not clinical depression.

14.3 Ronald Fairbairn: libido is object-seeking, not pleasure-seeking

The single sentence that defines the school. Ronald Fairbairn made the decisive theoretical break: he held that *libido is object-seeking, not pleasure-seeking* (Kaplan & Sadock 2024). For Freud the infant seeks tension-reducing gratification and the object is merely the means; for Fairbairn the infant seeks the object (the relationship) from the start, and pleasure is the signpost to the object, not the goal. He recast the ego, in Freud a superficial servant of the id, as the core of the psyche, an authentic self that is object-relating from birth. Working chiefly with schizoid patients, he argued their central problem was not controlling dangerous impulses but having an ego capable of relating to objects at all. To manage unsatisfying early relationships the ego *splits* internally, giving Fairbairn's **endopsychic structure**: a central ego relating to an ideal object, a libidinal ego tied to an exciting (tantalising) object, and an anti-libidinal ego (the internal saboteur) tied to a rejecting object. This tripartite internal world of self-and-object pairs is Fairbairn's signature and a direct ancestor of Kernberg's later model.

HOLD THIS

Fairbairn's one line defines the whole school: libido is object-seeking, not pleasure-seeking. The infant seeks the relationship from the start; pleasure is the signpost to the object, not the goal.

14.4 Donald Winnicott: good-enough mothering, the transitional object, the true and false self

The paediatrician-analyst of the Independent school. Donald Winnicott, a paediatrician before he was an analyst and the best-known figure of the British *Independent* (Middle) group, grounded development in the earliest mother-infant relationship (Kaplan & Sadock 2024). His concepts are a cluster examiners love.

Good-enough mother

The mother need not be perfect, only **good-enough**: reliably responsive at first, then failing the infant in small, graduated, tolerable ways so that the child moves from absolute dependence to relative dependence and learns to tolerate frustration. Perfect attunement would in fact impede growth.

Holding environment

The physical and emotional "holding" the mother provides, later a metaphor for the safe, reliable containment the analyst provides in therapy.

Primary maternal preoccupation

The heightened, almost illness-like state of identification with the baby that lets the mother sense and meet its needs in the earliest weeks.

Transitional object

The child's first "not-me" possession (the blanket, the teddy) that stands in for the mother and occupies an intermediate *transitional* space that is neither wholly inner fantasy nor wholly outer reality. It is the developmental bridge from subjective omnipotence to objective reality; Winnicott saw this same intermediate realm of illusion surviving in adult creativity, play, art and religious experience (these are the **transitional** phenomena).

True self and false self

From authentic spontaneous gestures met by good-enough care grows the *true self*. When care is impinging or the child must comply with the mother's needs, a compliant *false self* is built as a protective shell; such patients present as neither neurotic nor psychotic but as subtly unreal, disengaged and compliant.

14.5 The British Independent school and Balint

The middle group that made relationship primary. The *British Independent* (or Middle) group, which formed to sit between Anna Freud's ego-psychological Freudians and the Kleinians during the wartime "Controversial Discussions", is the home of Fairbairn, Winnicott and Michael Balint. Balint's contribution is the **basic fault**: a level of pre-verbal, two-person early damage below the reach of ordinary verbal interpretation, where the therapeutic task is empathic recognition rather than interpretation, and he distinguished benign from malignant regression in treatment (Kaplan & Sadock 2024). The common thread of the Independents is that relationship with the object, not drive discharge, is the engine of development, and that the earliest failures are pre-Oedipal and require a relational, not purely interpretive, cure.

14.6 Heinz Kohut: self psychology and the selfobject

The self, not the drive, at the centre. Heinz Kohut founded **self psychology** in the United States after finding classical drive theory unhelpful with narcissistic patients (Kaplan & Sadock 2024). His organising unit is the **selfobject**: another person experienced not as a separate individual but as a part of, and in the service of, the self, providing functions the self cannot yet perform alone. The infant needs selfobject responses across development, and Kohut named three selfobject transferences that reveal these needs in treatment: *mirroring* (the need to be admired and confirmed, met originally by the gleam in the mother's eye and reflecting the child's *grandiose self*), *idealising* (the need to merge with a calm, strong, idealised figure, the *idealised parental imago*), and *twinship*/alter-ego (the need for likeness and belonging). Normal narcissism matures through gradual, non-traumatic disappointments (*optimal frustration* and *transmuting internalisation*) into healthy self-esteem, ambitions and ideals. Pathological narcissism reflects failed **empathic** mirroring and a self left prone to fragmentation, and the treatment is above all empathic, restoring the arrested developmental need rather than interpreting a conflict.

14.7 Otto Kernberg: the object-relations model of borderline organisation

Drive and object relations, fused, staged by severity. Otto Kernberg integrated ego psychology with object relations and, unlike Kohut, kept libido and aggression inside the model (Kaplan & Sadock 2024). For Kernberg the building blocks of the psyche are *self-representation, object-representation and the affect linking them*, laid down under highly activated early affect states;

excess constitutional aggression is central to severe pathology. His most examined contribution is the classification of personality by **levels of personality organisation**, defined by three variables: identity integration, the maturity of defences, and reality testing.

LEVEL	IDENTITY	PREDOMINANT DEFENCES	REALITY TESTING
Neurotic organisation	Integrated (stable sense of self and others)	**Repression-based (repression, reaction formation, intellectualisation)**	Intact
Borderline organisation	**Identity diffusion (contradictory, unintegrated self and object images)**	**Splitting-based (splitting, projective identification, denial, idealisation/devaluation, omnipotence)**	Grossly intact but fragile under stress
Psychotic organisation	Identity diffusion	Splitting-based, more primitive	**Lost**

The two discriminators that place a patient are identity (integrated versus diffuse) and reality testing (intact in neurotic and borderline, lost in psychotic); splitting versus repression separates borderline from neurotic. This is Kernberg's structural interview in one grid.

Borderline *personality organisation* is a broad structural level (identity diffusion + splitting defences + preserved reality testing) that is wider than the DSM/ICD borderline personality *disorder* category and houses much of severe personality pathology. This model is the theoretical engine of transference-focused psychotherapy (below).

14.8 Kohut versus Kernberg on narcissism

The single most-tested contrast in the topic. Both wrote the modern account of narcissism, and they disagree at the root.

FEATURE	KOHUT (SELF PSYCHOLOGY)	KERNBERG (OBJECT RELATIONS)
Status of drive theory	**Discards drive theory; deficit model**	**Retains libido and aggression; conflict model**
Nature of the grandiose self	A fixation of a *normal* archaic infantile self, arrested by empathic failure	A *pathological* structure fusing real self, ideal self and ideal object, saturated with aggression
Core problem	**Developmental *deficit* from failed empathy**	**Defensive structure against oral *aggression* and envy**
Stance in treatment	Empathic, provides missing self-object experience	Interpretive and confrontational; interprets aggression and defences in the transference

Deficit-and-empathy (Kohut) versus conflict-aggression-and-interpretation (Kernberg) is the discriminator line; if a stem contrasts two narcissism theorists, it is testing exactly this.

RULE **On narcissism, Kohut is deficit plus empathy; Kernberg is conflict, aggression and interpretation.** They are opposites, not variants, and a stem contrasting two narcissism theorists is testing exactly this.

14.9 The neo-Freudians: Horney, Sullivan, Fromm

Keep the method, swap the drive for culture and relationships. The **neo-Freudian** analysts accepted Freud's clinical method but replaced his biological instinct theory with social, cultural and interpersonal determinants.

Karen Horney

Horney located neurosis in disturbed early relationships producing **basic anxiety**, the child's feeling of isolation and helplessness in a potentially hostile world. The child defends against it with one of three *neurotic trends* (interpersonal orientations): *moving toward people* (compliance, seeking love), *moving against people* (aggression, seeking mastery), and *moving away from people* (detachment, seeking self-sufficiency). She is also the first major critic of Freud's *penis envy*, arguing it was a cultural artefact of women's subordinate social position rather than an anatomical inevitability, and she countered it with the notion of male *womb envy*. Her later "tyranny of the should" and the idealised self prefigure cognitive therapy.

Harry Stack Sullivan

Sullivan founded *interpersonal theory*: personality is "the relatively enduring pattern of recurrent interpersonal situations", not an intrapsychic apparatus, so it cannot even be studied apart from relationships. Anxiety originates interpersonally, transmitted from mother to infant, and the self-system develops to avoid it, sorting experience into the *good-me*, *bad-me* and (dissociated, anxiety-laden) *not-me*. He described the *parataxic distortion* (perceiving a present person through the template of a past relationship, an interpersonal reading of transference) and stressed the therapist as a *participant observer*.

Erich Fromm

Fromm, the social and humanistic analyst, sited the person within society and history. In *Escape from Freedom* he argued that modern freedom brings isolation, so people flee it through authoritarianism, destructiveness or automaton conformity. He described non-productive character orientations (receptive, exploitative, hoarding, marketing) versus the healthy *productive* orientation, and set human *existential needs* (relatedness, transcendence, rootedness, identity, a frame of orientation) at the centre of character.

14.10 Currently accepted position

Metabolised, not practised intact. No single one of these systems is used whole today, but the **currently accepted** position is that object relations is the dominant relational framework in contemporary psychodynamic practice, converging with attachment theory (the General and Developmental Psychology notes) and with mentalisation research into a single account: personality is organised around internalised relationships (internal working models / internal objects), and both develop through the caregiver's empathic responsiveness. The practical descendants are two manualised, evidence-based therapies for borderline personality: *transference-focused psychotherapy* (Kernberg and colleagues), which uses the here-and-now transference to integrate split self and object representations, and *mentalisation-based treatment* (Bateman and Fonagy), which grows the capacity to read mental states in self and other, itself rooted in attachment and object-relations thinking (cross-referenced with the personality-disorder and psychotherapy topics). Klein's splitting, Winnicott's holding and Kohut's empathic stance are now common technical vocabulary across the psychodynamic field.

14.11 Neural correlate

Where the internal object world lives, tentatively, in the brain. These are psychological constructs, so any *neural correlate* is a mapping onto systems rather than a discovery within the theories, and it should be held loosely. The *neurobiology* most relevant is the social-cognition and attachment circuitry: representing self and other and reading their mental states engages the *medial prefrontal cortex*, *temporoparietal junction* and *posterior superior temporal sulcus* (the mentalising network that underwrites Fonagy's reflective function). The affect that binds each internal object is carried by the *amygdala* and *anterior cingulate cortex*, and the attachment and selfobject-seeking pull rests on the *oxytocin* and endogenous-opioid systems and mesolimbic reward pathways. Splitting and identity diffusion in borderline organisation track onto impaired prefrontal (especially ventromedial and dorsolateral) regulation of an over-reactive amygdala, the same amygdala-prefrontal imbalance described in the borderline-personality neurobiology. The claim is only that internalised-relationship constructs plausibly ride on the brain's social-cognitive, affective and attachment systems, not that Klein or Kohut localised anything.

14.12 Worked example: one patient through the school

A young woman with unstable relationships and self-harm. Take a patient who idealises a new partner one week and vilifies them the next, cannot say who she is when alone, and cuts herself after feeling abandoned. *Klein:* she is operating largely in the paranoid-schizoid position, splitting each person into all-good and all-bad and using projective identification, drawing others into the very rage she fears. *Winnicott:* a history of impinging, non-attuned early care fostered a false-self compliance masking an unmet true self, and the therapeutic frame must first provide reliable holding. *Kohut:* she seeks selfobjects to steady a fragile self and fragments when mirroring fails, so an empathic stance is primary. *Kernberg:* she shows borderline personality organisation, identity diffusion plus splitting defences with intact reality testing, and transference-focused work would name the alternating idealised and persecutory object relations as they appear with the therapist to integrate them. *Fonagy:* her deficit is mentalising under attachment stress, the explicit target of mentalisation-based treatment. Each lens reads the same clinical picture; together they are the object-relations account of borderline pathology and its treatment.

CLINICAL ANCHOR

Splitting is the concept that unites the school with the ward. The patient who divides the team into all-good and all-bad staff, and the borderline patient who idealises then devalues the same clinician, is displaying Klein's paranoid-schizoid splitting operationalised in Kernberg's borderline organisation. Recognising it (and not taking a side in the split) is the practical yield of this entire topic.

COMMON TRAP

Do not confuse the paired opposites. Klein's *depressive position* is a developmental achievement (whole-object relating, guilt, reparation), not clinical depression. Kohut is *deficit + empathy*; Kernberg is *conflict + aggression + interpretation*, they are opposites on narcissism, not variants. Fairbairn's line is "libido is object-seeking, not pleasure-seeking" (do not swap it onto Winnicott). And keep the neo-Freudians (Horney, Sullivan, Fromm), who replace the drive with culture and interpersonal reality, separate from the object-relations analysts (Klein, Fairbairn, Winnicott), who keep an internal-world focus.

MNEMONIC

"Kids Fear Weird Bosses; Kohut Knows Kids"

The object-relations line in order, then the two moderns: **K**lein (positions, splitting), **F**airbairn (object-seeking libido, endopsychic structure), **W**innicott (good-enough, transitional object, true/false self), **B**alint (basic fault); then **Kohut** (selfobject, mirroring) and **K**ernberg (levels of organisation). For Horney's three trends: "toward, against, away".

GOOD TO REMEMBER

- **Object relations:** mind built from internalised relationships (internal objects), not drive discharge; object = a person or part-person.
- **Melanie Klein:** founder of the school; part-objects (good/bad breast); death-instinct basis.
- **Paranoid-schizoid position:** earliest mode; splitting + persecutory anxiety; all-good vs all-bad part-objects.
- **Depressive position:** whole-object relating; guilt, concern, mourning, reparation; a maturational achievement, not clinical depression.
- **Projective identification:** Klein (extended by Bion); split-off part projected into another who is pressured to enact it; Bion's container-contained.
- **Ronald Fairbairn:** "libido is object-seeking, not pleasure-seeking"; endopsychic structure (central ego / libidinal ego + exciting object / anti-libidinal ego (internal saboteur) + rejecting object); schizoid focus.
- **Donald Winnicott:** good-enough mother; holding environment; primary maternal preoccupation; transitional object and transitional phenomena; true self and false self.
- **Michael Balint:** the basic fault (pre-verbal two-person deficit); benign vs malignant regression.
- **British Independent (Middle) school:** Fairbairn, Winnicott, Balint; relationship over drive; pre-Oedipal focus.
- **Heinz Kohut:** self psychology; the selfobject; mirroring, idealising and twinship transferences; grandiose self and idealised parental imago; optimal frustration and transmuting internalisation; empathy central; discards drive theory (deficit model).
- **Otto Kernberg:** integrates object relations with drive theory (conflict model); self-representation + object-representation + affect; levels of personality organisation (neurotic / borderline / psychotic) defined by identity, defences (repression vs splitting), reality testing; borderline personality organisation; engine of transference-focused psychotherapy.
- **Kohut vs Kernberg:** deficit + empathy vs conflict + aggression + interpretation; normal-archaic vs pathological grandiose self.
- **Karen Horney:** basic anxiety; three neurotic trends (moving toward, against, away from people); critique of penis envy (cultural, not anatomical); womb envy.
- **Harry Stack Sullivan:** interpersonal theory; personality as recurrent interpersonal situations; good-me / bad-me / not-me; parataxic distortion; participant observer.
- **Erich Fromm:** social/humanistic psychoanalysis; Escape from Freedom; character orientations (receptive, exploitative, hoarding, marketing, productive); existential needs.
- **Clinical reach:** transference-focused psychotherapy (Kernberg) and mentalisation-based treatment (Bateman and Fonagy) for borderline personality; converges with attachment theory (the General and Developmental Psychology notes).

15 · Personality theories: trait, type, humanistic and positive psychology

The century-long argument about what a person *is*, told as a sequence of theories each fixing the last one's blind spot. **Personality** is the enduring, characteristic pattern of thinking, feeling and behaving that distinguishes one individual from another and shows consistency across time and situations. The exam does not want a single definition; it wants the four grand traditions and how they answer the same question differently: the **psychodynamic** tradition (personality as the outcome of unconscious conflict and defence, covered under Freud, Jung, Adler on the General and Developmental Psychology notes), the **trait** tradition (personality as a profile of measurable stable dimensions), the **humanistic** tradition (personality as the striving of a whole self toward growth), and the **social-cognitive** tradition (personality as learned expectancies and constructs

interacting with situations). Before all four sat the ancient **type theories**, which sorted people into discrete boxes rather than placing them on continua (Kaplan & Sadock 2024; Companion to Psychiatric Studies).

Structure your answer as an evolution. Type theories gave way to the trait tradition when Allport, Eysenck and Cattell showed that people are better described by where they fall on continuous dimensions than by which box they occupy; the trait tradition converged, via the lexical hypothesis and factor analysis, on the **Big Five** or five-factor model, which is the currently accepted descriptive consensus; the humanistic tradition (Rogers, Maslow, and the existential strand of May and Frankl) rose as a "third force" reacting against both the determinism of psychoanalysis and the mechanism of behaviourism; Kelly's personal construct theory bridged into social cognition; the person-situation debate raised by Mischel was resolved into interactionism; and behavioural genetics and the neuroscience of traits supplied the biological correlate. Positive psychology (Seligman, Csikszentmihalyi) is the newest layer, routed here from the General and Developmental Psychology notes, studying what makes life worth living rather than what makes it go wrong (Kaplan & Sadock 2024).

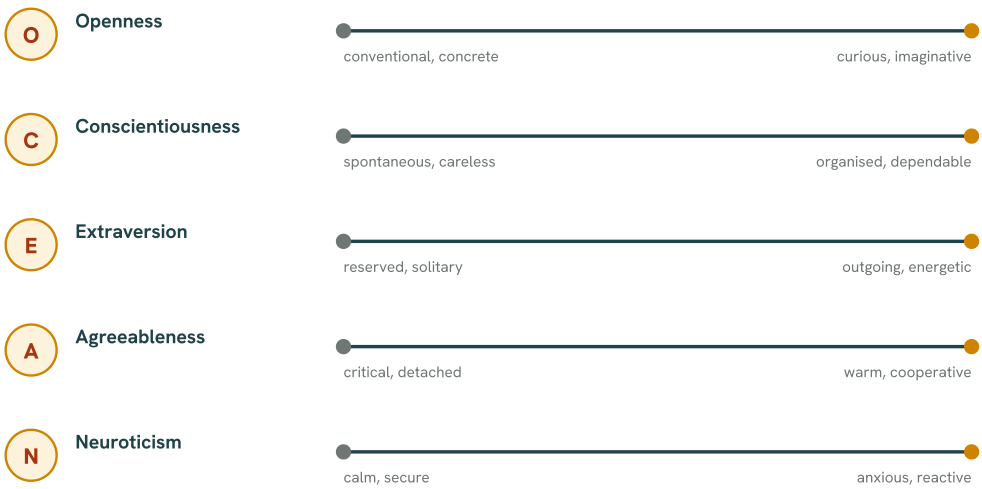


Fig 5.6 The five-factor model (OCEAN), the current descriptive consensus in trait theory. Each factor is a continuous dimension, not a type: a person sits somewhere along all five at once. The poles shown are the extremes; most people cluster near the middle. The model is robust across cultures and languages and is measured by the NEO-PI-R. Neuroticism is the factor most tied to psychopathology, and low conscientiousness and low agreeableness track with externalising problems.

	Psychodynamic	Trait	Type	Humanistic	Social-cognitive
unit	unconscious conflict	stable dimensions	discrete categories	the self, growth	person x situation
human nature	driven, determined	consistent traits	born a type	free, self-actualising	agentic, learning
assessed by	projectives, free association	NEO-PI, 16PF, EPQ	typologies	self-report, Q-sort	behavioural, self-efficacy
key figures	Freud, Klein	Allport, Eysenck	Sheldon, Kretschmer	Rogers, Maslow	Bandura, Mischel

Fig 5.7 The five traditions of personality theory compared. Each answers the same questions differently: what the basic unit of personality is, whether the person is determined or free, how personality is measured, and who its founders are. The trait tradition (now the Big Five) describes personality; the psychodynamic explains its unconscious roots; the type tradition sorts people into kinds; the humanistic centres the self and growth; the social-cognitive puts behaviour at the meeting of person and situation.

15.1 Type theories: the ancient precursor

Sorting people into boxes. A **type theory** proposes a small number of discrete, qualitatively distinct categories into which every person falls; you are one type or another, not more or less of a dimension. The oldest is the humoral scheme of **Hippocrates** and later **Galen**, which linked four bodily humours to four temperaments: blood to the *sanguine* (cheerful, sociable), black bile to the *melancholic* (gloomy, anxious), yellow bile to the *choleric* (irritable, driven), and phlegm to the *phlegmatic* (calm, slow). The word "temperament" preserves this idea of a mixture (Latin *temperare*, to mix). Two twentieth-century constitutional type theories are examinable: **Kretschmer** correlated body build with temperament and psychosis-proneness (the lean *asthenic/leptosomic* build with schizoid/schizophrenic tendency, the rounded *pyknic* build with cyclothymic/manic-depressive tendency, plus the *athletic* and *dysplastic* types), and **Sheldon** restated this as three **somatotypes**, the soft rounded *endomorph* (viscerotonic, sociable, comfort-loving), the muscular *mesomorph* (somatotonic, assertive, energetic), and the thin fragile *ectomorph* (cerebrotonic, restrained, introverted). The fatal weakness of every type theory, and the reason the trait tradition replaced it, is that real people do not fall into clean boxes; the correlations were weak and the categories forced continuous variation into false dichotomies (Kaplan & Sadock 2024).

TRAP Type theories are **categories** (you are a type); trait theories are **dimensions** (you have a score on a continuum). The whole point of the trait tradition was to replace the former with the latter.

15.2 Allport: the founding of the trait tradition

What Allport fixed: continua instead of boxes, and the individual restored. Gordon **Allport** (his classic monograph appeared in 1937) is credited with making personality a scientific discipline and with defining the **trait** as a generalised, enduring neuropsychic disposition to render many stimuli functionally equivalent and to initiate consistent forms of behaviour

(Kaplan & Sadock 2024). His enduring exam-content is a three-tier hierarchy of traits by how pervasive they are in a life:

Cardinal trait
A single dominant disposition so ruling that almost every act can be traced to it; rare, and it can lend its bearer's name to a quality (Machiavellian, narcissistic). Most people have none.

Central traits
The five to ten general characteristics that describe a person's core and would head a good reference letter (honest, anxious, sociable); the building blocks of personality.

Secondary traits
Situation-specific, peripheral dispositions and preferences (a dislike of crowds, a food preference) shown only in particular contexts and not central to the person.

Allport's second lasting contribution is the **idiographic** versus **nomothetic** distinction. The nomothetic approach studies universal dimensions on which everyone can be ranked and compared (the strategy of Eysenck, Cattell and the Big Five); the idiographic approach studies the unique organisation of the single individual, insisting that the pattern of one person cannot be fully captured by scores on group-derived dimensions. Allport championed the idiographic view while conceding the value of both, and the tension he named still runs through the field (Companion to Psychiatric Studies).

15.3 Eysenck: the biologically grounded trait model

What Eysenck fixed: few dimensions, each with a physiological cause. Hans **Eysenck** insisted that a good trait theory must be parsimonious and biologically anchored, and used factor analysis to reduce personality to a small number of higher-order dimensions with a causal substrate (Eysenck & Eysenck 1975; Shorter Oxford Textbook of Psychiatry). His **PEN model** has three superfactors:

Extraversion to introversion (E)
Sociability, liveliness and stimulation-seeking versus quiet reserve. Eysenck's causal claim: introverts have *higher* baseline cortical arousal (an ascending reticular activating system set higher), so they seek less external stimulation; extraverts are chronically under-aroused and seek stimulation to compensate.

Neuroticism to stability (N)
Emotional lability, anxiety and reactivity versus calm and even-temperedness, grounded in the reactivity of the limbic/autonomic (visceral brain) system.

Psychoticism (P)
A dimension of tough-mindedness, aggression, impulsivity, coldness and non-conformity (not psychosis itself), added later and the weakest of the three empirically.

What Eysenck left debated: three dimensions proved too few. Many robust traits (notably conscientiousness and agreeableness) do not reduce cleanly to E, N and P, and the arousal theory of extraversion has only partial empirical support. His enduring win is the idea that traits are dimensions with a neurobiology, which the modern field kept (Kaplan & Sadock 2024).

15.4 Cattell: the factor-analytic 16PF

What Cattell fixed: let the data, not the theorist, decide the number of traits. Raymond **Cattell** took the opposite tack to Eysenck's parsimony. Starting from the thousands of trait words in the dictionary (the lexical raw material) and from behavioural and questionnaire data, he applied factor analysis to distil the many observable **surface traits** (clusters of correlated behaviour) down to the smaller set of underlying **source traits** that generate them. He arrived at sixteen source-trait factors and built the **16PF** (Sixteen Personality Factor Questionnaire) to measure them (Companion to Psychiatric Studies). What Cattell left debated was granularity: sixteen factors were too many to be stable and several were intercorrelated, so higher-order analysis of his own factors kept collapsing them into a handful of broad dimensions. That collapse pointed straight at five, and the field's centre of gravity shifted from sixteen to five.

> **PEARL**
>
> Read Eysenck and Cattell as two answers to one question, "how many traits?" Eysenck went top-down and biological and said three; Cattell went bottom-up and statistical and said sixteen. The Big Five sits between them and is where higher-order factoring of Cattell's sixteen and expansion of Eysenck's three both converge. That convergence, from opposite methods, is why the five-factor solution is so trusted.

15.5 The lexical hypothesis and the Big Five (five-factor model)

The currently accepted descriptive consensus. The **lexical hypothesis** holds that the personality differences most important in human affairs have become encoded as single words in every natural language, so factor-analysing the trait lexicon should reveal the true basic dimensions. Independent lexical and questionnaire programmes across the 1980s and 1990s repeatedly recovered the same five broad orthogonal factors, the **Big Five** or **five-factor** model, remembered by the acronym **OCEAN** (Kaplan & Sadock 2024; Tasman Psychiatry).

FACTOR (OCEAN)	HIGH POLE	LOW POLE / CONTRAST
O: **Openness** to experience	Imaginative, curious, unconventional, aesthetically sensitive, open to ideas and feelings	**Closedness: practical, conventional, prefers routine and the familiar**
C: **Conscientiousness**	Organised, dependable, self-disciplined, goal-directed, deliberate	**Impulsivity: careless, disorderly, spontaneous, undisciplined**
E: **Extraversion**	Sociable, assertive, energetic, positive-emotion-prone, stimulation-seeking	**Introversion and detachment: reserved, quiet, solitary**
A: **Agreeableness**	Trusting, cooperative, warm, altruistic, compliant	**Antagonism: suspicious, competitive, callous, oppositional**
N: **Neuroticism**	Anxious, moody, emotionally reactive, prone to negative affect	**Emotional stability: calm, even-tempered, resilient**

The discriminator that makes the five-factor model examinable: each factor is a bipolar continuum, not a type, and the five are broadly independent, so a person is a *profile* of five scores. Costa and McCrae's NEO-PI further divides each domain into six narrower facets (thirty facets in all).

HOLD THIS

The Big Five (OCEAN) is the currently accepted descriptive consensus, measured by the NEO-PI. Eysenck (three, PEN) and Cattell (sixteen, 16PF) converge on it from opposite methods; neuroticism is the factor most tied to psychopathology.

Costa and McCrae's NEO-PI. The standard instrument for the five-factor model is the **NEO-PI** (originally the NEO Personality Inventory, later NEO-PI-R, and the brief NEO-FFI), developed by Paul Costa and Robert McCrae, which scores the five domains and their thirty facets and carries strong evidence of reliability, cross-cultural replicability and temporal stability across the adult lifespan (Kaplan & Sadock 2024; Companion to Psychiatric Studies; Tasman Psychiatry). Its clinical footprint is direct: the DSM-5 Section III alternative model of personality disorders reframes pathology as maladaptive variants of five domains (negative affectivity, detachment, antagonism, disinhibition, psychoticism) that map onto the maladaptive poles of the five-factor model, high neuroticism, low extraversion, low agreeableness, low conscientiousness, and high openness respectively (Kaplan & Sadock 2024).

15.6 The humanistic tradition: Rogers and the self

The "third force" reacting against determinism. The **humanistic** psychologists rejected both the psychoanalytic view of the person as driven by unconscious conflict and the behaviourist view of the person as a bundle of conditioned responses, and put in their place a person who is fundamentally growth-oriented, free and striving toward fulfilment. Carl **Rogers** built the most complete humanistic personality theory, his *self theory* (Wolberg, Technique of Psychotherapy; Kaplan & Sadock 2024). Its core constructs:

Self-concept

The organised, consistent set of perceptions and beliefs a person holds about themselves; the "real self". Rogers also posits an "ideal self", the person one wishes to be.

Congruence and incongruence

The degree of match between self-concept and actual experience (and between real and ideal self). High congruence underlies psychological health; incongruence, the gap between them, generates anxiety and defensiveness.

Conditions of worth

Internalised standards, learned from others' conditional acceptance, that make self-regard contingent on meeting demands; the developmental source of incongruence.

Unconditional positive regard

Acceptance and valuing of a person without conditions attached. Received in childhood it builds congruence; supplied by the therapist it is the healing condition of client-centred therapy.

Fully functioning person

Rogers' endpoint of healthy development: someone open to experience, living existentially in the present, trusting their own organismic valuing, free and creative.

Driving all of it is a single motivational assumption, the **actualising tendency**, an innate push of every organism toward maintenance, growth and the realisation of its potential. Personality, for

Rogers, is what happens to that tendency under the conditions of worth a life imposes (Kaplan & Sadock 2024).

15.7 Maslow and the existential strand

Self-actualisation as a personality endpoint. Abraham **Maslow**, the other pillar of humanism, is examined here for his **hierarchy of needs** (physiological, safety, love and belonging, esteem, and at the summit **self-actualisation**, the realisation of one's full potential) and for his study of self-actualised people as the model of the healthy personality, marked by accurate perception of reality, autonomy, spontaneity, deep relationships, peak experiences and a problem-centred rather than self-centred focus. Where the trait theorists describe the average person, Maslow described the flourishing one, and made growth, not the reduction of tension, the organising motive of personality (Kaplan & Sadock 2024).

The **existential** strand is humanism's darker, European cousin, concerned with freedom, responsibility, meaning and the confrontation with death, isolation and meaninglessness. Rollo **May** brought existential thought into American psychology, framing anxiety as the normal accompaniment of freedom and the awareness of non-being, and distinguishing normal from neurotic anxiety. Viktor **Frankl**, a psychiatrist and Holocaust survivor, founded logotherapy on the "will to meaning", the thesis that the primary human drive is to find meaning, and that meaning can be found even in unavoidable suffering; his *Man's Search for Meaning* is the movement's touchstone. The existentialists fixed a gap in Rogers and Maslow by taking seriously the tragic givens of existence that a purely growth-optimistic humanism underplayed (Kaplan & Sadock 2024).

15.8 Kelly's personal construct theory: the social-cognitive bridge

The person as scientist. George Kelly's **personal construct** theory casts each person as an intuitive scientist who construes the world through a personal repertoire of bipolar dimensions (constructs such as kind-cruel, safe-dangerous) and uses them to anticipate events; behaviour follows from the anticipations these constructs generate, and psychological problems arise when a person's construct system fits the world poorly and resists revision. Because it locates personality in learned cognitive structures interacting with situations rather than in fixed traits or unconscious drives, it forms the bridge from the humanistic tradition into the social-cognitive one (Bandura's reciprocal determinism and self-efficacy, Rotter's locus of control, Mischel's cognitive-affective processing), which is developed under the learning-theory topics (Kaplan & Sadock 2024).

15.9 Currently accepted: the Big Five and the resolution of the person-situation debate

The consensus and the crisis it survived. The **currently accepted** descriptive framework for normal personality is the Big Five / five-factor model: five broad, replicable, cross-culturally recovered dimensions that subsume the earlier trait models and now anchor the dimensional reframing of personality disorder in DSM-5 Section III and ICD-11 (Kaplan & Sadock 2024). It reached this status only after surviving the **person-situation debate**. In 1968 Walter **Mischel** observed that trait scores predict behaviour in any single situation only modestly (the

"personality coefficient" ceiling of roughly 0.30) and argued that situations, not traits, drive behaviour. The debate was resolved into **interactionism**: traits predict behaviour well when it is *aggregated* across many situations (a person high in conscientiousness is reliably more conscientious on average), while situations determine the specific act; person and situation interact, and Mischel's own later cognitive-affective processing system (CAPS) model captured the stable *if-then* behavioural signatures that reconcile cross-situational variability with genuine personality consistency.

15.10 The behavioural-genetic and neural correlate of traits

Where the dimensions live in the biology. Twin and adoption studies converge on a **heritability** of the major personality traits of roughly 40 to 50 per cent (often quoted as the 40 to 60 per cent band across studies and traits), with the remaining variance dominated by the *nonshared* environment and shared-family environment contributing little; large genome-wide association studies have so far failed to pin the heritability to reliable common variants, the classic missing-heritability picture (Tasman Psychiatry; Kaplan & Sadock 2024). For the **neural correlate**, two frameworks are examinable. Jeffrey **Gray**'s reinforcement-sensitivity theory reinterprets Eysenck's axes as two motivational systems: a behavioural inhibition system (BIS, septo-hippocampal and amygdalar, sensitive to punishment and novelty, underlying anxiety and mapping toward high neuroticism/introversion) and a behavioural activation system (BAS, mesolimbic dopaminergic, sensitive to reward, underlying impulsivity and mapping toward extraversion). Colin **DeYoung**'s cybernetic/personality-neuroscience programme links each Big Five domain to systems: extraversion to dopaminergic reward circuitry, neuroticism to the amygdala and threat/defensive systems, conscientiousness to lateral prefrontal cortex, openness to dopaminergic cognitive-exploration circuits, and agreeableness to social-cognition and theory-of-mind networks. The through-line is that traits are moderately heritable dimensions with identifiable neurotransmitter and circuit substrates, exactly the biological grounding Eysenck first demanded (Kaplan & Sadock 2024).

40-50%	~0.30	5
HERITABILITY OF MAJOR TRAITS	MISCHEL'S PERSONALITY COEFFICIENT CEILING	FACTORS (OCEAN), 30 FACETS

CLINICAL ANCHOR

A worked example that ties the traditions together. A reserved, meticulous, easily-worried patient can be read at every level: a *type* theorist would once have called him a melancholic or an ectomorph; the *trait* reading is low extraversion, high conscientiousness, high neuroticism on the NEO-PI; Eysenck would flag high N and high introvert arousal; Gray would locate an overactive behavioural inhibition system; the *humanistic* reading asks what conditions of worth made his self-worth contingent on flawless performance and where his self-concept is incongruent with his experience; Kelly would map the rigid bipolar constructs (perfect-worthless) through which he anticipates evaluation. None is wrong; each tradition answers a different clinical question, and a good formulation uses more than one.

15.11 Positive psychology (delta): Seligman, PERMA, strengths and flow

The science of what goes right, routed here from the General and Developmental Psychology notes. **Positive psychology**, launched as a formal programme by Martin **Seligman** during his 1998 American Psychological Association presidency, studies positive emotions, positive traits and enabling institutions, the conditions under which people and communities flourish, as a deliberate counterweight to psychology's traditional focus on disorder. It sits naturally beside the humanistic tradition (both centre growth and the healthy person) but insists on empirical measurement (Kaplan & Sadock 2024).

PERMA

Seligman's five-element model of well-being: **P**ositive emotion, **E**ngagement, **R**elationships (positive), **M**eaning, and **A**ccomplishment. Well-being is the flourishing that comes of building all five, not merely the absence of distress.

Character strengths and virtues

Peterson and Seligman's classification (the deliberate "un-DSM") of 24 measurable character strengths grouped under six universal virtues (wisdom, courage, humanity, justice, temperance, transcendence), assessed by the VIA Inventory of Strengths.

Flow

Mihaly **Csikszentmihalyi**'s state of complete absorption in an intrinsically rewarding activity, in which challenge and skill are well matched and self-consciousness and the sense of time drop away; the experiential core of engagement.

Authentic happiness / well-being theory

Seligman's earlier "authentic happiness" scheme (pleasant, engaged and meaningful lives) which he later broadened into the multi-element well-being theory captured by PERMA.

COMMON TRAP

Do not confuse the neighbouring frameworks. Type theories are *categories* (you are a type); trait theories are *dimensions* (you have a score on a continuum), and the whole point of the trait tradition was to replace the former with the latter. Eysenck (three factors, PEN) is not Cattell (sixteen factors, 16PF), and neither is the Big Five (five factors, NEO-PI), though all three are trait/nomothetic models. Maslow's self-actualisation is the *top of a need hierarchy*; Rogers' fully functioning person is the *outcome of unconditional positive regard and congruence*, the two are humanistic cousins but not the same construct. And positive psychology (Seligman, an empirical programme with instruments) is not the same as humanism (Rogers/Maslow, a mid-century philosophical movement), even though they share the growth agenda.

INDIA

The five-factor structure replicates in Indian samples but is not culturally exhaustive: indigenous work has argued for additional or reweighted dimensions, and constructs such as the trigunas of Samkhya (sattva, rajas, tamas) have been operationalised into scales as an emic model of personality. For the exam, know that the Big Five is the accepted *universal* descriptive framework while accepting that lexical studies in different languages recover locally salient factors on top of it.

MNEMONIC

OCEAN and PERMA

The Big Five is **OCEAN**: **O**penness, **C**onscientiousness, **E**xtraversion, **A**greeableness, **N**euroticism. Positive-psychology well-being is **PERMA**: **P**ositive emotion, **E**ngagement, **R**elationships, **M**eaning, **A**ccomplishment. For the traditions in order, remember "Boxes, then Dimensions, then Selves, then Scientists": type theories (boxes), trait theories (dimensions), humanism (the self), social-cognitive/constructs (the person as scientist).

GOOD TO REMEMBER

- **Personality:** enduring characteristic pattern of thought, feeling and behaviour, consistent across time and situations.
- **Four grand traditions:** psychodynamic (unconscious conflict), trait (measurable dimensions), humanistic (the striving whole self), social-cognitive (learned expectancies and constructs); type theories are the ancient precursor.
- **Type theories:** Hippocrates/Galen four humours and temperaments (sanguine, melancholic, choleric, phlegmatic); Kretschmer (asthenic-schizoid, pyknic-cyclothymic, athletic); Sheldon somatotypes (endomorph-viscerotonic, mesomorph-somatotonic, ectomorph-cerebrotonic).
- **Allport:** cardinal, central and secondary traits; the idiographic (unique individual) versus nomothetic (universal dimensions) distinction; founder of trait psychology.
- **Eysenck:** biologically grounded PEN model, extraversion-introversion (introverts higher cortical arousal), neuroticism (limbic reactivity), psychoticism; three superfactors.
- **Cattell:** factor-analytic model, surface traits versus source traits, sixteen source factors measured by the 16PF.
- **Big Five / five-factor model (OCEAN):** Openness, Conscientiousness, Extraversion, Agreeableness, Neuroticism; the currently accepted descriptive consensus, measured by Costa and McCrae's NEO-PI (five domains, thirty facets).
- **Rogers (self theory):** self-concept, real versus ideal self, congruence-incongruence, conditions of worth, unconditional positive regard, the fully functioning person, actualising tendency.
- **Maslow:** hierarchy of needs topped by self-actualisation as the healthy-personality endpoint.
- **Existential strand:** May (anxiety as accompaniment of freedom and non-being) and Frankl (logotherapy, the will to meaning).
- **Kelly:** personal construct theory, the person as intuitive scientist; the bridge into social cognition.
- **Person-situation debate:** Mischel (1968) challenged trait predictiveness (the ~0.30 personality coefficient); resolved into interactionism (traits predict aggregated behaviour, situations predict the specific act).
- **Heritability of traits:** roughly 40 to 60 per cent, remainder mostly nonshared environment; GWAS missing-heritability picture.
- **Neuroscience of traits:** Gray's BIS/BAS (septo-hippocampal/amygdalar punishment system; mesolimbic-dopaminergic reward system); DeYoung's personality neuroscience (extraversion-dopamine reward, neuroticism-amygdala threat, conscientiousness-prefrontal, openness-dopaminergic exploration, agreeableness-social cognition).
- **Positive psychology (Seligman, 1998):** PERMA (positive emotion, engagement, relationships, meaning, accomplishment); character strengths and virtues (24 strengths, 6 virtues, VIA inventory); flow (Csikszentmihalyi); well-being theory.

Special topics

16 · Psychology of rape

The **psychology of rape** is a named Paper-1 essay topic, and it is examined as a piece of applied social and forensic psychology rather than as a description of an offence. It sits on these notes because it draws together attribution, aggression, attitudes and the psychology of the survivor. The register throughout is clinical and sober: this is doctor-facing revision, the material concerns both the person who offends and the person who is harmed, and it is written without case detail or sensationalism.

Two bodies of theory are examined. The first is the psychology of the offender, where the central shift over the last half century has been away from the idea that **rape** is driven by sexual desire and toward understanding it as an act of power and aggression expressed through sex. The second is the psychology of the survivor of **sexual assault**, where the key construct is the patterned psychiatric response first described as the rape trauma syndrome. The clinician also needs the framework for a trauma-informed response and an outline of the Indian medico-legal setting.

16.1 The reframing: power and aggression, not lust

The foundational idea, from Nicholas Groth's clinical work with offenders (Men Who Rape, 1979), is that rape is the sexual expression of power and anger, not primarily the aggressive expression of sexuality. Sexuality is the medium; power, control and hostility are the motives. This reframing matters clinically and forensically because it predicts that rape is poorly explained by sexual deprivation or provocation, and it displaces the rape myths that treat the act as a misunderstanding about sex. It also aligns the offence with the general aggression literature of these notes rather than with the paraphilias, although a minority of offenders do have a paraphilic (sexual sadism) or antisocial profile.

RULE **Rape is the sexual expression of power and anger, not primarily lust (Groth).** Sexuality is the medium; power, control and hostility are the motives, which is why the act is poorly explained by sexual deprivation or provocation.

16.2 Offender typologies

Groth (1979) himself described *three* patterns by the motive that predominates: **anger rape**, **power rape** and **sadistic rape**. The four-type scheme below is the later investigative elaboration associated with Hazelwood and the FBI, which splits Groth's power category into reassurance and assertive subtypes (a split Knight's typology also uses) and his anger category into retaliatory and excitation subtypes. Cite the three when asked for Groth and the four when asked for the investigative typology. Either way it is a clinical heuristic, not a diagnosis, and most real offenders are heterogeneous, so the caveats matter as much as the categories.

TYPE	PREDOMINANT MOTIVE	CHARACTER
Power-reassurance	**Restoring a fragile sense of masculine adequacy**	The least overtly aggressive; scripted, seeks reassurance; the commonest type
Power-assertive	**Asserting dominance and entitlement**	Uses force to control; sees the act as a right, not a fantasy
Anger-retaliatory	**Punishing and degrading, revenge on women**	Impulsive, high gratuitous violence, brief and brutal
Anger-excitation (sadistic)	**Eroticised suffering**	The rarest and most dangerous; planned, ritualised; overlaps sexual sadism and psychopathy

The four investigative offender types (Hazelwood and the FBI, elaborating Groth's three) by predominant motive; power types outnumber anger types, and the sadistic type is rare but carries the greatest risk.

16.3 Risk factors and the limits of prediction

The best-supported model of the propensity to sexual aggression is Malamuth's confluence model, which locates risk at the meeting of two paths: hostile masculinity (adversarial, controlling attitudes toward women, hostility, and a need to dominate) and an impersonal, non-intimate orientation to sex. Attitudinal factors (acceptance of rape myths, hostility) and situational disinhibitors (alcohol, peer norms) raise risk. The clinically honest point for the exam is that prediction at the level of the individual is weak: these are group-level associations, and no profile identifies an offender with useful accuracy.

TRAP Groth's typologies and the confluence-model risk factors are **group-level associations, not an individual-prediction tool**; no profile identifies an offender with useful accuracy.

16.4 Rape myths and their harm

Rape myths are false but widely held beliefs about rape, offenders and survivors that serve to deny, minimise or justify sexual aggression: that survivors provoke it by dress or conduct, that only strangers commit it, that a real rape leaves visible injury, that a delayed or calm disclosure means it did not happen. Rape myth acceptance is measurable and predicts victim-blaming attitudes. Its harm is concrete: it suppresses disclosure, colours the medical and legal response, and inflicts the second injury of not being believed. Recognising these myths is part of a competent clinical stance.

16.5 The survivor: the rape trauma syndrome

Ann Burgess and Lynda Holmstrom described the rape trauma syndrome in 1974 as the patterned psychological response to sexual assault, in two phases. The acute or disorganisation phase (days to weeks) brings shock, fear, disbelief, and either an expressed style (overt distress) or a controlled style (a composed, flat presentation that can be misread as unaffected). The reorganisation phase (months and longer) brings the intrusive and avoidant symptoms, phobias, sexual difficulties, and changes to lifestyle and relationships. In modern terms this maps onto acute stress and post-traumatic stress disorder, with high rates of comorbid depression, sexual dysfunction and substance use; suicidality must be assessed.

HOLD THIS

The rape trauma syndrome (Burgess and Holmstrom 1974) runs in two phases: acute or disorganisation, then reorganisation. The acute phase can present as an expressed (overt distress) or a controlled (composed, flat) style, and a calm presentation must not be misread as unaffected.

16.6 Secondary victimisation and a trauma-informed response

Secondary victimisation, the second injury, is the further harm done by the responses of services, family and the legal process: disbelief, blame, intrusive questioning, and loss of control over the process. The clinical antidote is a trauma-informed response whose principles are safety first, restoring choice and control to the survivor, believing and validating, minimising re-traumatisation during examination, and coordinating the medical, psychological and forensic tasks so the survivor is not made to repeat the account needlessly.

16.7 The Indian medico-legal frame

INDIA

In India the clinical care of a survivor of sexual assault is governed by consent, the guidance that treatment is not conditional on reporting to police, and the post-2013 reforms that discredited and moved away from the so called two-finger test as unscientific and degrading. Offences against minors are dealt with under the Protection of Children from Sexual Offences (POCSO) Act. The statutory detail belongs to the the forensic psychiatry chapter and is cross-referenced there; what belongs here is the clinical stance: examine with consent, document carefully, treat injuries and prophylaxis, and provide trauma-informed psychological care.

GOOD TO REMEMBER

- **Reframing (Groth 1979):** rape is power and anger expressed through sex, not lust.
- **Offender types:** Groth's own three are anger, power and sadistic rape; the investigative four (Hazelwood/FBI) are power-reassurance (commonest), power-assertive, anger-retaliatory and anger-excitation or sadistic (rarest, most dangerous).
- **Risk (Malamuth confluence model):** hostile masculinity plus impersonal sex; individual prediction is weak.
- **Rape myths:** false beliefs that deny or justify assault; raise victim-blaming, suppress disclosure.
- **Rape trauma syndrome (Burgess and Holmstrom 1974):** acute or disorganisation phase (expressed or controlled style) then reorganisation phase; maps onto ASD and PTSD with depression and sexual dysfunction.
- **Second injury:** secondary victimisation by services and the process; countered by a trauma-informed response.
- **India:** consent-based care, care not conditional on reporting, the two-finger test abandoned (2013), POCSO for minors.

17 · The Indian therapy relationship: guru-chela and expressed emotion

Two constructs from the Paper-1 syllabus carry a distinct Indian weight, and both concern the relationships around the patient rather than the patient alone. The first is the **guru-chela** relationship, an Indian model of the therapeutic bond. The second is **expressed emotion**, the

measurable emotional atmosphere of the family, whose Indian findings are part of why outcomes for serious mental illness have been better in the developing world.

17.1 The guru-chela relationship (Neki)

J. S. Neki, in a classic pair of papers (Guru-Chela relationship: the possibility of a therapeutic paradigm, American Journal of Orthopsychiatry, 1973), argued that the Western contractual, autonomy-valuing therapeutic alliance is a poor cultural fit for many Indian patients, and that the indigenous guru-shishya (guru-chela) ideal offers a better paradigm. In that ideal the disciple approaches the teacher with trust, reverence and a willing dependence; the guru accepts responsibility for the disciple's growth, offers guidance and a model to identify with, and the bond is warm, hierarchical and personal rather than contractual and time-limited.

17.2 Why it matters for practice

The guru-chela frame reframes several things the Western model treats as problems. Dependence, which the autonomy-valuing model tends to pathologise, is here a legitimate and even therapeutic stage; idealisation of the therapist is expected rather than interpreted away at once; and the therapist is permitted to be more active, directive and personally invested. Neki's point is not that the therapist should pose as a guru, but that Indian patients often enter treatment with guru-chela expectations, and that understanding this improves engagement and the handling of transference and dependence. Its risks are the risks of any hierarchical bond: fostering excessive dependence, and blurring boundaries if the therapist accepts the idealisation uncritically.

RULE **In the guru-chela paradigm (Neki), dependence and idealisation are legitimate therapeutic stages, not pathology to interpret away.** The point is not to pose as a guru but to recognise the expectations Indian patients often bring.

17.3 Expressed emotion: the construct

Expressed emotion is a measure of the emotional climate a relative shows toward a patient, developed by George Brown and Michael Rutter and assessed through the Camberwell Family Interview. It has three key components: critical comments (the count of critical remarks), hostility (generalised rejection of the person, not just their behaviour), and emotional over-involvement (over-protective, self-sacrificing, dramatic concern). A household is rated high in expressed emotion if a relative exceeds threshold on criticism or hostility, or shows marked over-involvement.

HOLD THIS

Expressed emotion (Brown and Rutter; Camberwell Family Interview) has three components: critical comments, hostility and emotional over-involvement. Indian families tend to show lower expressed emotion, part of the better outcome of schizophrenia in the developing world.

17.4 Expressed emotion and relapse

The robust finding, replicated across many samples, is that patients with schizophrenia who return to a high expressed emotion household relapse at markedly higher rates than those returning to a low expressed emotion household (Vaughn and Leff), and the effect extends to mood disorders and other conditions. The mechanism is understood as a chronic stressor acting on a vulnerable individual, a family-level instance of the diathesis-stress model. The practical payoff is that family psychoeducation which lowers expressed emotion reduces relapse: Leff and colleagues (1982) showed a controlled social intervention in families cut the relapse rate, which is why lowering expressed emotion is a target of family work.

RULE **High expressed emotion predicts relapse; lowering it (through family psychoeducation) reduces relapse.** It acts as a chronic stressor on a vulnerable individual, a family-level instance of diathesis-stress.

17.5 Expressed emotion in India

INDIA

The cross-cultural expressed emotion research, including the WHO Determinants of Outcome study and Indian work by Wig, Leff and colleagues in Chandigarh, found that Indian families tend to show lower expressed emotion than Western families, with fewer critical comments and less over-involvement. This lower family criticism is one of the cultural factors invoked to explain the better course and outcome of schizophrenia reported in the developing world (cross-ref the cross-cultural outcome material). It is a clean example of a social variable, the family's emotional tone, shaping the course of a biological illness.

GOOD TO REMEMBER

- **Guru-chela (Neki 1973):** an Indian therapeutic paradigm of trust, reverence and willing dependence on the therapist-as-guru, against the Western contractual, autonomy-valuing alliance.
- **Clinical use:** dependence and idealisation are legitimate stages, the therapist is more active; the risk is over-dependence and boundary blurring.
- **Expressed emotion (Brown and Rutter; Camberwell Family Interview):** critical comments, hostility, emotional over-involvement.
- **High expressed emotion predicts relapse** in schizophrenia (Vaughn and Leff) and mood disorders; a family-level diathesis-stress effect.
- **Family psychoeducation** that lowers expressed emotion reduces relapse (Leff et al 1982).
- **India:** Indian families tend to show lower expressed emotion (Wig, Leff), part of the better outcome of schizophrenia in the developing world.

Discriminate

18 · Discriminate: the paradigms side by side

The examinable skill of these notes is discrimination: not reciting one theory, but telling it apart from its neighbours. Three comparisons carry most of the marks. The first tells the learning paradigms apart, the second tells the personality models apart, and the third tells the social-

thinking biases apart. Read each table down the discriminator column, the shaded cell, because that is where the distinguishing feature sits.

18.1 The learning paradigms: classical, operant and social learning

The three paradigms are often confused because all three are about learning, but they differ in what is associated, what the learner does, and the therapy each produces. The move across them is also historical, from a passive organism forming stimulus associations to an active, cognitive one learning by watching.

FEATURE	CLASSICAL (PAVLOV)	OPERANT (SKINNER)	SOCIAL LEARNING (BANDURA)
What is learned	**A stimulus predicts a stimulus (CS predicts US)**	**A behaviour predicts a consequence**	**A behaviour and its outcome, by watching a model**
Key relationship	CS paired with US, before the response	Reinforcement or punishment, after the response	Vicarious reinforcement of the model
The learner	Passive, reflexive (involuntary responses)	Active, emitting behaviour (voluntary responses)	Cognitive: attends, retains, expects
Signature study	Salivating dogs; Little Albert	The Skinner box; schedules of reinforcement	The Bobo doll
Therapy it yields	Systematic desensitisation, exposure, aversion	Token economy, contingency management, ABA	Modelling, skills training, self-efficacy work

Classical learns what predicts what before a reflex; operant learns what a voluntary action earns; social learning learns by watching a model, with cognition in the middle.

HOLD THIS

Classical is a stimulus predicting a stimulus before an involuntary reflex; operant is a voluntary behaviour shaped by its consequence; social learning is behaviour acquired by watching a model. The learner moves from passive to active to cognitive across the three.

18.2 The personality models: five traditions

The five traditions answer the same questions differently: what the basic unit of personality is, whether the person is determined or free, how personality is measured, and what the main criticism is. Type theories sort people into kinds; trait theories place them on continuous dimensions; the psychodynamic explains the unconscious roots; the humanistic centres the self and growth; the social-cognitive puts behaviour at the meeting of person and situation.

TRADITION	UNIT OF ANALYSIS	ASSESSED BY	MAIN CRITICISM
Psychodynamic	**Unconscious conflict and drives**	Projective tests, free association	Hard to test, over-interprets
Trait	**Stable dimensions (the Big Five)**	Questionnaires (NEO-PI, 16PF, EPQ)	Describes rather than explains
Type	**Discrete categories or kinds**	Typologies, body build	Loses individual variation
Humanistic	**The self, growth, meaning**	Self-report, Q-sort	Vague, optimistic, hard to measure
Social-cognitive	**Person interacting with situation**	Behavioural measures, self-efficacy scales	Underweights emotion and biology

The five personality traditions compared on their unit of analysis, their assessment method and their main criticism; the trait tradition, now the Big Five, is the descriptive consensus.

18.3 The social-thinking biases

Four social-cognitive phenomena from these notes are easily confused because each describes a distortion in how people think about themselves and others. The one-line signature tells them apart.

BIAS	SIGNATURE
Fundamental attribution error	**Over-attributing others' behaviour to disposition, underrating the situation**
Self-serving bias	**Taking credit for success (internal), blaming the situation for failure (external)**
Cognitive dissonance	**Changing an attitude to resolve the tension of inconsistent cognitions**
Group polarisation	**A group's average view becoming more extreme after discussion**

Four social-thinking distortions distinguished by their signatures; the first two are attribution biases, the third an attitude-change process, the fourth a group effect.

COMMON TRAP

The high-yield mix-ups: classical conditioning is before the reflex and involuntary, operant is after a voluntary act; negative reinforcement strengthens behaviour (it removes something aversive) and must not be called punishment, which weakens it; Eysenck's model is a few broad biologically grounded dimensions (PEN) while Cattell's is sixteen factors (16PF); and in object relations, Klein is the paranoid-schizoid and depressive positions while Kohut is self psychology and the selfobject.

Apply and consolidate

19 · Apply: four psychology vignettes

Four short worked vignettes turn this theory into the reasoning the exam actually rewards. Each gives a brief presentation, then the psychological reasoning, then the read. The tool changes each time, so that the discriminator carries the answer.

RULE **In an applied vignette, name the process, not the personality.** Identify the domain and its mechanism (a bias, a conditioning contingency, a Big Five profile, a group effect), and the discriminator carries the mark.

19.1 An attribution read

CLINICAL ANCHOR

Case: a vignette in attribution. A final-year student fails an examination and tells you the paper was unfair and the examiners had it in for him, while explaining that his distinctions in earlier years were down to his own ability. Reasoning: the failure is attributed to external, unstable, uncontrollable causes and the successes to internal, stable ones. This asymmetry, taking credit for success and externalising failure, is the self-serving bias. His readiness to see the examiners' intent rather than the situation is the fundamental attribution error turned on others. The read: a self-serving attributional style, which protects self-esteem but, if rigid, blocks the learning that a more balanced, effort-based attribution would allow.

19.2 A learning and behaviour-therapy plan

CLINICAL ANCHOR

Case: a vignette in conditioning. A woman develops an intense fear of lifts after being trapped in one during a power cut; she now avoids lifts entirely and her world is shrinking. Reasoning: the trapping (an aversive unconditioned stimulus) was paired with the lift (now a conditioned stimulus), so the lift alone evokes a conditioned fear response, classical conditioning; the avoidance is then maintained by operant negative reinforcement, because escaping the lift removes the anxiety and so is reinforced. The read: a specific phobia by conditioning. The matching treatment follows the paradigm: graded exposure or systematic desensitisation to extinguish the conditioned fear, and blocking the avoidance so the negative reinforcement cycle cannot maintain it.

19.3 A personality-model read

CLINICAL ANCHOR

Case: a vignette in personality. A colleague is described as anxious and easily stressed, meticulous and dutiful, reserved in company, and quick to imagine worst cases. Reasoning on the Big Five: high neuroticism, high conscientiousness, low extraversion, with average openness and agreeableness. A trait clinician stops there and predicts behaviour from the profile. A psychodynamic clinician asks what unconscious conflict the meticulousness defends against (obsessional defences against anxiety). A humanistic clinician asks whether the person is living in line with their own values or an introjected standard, and where the conditions of worth lie. The read: the same person, formulated three ways, showing how the tradition you choose determines the questions you ask.

19.4 A group-influence read

CLINICAL ANCHOR

Case: a vignette in social influence. A junior doctor on a ward round privately doubts a senior's plan but says nothing, and later, in an unanimous team, finds the group settling on a riskier plan than any member would have chosen alone. Reasoning: the silence in the face of an authority is obedience and normative conformity; the unanimous team suppressing dissent and drifting to a more extreme, poorly examined decision is groupthink and group polarisation. The read: name the processes rather than the personalities, and note the antidotes, inviting dissent, a devil's advocate, and anonymous input, that break the pressure toward uniformity.

HOLD THIS

The same case reads differently in each tradition, and the exam rewards saying which lens you are using. A trait reading, a psychodynamic reading and a humanistic reading of one person ask different questions; none is wrong.

20 · Consolidate: mnemonic, retrieval and synthesis

This chapter closes with three consolidation devices: a master mnemonic that chains the whole of it, a set of answer-free retrieval prompts to test yourself against, and a synthesis map to redraw from memory. Use them actively; reading them is not the same as recalling them.

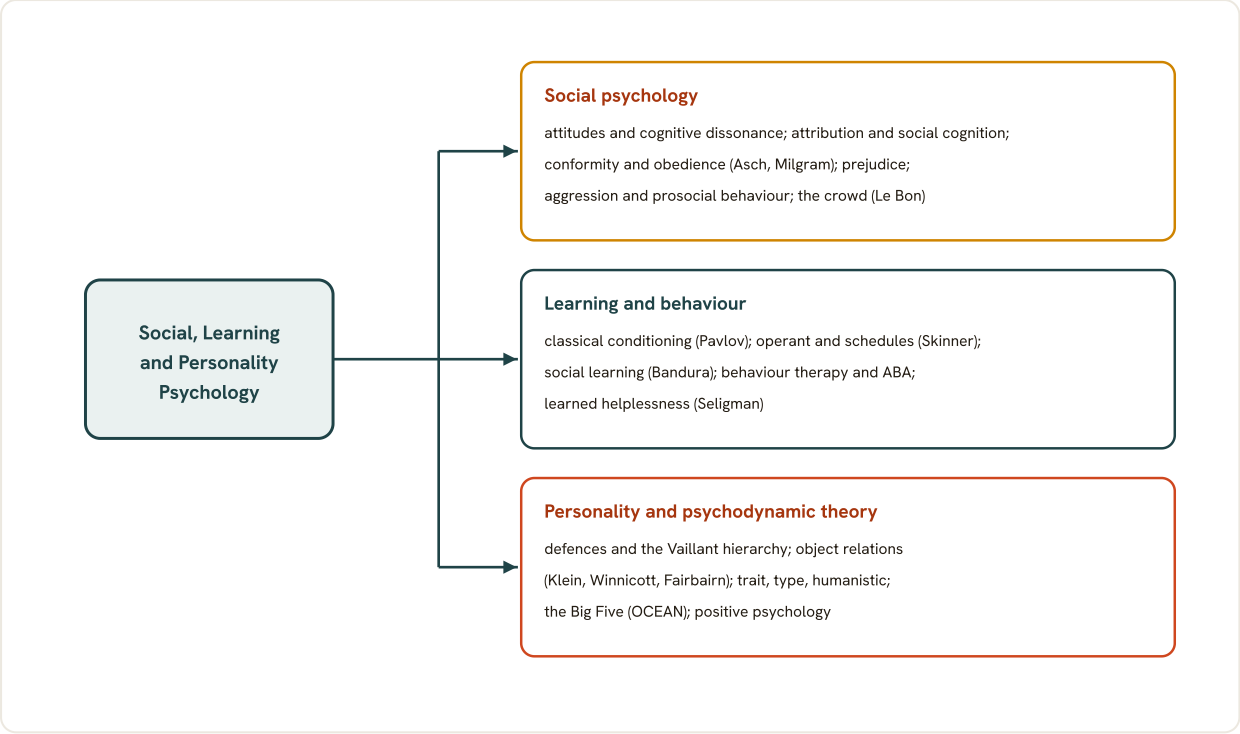


Fig 5.8 The whole synthesis map. Redraw it from memory as a recall check: the three domains branch from the centre, and under each you should be able to reconstruct its topics and their key figures. If a branch comes back thin, that is the section to revisit. Social psychology is how people are moved by others; learning and behaviour is how conduct is shaped and reshaped; personality is how the whole person is theorised.

20.1 The master mnemonic

MNEMONIC

Walk three lands: SOCIAL, LEARNING, PERSONALITY

This chapter is three lands, S, L, P (Social, Learning, Personality). In the SOCIAL land, six phenomena in the line **"Any Argument Gets People Awfully Cross"**: **A**ttitudes (and cognitive dissonance), **A**ttribution (and its biases), **G**roup dynamics (conformity, obedience), **P**rejudice, **A**ggression (and prosocial behaviour), **C**rowd. In the LEARNING land, **"Clever Owls Study Behaviour"**: **C**lassical conditioning, **O**perant conditioning (and schedules), **S**ocial learning (Bandura), **B**ehaviour therapy (with ABA and learned helplessness). In the PERSONALITY land, **"Defend Our Persons"**: **D**efences (the Vaillant hierarchy), **O**bject relations (and the neo-Freudians), **P**ersonality theories (trait, type, humanistic, positive). Two Paper-1 extras hang off the map: the named schools Meyer and Rank, and the two clinical relationships, the psychology of rape and the Indian pair guru-chela and expressed emotion.

HOLD THIS

The whole chapter is three lands: Social, Learning, Personality (SLP). Social psychology is how people are moved by others, learning is how conduct is shaped and reshaped, personality is how the whole person is theorised.

20.2 Retrieval practice

RETRIEVAL PRACTICE, COVER THE ANSWERS

Use active recall: cover the answers you know from this material and try to produce each of these from memory before checking back. This is retrieval practice, and it is worth more than rereading.

1. State Festinger's cognitive dissonance theory and the counter-intuitive result of the induced-compliance study.
2. Name Kelley's three covariation criteria and two attribution biases.
3. Distinguish normative from informational influence, and name the Asch, Milgram and Zimbardo studies.
4. Give Allport's four conditions for the contact hypothesis to reduce prejudice.
5. Contrast the frustration-aggression hypothesis with the social-learning account of aggression.
6. Put the four crowd theories in order from Le Bon to the social identity model.
7. Define the unconditioned and conditioned stimulus and response, and describe extinction and spontaneous recovery.
8. Draw the reinforcement-versus-punishment matrix and name the four schedules with their response patterns.
9. List Bandura's four subprocesses of observational learning and the four sources of self-efficacy.
10. Match three behaviour-therapy techniques to their parent learning paradigm, and state the learned-helplessness reformulation.
11. Name the four levels of Vaillant's defence hierarchy with one mechanism each.
12. Distinguish Klein, Winnicott and Fairbairn in one line each.
13. Give Eysenck's PEN dimensions, Cattell's model and the five factors of OCEAN.
14. State what positive psychology added, and what PERMA stands for.
15. Explain the guru-chela paradigm and the three components of expressed emotion.

20.3 The synthesis map

Finally, redraw the whole synthesis map from memory. Start from the title at the centre, branch to the three domains, and under each branch reconstruct its topics and their key figures: the social phenomena and their theorists, the learning paradigms and the therapies they yield, and the personality strands ending in the Big Five. If a branch comes back thin when you redraw it, that is the section to revisit. The map is not decoration; rebuilding it from memory is the last and best retrieval check for this material.

Previously asked

Real long-essay (25-mark) and short-note (10-mark) questions from the social, learning and personality-psychology territory, most-recent year shown.

LONG ESSAYS (25 MARKS)

Q Discuss the theories of learning and the various types of learning, classical conditioning, and its applied aspect. MUHS 2017

- Discuss defence mechanisms. Discuss their relevance in mental illness. MUHS 2015
- Describe the role of genetic, biological and psychological factors in the development of personality. MUHS 2018
- Describe the basic principles and clinical application of behaviour therapy. MUHS 2012
- Describe the clinical assessment of personality. MUHS 2013
- Discuss the risk factors for aggression. Describe the investigation and management of an aggressive patient. MUHS 2015

SHORT NOTES (10 MARKS)

- Attitudes. MUHS 2017
- Operant conditioning. MUHS 2017
- Humanistic theories in personality. MUHS 2018
- Etiology of aggression. MUHS 2018
- Psychology of aggression and its clinical implications. MUHS 2019

This territory is examined reliably: learning and conditioning with its applied aspect (behaviour therapy), defence mechanisms, the theories of personality and the clinical assessment of personality, and the psychology of aggression recur as both essays and short notes. Prepare each so you can give the core theory, the named figures and one clinical link in a few lines. The acute evaluation and management of the aggressive or violent patient is developed on the the emergency psychiatry chapter; personality and intelligence testing (MMPI, Rorschach, the Wechsler scales) is taken up on the Psychometry, Assessment and Descriptive Psychopathology notes; and Freud's models, Adler and Jung are covered in full on the General and Developmental Psychology notes. The psychology of rape, the guru-chela therapeutic relationship and expressed emotion are named in the Paper 1 syllabus and are covered here.

Quick review

The whole picture in one table	
THE THREE DOMAINS	After the General and Developmental Psychology notes's general functions and developmental theorists, this material covers the social person (moved by others), the learned person (behaviour shaped by consequence and models) and the theorised person (personality). Freud's models, Adler and Jung are on the General and Developmental Psychology notes; the psychological tests are on the Psychometry, Assessment and Descriptive Psychopathology notes.
ATTITUDES AND DISSONANCE	Attitude as affect, behaviour and cognition; the attitude-behaviour gap. Change: the Yale persuasion approach, Festinger's cognitive dissonance (inconsistent cognitions drive change; induced compliance, effort justification), Bem's self-perception, and the elaboration likelihood model (central versus peripheral route). Currently accepted: dual-process persuasion.
ATTRIBUTION AND SOCIAL COGNITION	Heider's naive psychology, Jones-Davis correspondent inference, Kelley's covariation (consensus, distinctiveness, consistency), Weiner's dimensions (locus, stability, controllability). The biases: fundamental attribution error, actor-observer asymmetry, self-serving bias, just-world, false consensus. Culture shifts the default (individualist versus collectivist).
GROUP DYNAMICS	Sherif norm formation; Asch conformity (normative versus informational); Milgram obedience (agentic state, situational factors); Zimbardo roles (with the modern critique). Group decisions: polarisation, groupthink (Janis), social facilitation (Zajonc), social loafing, minority influence (Moscovici).
PREJUDICE	Stereotype (cognition), prejudice (affect), discrimination (behaviour). Allport; the authoritarian personality; realistic conflict (Robbers Cave); social identity theory (Tajfel, minimal groups, in-group favouritism). Reduction: the contact hypothesis and its conditions (equal status, common goals, cooperation, institutional support).
AGGRESSION AND PROSOCIAL	Aggression: instinct and ethology, the frustration-aggression hypothesis (Dollard-Miller, Berkowitz), social learning (Bandura, Bobo doll), biological substrates. Prosocial: the bystander effect and diffusion of responsibility (Latane and Darley), empathy-altruism (Batson) versus social exchange and reciprocity (Trivers), kin selection.
CROWD AND MOB	Le Bon (contagion, suggestibility, the group mind) to deindividuation (anonymity, reduced self-awareness) to emergent-norm theory (Turner and Killian) to the social identity model of crowds (Reicher: crowds act on a shared identity, not mindless contagion). Relevance: mass hysteria, panic, riots.

The whole picture in one table	
CLASSICAL CONDITIONING	Pavlov: US, UR, CS, CR; acquisition, extinction, spontaneous recovery, generalisation, discrimination, higher-order. Watson's Little Albert (conditioned fear). Rescorla-Wagner (learning as prediction and surprise; blocking); preparedness and taste aversion (Garcia). Clinical: phobia, conditioned nausea, cue reactivity.
OPERANT CONDITIONING	Thorndike's law of effect to Skinner: the reinforcement-versus-punishment matrix (positive and negative each), primary and secondary reinforcers, Premack; shaping, chaining, extinction burst, stimulus control. The four schedules: fixed and variable, ratio and interval; variable ratio gives the highest, most extinction-resistant rate.
SOCIAL LEARNING	Bandura: observational learning and modelling (attention, retention, reproduction, motivation), vicarious reinforcement, the Bobo doll. Reciprocal determinism (person, behaviour, environment). Self-efficacy and its four sources (mastery, vicarious, persuasion, physiological state). The cognitive turn away from radical behaviourism.
BEHAVIOUR THERAPY, ABA, LEARNED HELPLESSNESS	From classical conditioning: systematic desensitisation (Wolpe), exposure and flooding, aversion. From operant: token economy, contingency management, applied behaviour analysis (functional analysis, ABC). Seligman's learned helplessness (uncontrollable aversive events, the attributional reformulation) as a model of depression.
MEYER, RANK AND THE MAP	The three depth-psychology schools (Freud psychoanalysis, Adler individual psychology, Jung analytical psychology) are on the General and Developmental Psychology notes. these notes add the two Paper-1-named figures: Adolf Meyer's psychobiology (the reaction-type view, the life chart, his influence on formulation) and Otto Rank (birth trauma, will therapy, the break from Freud).
DEFENCES AND VAILLANT	The full catalogue by Vaillant's maturity levels: psychotic (denial of reality, distortion, delusional projection), immature (projection, acting out, splitting, projective identification, passive aggression, regression), neurotic (repression, reaction formation, displacement, intellectualisation, isolation, undoing), mature (sublimation, altruism, humour, suppression, anticipation).
OBJECT RELATIONS AND NEO-FREUDIANS	Klein (paranoid-schizoid and depressive positions, projective identification), Winnicott (good-enough mother, transitional object, holding, true and false self), Fairbairn (libido is object-seeking); Kernberg (levels of personality organisation) and Kohut (self psychology, the selfobject). Neo-Freudians: Horney, Sullivan, Fromm.
PERSONALITY THEORIES	Type theories (humours, Sheldon, Kretschmer) to trait (Allport; Eysenck PEN; Cattell 16PF) to the Big Five consensus (OCEAN, NEO-PI) to humanistic (Rogers self theory, unconditional positive regard; Maslow; existential) to Kelly's constructs. The

The whole picture in one table	
	person-situation debate resolves into interactionism. Then positive psychology (Seligman, PERMA, character strengths, flow).
PSYCHOLOGY OF RAPE	Rape as an act of power and aggression more than sexuality (Groth); offender typologies (with their caveats) and the limits of prediction; rape myths and their harm. Survivor side: the rape trauma syndrome (Burgess and Holmstrom), PTSD and sequelae, the second injury of secondary victimisation, and trauma-informed care. The Indian medico-legal frame is on the forensic psychiatry chapter.
GURU-CHELA AND EXPRESSED EMOTION	Neki's guru-chela model: an Indian, culturally rooted therapeutic relationship built on guidance, dependence and idealisation, contrasted with the Western contractual alliance. Expressed emotion (Brown and Rutter; the Camberwell Family Interview): critical comments, hostility and over-involvement predict relapse; Indian families tend to show lower expressed emotion.
DISCRIMINATE AND APPLY	Tell the learning paradigms apart (classical versus operant versus social learning), the personality models apart (psychodynamic, trait, type, humanistic, social-cognitive), and the social biases apart (fundamental attribution error, self-serving, dissonance, group polarisation). Apply by reading an attribution, choosing a behaviour-therapy technique, placing a person on the Big Five, and naming a group process.

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This chapter is grounded in the standard texts (the source hierarchy below); each theory is attributed to its primary source, and landmark, contested or numeric claims carry a PubMed-verified journal citation. Every PMID here was checked against PubMed this build, and citations whose identifier did not resolve to the cited paper were corrected or dropped.

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