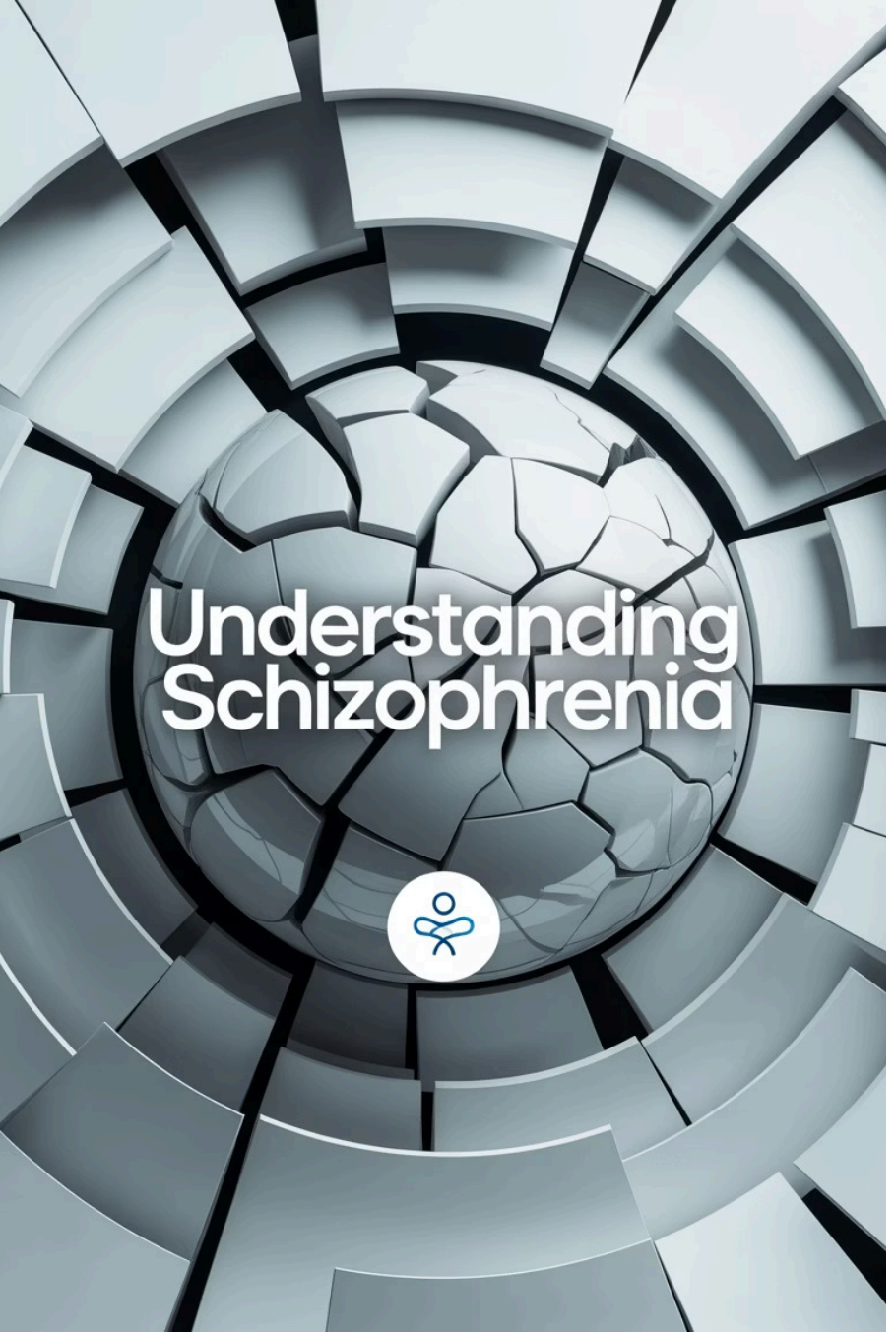


Schizophrenia: AQA A-Level Psychology

This presentation explores schizophrenia as outlined in the AQA A-Level Psychology specification (section 4.3.5). Each slide contains key information and exam-style questions to help students prepare for assessments. We'll examine classification, explanations, treatments and the importance of an interactionist approach to understanding this complex condition.

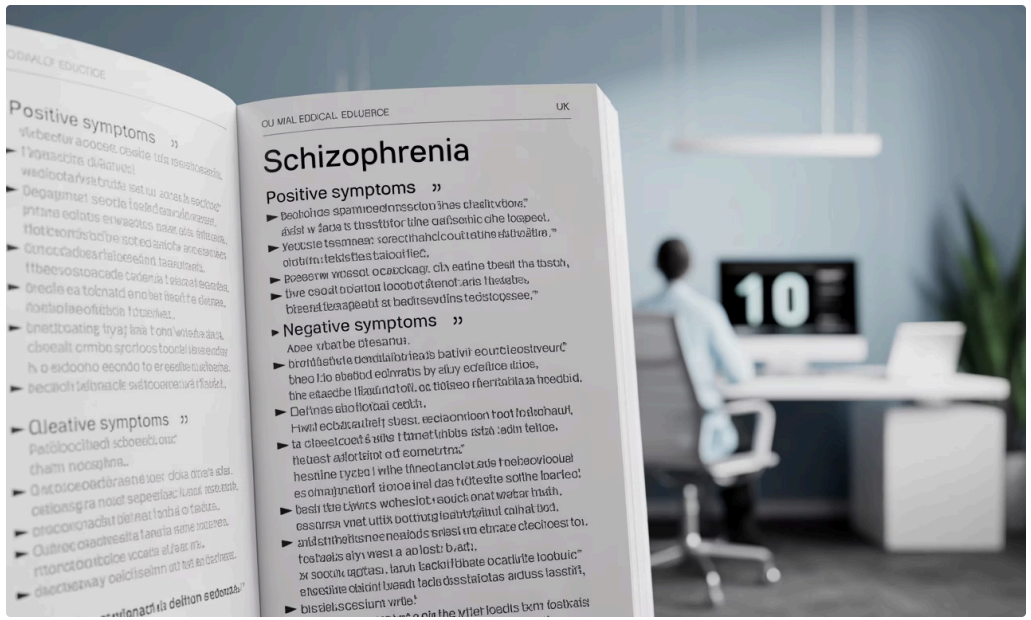
by Stephen Renwick

Classification of Schizophrenia

Schizophrenia is classified as a psychotic disorder characterised by disruptions in thought, perception, emotion, language, sense of self and behaviour. The condition affects approximately 1% of the population worldwide.

The DSM-5 requires symptoms to be present for at least 6 months, with active symptoms for at least 1 month. Two or more of the following symptoms must be present: delusions, hallucinations, disorganised speech, grossly disorganised or catatonic behaviour, and negative symptoms.

The ICD-11 classification focuses more on symptom patterns and duration, requiring symptoms to persist for at least one month.



Exam Questions:

1. Outline two classification systems used to diagnose schizophrenia. (4 marks)

2. Explain what is meant by 'classification' in relation to mental disorders. (2 marks)

3. Discuss the reliability and validity of classification systems used to diagnose schizophrenia. (16 marks)

Positive Symptoms of Schizophrenia

1 Hallucinations

Sensory perceptions that occur without external stimuli. Most commonly auditory (hearing voices), but can also be visual, tactile, olfactory or gustatory. Voices often comment on the person's behaviour, give commands, or engage in conversation.

2 Delusions

Fixed false beliefs that are not amenable to change in light of conflicting evidence. Common types include persecutory delusions (belief that one is being harassed/persecuted), delusions of reference (belief that insignificant events/objects hold personal significance), and delusions of grandeur (belief that one has exceptional abilities/importance).

3 Thought Disorder

Disorganised thinking manifested in disorganised speech, including loose associations, tangentiality, and incoherence. May include making up words (neologisms) or speaking in rhyme.

Exam Questions:

1. Describe two positive symptoms of schizophrenia. (4 marks)

2. Explain the difference between hallucinations and delusions. (4 marks)

3. Outline how positive symptoms might affect a person's daily functioning. (3 marks)

Negative Symptoms of Schizophrenia

Negative symptoms represent a diminishment or absence of normal functions. They often persist even when positive symptoms are controlled with medication and can significantly impact quality of life and functional outcomes.

1 Speech Poverty (Alogia)

Reduction in speech output or content, resulting in brief, empty replies. Includes reduced fluency and productivity of speech.

2 Avolition

Lack of motivation and initiative to complete goal-directed activities. Difficulty beginning and sustaining activities.

3 Affective Flattening

Reduced emotional expressiveness, including limited facial expressions, poor eye contact, and reduced body language.

4 Anhedonia

Inability to experience pleasure from activities normally found enjoyable.

Exam Questions:

1. Define 'avolition' as a negative symptom of schizophrenia. (2 marks)

2. Explain two negative symptoms of schizophrenia. (4 marks)

3. Compare and contrast positive and negative symptoms of schizophrenia. (8 marks)

Issues in Diagnosis and Classification

Reliability

Concerns about consistency in diagnosis between different clinicians (inter-rater reliability) and across time (test-retest reliability). The introduction of operational criteria in DSM and ICD has improved reliability, but challenges remain.

Validity

Questions about whether schizophrenia represents a single disorder or a syndrome with multiple causes. Concerns about construct validity (does the diagnosis measure what it claims to measure?) and predictive validity (does the diagnosis predict course and treatment response?).

Co-morbidity

High rates of co-occurring conditions, including depression, anxiety disorders, and substance use disorders, which can complicate diagnosis and treatment planning.

Cultural and Gender Bias

Diagnostic criteria may not be culturally sensitive, leading to misdiagnosis. Some symptoms may be interpreted differently across cultures. Research suggests men are diagnosed more frequently and at an earlier age than women, raising questions about potential gender bias in recognition and diagnosis.

Exam Questions:

1. Explain what is meant by 'reliability' in the context of diagnosing schizophrenia. (3 marks)

2. Discuss two issues that affect the validity of schizophrenia diagnosis. (6 marks)

3. Evaluate the influence of culture and gender in the diagnosis of schizophrenia. (8 marks)

Genetic Explanations for Schizophrenia

Genetic factors play a significant role in the development of schizophrenia, with heritability estimates ranging from 60-80%. Evidence comes from family, twin, and adoption studies:

1 Family Studies

First-degree relatives of individuals with schizophrenia have a risk of approximately 10%, compared to the general population risk of about 1%. The risk decreases as genetic relatedness decreases.

2 Twin Studies

Monozygotic (identical) twins show concordance rates of 40-50%, compared to 10-15% in dizygotic (fraternal) twins, suggesting a strong genetic component.

3 Adoption Studies

Children of parents with schizophrenia raised by adoptive parents without the disorder still show increased rates of schizophrenia, supporting a genetic rather than environmental transmission.

Recent genome-wide association studies (GWAS) have identified multiple genes of small effect rather than a single "schizophrenia gene." These include genes involved in neurodevelopment, immune function, and neurotransmitter systems.

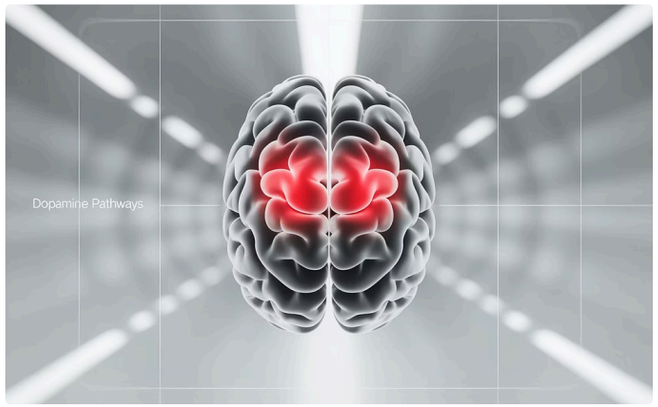
Exam Questions:

1. Outline evidence from twin studies that suggests a genetic basis for schizophrenia. (4 marks)

2. Explain what is meant by 'concordance rates' in the context of twin studies. (2 marks)

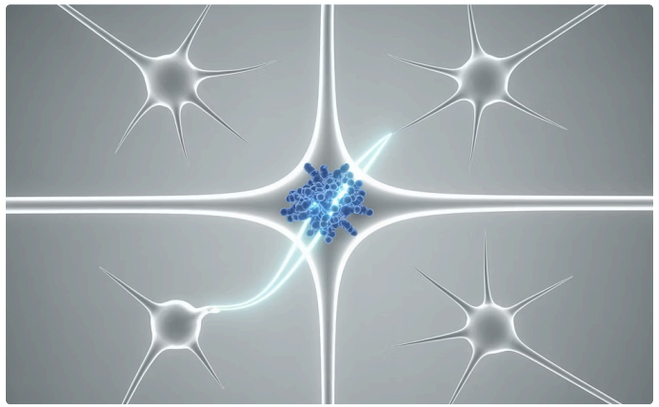
3. Evaluate genetic explanations for schizophrenia. (16 marks)

Neural Correlates and the Dopamine Hypothesis



Structural Abnormalities

Brain imaging studies have identified several structural abnormalities in individuals with schizophrenia, including enlarged ventricles, reduced grey matter volume in the prefrontal cortex, and abnormalities in the temporal lobes, particularly the hippocampus and amygdala.



Dopamine Hypothesis

The dopamine hypothesis suggests that schizophrenia results from excessive dopaminergic activity. Originally proposed in the 1960s based on observations that drugs that increase dopamine (e.g., amphetamines) can induce psychosis, while drugs that block dopamine receptors reduce psychotic symptoms.

Revised Dopamine Hypothesis

Modern versions propose regional differences in dopamine activity: hyperactivity in the mesolimbic pathway (explaining positive symptoms) and hypoactivity in the mesocortical pathway (explaining negative symptoms). Other neurotransmitters, including glutamate and serotonin, are also implicated.

Exam Questions:

1. Describe two structural brain abnormalities associated with schizophrenia. (4 marks)

2. Outline the original dopamine hypothesis of schizophrenia. (4 marks)

3. Evaluate the dopamine hypothesis as an explanation for schizophrenia. (8 marks)

Family Dysfunction Explanations

Psychological explanations focusing on family dynamics suggest that dysfunctional family interactions may contribute to the development or maintenance of schizophrenia. Key theories include:

1 Double Bind Theory (Bateson)

Proposes that contradictory messages from parents create impossible situations for children. When a child receives conflicting messages (e.g., verbal affection with physical rejection) and cannot comment on the contradiction, psychological distress may result.

2 Expressed Emotion (Brown and Rutter)

High levels of criticism, hostility, and emotional over-involvement in families are associated with higher relapse rates in individuals with schizophrenia. Not necessarily causal but may exacerbate symptoms or trigger relapses.

3 Communication Deviance

Vague, fragmented, or confusing communication patterns in families may contribute to thought disorder in vulnerable individuals.

These theories have been criticised for potentially blaming families without sufficient evidence of causation. Modern approaches view family factors as potential stressors that interact with biological vulnerability rather than primary causes.

Exam Questions:

1. Explain what is meant by 'expressed emotion' in relation to schizophrenia. (3 marks)

2. Describe the double bind theory as an explanation for schizophrenia. (4 marks)

3. Evaluate family dysfunction explanations for schizophrenia. (8 marks)

Cognitive Explanations

Cognitive Deficits

Individuals with schizophrenia often show impairments in attention, working memory, executive function, and information processing. These deficits may underlie both positive and negative symptoms.

Impaired Filter Theory (Frith)

Suggests a breakdown in the filtering mechanism that normally screens out irrelevant stimuli, leading to sensory overload and difficulty distinguishing between relevant and irrelevant information.

Metacognitive Deficits

Difficulties in monitoring one's own thoughts may lead to misattribution of internal thoughts to external sources, potentially explaining hallucinations.

Attribution Biases

Individuals with schizophrenia may show biases in how they explain events, including jumping to conclusions based on limited evidence and difficulties understanding others' mental states (theory of mind deficits).

These cognitive explanations help account for specific symptoms and provide targets for cognitive behavioural therapy interventions.

Exam Questions:

1. Describe how impaired filtering might explain hallucinations in schizophrenia. (4 marks)

2. Outline two cognitive deficits associated with schizophrenia. (4 marks)

3. Evaluate cognitive explanations for schizophrenia. (8 marks)

Drug Therapy: Antipsychotics

Typical Antipsychotics

First-generation drugs (e.g., chlorpromazine, haloperidol) that primarily block dopamine D2 receptors. Effective for positive symptoms but less effective for negative symptoms. Associated with significant side effects, including extrapyramidal symptoms (movement disorders), tardive dyskinesia, and sedation.

Atypical Antipsychotics

Second-generation drugs (e.g., clozapine, risperidone, olanzapine) that affect multiple neurotransmitter systems, including dopamine and serotonin. Generally more effective for negative symptoms with fewer extrapyramidal side effects, but may cause metabolic side effects (weight gain, diabetes risk).

Effectiveness and Limitations

Antipsychotics are effective in reducing symptoms in approximately 70% of patients but are not curative. About 30% of patients show limited response. Medication adherence is a significant challenge due to side effects and lack of insight. Long-acting injectable formulations may improve adherence for some patients.

Exam Questions:

1. Explain how typical antipsychotics work to reduce symptoms of schizophrenia. (4 marks)

2. Describe two differences between typical and atypical antipsychotics. (4 marks)

3. Evaluate the effectiveness of drug therapy in treating schizophrenia. (16 marks)

Cognitive Behaviour Therapy for Schizophrenia

Cognitive Behaviour Therapy (CBT) for schizophrenia aims to help individuals understand and manage their symptoms by identifying and modifying unhelpful thoughts and behaviours. Key components include:

Engagement and Assessment

Building therapeutic relationship, normalising experiences, and collaborative goal setting.

Psychoeducation

Providing information about schizophrenia, symptoms, and treatment options to improve understanding and insight.

Cognitive Restructuring

Identifying and challenging delusions and distorted thinking patterns, generating alternative explanations.

Coping Strategy Enhancement

Developing skills to manage hallucinations, reduce distress, and prevent relapse.

NICE guidelines recommend CBT as an adjunct to medication, not as a replacement. Evidence suggests CBT can reduce symptom severity, improve functioning, and reduce relapse rates, particularly when delivered over at least 16 sessions.

Exam Questions:

1. Describe two techniques used in CBT for schizophrenia. (4 marks)

2. Explain how cognitive restructuring might help someone with delusions. (4 marks)

3. Evaluate the effectiveness of CBT in treating schizophrenia. (8 marks)

Family Therapy for Schizophrenia

1 Principles and Goals

Family therapy views schizophrenia in the context of family systems rather than as an individual disorder. It aims to improve family communication, reduce expressed emotion, enhance problem-solving skills, and provide support to both the individual with schizophrenia and their family members.

2 Key Components

Psychoeducation about schizophrenia, communication training, problem-solving skills, crisis management strategies, and relapse prevention planning. Sessions typically involve multiple family members and may be conducted in single-family or multi-family formats.

3 Evidence Base

Research indicates that family therapy can significantly reduce relapse rates and hospitalisation, particularly when combined with medication. Most effective when delivered over 9-12 months and when focusing on practical problem-solving rather than psychological causes.

Exam Questions:

1. Describe two aims of family therapy for schizophrenia. (4 marks)

2. Explain how family therapy might help reduce 'expressed emotion' in families. (4 marks)

3. Evaluate the effectiveness of family therapy in treating schizophrenia. (8 marks)

Token Economies in the Management of Schizophrenia

Token economies are behavioural interventions based on operant conditioning principles, primarily used in inpatient or residential settings to manage and modify behaviour in individuals with schizophrenia.

1 Basic Principles

Desired behaviours (e.g., self-care, social interaction, medication adherence) are reinforced with tokens that can be exchanged for privileges or rewards. Undesirable behaviours receive no tokens or may result in token loss.

2 Implementation

Clear identification of target behaviours, consistent application of reinforcement schedules, and gradual fading of the token system to promote maintenance of behaviour change in natural environments.

3 Effectiveness

Research shows token economies can improve self-care, social skills, and ward behaviour in institutional settings. However, generalisation to community settings is often limited, and effects may not persist after the programme ends.

Ethical concerns include potential coercion, restriction of autonomy, and the artificial nature of reinforcement. Modern applications tend to focus on positive reinforcement rather than punishment and incorporate patient choice in setting goals and selecting rewards.

Exam Questions:

1. Describe how a token economy might be used to improve medication adherence in schizophrenia. (4 marks)

2. Explain one strength and one limitation of using token economies to manage schizophrenia. (4 marks)

3. Evaluate the use of token economies in the management of schizophrenia. (8 marks)

The Diathesis-Stress Model

Diathesis (Vulnerability)

Genetic predisposition, neurobiological abnormalities, or early developmental factors that create vulnerability to schizophrenia. Individuals may carry this vulnerability without ever developing the disorder if not exposed to sufficient stress.

Stress Factors

Environmental triggers that interact with underlying vulnerability, including major life events, trauma, drug use (particularly cannabis), social adversity, and family communication patterns. Stress alone is insufficient to cause schizophrenia without underlying vulnerability.

Interaction

The model proposes that schizophrenia emerges when genetic/biological vulnerability interacts with environmental stressors, exceeding a threshold. Different individuals may have different thresholds based on their level of vulnerability.

Exam Questions:

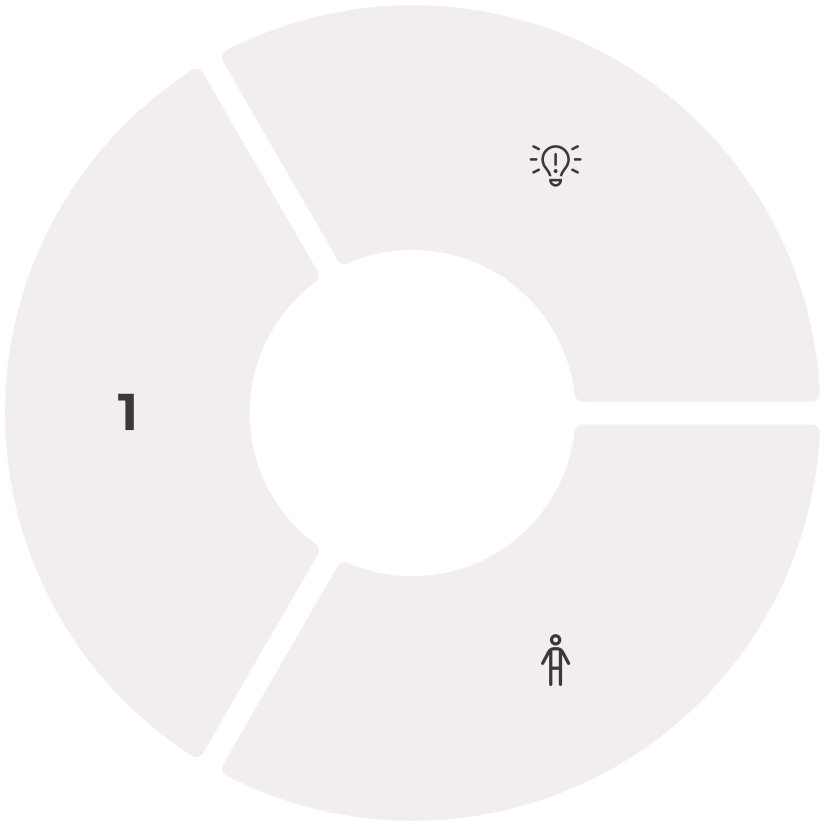
1. Explain what is meant by 'diathesis' in the diathesis-stress model. (2 marks)

2. Describe two environmental stressors that might trigger schizophrenia in vulnerable individuals. (4 marks)

3. Evaluate the diathesis-stress model as an explanation for schizophrenia. (16 marks)

The Interactionist Approach to Schizophrenia

The interactionist approach recognises that schizophrenia is best understood through the integration of biological, psychological, and social factors. This approach acknowledges that no single explanation is sufficient and that multiple factors interact in complex ways.



1 Biological Factors

Genetics, neurotransmitter abnormalities, brain structure and function

Psychological Factors

Cognitive processes, stress response, coping mechanisms

Social Factors

Family dynamics, social support, socioeconomic status, cultural context

The interactionist approach has important implications for treatment, suggesting that comprehensive care should address multiple dimensions of the disorder. This typically involves combining pharmacological treatments with psychological therapies and social interventions.

Evidence supports this integrated approach, with better outcomes observed when multiple treatment modalities are combined compared to single-approach treatments.

Exam Questions:

1. Explain what is meant by an 'interactionist approach' to understanding schizophrenia. (4 marks)

2. Describe how biological and psychological factors might interact in the development of schizophrenia. (6 marks)

3. Evaluate the importance of an interactionist approach in explaining and treating schizophrenia. (16 marks)