



## Biological and Psychological Models of Abnormality

This Factsheet summarises biological and psychological models of psychological abnormality. These models are ways of explaining the causes of abnormality. This topic is included in individual differences (AQA and OCR) and clinical psychology modules (Edexcel). Terms in bold are explained in the glossary.

### What is 'psychological abnormality'?

It refers to psychological disorders and mental ill-health. Factsheet 38 'Psychological abnormality: definitions and classification' covers how we define psychological abnormality. *Models* of psychological abnormality explain why mental illnesses happen.

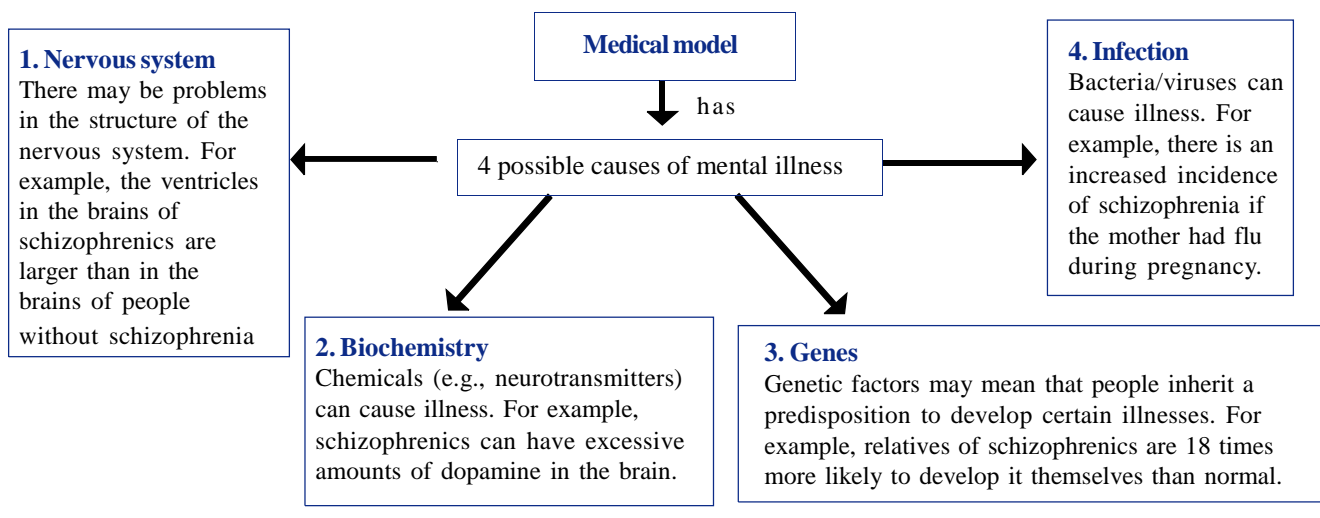


### 1. Biological model

- ⊙ This model is also called the medical, biomedical, physiological or somatic model.
- ⊙ Being psychologically **normal** involves (a) having no genetic **predisposition** to suffer from mental illness and (b) having a properly functioning body.
- ⊙ Being psychologically **abnormal** is like having a physical illness; there is an underlying physical cause which produces psychological and behavioural symptoms of mental illness.
- ⊙ The causes are considered to be biological (e.g., infection) or genetic, chemical or anatomical (see figure 1).
- ⊙ Mental illness can be diagnosed from the symptoms and the illness can be treated by therapy in psychiatric hospitals. Psychiatrists mostly accept the biological model.



### Causes of mental disorders in the medical model



### Evaluation of the biological model

- ⊙ This model lessens mentally-ill people being **stigmatised** as it does not view them as responsible for their behaviour or symptoms. They are seen as a victim of their disorder as it is beyond their control.
- ⊙ The idea that biological factors cause mental illness and loss of self-control means that people considered mentally ill can be **sectioned**. However, seeing mentally-ill people as not responsible for their actions can lead to loss of rights (e.g., being sectioned against their will).
- ⊙ A mentally-ill person can be institutionalised which puts them into a safe environment where they can be observed and treated. However, being in an institution could make the patient worse as it is an unusual environment and can cause patients to become passive. Consider the research by Rosenhan (1973) which highlighted the **labelling** of patients in psychiatric hospitals (see Curriculum Press factsheet 'Rosenhan (1973) on being sane in insane places').
- ⊙ Viewing mentally-ill people as being different from people who are not ill can lead to labelling and prejudice.
- ⊙ Treatments are biologically-based, such as drugs, electro-convulsive therapy and psychosurgery (e.g., frontal lobotomies). These can be effective but can also have negative side effects (e.g., drowsiness).
- ⊙ Just because biological treatments are effective, it does not necessarily mean that the mental illness has biological causes.
- ⊙ This model is criticised for focusing too much on the symptoms and not enough on the patient's experiences and difficulties.
- ⊙ There is not always a clear biological cause for a disorder; many disorders have psychological factors causing them as well as biological causes.
- ⊙ This model is not relevant to some disorders (e.g., eating disorders).



## 2. Psychological model

- ⊙ This model includes several approaches: psychodynamic, humanistic, behavioural and cognitive. These are explained in Table 1. Each approach emphasises one factor in causing illness over other factors.
- ⊙ Clinical psychologists tend to favour psychological models.



**Table 1: Approaches in the psychological model**

Assumptions of each approach	Treatment	Evaluation of approaches
<p><b>Psychodynamic approach</b>            Psychological normality = balance between the id, ego and superego.            Abnormality = caused by an imbalance and unresolved conflicts in childhood (e.g., from repressed traumas). Unconscious psychological processes cause psychological and physical symptoms.</p>	<p>Therapist uses psychoanalysis to help the patient explore unconscious causes and interpret them (e.g., dream analysis).</p>	<p><b>Positive:</b> Psychoanalysis is compassionate as the analyst does not blame or judge the patient. It does not involve putting the patient into an institution.  <b>Negative:</b> It can cause anxiety (e.g., revealing disturbing repressed experiences). Expensive, long-term and has low success (e.g., with psychotic disorders). It focuses on the past rather than problems in the person's current life.</p>
<p><b>Humanistic approach (existential or phenomenological approach)</b>            Normality = positive self-regard, healthy relationships, control over life.            Abnormality = everyone is unique and will occasionally experience problems stemming from relationships and personal circumstances. It is wrong to talk of abnormality.</p>	<p>A humanist therapist helps the person to change. Therapy is based on the premise that people have free will and so are responsible for their own change.</p>	<p><b>Positive:</b> It is humane as the person's happiness is important and therapist gives an unconditional, positive response. Humanist therapy does not label a person as it is counter-productive and irrelevant as each person is unique. Patients are not institutionalised.  <b>Negative:</b> Expensive, low success (better for problems with living than for psychotic disorders).</p>
<p><b>Behavioural approach (learning theory)</b>            Normality = person has wide range of <b>adaptive</b> responses acquired by their learning (via conditioning and observation).            Abnormality = person has learnt incorrect responses or has not learnt adaptive ones. Abnormality only related to behaviour which can be observed; there is no underlying cause.</p>	<p>Therapist helps patient to unlearn inappropriate behaviours and learn adaptive ones.</p>	<p><b>Positive:</b> The whole person is not labelled, just the specific behaviours. Relatively cheap and high success rates for certain disorders (e.g., phobias).  <b>Negative:</b> Some behaviour therapy can be stressful and painful (e.g., aversion therapy). Institutionalisation may be needed for therapists to have environmental control. Model is considered to be oversimplified.</p>
<p><b>Cognitive approach</b>            Normality = properly functioning thought processes, the person accurately perceives the world and controls behaviour.            Abnormality = unrealistic and disordered thought processes about self, others and/or the environment. Person has difficulty controlling their thoughts and using them to control their actions.</p>	<p>Therapist provides aid to help the client control their thoughts (e.g., stress inoculation training).</p>	<p><b>Positive:</b> Treatment is inexpensive relative to other therapies. Fairly high success with certain disorders and when done together with behavioural therapy (<b>cognitive-behavioural therapy</b>). No institutionalisation is needed.  <b>Negative:</b> Can be stressful and disturbing although most cognitive therapy is compassionate. It suggests that the person is responsible for their disorder.</p>

### How good are these models?

Both the biological and psychological models can successfully treat mental disorders. However, these models are both limited as they consider only one type of cause of mental illness. Each model can be viewed as being partly correct. Multi-causal models may be better as they accept that many factors cause a disorder. For instance, the **diathesis-stress model** proposes that there are two factors involved in psychological disorders. One factor is **diathesis** which is the genetic predisposition to a disorder. The other factor is **stress** where something severe or disturbing occurs. Both factors are needed for the disorder to arise.



**An example: cognitive-behavioural therapy and schizophrenia**

Startup, Jackson, Evans and Bendix (2005) studied how well cognitive-behavioural therapy (CBT) could help people who suffered from schizophrenia. They followed the progress of a group of schizophrenics who had been admitted to hospital with a **psychotic episode**. They were split into two sub-groups. One sub-group received only their anti-psychotic medication as normal. The other sub-group received their normal anti-psychotic medication *plus* CBT (they could have up to 25, 90-minute sessions). When Startup and colleagues re-examined 73% of the original group two years after their hospital admission, they found that the medication plus CBT sub-group had fewer **negative symptoms** and better social functioning than the normal medication-only sub-group.

**Exam Hints:** Make sure you:

- Can describe each model/approach.
- Know the assumptions of all of these models/approaches.
- Know the implications of each model/approach for different ways of treating psychological abnormality.

Be prepared to evaluate the models: what are the strengths and weaknesses of each model/approach? You can refer to other models to emphasise the problems of one model. For example, the behavioural approach does not consider people's inner thoughts, whereas the cognitive approach does.

**Exam Hint:** When explaining what a model is about, you must relate it to abnormal behaviour. For instance, describe how the psychodynamic model views abnormal behaviour as stemming from unresolved conflicts, not just what the psychodynamic approach entails in general.

**Example Exam Question**

- Give an account of the psychodynamic model of psychological abnormality.
- What are the implications of the psychodynamic model for treating abnormal behaviour?
- What are the strengths and limitations of the psychodynamic model?

**Answer**

'Give an account' means that you need to describe the assumptions of the model. In part (b), you need to consider what kinds of treatment are used according to that model. For example, the psychodynamic model believes that mental ill-health is partly caused by repressed traumatic events, so some treatment involves helping the patient to retrieve and understand these repressed memories using free association or dream analysis. For part (c), write about the model's strengths and weaknesses. These questions can be applied to any of the models.

**Glossary**

**Adaptive:** the extent to which a behaviour fits into the environment. An adaptive behaviour helps the person function, and so survive, in their environment.

**Cognitive-behavioural therapy:** a method of therapy which aims to alter both the person's thoughts and how they behave in a situation.

**Labelling:** giving a person the 'label' of being a certain way which persists (e.g., the label of being mentally ill). It may lead to discrimination against them.

**Negative symptoms:** these are symptoms which show a reduction of normal activity, such as having difficulty initiating doing things.

**Predisposition:** a tendency to develop an illness.

**Psychotic episode:** A schizophrenic person does not show the symptoms all of the time. A psychotic break is when the person shows the symptoms (e.g., hallucinations and delusions).

**Sectioned:** the Mental Health Act (1983) allows for a person to be detained compulsorily if they are regarded as a danger to themselves or others. This is done by a social worker, GP and a psychiatrist.

**Stigmatise:** to characterise someone or something in a negative way.

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### Worksheet: Biological and psychological models of abnormality

Name \_\_\_\_\_

1. Name the two models which explain psychological abnormality.

- 1. -----
- 2. -----

2. Name the approaches within the psychological model.

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3. Which model views mental illness as being just like physical illness?

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4. Explain why a cognitive therapist helps a person to alter their thoughts.

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5. Give one strength and one limitation of the medical model

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6. What are the assumptions of the (i) psychodynamic and (ii) humanistic approaches?

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7. How would each of the models/approaches view and treat depression?

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