

Biological explanation of schizophrenia assignment

[Psychology](#)



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Provide 2 or more biological explanations of schizophrenia? 1) Genetic Factors ? Gottesman: Schizophrenia is more common in the biological relatives of a Schizophrenic, the closer the degree of genetic relatedness, the greater the risk. If a parent has schizophrenia the chance of child having it is 10% ? MZ twins have 48% chance risk of developing Schizophrenia if their twin has the disorder, whereas DZ twins 17% chance of having Schizophrenia if their twin has the disorder, that's more than double! ? Kety et al: 14% of the biological relatives of adoptees with Schizophrenia were classified as Schizophrenic, whereas only 2. % of the adoptive relatives were found to be Schizophrenics. ? Researchers studies DNA from human families affected by schizophrenia and found that those with Schizophrenia were more likely to have a defective version of a gene called PPP3CC; which is associated with calcineurin. ? Attempts to explain Schizophrenia in terms of one biological cause are challenged by the fact that there are many types of Schizophrenia. (Crow: Type 1 is characterised by positive symptoms, Type 2 is characterised by negative symptoms) ?

Another issue is whether the causes identified are proximate (direct) symptoms i. e. enlarged ventricles or ultimate (indirect) symptoms i. e. biological. ? Genetic explanations cannot account for patients who have no family history of the disorder. 2) Biochemical Factors ? Comer: The Dopamine Hypothesis; Schizophrenics are thought to have high number of D2 receptors on postsynaptic neurones, resulting in more of the neurotransmitter Dopamine binding and more neurones/ action potentials firing through bodies axons. Result is ' attentional deficit' ? Evidence to support the Dopamine Hypothesis is i.

Antipsychotic/antischizophrenic drugs; called Phenothiazines, which bind to D2 receptors, blocking Dopamine from binding, reducing the ' attentional deficit' effect. ii. Parkinson's Disease; have low levels of Dopamine so L-dopa is given to increase Dopamine levels, and then schizophrenic symptoms result. (Grilly) iii. Post mortems on schizophrenics shows high levels of Dopamine ? But the evidence is inconclusive!! ? But, there are many types of schizophrenia, cannot generalise explanations to each and every schizophrenic ? Also, more recent antipsychotic drugs have been found such as clozapine which is more successful at treating Schizophrenia