

Research and planning

Context: Schizophrenia is a serious mental disorder in which people interpret reality abnormally. Schizophrenia may result in some combination of hallucinations, delusions, and extremely disordered thinking and behaviour that impairs daily functioning and can be disabling. People with schizophrenia require lifelong treatment.

Research suggests a combination of physical, genetic, psychological and environmental factors can make a person more likely to develop the condition. Some people may be prone to schizophrenia, and a stressful or emotional life event might trigger a psychotic episode.

Approach One: Psychodynamic Theories for Approach One:

1. Theory of Personality/Self (Id, Ego, Super Ego)
2. Nurture

Approach Two: Biological Approach Theories for Approach Two:

1. Biological link
2. Dopamine hypothesis
3. Gottesman - Uses Technology
4. Nature

Theoretical Analysis

In studying and explaining behaviour, the biological approach and psychodynamic approach choose to focus on different positions in the nature vs. nurture debate. The biological approach focuses on the belief that we are a consequence of genetics and physiology. This approach examines thoughts, feelings, and behaviours all of these ultimately having a biological cause. A biological perspective is relatable to the study of psychology in three ways: comparative method (different species can be studied), physiology (how the brain works and how changes in structure and/or function can affect behaviour, etc), and the investigation of inheritance (genetics). All three of these aspects can help to explain our human behaviour. This is where we see it favour the nature side of the debate as nature involves the extent to which aspects of behaviour are a product of inherited (genetic) influences. The Nature side of the debate was originally credited to psychologist Sir Francis Galton in 1869. The psychodynamic approach however emphasises human behaviour based upon the interaction of drives and forces within a person, particularly unconscious, and between the different structures of the personality. It explains that experiences in your childhood have a key influence on your adult life in terms of shaping your personality. Different events that occur during your childhood can remain in the unconscious, and later cause problems as an adult. The theoretical aspect the psychodynamic approach chooses to focus on is nurture. Nurture is influenced by external factors such as the environment, for example, the result of exposure, experience, and learning on an individual. This places it more on the nurture side of the debate as nurture involves the extent to which aspects of behaviour are a product of environmental influences. This approach leans more towards nurture however it does have some nature influences amongst it too.

The biological approach focuses on the biological influence that can lead to schizophrenia.

Under the biological approach through the investigation into inheritance, experiments have been conducted by studying twins. Twin studies have acted as the primary source of evidence for supporting the importance of genetic determinants.

Research and writings gathered by clinical psychologist Irving Gottesman have radically changed the way that we think about schizophrenia in terms of the biological approach. A study by Gottesman in 1991 found that the occurrence of schizophrenia was higher in relatives of a person with schizophrenia than the general population. Identical and non-identical twins tend to share the same environment in which they are raised. Therefore, if a disorder such as schizophrenia shows greater co-occurrence in identical versus non-identical twins it will show evidence of there being a genetic effect.

Likewise, if the absence of 100% concordance in identical twins occurs it shows evidence of environmental effects. Gottesman's Twin Study conducted in 1967, clearly confirmed the idea that genes play a role in schizophrenia. This concordance indicated that genes influenced such behaviour. This theory explains schizophrenia as a genetic influence which you were born with. This creates a strong link between the biological approach sitting on the theoretical nature side of the debate as they both are linked to genetic and biological factors. While the psychodynamic approach focuses on environmental influence which can lead to schizophrenia. The investigation of our behaviour being based on the interaction of internal drives and forces within a person have been shown through Sigmund Freud's psychodynamic theory. Freud's work accumulated over more than 50 years from 1885 to 1939. His work was psychoanalytic and focused particularly on the unconscious state, and between the different structures of the personality. He found that your mind is made up of three different parts; The id, ego and superego. His research and writings have changed the way that we think about schizophrenia in terms of the psychodynamic approach. He believes that schizophrenia occurs when the ego gets overwhelmed by the wants of the id or from being surrounded by the guilt from the superego. The ego can no longer cope so it uses protection mechanisms to look after itself which is regression. The schizophrenic's ideals become a blur with reality which increases hallucinations and delusions. He suggests that the hallucinations are not actually happening and that the schizophrenic sufferer is dreaming as they cannot tell the difference between their dreams and reality. Freud believed that schizophrenia was an infantile state and that such symptoms of delusions grandeur reflect this primitive state. He further thought that auditory hallucinations reflect their attempt to restore ego control. This theory explains schizophrenia as a result of the experiences in your childhood having a key influence on your adult life in terms of shaping your personality. The psychodynamic approach recognises the influence of environmental factors as it argues that we are driven by innate biological instincts, represented by the Id through nature, but the way that these instincts are expressed is shaped by our social and cultural environment through nurture.

In studying and explaining behaviour, the biological approach and psychodynamic approach each focus on having an objective or subjective perspective. The biological approach focuses on the belief that its conclusions are objective therefore they are not influenced by personal opinion. The biological approach uses a range of highly scientific and accurate methods such as scanning techniques like fMRIs, EEGs and drug trials, meaning their measurements and findings are objective, increasing the reliability of data, making the approach more valid. This means the approach has an objective perspective as it is based on scientific evidence.

The psychodynamic approach's conclusions however are subjective therefore they are in fact influenced by personal opinion. The psychodynamic approach is based largely around case studies.

Therefore, we cannot generalise the results. Subjective conclusions refer to a person's perspective or opinion, feelings, beliefs, and desires. It is often referred to as unconfirmed personal opinions rather than knowledge and fact-based beliefs. Freud's ideas are clinically derived as he based them on what his patients told him during their therapy sessions. This means the psychodynamic approach has a subjective perspective as it is based on personal bias.

The biological approach focuses on schizophrenia being understood by an objective approach. The dopamine hypothesis shows the relationship between neurotransmitters and their influence on causing schizophrenia through the use of genetic techniques. First mentioned by J. Van Rossum in 1967, he studied dopamine, the chemical in your brain which causes neurons to fire. The initial dopamine hypothesis found that schizophrenia suffered from an excessive amount of dopamine. This means that the neurons used dopamine to fire too often and transmit too many messages. It was found that when studies used amphetamine it increased your dopamine levels but at the same time it also increased psychotic symptoms. Large doses of amphetamine were given to people with no history of psychological disorders; they showed behaviour which was very close to paranoid schizophrenia. When small doses were given to people who already suffered from schizophrenia their symptoms also tended to get worse. These high dopamine levels lead to serious episodes and positive schizophrenia symptoms such as delusions, hallucinations and confused thinking. However, when reserpine was used it decreased your dopamine levels and reduced psychotic symptoms. This hypothesis states that schizophrenia is a cause of excessive amounts of the neurotransmitter dopamine in the neural pathway. This theory proves that the biological approach falls under an objective perspective. This study was scientifically and genetically understood therefore it was based on reliable and accurate information used to form a conclusion on how schizophrenia is caused.

The psychodynamic approach focuses on schizophrenia being understood by a subjective approach. The double bind theory shows the relationship between environmental factors and their influence on causing schizophrenia through the analysis of communication patterns. In 1956 Bateson found that a double bind is a communication problem that arises from a conflict between two or more messages. This situation can lead to psychological disorders like schizophrenia. An example of this is when a child interacts with their mother who struggles to be affectionate. She physically displays how much she loves them but unfortunately only through her body language. The verbal signs the mother is sending doesn't align with her body language. As a result, the child only sees an indication of rejection finding themselves stuck in a conflict between affection and rejection. Using this theory and observations from schizophrenic patients, they came to the idea of the "double bind".

This theory proves that the psychodynamic approach falls under a subjective perspective. This study was analysed around communication patterns therefore it is not considered as factual evidence. They used subjective information to form a conclusion on how schizophrenia could be caused.

Methodology Analysis

In studying and explaining behaviour, the biological approach and psychodynamic approach have methodological differences between using technology and case studies to discover and develop their ideas. The biological approach has used technology to form accurate conclusions in their inquiries. The human brain is very complicated and can influence several different types of behaviour, so it is important that we have methods that enable us to study how our brain works. The first method is neurosurgery, because we know so little about the brain and its functions, brain surgery is usually followed through at the last resort. In 1953,

Henry Molaison (H.M) suffered severe epilepsy and brain surgery was the last option to help. After the surgery was completed, his epilepsy was cured although they had to remove the hippocampus (part of the limbic system in the middle of the brain.) He could remember everything from before but anything new was a struggle so this led to the conclusion the hippocampus is involved with our memory. The other two methods are Electroencephalograms (EEGs) and brain scans. The biological approach also show that human behaviour can largely be explained through biology e.g. our genes and hormones. Human genes have evolved over millions of years to adapt behaviour to the environment. The biological approach provides us with clear predictions about the effects of neurotransmitters or the behaviours from genetics related people. This means that explanations can be scientifically tested, proven and supported with strong evidence through genetic testing. Gottesman's Twin Study conducted in 1967 further supports the use of technology and genetic testing as a methodological use in the biological approach. He was able to clearly confirm the idea that genes play a role in schizophrenia, also finding in 1991 that the occurrence of schizophrenia was higher in relatives of a person with schizophrenia than the general population.

The methodological use of exploring our brain's function was further discovered between the 1960s and 70s by J. Van Rossum with his dopamine hypothesis. This hypothesis shows the use of drug trials to see how dopamine the chemical in our brains influences the onset of schizophrenia. These genetic techniques proved the relationship between neurotransmitters and their influence on causing schizophrenia. In studying and explaining behaviour, the biological approach has demonstrated their methodological use of technology and genetics in studies above to discover and develop their ideas. On the other hand, the psychodynamic approach uses case studies of individual patients and groups to form accurate conclusions in their inquiries. A case study is an in-depth study of a specific subject. A clinical case study is a narrative report written by the therapist of what happened during a therapy session combining the therapist's interpretations of what happened. It is possible that certain semi structured assessment materials are used such as questionnaires or diagnostic interviews. It is still the therapist however that uses these to interpret and discuss them in their report. Freud's investigation into behaviour being based on the interaction of internal drives and forces within a person have been shown through his id, ego and superego approach further supports the use of case studies as a methodological use in the psychodynamic approach. With Freud's work accumulating over more than 50 years (1885-1939), his work came about through his clinical trials with patients and general observations of their human behaviour. His work was psychoanalytic and focused particularly around their unconscious state. His use of individual patient accounts supports case studies as a large influence of methodology in this approach. The research and writings gathered by Sigmund Freud's case studies have radically changed the way that we think about schizophrenia in terms of the psychodynamic approach.

A further methodological relationship was discovered in 1956 where the double bind theory showed the relationship between environmental factors and their influence on causing schizophrenia through the analysis of communication patterns. Bateson used communication patterns with his patients through several case studies as the analysis of their health. In studying and explaining behaviour, the psychodynamic approach has proved their methodological use of case studies in the research above to discover and develop their ideas.

How the two approaches interact

In the context of schizophrenia, the interaction between the biological and psychodynamic approach is shown through the Diathesis stress model proposed by Meehl in 1962. Diathesis means that you are predisposed to something which is inherited, for example schizophrenia.

If your mother has it then you are more vulnerable to getting it yourself. The biological approach is demonstrated through Gottesman's twin studies when in 1991 he found that the occurrence of schizophrenia was higher in relatives of a person with schizophrenia than the general population. This demonstrates the genetic predisposition there is to schizophrenia as there is a genetic connection between family members already suffering from the disease and their offspring aligning with the ideas of the diathesis structure. The stress factor includes environmental stressors which could come as a result of childhood trauma or drugs. The psychodynamic approach is demonstrated by Varese, et.al. (2012) when it was found that children who experienced severe trauma before the age of 16 were 2.7 times more likely to develop schizophrenia when they were older compared to the general population. Within stress some of the id, ego and superego around family trauma is where this approach fits into this model. If you experience trauma you are more likely to develop schizophrenia.

These findings show that childhood difficulty is strongly associated with increased risk for psychosis. Tienari, et.al (1985) conducted an important study around parental influence on schizophrenia. It shows a good indication of this model and fits under the psychodynamic approach in terms of family parenting influence and genetic predisposition. Because psychodynamic is not scientific, these ideas are all not proven. So, although they help to explain this model, they do not entirely make it up as there are other theories and approaches involved. If you have the genetic component as well as the stress factor, then you are likely to develop schizophrenia but without enough of either of these components you are not likely to develop schizophrenia. The biological approach comes into play around the diathesis stage and interlinks with the psychodynamic approach which features in the stress stage. The stronger your genetic influence is of schizophrenia (diathesis) means the less stress is necessary to produce schizophrenia. This works the other way around too. The more stress you have means the less amount of genetic influence you will need before developing the disease.

Tienari et al. (1985) investigated the combination of genetic vulnerability and parenting style in children adopted from Finnish mothers with schizophrenia. It was found that a 'Schizophrenic' mother as well as a healthy or only mildly disturbed adoptive family resulted in no schizophrenia. Whereas a 'Schizophrenic' mother as well as a disturbed adoptive family resulted in schizophrenia. Disturbed meaning a child who was brought up with high levels of criticism and conflict and low levels of empathy. This combination of findings supports the idea that there is a possible genetic vulnerability which interacts with the adoptive upbringing environment. The diathesis stress model works by using these two approaches and their interaction together to understand the cause of schizophrenia.

The degree of interaction of the two approaches:

The biological and psychodynamic approach's degree of interaction in terms of the approaches theoretical and methodological ideas are limited as they are quite contrasting. In studying and explaining behaviour, the biological approach and psychodynamic approach each have differing theoretical positions in the nature vs. nurture debate. They are based on totally different ends of the theories. The biological approach comes as a cause of nature proven through Gottesman's 1991 twin studies and the psychodynamic as a cause of nature proven through Freud's work (1885-1939) around the psychoanalytic theory id, ego, superego. The limited interaction of these approaches is also seen through their contrasting theoretical objective or subjective perspectives. They are based on totally different ends of these perspectives. The biological approach takes an objective perspective proven through the dopamine hypothesis, J. Van Rossum in 1967. These findings were not influenced by personal opinion. The psychodynamic approach takes a subjective perspective proven through the double bind theory, Bateson 1956 where the findings were influenced by personal opinion as they were based around the analysis of communication patterns. The

biological approach and psychodynamic approach have methodological differences between using technology and case studies to discover and develop their ideas. The biological approach uses technology to form accurate conclusions in their inquiries. This was again demonstrated through the dopamine hypothesis, 1967 and Gottesman twin studies, 1991. This contrasts the psychodynamics use of case studies of individual patients shown through Freud's work (1885-1939) work in his clinical trials with patients and general observations of their human behaviour. These examples show the degree in which there is limited interaction between these two approaches' theoretical and methodological ideas however in the context of schizophrenia each complement one another to help us understand schizophrenia. The degree of interaction between the two isn't that strong; however, a model used to show the slight interaction that they do have is the Diathesis stress model proposed by Meehl in 1962 as explained above. The diathesis stress model shows a more comprehensive explanation of schizophrenia with the two approaches providing theories as evidence to support this. This is where we see the two approaches interact with one another. Their relationship is further proven through the treatment of schizophrenia below.

Impact of the interaction on the treatment and relapse of Schizophrenia:

In the last three decades, medical and psychosocial treatments for schizophrenia have evolved rapidly resulting in remarkable effects on patient's relapse prevention and symptom control. It is important that we understand schizophrenia is not caused by one factor alone, instead it is a combination of the interaction between biological and psychological factors. This is understood above through the psychodynamic and biological approach. People with schizophrenia will get the best out of their treatment if they use both of these factors in conjunction to reduce psychotic symptoms, potential relapse and improve a patient's recovery, remission, and illness progression.

Under the biological approach the dopamine hypothesis was an idea that has contributed to the development around the use of medication for the treatment of schizophrenia. Originally introduced by Van Rossum in 1967 he found that hyperactivity of dopamine transmission resulted in symptoms of schizophrenia as well as certain drugs being able to block dopamine which reduced their psychotic symptoms. The idea that your brain functioning could lead to increased symptoms meant that they needed to create a drug designed to work on specific biological targets. In 1957 the introduction of chlorpromazine (antipsychotic) as a treatment for schizophrenia was discovered. In the early 1960s it was found that continuing antipsychotic treatment after a person with schizophrenia has responded to the medication, as opposed to stopping treatment, resulted in more than half the risk of relapse and readmission to hospital. These antipsychotics help to treat hallucinations and delusions. The best treatment for schizophrenia however is a combination of both medication, psychological treatment and community support.

Under the psychodynamic approach the expressed emotion theory (EE) can occur in a disadvantaged family environment involving the standard of interaction patterns of family relationships between family caregivers and patients suffering from schizophrenia. The influence of expressed emotion has been found to be one of the crucial predictors of relapses in schizophrenia. The idea that the environment you are surrounded in could lead to increased symptoms meant that they needed to find a way to help not only the person suffering but their relationships with the people they live with. This was discovered through the use of counselling around family environments. Types of psychological treatment for schizophrenia include cognitive behavioural therapy (CBT), psychoeducation and family psychoeducation. A study of schizophrenia sufferers who are already receiving antipsychotic medications and are living in high expressed emotion households was conducted by Falloon et. al. (1985) and Falloon & Pederson (1985, 1987). It reported that only 17% of patients who received behavioural family therapy relapsed compared to 83% who only received individual

supportive therapy. Patients that received family therapy showed improvements in their social and vocational performance as well as fewer hospitalisations and lower doses of antipsychotic medications prescribed by psychiatrists. This shows how important the combination of both the biological and psychodynamic approach is to get the best out of the treatment for schizophrenia. Not only with individual therapy but with family therapy reducing relapse rates even further.

Research by (Malmberg & Fenton, 2001) shows that there is little evidence to support the traditional methods of psychodynamic psychotherapy. Psychodynamic treatment is understood by 'talking' therapies. The relationship between the therapist and the patient suffering from schizophrenia plays a key role for their therapy.

Therapy for people with schizophrenia as their only treatment, without medication, has not been assessed very well, apart from four studies in the early 1970s and 1980s. From the limited studies available it is clear that medication is a main part of treatment for psychological illnesses and should be used together with talking treatments.

With the continuous and increased understanding around schizophrenia constantly improving, more effective methods and personalised treatment plans are being developed to allow mental health experts to better explain and control their patients' recovery from the illness.

[The student had included a reference list, which has been removed for brevity]