

Reinforcing Target Behaviours

- When patients perform desirable target behaviours clinician awards them with token
- More items or rewards token can be exchanged for the more powerful token becomes
- Sran and Borrero (2010) – Compared behaviours reinforced by tokens that could be exchanged for one item or variety of items – Found all participants had higher rates of responding to tokens for variety of items

The 'Trade'

- Important part of token economy is exchange of tokens for backup rewards chosen by clinician
- During early stages of token economy frequent exchange periods mean patients are quickly reinforced and target behaviours increase in frequency
- Kazdin (1977) – Effectiveness of token economy may decrease if more time passes between presentation of token and exchange for backup reinforcers

EVALUATION OF TOKEN ECONOMY – AO3**Research Support**

- Dickerson Et. Al. (2005) – Research support for token economies in psychiatric setting
- Reviewed 13 studies for use of token economy system in treatment of schizophrenia – 11 studies reported beneficial effects directly attributable to use of token economy
- Overall studies provide evidence of token economy effectively increasing adaptive behaviours of schizophrenic patients
- However many studies reviewed had significant methodological shortcomings that limited impact in overall assessment of token economy in context

Difficulties Assessing Success of Token Economy

- Comer (2013) – Major problem in assessing effectiveness of token economy studies used uncontrolled
- When token economy system introduced in psychiatric ward all patients brought into program rather than having experimental group and control group
- Patient's improvements can't be compared with past behaviours rather than those in control group
- As no control other factors like staff attention could cause improvement rather than token economy

Usefulness of Token Economy in Community

- Token economy mainly known to work well in a hospital setting
- Corrigan (2004) – Problems administering token economy method for outpatients in community
- Within psychiatric hospital inpatients receive 24 hour care – Better control for staff to monitor and reward patients appropriately
- In community as outpatients not constantly watched token method would be very infrequent – Hard to maintain results outside of strict hospital setting

Ethical Concerns

- In order to make reinforcement effective clinicians may exercise control over important primary reinforcers like food, privacy or access to activities
- Generally accepted that all human beings have certain basic rights to food and privacy – Basic rights must be violated regardless of positive consequences
- Manipulation by token economy goes against rights so may be considered unethical

INTERACTIONIST APPROACH – AO1

- Given constant interplay between genes and environment the greater exposure to schizophrenia linked environmental factors the greater likelihood person with a given level of genetic predisposition will actually develop schizophrenia
- If a person with fewer of gene variants linked with schizophrenia exposed to more environmental stressors they may pass threshold for development of schizophrenia
- Different gene variants and different environmental pressures lead to differing levels of development of schizophrenia

- Approach important because singular explanations are incomplete/ineffective at explaining all schizophrenia

DIATHESIS STRESS MODEL – AO1

Diathesis Stress – Mental disorders result of interaction between biological and environmental influences
Diathesis

- Schizophrenia has a genetic component which makes individuals who inherit genes more likely to develop disorder
- Tienari Et. Al. (2004) – MZ twin of person with schizophrenia is at greater risk at developing schizophrenia than sibling or DZ twin
- In 50% of MZ twins in which one is diagnosed with schizophrenia the other never met diagnostic criteria for disorder
- Dis-concordance among MZ twins means environment must play a role in determining whether a biological vulnerability for schizophrenia actually develops into disorder

Stress

- Stressful life experiences like childhood trauma or urbanisation
- Varese Et. Al. (2012) – Children who experienced severe trauma before age 16 were three times more likely to develop schizophrenia in later life compared to general population – Those severely traumatised at greater risk
- Vassos Et. Al. (2012) – Risk for schizophrenia in most urban environments estimated to be 2.37 times higher than in most rural environments
- Possible more adverse living conditions of a densely populated urban environment may be contributory factor

Additive Nature of Diathesis and Stress

- Combination of diathesis and stress can lead to onset of schizophrenia
- Relatively minor stressors may lead to onset of disorder for individual who is highly vulnerable or a major stressor may lead to onset in person with low vulnerability

Tienari Et. Al. (2004)

Procedure:

1. Reviewed hospital records for 2000 women admitted to Finnish psychiatric hospitals between 1960 and 1979 – identified those diagnosed with schizophrenia
2. 145 of women adopted away offspring known as high risk group compared to 158 adoptees without genetic risk known as low risk group
3. Both groups assessed at 12 years and again after 21 years
4. Psychiatrists assessed family functioning using OPAS scale – Measures families on various aspects of functioning including parent-offspring conflict and insecurity
5. Psychiatrists blind to high or low genetic risk

Findings:

- High genetic risk + High OPAS – 13% developed schizophrenia
- High genetic risk + Low OPAS – 8% developed schizophrenia
- Low genetic risk + High OPAS – 5.3% developed schizophrenia
- Low genetic risk + Low OPAS – 4.8% developed schizophrenia

Evaluation:

- When psychiatrists assessed stress in adoptive family using OPAS they only assessed at one point in time – unable to reflect developmental changes in family functioning
- Stress shown by adoptee may be due to adoptee themselves not family environment

EVALUATION OF INTERACTIONIST APPROACH – AO1

Flexibility of Interactionist Approach

- In addition such interactionist approaches provide a more flexible approach to explaining a very complex disorder where symptoms and type vary considerably
- Explanations can be switched or one explanation emphasised more than another depending on the symptoms and type being explained – Interactionist approach can offer a more complete way of explaining schizophrenia than a singular explanation
- Interactionist approach may lead to treatments that are more effective like a combined approach instead of one which only focuses on one cause
- Treating schizophrenia with drugs only may not alleviate all of the symptoms – Evidence suggests that patients make a better recovery from combined therapy rather than just medication alone
- This supports the benefits of a combined interactionist approach over a singular approach

Diathesis may not be Exclusively Genetic

- Increased risk in vulnerability can also result from brain damage caused by environmental factors
- Verdoux Et. Al. (1998) – Risk of developing schizophrenia in life for individuals who have experienced obstetric complications at birth is four times greater than those without complications
- Brain damage can play a role in the development of schizophrenia as well as genes so important to assume diathesis not only genetic

Urban Environments are not Necessarily more Stressful

- Romans-Clarkson Et. Al. (1990) – No urban-rural differences in mental health among women in NZ
- Paykel Et. Al. (2000) – Urban-rural differences seem to disappear when adjusting for socioeconomic differences between two groups
- Although social adversity may be a trigger leading to onset of schizophrenia, the claim that social adversity and urbanisation are synonymous is likely to be an oversimplification

Difficulties in Determining Causal Stress

- Typical diathesis-stress models make reference to stressful events that occur close to onset of schizophrenia
- Possible stressors earlier in life may also influence how people respond to later stressful events and increase future susceptibility to a disorder
- Hammen (2002) – Maladaptive methods of coping with stress in childhood and throughout development means individual fails to develop coping skills compromising resilience and increasing vulnerability
- Ineffective coping skills may make life more stressful for individual and trigger mental illness
- Suggests identifying stressors is difficult meaning it is difficult to implement diathesis-stress model

Limitations of Interactionist Approach

- Can be difficult to carry out research that involves more than one explanation – Research that involves multiple independent variables is very difficult to design and carry out
- Therefore whilst recognising that an interactionist approach may be a better way of explaining schizophrenia practical difficulties of carrying out such research mean there are few attempts to do so
- Tienari's study of adoptees in Finland is one of the few studies to show the combined impact of genetic and environmental factors
- In terms of combined treatment it is difficult to know whether one form is playing a bigger role than the other in recovery – This means that resources in terms of therapeutic time and money may be wasted which is not good for the patient or the health service.