

Prep 2 – Explanations of Schizophrenia

Biological explanations

➤ **Genetics**

Task 1: Use the Powerpoint (on psych205 under Paper 3 > Schizophrenia) **to answer these questions:**

- 1) According to the general genetic hypothesis what increases your chance of developing the disorder?
- 2) What is the likelihood of developing the disorder in the general population?
- 3) According to Gottesman (1991), what is the percentage concordance rate of developing the disorder if one parent has the disorder?
- 4) What 4 research methods are used to determine the genetic influence on schizophrenia?
- 5) What does concordance rate mean?
- 6) What were the findings of Gottesman's (1991) study of MZ and DZ twins? What does this suggest about a genetic link in schizophrenia?
- 7) What were the results of Kety and Ingraham's adoption study (1992)?
- 8) Why does it help our understanding of genetics to look at children brought up away from their biological parents?
- 9) Gene mapping (The Genome project) has identified a number of candidate genes for schizophrenia and the disorder could be described as polygenic. What does polygenic mean?
- 10) What is a candidate gene? Can you give an example of one candidate gene that has been identified in schizophrenia?
- 11) There is strong evidence that shows schizophrenia is the result of multiple factors (genes + environment). This is also known as the diathesis stress model. How does the diathesis stress model explain schizophrenia?

HELP: If you are still not sure about genetic explanations this video will help to explain the basic genetic explanations: <https://www.youtube.com/watch?v=1utzV5Pi2SY>

Task 2: Watch this short video and based on what Dr. Pearce discusses, **write summarised notes** on genetic influences on the development of schizophrenia.

<https://www.youtube.com/watch?v=HT6gB9VLRk> (only watch up to 2 min 7secs)

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Task 2: Make brief notes from the Powerpoint on which areas of the brain are affected by increased/decreased levels of dopamine.

➤ **Neural correlates (areas of the brain associated with schizophrenia)**

Using the Powerpoint and the information booklet make bullet point notes under the following headings:

- How the brain of schizophrenics are investigated
- Enlarged ventricles
- superior temporal gyrus and anterior cingulate gyrus

Psychological explanations

➤ **Cognitive explanations – dysfunctional thought processing**

Task 1: Using your schizophrenia pack make notes/draw a mindmap on the cognitive explanation. You may want to draw pictures to accompany your notes to help you remember the key concepts.

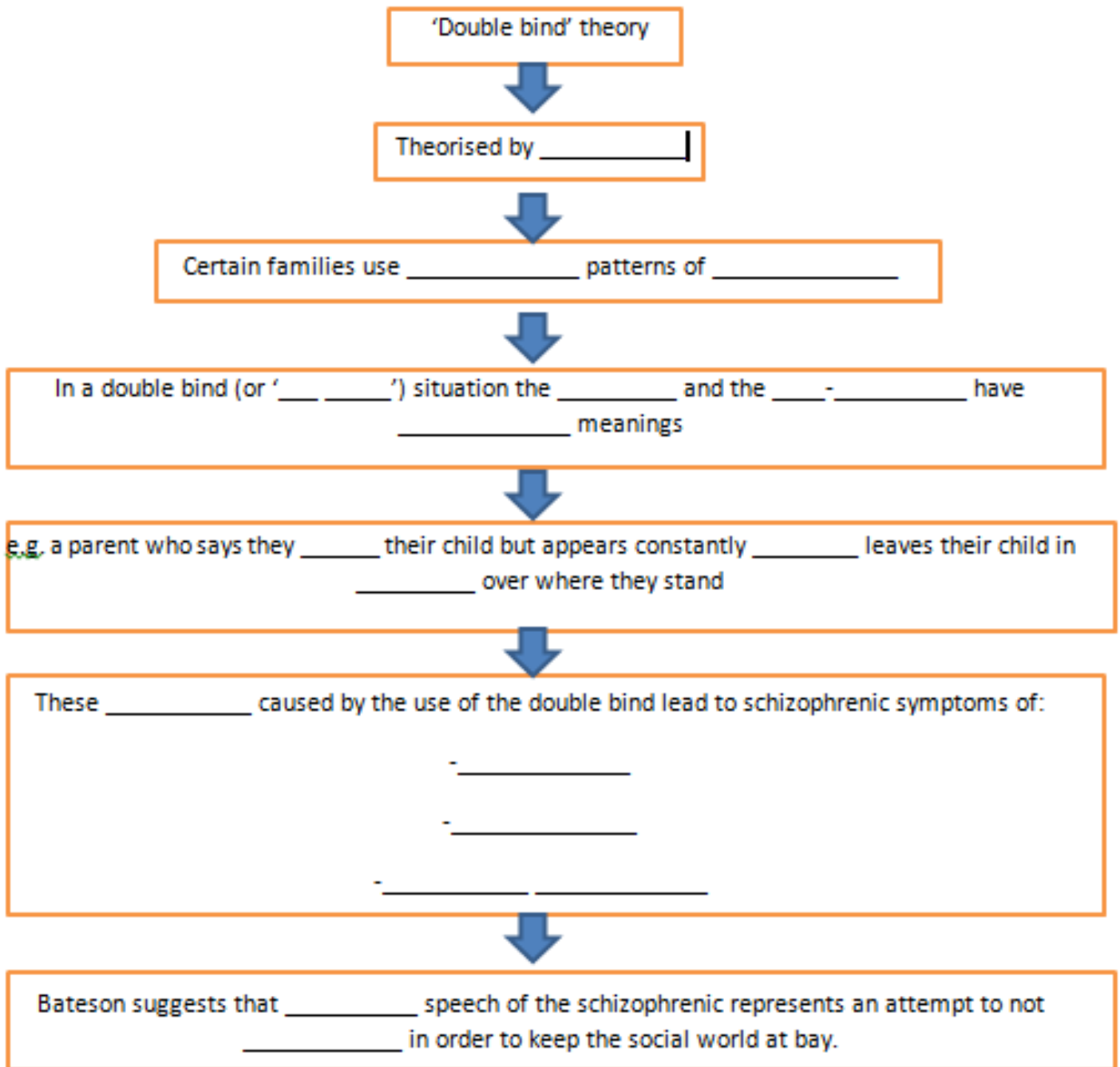
You must include these sub headings:

- What is a cognitive explanation focused on?
- Metarepresentation
- Central control
- Bentall- attentional biases
- The link to the dopamine hypothesis

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➤ **Family Dysfunction (double bind and expressed emotions)**

Double bind theory: Using the information in your pack on Bateson's 'double bind' theory, complete the flow diagram of the theory below and define the key terms at the end.



Communication consists of 2 main components. Define the key terms below:

The message-

The meta-message-

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Expressed Emotion: Answer the questions below to make notes on Expressed Emotion (EE) for your folders.

- 1) High EE environments are characterised by what behaviours?
- 2) What effect can a high EE environment have for people with schizophrenia?
- 3) What did Vaughn and Leff's (1976) research find?
- 4) What did Butzlaff and Hooley (1998) find that supported this?
- 5) How can EE also play a part in the cause of the disorder? Mention the diathesis stress model in your answer.
- 6) Can you think of any reasons why there might be a higher level of expressed emotion within families when one member is suffering from schizophrenia?