



## INTRODUCTION TO SCHIZOPHRENIA

handout number

8.1

Activity type Starter

Students identify whether the statements are true or false. Those that finish early can give a reason for their answer in each case.

### Practical use

This is best used at the start of the topic area to raise awareness of key themes and clarify any popular

misconceptions (e.g., schizophrenia is not actually when you have a split personality).

### Additional notes

Links can be made with the key topic areas (e.g., issues with diagnosis, explanations and therapies).

### Answers

- Schizophrenia is a disorder where a person has difficulty distinguishing what is real and what is in their imagination.  
True
- Schizophrenia is when someone has a split personality.  
False – although there is a significant overlap between symptoms of DID (dissociative identity disorder, previously called multiple personality disorder) and schizophrenia.
- All schizophrenics are violently aggressive.  
False – only about 8% are aggressive.
- People with schizophrenia are at least ten times more likely than the general population to commit suicide.  
True – 14% commit suicide (in comparison to the 1% of the general population).
- Schizophrenia is more common in women than in men.  
False – Men are almost twice as likely as women to be diagnosed.
- While schizophrenia can occur at any stage of life, it is extremely rare after the age of 40 and quite uncommon after the age of 30.  
True
- Schizophrenia is less frequently diagnosed by doctors in African and West Indian cultures than doctors in the UK.  
True
- Predominantly the illness affects younger people and 75% of sufferers will first experience the onset of schizophrenia between the ages of 16 and 25.  
True
- Schizophrenia means that you just hear voices and see things that aren't there.  
False – although auditory and visual hallucinations are key symptoms of the disorder, they are not the only symptoms.
- Once someone has schizophrenia they never make a full recovery.  
False
- Most people affected by schizophrenia can enjoy a good quality of life with good treatment and support.  
True
- Schizophrenia can develop due to a person's family as well as complications in pregnancy.  
True – this links to the family explanations of expressed emotion and double bind behaviour as well as the viral hypothesis (birth complications) and genetics.
- Schizophrenia has a strong genetic component.  
True
- It is easy to get schizophrenia confused with other disorders.  
True – unipolar depression features many of the negative symptoms of schizophrenia (e.g., avolition and social withdrawal), whilst bipolar depression shares positive symptoms like hallucinations and delusions.
- Schizophrenics are often just prescribed one treatment at any one time.  
False – e.g. drugs and CBT are a common combination treatment.
- Schizophrenia can be caused by a multitude of biological and psychological factors.  
True – this relates to the diathesis-stress model.



## THE SIGNS OF SCHIZOPHRENIA

handout number

8.2

Activity type    Application

Students identify symptoms of schizophrenia by underlining relevant passages in the case studies and

making notes as to what they think the symptoms might be. See answers box below for examples.

### Practical use

This can be done as an introductory activity to raise awareness of positive and negative symptoms or it can be done as a consolidation activity where the students identify the symptoms they have previously learned.

Students could also read the textbook spread first to make identifying the symptoms correctly a little easier.

They could also use their mobile phones to research any symptoms not covered in the textbook.

Further extension activities could involve dividing them into groups and allocating each group one of the six case studies and have them identify at least three potential causes for the person's schizophrenia.

### Additional notes

This activity is good preparation for the application style questions students will encounter in their exam.

### Answers

Answers highlighted below in blue. Symptoms in green.

- DD, an economics graduate, frequently heard a voice she believed to be the devil (auditory hallucination). The devil was using DD's telepathic powers to control the Prime Minister, making him do things that would destroy the British economy (delusion of grandeur). DD tried to resist the voice every time she heard it, by saying the opposite of what the voice commanded but would always eventually give in to the voice. She monitored the economic news carefully, and always felt very guilty when the economy took a turn for the worse (Chadwick and Birchwood 1996).
- A patient complained that communists were flying over his house in planes, shooting him with invisible rays (visual hallucination) that caused abdominal churning, tension and heart palpitations (Turkington and Kingdon 1996).
- Mr X believed that other people could read his thoughts through telepathy (delusional thinking – example relates to thought broadcasting – the belief that the brain acts as a radio transmitter for your thoughts). This belief started when a woman looked at him in a supermarket and said to her companion 'I can read his thoughts'. Mr X was convinced that other people had this power but would not admit to it. He was afraid that people would attack him because of what he was thinking (delusion of persecution), and tended to avoid situations that would bring him into contact with others (social withdrawal) (Kuipers *et al.* 1996).
- Damien has alienated a lot of his friends by telling them that he is working as a spy for the government (delusion of grandeur). After they stopped speaking to him, he grew suspicious and wondered if they actually were foreign agents who were actually checking up on his movements for his enemies (delusion of persecution). He sits at his window at night and claims that he can see them all hiding behind the bushes (visual hallucination) even though his mother regularly confirms to him that there is nothing there. His mum tells him to stop but he prefers to listen to the voices in his head that tell him to 'continue to look out for enemy threats' (auditory hallucinations).
- Richard has problems with his speech (disorganised speech). Take the example of his mother asking him if he wants a drink. The first time she asks him he replies with the phrase 'clink, dink, link' (echolalia – rhyming words). She tries again a few minutes later and the sentence is more coherent until the last word where he accuses her of being a real 'plebspurrer' (neologism – making up new words). She tries one final time later on again but this time the right words are said 'drink, a, want, don't, I' but are given in the wrong order (word salad – jumbling up the words of a sentence).
- Nick has a different type of schizophrenia. It is as if the person he once was has disappeared (reference to negative symptoms). He no longer smiles when his favourite cartoon is on or cries or gets unhappy at sad things (e.g. when his pet cat died) (affective flattening – absence of emotional expression). He makes no effort to go outside and play with his friends like he used to and has no desire to get out of bed (avolition) He does not brush his hair or wash his face and clearly does not care for his own appearance (disordered appearance). Lately he has taken to standing in the same position for hours on end, like a statue (catatonic behaviour).



## DIAGNOSING SCHIZOPHRENIA

handout number

8.3

Activity type    Application

This activity involves watching the following YouTube clip (about 8 minutes long):

[www.youtube.com/watch?v=gGnl8dqEoPQ](http://www.youtube.com/watch?v=gGnl8dqEoPQ)

Ask your students to fill in the table on the handout with

the symptoms that Gerald displays. As preparation for the task, students can use the textbook to write down definitions of each of the symptoms under the headings in the left-hand column of the table.

### Practical use

This is good to use to review the symptoms of schizophrenia as it serves to consolidate previous learning of this topic area.

### Additional notes

The second half of this clip can be shown as a lead-in to looking at explanations of schizophrenia as it focuses on some of the causes of Gerald's schizophrenia:

[www.youtube.com/watch?v=i6h8lc-l7R0](http://www.youtube.com/watch?v=i6h8lc-l7R0)  
(7 minutes)

### Answers

Symptoms	Examples
Delusions	Delusions of persecution: 'People are trying to electrocute me and put me in jail'. Delusions of grandeur such as believing that he can get a job in medical school.
Hallucinations	Auditory hallucinations such as persecutory voices accusing him of raping a woman. Visual hallucinations such as seeing a man with green teeth.
Mood disturbances such as affective flattening or inappropriate affect	Sometimes his mood is absent (affective flattening) whilst at other times he displays the wrong emotional response for the situation (inappropriate affect).
Speech disorganisation	Speech reflects loosely connected thoughts, e.g. 'That picture's got a headache' or 'I can go home and get a job in a bakery and then go to medical school'.
Avolition, i.e. an absence of goal directed behaviour such as poor motivation, poor hygiene and grooming, lack of energy or interest shown.	He displays 'purposeless aimless behaviour around the ward', i.e. difficulty keeping up with goal-directed behaviour. Evidence of poor grooming as his hair is dishevelled.

### Answer to Extension task

He probably has hebephrenic schizophrenia as he has grossly disorganised thoughts and speech. He is highly delusional (paranoid and grandiose delusions) and also has disturbances in his mood as well as a disorganised appearance.



## ARE YOU SURE?

Activity type    Idea

This activity teaches students the difference between reliability and validity when diagnosing schizophrenia.

Describe a symptom or type of schizophrenia and ask students to write down on mini-whiteboards what they think it is.

If they all say the same answer then their diagnosis is reliable as they are being consistent.

If they are correct then their diagnosis is valid as their

response is accurate.

For example, the teacher says 'a patient believes that others are plotting against them' and then the students write down what they think it is. If they all say 'delusion of persecution' then their diagnosis is valid and reliable. Those students who say a different answer will lack validity in their diagnosis and will make the overall diagnosis less reliable as there is inconsistency amongst the students' responses.

### Practical use

This can be used to introduce two concepts that students can have difficulty defining. It also makes studies in this area easier to understand as many of them report

correlational findings that reflect how consistent different psychiatrists were at diagnosing the same case of schizophrenia.

### Additional notes

The activity can be used to get students to practise their AO1 skills by defining the symptoms themselves and having the other students guess them.

As some of the studies look at correlations between diagnostic rates of psychiatrists who are given the same case of schizophrenia to identify, you could get

the students to give a correlation co-efficient based on the similarity of the students' responses in class. For example, if they all give the same diagnosis then the number they write will be 1, whilst an inconsistent diagnosis will be closer to 0.

## BEING SANE IN INSANE PLACES

Activity type    Consolidation

This is an excellent introduction to issues of reliability and validity in the classification and diagnosis of schizophrenia as it highlights David Rosenhan's 1973 study, which illustrated just how poor psychiatrists were at accurately diagnosing whether someone had schizophrenia.

The eight-minute clip provides good background information to the study as well as outlining what happened in the study (i.e. that seven people managed

to successfully gain entry to twelve different psychiatric institutions despite only saying that they heard a voice saying empty, hollow or thud and were all kept in the institutions for up to two months despite immediately stating that the symptom had gone as soon once they had gained admission).

Go to the following link and have students answer the questions on the accompanying handout:

[www.youtube.com/watch?v=D8OxdGV\\_7Io](http://www.youtube.com/watch?v=D8OxdGV_7Io)

handout number

8.4

### Practical use

This can be used as further research that illustrates issues in the reliability and validity in the classification and diagnosis of schizophrenia.

### Additional notes

Reference:

Rosenhan, D.L. (1973) On being sane in insane places. *Science*, 179, 250–258.

The activity can be made more challenging – rather than having the students answer the questions on the handout after watching the clip, they could instead make notes from the clip and then come up with three questions they could then ask the rest of the class.



## Answers

1. What happened to Elizabeth Cochrane when she assumed a false identity and acted in a strange manner in a boarding house?

She was put into an insane asylum.

2. Who were Rosenhan's participants for his study?

7 students (4 male, 3 female).

3. How many hospitals did they visit?

12 in 5 different states.

4. What did these pseudopatients have to do?

State that they were hearing a voice saying 'empty, hollow, thud'.

5. What did they do once they gained admission?

Acted normal and said the symptoms had gone away.

6. What were the two aims of the study?

Aim 1: To investigate whether psychiatric labels would be used in situations where they weren't appropriate.

Aim 2: To investigate the experience of being hospitalised in a psychiatric ward.

7. What were the main findings?

None were ever detected as being pseudopatients (fakers) and the longest stay was two months.

## Follow-up questions

- a) In his original study, all but one of the patients were given the label of paranoid schizophrenia with the other patient being labelled as bipolar. How does this show that there are issues with the reliability of diagnosis?

The diagnosis of the different psychiatrists was inconsistent when they were presented with the same symptoms of schizophrenia.

- b) Rosenhan did a follow-up study where he told the psychiatric institutions that he would send them more pseudopatients (fake patients) over the next three months and they had to detect them. After three months they were confident that approximately a third of the new patients they were sent were pseudopatients and were shocked when they found out that Rosenhan had not actually sent any!

Explain how this further highlights the poor validity of diagnosis.

It shows that the psychiatrists were unsure what schizophrenia actually was, as they were labelling someone with the disorder (insane) when they were actually sane!

- c) What were the implications of this study for the psychiatric profession?

It brought about widespread distrust in the ability of psychiatrists to accurately diagnose mental illness.

It brought about a revision of the classification systems to incorporate a more in-depth overview of mental illnesses.

It led to the more humane treatment of people with mental illnesses in psychiatric institutions.



## BAD SCIENCE

handout number

8.5

Activity type Starter

This activity is a useful way of reviewing the key points of biological explanations for schizophrenia.

Students read page 204 of the student book and then review each of the headlines in the table and decide

how each one is incorrect. They then write the correct headline in the second column and produce some evidence in the final column that justifies their new claim.

### Practical use

This can be done as an individual or paired activity. It could be easily modified into a card sort by cutting out the model answers in the table below and then having

students work in pairs to arrange them into the correct parts of the table.

### Additional notes

This activity could be made more challenging by asking students to create their own incorrect headlines (rather

than using those on the handout). These could be given to other students in the class to work out why they are fake.

### Answers

Headline	New headline	Evidence supporting it
Relatives of people with schizophrenia are less likely to get the disorder than the general population	Schizophrenia runs in the family	Research from Gottesman (1991) found that the more genes someone had in common with an individual with schizophrenia, the more likely they were to get the disorder as well.
Scientists discover the gene for schizophrenia	Schizophrenia linked to many genes	Research suggests schizophrenia is polygenic, i.e. linked to many genes that code for neurotransmitters such as dopamine. Ripke <i>et al.</i> (2014) studied the genetic make-up of 37,000 people and found 108 genetic variations were linked with schizophrenia.
Young dads are more likely to father children with schizophrenia	Older dads are more likely to produce children with schizophrenia	Sperm mutations that could cause schizophrenia are more likely to occur in older men. Brown <i>et al.</i> (2002) found that as men got older, they were more likely to father offspring with schizophrenia.
Research finds that brains of people with schizophrenia function in the same way as other brains	The brains of people with schizophrenia are different from other brains	Research into neural correlates has found that the brains of people with schizophrenia vary in their structure and function.
People with Parkinson's disease feel better after taking antipsychotic drugs	Antipsychotic drugs produce similar symptoms to Parkinson's disease	People with Parkinson's disease have low dopamine levels so antipsychotic drugs which lower dopamine levels are more likely to make people behave in a similar way.
High dopamine levels found to exclusively cause schizophrenia	Schizophrenia is linked to high and low dopamine levels	High levels of dopamine activity have been linked to positive symptoms like auditory hallucinations whilst low levels have been associated with negative symptoms linked to disrupted cognition.

## SYNAPTIC TRANSMISSION AND THE DOPAMINE HYPOTHESIS

Activity type Idea

Give students a piece of paper each and have them write down one of the main components of neuronal and synaptic transmission in large letters, e.g. electric impulse passes along axon, synaptic vesicles release

neurotransmitters, neurotransmitters pass into synapse, neurotransmitters bind to receptors on dendrites of neuron.



Although the above terms are in the correct order, give the students the terms in a random order.

Have each student hold one piece of paper and then go and stand in a line at the front of the class and arrange the terms in the correct order.

### Practical use

This is best used as an introduction to the dopamine hypothesis as it reviews the key process in dopamine transmission.

It could then lead into a discussion of how altering dopamine transmission leads to schizophrenia. For example, discuss the behaviours that dopamine affects (pleasure, movement, thinking and perception) and

then discuss the implications of too much or too little dopamine transmission occurring – low dopamine activity is associated with less pleasure, which could affect motivation as people experience less frequent rewarding feelings from their actions. Alternatively, too much dopamine activity could lead to excessive thinking, leading to distortions in cognition such as delusions and hallucinations.

### Additional notes

Incorporate peer assessment into the synaptic transmission recap activity by getting one student to judge whether it is accurate.

You could go into more detail depending on how many students you have (i.e. write more terms).

### Answers

See above example in teacher notes.

## EVALUATION OF THE DOPAMINE HYPOTHESIS

handout number

8.6

Activity type      Evaluation

This activity helps students practise their evaluation skills by having them practise writing the 'explain' part of their PEE statements (POINT, EVIDENCE and EXPLAIN).

On the accompanying handout, students are presented with separate pieces of evidence in relation to the dopamine hypothesis of schizophrenia and their job is to work in pairs and explain whether the evidence relates to a strength or weakness of the explanation.

For example:

**Evidence:** Research has shown that drugs that increase levels of dopamine (for example, amphetamines) produce psychotic (schizophrenic symptoms).

**Explanation:** This is a strength because it demonstrates that increased levels of dopamine activity lead to schizophrenic symptoms.

Students discuss the questions in pairs and then answer the questions individually.

### Practical use

This can be done after the dopamine hypothesis has been taught.

### Additional notes

This activity helps develop AO3 skills of analysis as it is getting students to explain why evidence supports or challenges an explanation.

An easier version of the activity is to give students the answers below in a jumbled-up form and get them to match the correct answers to the questions on the handout.

### Answers

1. Research has shown that drugs that increase levels of dopamine (for example, amphetamines) produce psychotic (schizophrenic symptoms).

A strength as it demonstrates that increased levels of dopamine activity lead to schizophrenic symptoms.

2. Clozapine is the most effective drug at reducing schizophrenic symptoms. It acts on serotonin as well as dopamine.

A limitation as it implies that serotonin is involved in schizophrenia – it is not just dopamine.



3. High levels of dopamine could actually be a symptom of schizophrenia.

A limitation as it suggests that something else caused the schizophrenia to occur.

4. An excess number of dopamine receptors have been found in Broca's area, which is linked to speech production and auditory hallucinations.

A strength as it shows that excess dopamine levels can explain positive symptoms of schizophrenia.

5. Antipsychotic drugs that reduce schizophrenia do so by blocking this neurotransmitter (i.e. reduce the amount of it).

A strength as it shows that schizophrenia is linked to dopamine as these drugs alter dopamine transmission in the predicted direction.

6. Low levels of dopamine have been linked to negative symptoms of schizophrenia like avolition.

A strength as it supports the idea that people will have less motivation to do things (avolition) if they experience less pleasure (which is linked to low dopamine levels).





# WHAT IS EXPRESSED EMOTION?

handout number

8.7

Activity type    Application

This is a useful introduction to the expressed emotion part of the family dysfunction explanation of schizophrenia.

Give a brief outline of what expressed emotion is before the students complete the activities on the accompanying handout.

Activity 1 contains a model answer to the question ‘What is expressed emotion?’, covering all of the key points. Students should complete the gap-fill by using the key words in the box on the right.

Activity 2 involves students putting the statements underneath the appropriate headings in the table. Go through the first few statements as examples so that students are clear what they have to do. Students sometimes struggle to differentiate between criticism and hostility so make the distinction that hostility involves increased aggression and so the statements relating to this characteristic are going to be more threatening.

There is also an extension activity asking students to think of their own examples.

## Practical use

Think/pair/share works well for the first activity, i.e. students do the first activity individually and then share

their answers with their partner so that they can peer assess.

## Additional notes

The second activity can be done as a card sort in that each of the 10 points could be cut out and then placed in the columns.

## Answers

### Activity 1

Expressed emotion relates to a negative **emotional** climate that is characterised by a family communication style of criticism, hostility and emotional over-**involvement**. Criticism relates to **negative** comments said between family members; hostility relates to any aggressive behaviour, whilst emotional involvement involves things such as over-**protective** parenting where parents spend too much time interfering in the affairs of other family members. These family members can also come over as overly **moralistic**, (i.e. having a very strong

sense of right and wrong).

**High** levels of expressed emotion (EE) are more likely to influence relapse rates of recovering schizophrenics who return to their families after treatment.

It is the high **stress** levels that this EE creates that trigger a schizophrenic **episode**.

These families also feature things such as **secret** alliances between members, which encourage paranoid symptoms such as delusions of **persecution**.

### Activity 2

<b>Criticism</b> (negative comments)	<b>Hostility</b> (aggressive comments such as threats)	<b>Emotional over-involvement</b> (behaviour that involves interfering in other family members’ affairs)
<p>Can’t you do anything right?</p> <p>You are the worst daughter in the world.</p> <p>I wish you had never been born.</p> <p>Why do you always do things wrong?</p> <p>You are the reason that we are all so unhappy.</p>	<p>If you do that again I will shout at you.</p> <p>If you look at me like that again I will never speak to you.</p> <p>Don’t make me do something that I may regret.</p> <p>This is going to end in tears.</p>	<p>You can always come to me if you need to talk about your personal life.</p> <p>What did your father say about me when he was upset last night?</p> <p>Why are you and your boyfriend having problems?</p> <p>A parent going through their child’s mobile phone.</p> <p>A parent logging into their child’s email account.</p>



## DOUBLE BIND THEORY

handout number

8.8

Activity type    Application

This activity helps students consolidate their understanding of double bind theory by exposing them to many examples of the type of mixed messages parents of schizophrenics give their children.

On the first question students need to explain in each case why the statement is an example of double bind behaviour. The most obvious way to do this is through commenting on the part of the statement that expresses care as well as pointing out the part of the statement that expresses criticism. They could also comment on how some statements involve a contradiction between verbal and nonverbal communication.

Question 2 encourages students to apply their knowledge by thinking of their own statements whilst question 3 involves them making links between this communication style and schizophrenia by explaining how certain statements may encourage symptoms of schizophrenia. For example, the statement 'a mother goes to hug her daughter but stiffens when they actually embrace' could lead to the symptom of inappropriate affect as it illustrates the idea of showing the wrong emotion in certain situations (e.g. withdrawing love when you should actually show affection).

### Practical use

Good to use when first explaining the double bind theory as the examples are a good aid to understanding.

### Additional notes

Students could also role-play double bind behaviour and other students could identify how it was contradictory.

### Answers

#### Question 1

- a)** A mother goes to hug her daughter but stiffens when they actually embrace.  
Hugging her daughter is expressing care but stiffening implies that she does not like her.
- b)** An older sister tells her younger sister that she loves her but at the same time looks unhappy when she says it.  
Her non-verbal behaviour is contradicting the vocal message of love she is giving her sister.
- c)** A father makes a big deal about holding a birthday party for his son and then fails to attend it.  
His verbal behaviour (enthusiasm about his son's birthday) is contradicted by his non-verbal behaviour of failing to attend.
- d)** A grandmother says to her granddaughter, 'you have such a lovely smile; you should definitely smile more often as it makes you appear less ugly'.  
The comment is expressing care (lovely smile) but is also critical at the same time as it implies she is ugly when she doesn't smile.
- e)** A father says to his wife after she makes him laugh: 'that joke was quite funny ... for you'.  
The compliment that expresses admiration (you are a funny person) is contradicted by the implied criticism that they are not usually funny.

- f)** 'You look nice in those jeans; you should wear them more often as they make you look slimmer.'

The compliment about their appearance is contradicted by the implied criticism that they are actually over-weight.

- g)** 'Well done for passing that test at school – you actually did really well for once.'

The compliment of passing the test is contradicted by the implied criticism that they are not usually that clever.

- h)** Saying that you really liked a story you have just been told in a very unenthusiastic tone of voice.

The non-verbal behaviour of tone of voice contradicts the positive verbal statement they make.

#### Question 2

Students will come up with their own answers for these questions.

#### Question 3

Possible answers relate to delusions of persecution, as many of the statements will make patients doubt what people really think of them, or avolition as being criticised can make people become demotivated.



## STROOP EFFECT

Activity type    Idea

The textbook describes how people with schizophrenia find the Stroop task difficult because it requires cognitive skills. Students might like to try the Stroop task which you can do on some websites, for example:

<https://faculty.washington.edu/chudler/java/ready.html>

Students should write down the time it takes them to identify the colour of the words for the first (control) condition and the second condition.

Discuss reasons why it took the students longer in the second condition.

### Practical use

This can be turned into a practical investigation using the general practical worksheet Handout (0.1).

### Additional notes

Students could use the textbook to write a paragraph explaining how the activity links into the cognitive explanation of central control of thought processes.

They should refer to the study by Stirling *et al.* (2006) to expand further on their answer.

handout number

8.9

## EVALUATION OF PSYCHOLOGICAL EXPLANATIONS OF SCHIZOPHRENIA

Activity type    Evaluation

This activity helps students practise their evaluation skills by having them practise writing the 'explain' part of their PEE statements (POINT, EVIDENCE and EXPLAIN).

On the accompanying handout, students are presented with separate pieces of evidence in relation to either family dysfunction or cognitive explanations of schizophrenia and their job is to explain how the research supports or challenges the respective explanation.

When they are explaining why, it is important that they make reference to the specific aspect of the explanation that the evidence relates to.

For example:

Support for the family relationships explanation comes from Linzen *et al.* (1997) who found that a patient who returns to a family high in hostility, criticism and emotional over-involvement is approximately four times more likely to relapse than one who returns to a family that has a low amount of these characteristics.

This shows that recovering schizophrenics are more likely to experience a return of their symptoms when they go back to dysfunctional families that are high in expressed emotion.

### Practical use

This can be done as an individual activity or alternatively the statements on the handout could be cut out and one given to pairs of students who discuss them and

then swap round statements every 30 seconds until they complete all eight statements.

### Additional notes

The activity could be made easier by making it as a matching activity where the students match the eight

statements on the handout with the answers below, which can be jumbled up.

### Answers

1. Support for the cognitive explanation comes from Myer-Linderberg who found reduced activity in the prefrontal cortex of schizophrenics when they did a task involving working memory.

This shows that there is a link between dysfunctional information processing and schizophrenia.

2. A limitation of the family dysfunction explanation is that high expressed emotion amongst families could be a symptom rather than a cause.

This implies that certain family settings are a consequence of living with a schizophrenic rather than the factor that helped the schizophrenia to originate in the first place.



3. Support for the family dysfunction explanation comes from Berger (1965) who found that schizophrenics reported a higher recall of double bind statements by their mothers than non-schizophrenics.  
This implies that it was the exposure to mixed messages from a specific family member that caused the schizophrenia to occur in their children.
4. Support for the family dysfunction explanation comes from Kalafi and Torabi who found that the negative emotional climate in Iranian culture (over-protective mothers and rejecting fathers) led to a higher relapse rate in schizophrenia.  
This suggests that schizophrenia can be linked to aspects of the family environment as over-protectiveness is a characteristic of a schizophrenogenic maternal figure whilst a negative emotional climate would link to one that is high in expressed emotion.
5. A limitation of the family dysfunction explanation is that it implies that parents are responsible for the problems of their children.  
This is an issue for the explanation as it could cause psychological harm to parents of schizophrenics as it blames them for their child's illness – something that could undermine their ability to help them.
6. A further problem with the family dysfunction explanation is that information about childhood experiences was gathered after the development of symptoms and a diagnosis of schizophrenia.  
This suggests that patients' disturbed cognitions may distort the validity of the information patients provide when recalling how their parents treated them as children.
7. An issue with the cognitive explanation is that dysfunctional thinking could be a consequence of schizophrenia rather than a cause.  
This is a problem for the explanation as it implies that something else causes the schizophrenia in the first place, and it is this factor that then leads to distortions in cognition.

## SAVING YOUR JOB

Activity type      Evaluation

First, explain the scenario to your students: They have to imagine that they are all lecturers in the psychology department at a university with each of them being a specialist in a different area of schizophrenia. The institution is in financial difficulty and has to make staff cutbacks and so each member of staff has to justify why they should keep their job.

Divide your students into groups and allocate them each a specialist area that correspond to each of the different explanations, e.g. genetics, dopamine hypothesis, neural correlates, dysfunctional families and cognitive. To make the activity more authentic you could give each of them a name of a key researcher in the area such as Irving Gottesman for genetics.

Each student takes it in turn to justify why they should keep their job – i.e. state the strengths of their explanation and explain why it is better than other explanations. For example, Irving Gottesman could argue that he has a history of strong research support from twin and family studies and that his approach is more scientific than dysfunctional family explanations, which tend to have less substantial empirical support for them.

After each person has said their piece, the whole group votes to decide whose was the best (obviously they can't vote for themselves!). The person with the most votes is the one who doesn't get 'fired'!

### Practical use

This is best done as a review activity so that students are more confident in their subject knowledge so that they

can recall more evidence to support their positions.

### Additional notes

The element of competition could be further reinforced by a prize, e.g. the best answer could be awarded a hypothetical cash bonus that they could then exchange for some chocolate. The group could decide on the

amount given, which in turn could be exchanged for more chocolate!

Students could further evaluate their explanations using the criteria on Handout 0.3 (general handouts).



## BEFORE ANTIPSYCHOTICS THERE WAS...

Activity type    Introduction

This activity is a useful introduction to the use of antipsychotic medication as it provides an overview of some of the psychiatric treatments that were used before these drugs were invented. It is a five-minute clip that features treatments that range from making patients cold (hydrotherapy, the wet pack), warming them up (the continuous bath, hotboxes and lamps), giving them seizures (insulin therapy, metrazol therapy) and invasive surgery (the lobotomy). A key aim of the clip is to raise awareness of how safe and effective antipsychotic medication is in comparison to previous treatments of mental illness.

Students should watch and make notes on this YouTube clip as well as identify three questions to ask the rest of

the class about the clip:

[www.youtube.com/watch?v=1lzmyru5T\\_w](http://www.youtube.com/watch?v=1lzmyru5T_w)

Each student takes it in turns to nominate someone in the class to answer one of their questions. After the student has answered the question, they then nominate someone else. The activity is complete when all students have answered a question. They do not have to ask all of their questions but it is a good idea to have them think of three just in case other students in the class have identified the same question.

Afterwards students can work in pairs to identify at least three ways that antipsychotic drugs would be superior to these early psychiatric treatments.

### Practical use

This is best done as a whole class activity at the start of the topic.

### Additional notes

The footage in the clip can be difficult to watch so give students the right to look away in places!

### Answers

Some benefits of using drugs instead of early psychiatric treatment:

- The effects are not necessarily permanent (unlike a lobotomy).
- There is no surgery – less danger of surgery going wrong.

- More ethical and less dehumanising.
- Drugs are easier to take.
- The patient has more motivation to take drugs than having invasive surgery/dehumanising treatments.

## DRUG THERAPY LEAFLET

Activity type    Idea

Students use the information on one type of anti-psychotic medication (*Chlorpromazine*, *Clozapine* or *Risperidone*) to write an information leaflet that could be given out at a doctor's surgery for patients who have been prescribed these types of drugs.

The leaflet could cover the following headings:

- How do the drugs work?

- What are the trade names of the different types of drug (e.g. *Chlorpromazine*)?
- What are the benefits?
- What are the drawbacks?

Students can illustrate the leaflet with a diagram of how the drug works at the synapse.

### Practical use

This activity could be used as a class activity or as homework. Students could judge each other's leaflets to decide which is the most helpful at educating patients

about drug therapy. Make sure that different groups of students get different antipsychotics to do so that all of the typical and atypical drugs are covered.

### Additional notes

The activity could be made more challenging through having students write the leaflet for a different audience.

For example, using more simple language so that children could understand it.



## CONTENT ANALYSIS OF TARDIVE DYSKINESIA

Activity type      Research methods

Give students a definition of tardive dyskinesia (i.e. uncontrollable movements of the face, lips, mouth tongue as well as other body areas).

Then show them the YouTube clip without the sound:  
[https://www.youtube.com/watch?v=W\\_3bbpFjI68](https://www.youtube.com/watch?v=W_3bbpFjI68)

Students should list the examples of tardive dyskinesia from the clip (e.g. puckering of the lips, movement of the tongue, repetitive hand movements) and also the frequency these behaviours occur. They should end up with a frequency table like this:

Puckering the lips	
Movement of the tongue	
Repetitive hand movements	
<i>Etc.</i>	

Ask them to compare their results with another student in order to illustrate the idea of inter-rater reliability.

Ask them to watch the clip again to see if they gain the same result in order to illustrate the idea of test-retest reliability.

Students could draw a bar chart to illustrate the results of their comparisons (inter-rater reliability and test-retest reliability).

### Practical use

This can be used as a starter activity when looking at evaluating antipsychotic medication. It could lead into a general discussion about the pros and cons of using

these types of drugs given the potential severity of the side effects.



## TOKEN ECONOMY CLASSROOM

Activity type    Idea

Explain the concept of token economies to your students: Students will be given coloured tokens for desirable behaviour in the lesson (e.g. you could cut out squares of paper to give to them).  
When they get a certain number of tokens they can get certain privileges.

Students could devise a list of desirable behaviours and privileges.

Students could then discuss examples of desirable behaviours and privileges that could be carried out when setting up a token economy in a psychiatric institution.

### Practical use

This activity can be done to introduce token economies.

### Additional notes

This activity is good at raising awareness of the evaluation points for token economies: e.g. the fact that people only perform desirable behaviour in class for

tokens; the ethical issues associated with giving them tokens for privileges they would normally get for free.

## INTRODUCING COGNITIVE BEHAVIOUR THERAPY FOR SCHIZOPHRENIA

*presentation*

8.10

Activity type    Introduction

Show the PowerPoint presentation to the students and tell them to remember as much as they can.

Afterwards give them the questions on Handout 8.11 to answer individually.

## COPING STRATEGY ENHANCEMENT

*handout number*

8.11

Activity type    Introduction

This activity gives students more information about how cognitive behaviour therapy is used to treat schizophrenia. It involves learning about Coping Strategy Enhancement (CSE) which is a specific type of CBT used to treat schizophrenia by having patients identify and develop their own cognitive and behavioural techniques to help deal with their schizophrenia.

After the students have been shown the above PowerPoint presentation (8.10) give them the questions on this handout to answer individually. When they cannot answer any more, have them work with a partner in order to fill in any answers they may have missed.

Finally, go through the answers to the questions outlined below.

### Practical use

This is best done as an individual activity.

### Additional notes

It needs to be made clear that CSE is a form of CBT that is used to treat schizophrenia, as students can find this confusing.

### Answers

1. Complete the sentence. TARRIER (1990) interviewed schizophrenics and found that they were able to identify **triggers** for their psychotic symptoms and also had developed their own **coping strategies** as well to manage the stress caused by them.

2. What does the therapy aim to teach?

To develop and apply coping strategies for the psychotic symptoms and the accompanying stress they produce.



3. List examples of cognitive and behavioural strategies used to deal with schizophrenia.

Cognitive strategies – distraction, concentrate on a specific task; positive self-talk

Behavioural strategies – relaxation techniques (e.g. breathing exercises); social withdrawal/increasing social contact, loud music to drown out voices; behavioural experiments

4. Outline the two parts of the therapy.

(i) Develop a rapport with patient to identify triggers of psychotic symptoms as well as reviewing existing and develop new coping strategies.

(ii) Target specific symptoms and find specific strategies to deal with them.

5. What is given to patients in order to perfect the strategies they learn?

Homework assignments.

6. What is the overall aim of the therapy?

To have two effective strategies for each distressing symptom.

7. Explain how Chadwick's (1992) study can be used to support the role that CBT can play in reducing delusional thinking.

Chadwick's study involved a schizophrenic who had the delusion that his thinking could influence the future. However, he failed to predict what would happen in 50 video clips shown to him which helped provide him with evidence to show that his delusional belief was false.

## USING CBT FOR SCHIZOPHRENIA

handout number

8.12

Activity type      Application

This activity involves students taking on the role of cognitive behaviour therapists by analysing a case study of somebody who has schizophrenia and suggesting strategies that they could use to help them challenge the maladaptive beliefs and behaviour that contributed to their condition.

Divide the students into pairs and ask them do the activity on the accompanying handout.

Tell them to use the cheat sheet below the activity if they need help on any of the questions.

### Practical use

This should be done after CBT has been taught to the students so that it gives them an opportunity to apply their knowledge effectively.

### Additional notes

The extension activity also allows students the opportunity to consolidate their understanding of the explanations of schizophrenia.

### Answers

1. Identify the two main symptoms of schizophrenia demonstrated here.

Hallucinations and delusions

2. What were the triggers to this particular psychotic episode?

Stomach pains and anxiety

3. Suggest a way you could reality test the irrational beliefs concerning the monitoring device implanted inside of Miss M.

There are a number of potential ways they could do this but one of the most obvious would be to have her visit a doctor and get an x-ray of her stomach so she could see there was no device there.

4. Suggest other cognitive and behavioural strategies that can be used to treat Miss M (See cheat sheet to assist you with this question if you get stuck).

Cognitive strategies

- Focus on a specific task like counting back in 3s from 456.
- Positive self-talk reassuring her she is not a bad wife and is not going to die!

Behavioural strategies

- Turn the TV/music to drown out the voices.



**Extension activity**

5. What do you think caused her schizophrenia in the first place? (Give a reason for your answer).

Again, a number of factors could be given. One interpretation could be that she could have had a genetic pre-disposition towards schizophrenia,

which was triggered by the stressful event of her divorce. The anxiety this created could have triggered her IBS symptoms of a stomach ache which would then be interpreted as evidence of something more sinister which would further reinforce her delusional thinking.

 HUMAN CONTINUUM

Activity type Introduction

Write nature on one piece of paper and nurture on the other piece of paper and then attach both pieces of paper to the wall in each corner at the front of the room. Have the students line up at the front of the class and tell them to stand in a position which best represents their point of view in terms of what they think are the causes

of schizophrenia. For example, if they feel that they think that you are born with schizophrenia they will stand at the nature end of the line whereas if they think it's more down to upbringing they will stand next to the nurture end.

Ask students justify their position with reference to different biological and psychological factors.

## Practical use

This is used as a starter activity before you teach the diathesis-stress model.

## Additional notes

This can be also used to review the research so far as students can bring in all the biological and psychological

explanations and also evaluate the degree to which they are relevant.

 TRUE OR FALSE?

Activity type Starter

Students do the activity first by answering in pairs whether they think the statements are true or false. Make sure that they are able to justify their answer in each case.

Afterwards they then self-assess their answers by reading the accompanying textbook spread.

handout number

8.13

## Practical use

This can be used as an introduction to the interactionist approach or alternatively, it could be used to review their

knowledge and understanding of the area.

## Additional notes

As an extension task, students could then be required to write their own true or false questions.

## Answers

1. The interactionist approach is also known as the biosocial model of schizophrenia.

True

2. The original form of the diathesis-stress model stated that people inherited several genes that made them more vulnerable to developing schizophrenia.

False – it stated they inherited one 'schizogene.'

3. A schizophrenogenic mother is one factor that can trigger schizophrenia in a vulnerable person.

True

4. Newer versions of the diathesis-stress model take into account that it is not just genetic factors that cause vulnerability but also other factors that affect the development of the brain during childhood.

True

5. Modern versions of the diathesis-model see stressors as just psychological in nature.

False – they can relate to biological factors like cannabis use as well.

6. The interactional model of schizophrenia recommends treatment that just involves drug therapy.

False – psychological therapy is recommended as well

7. Tienari *et al.* (2004) found evidence that those most at risk of developing schizophrenia were adopted children brought up in a negative family environment.

False – adoptees with a genetic vulnerability as well as being brought up in a negative family environment were most at risk of developing schizophrenia.



8. The original diathesis-stress model was seen as too complex.  
False – it was over-simplified.
9. There is support for the idea that a combination of biological and psychological treatments are both effective.  
True – Tarrrier *et al.* (2004) found that patients in the two combination treatment groups showed lower symptom levels than those with just medication.
10. The argument that drugs work and therefore schizophrenia must be caused by biological factors is an example of the treatment-causation fallacy.  
True

## REVISION CROSSWORD

handout number

8.14

Activity type Consolidation

Students complete the crossword.

### Practical use

This is best done as an individual activity at the end of the chapter as it reviews the whole topic.

### Additional notes

Aim to make the activity more challenging by not allowing students to use their notes.

### Answers

#### Across

- Activity in this area of the brain is a neural correlate for the negative symptoms of schizophrenia. (7,8 letters)  
**Ventral striatum**
- Token economies in particular involve this type of issue. (7)  
**Ethical**
- Emotional over-involvement, criticism and this characteristic are all qualities of families high in expressed emotion. (9)  
**Hostility**
- The absence of this type of group makes it very difficult to draw accurate conclusions about the effectiveness of psychological therapies. (7) **Control**
- \_\_\_\_\_ dyskinesia is an unpleasant side effect of anti-psychotic medication. (7) **Tardive**
- People with schizophrenia are poorer at this cognitive test. (6,6) **Stroop effect**
- Symptom \_\_\_\_\_ is where one mental illness (e.g. depression) has the same clinical characteristics as another disorder (e.g. schizophrenia). (7) **Overlap**
- A type of mother whose behaviour could cause schizophrenia. (15) **Schizophrenic**
- A collection of behaviours that relate to a general absence of motivation. (9) **Avolition**
- This is another word for vulnerability. (9) **Diathesis**
- Unreal perceptions that relate to sensory disturbances. (14)  
**Hallucinations**
- This psychologist did a family study and found that the stronger the degree of genetic relatedness with a sufferer of schizophrenia, the greater the likelihood someone would get the disorder themselves. (9) **Gottesman**
- This factor could affect paternal sperm cells and cause schizophrenia. (8) **Mutation**

- An issue that relates to the consistency of psychiatrists when diagnosing the same case of schizophrenia. (11)  
**Reliability**
- Types of treatment that are more popular when using an interactionist approach to treat schizophrenia. (11)  
**Combination**

#### Down

- An issue that relates to how accurate psychiatrists are when diagnosing schizophrenia. (8) **Validity**
- This relates to your ability to reflect on your own behaviour and is seen as a dysfunctional thought process that could contribute to schizophrenia. (18)  
**Metarepresentation**
- These are part of a psychological therapy and are given to schizophrenics as a reward for desirable behaviour. (6)  
**Tokens**
- This is when a patient has more than one mental illness at any one time. (11) **Comorbidity**
- This typical antipsychotic is also effective at treating the symptoms of depression that many schizophrenics experience as well as schizophrenia. (9) **Clozapine**
- Type of therapies that work by reducing the expressed emotion shown by relatives who live with a schizophrenic. (6)  
**Family**
- Bizarre irrational beliefs that can be grandiose in nature. (9)  
**Delusions**
- The dopamine hypothesis now states that both high and \_\_\_\_\_ amounts of dopamine in different areas of the brain are responsible for schizophrenia. (3) **Low**
- This gender is more likely to be diagnosed with schizophrenia. (3) **Men**

## JUMPING TO THE RIGHT CONCLUSION

Activity type Consolidation

This is a good kinaesthetic activity to use to review the whole topic.

Write down 20 key terms from the topic area in large letters on 20 separate pieces of A4 paper (e.g. hallucinations, double bind, diathesis, etc.)

Place them on the floor at the front of the room so that you can see all 20 key terms and none are on top of each other. Make sure you have a large space at the front of the class as students will be required to move around a lot.

Divide the class into two teams and select one representative from each team.

Give the representatives a spoken definition of one of the 20 key terms and tell them that the first person to stand on the correct term that relates to the definition will win a point for their team. You can get the whole class involved

by allowing team members to shout out the correct answer to help their teammate.

The team with the most points wins.

The game can be made more challenging by having students (rather than the teacher) defining the key term that the two team members then have to find.

### Practical use .....

This is best done as a whole group activity and works well at the start of the lesson, as it tends to energise the class

by getting them out of their seats and literally jumping around!

### Additional notes .....

Students could come up with the 20 key terms rather than the teacher.