Oxford Revise | AQA A Level Psychology | Answers

Chapter 12

All exemplar answers given would achieve full marks or the top level.

1. **Marks for this question: AO1 = 2**

   Hallucinations

   Delusions

2. **Marks for this question: AO2 = 4**

   This question is level-marked:

Level	Marks	Description
2	3–4	• Knowledge of the cognitive explanations of schizophrenia is clear and generally well detailed. • Application is mostly clear and effective. • The answer is generally coherent with appropriate use of specialist terminology.
1	1–2	• Knowledge of the cognitive explanations of schizophrenia is limited. • Application is either absent or inappropriate. • The answer as a whole lacks clarity and has inaccuracies. • Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO2 application:

- Cognitive explanations for SCZ identify abnormal thought processing as the cause of symptoms so Macey is experiencing dysfunctions in her thought processing.
- Macey's metarepresentation is dysfunctional - she is not able to reflect on her thoughts or recognise that her thoughts and actions are her own rather than Chappel Roan's. So, when Chappell Roan posts on social media, Macey therefore processes this in a way that she thinks the messages are specifically for her.
- Macey's mum is struggling to understand what Macey is saying because Macey's central control (the ability to suppress automatic responses while performing deliberate actions, like having a conversation) is dysfunctional. That means the conversation is constantly derailed by new information and Macey can't finish one sentence before starting another.
- Macey thought she heard Chappell's voice as her metarepresentation is dysfunctional. She can't recognise that the voice she heard is an auditory hallucination rather than Chappell Roan's voice.

Credit other relevant applications.

3. Marks for this question: AO1 = 4

This question is level-marked:

Level	Marks	Description
2	3–4	• Knowledge of how cognitive behavioural therapy is used in the treatment of schizophrenia is clear and accurate. • The answer is mostly coherent with effective use of specialist terminology.
1	1–2	• Knowledge of how cognitive behavioural therapy is used in the treatment of schizophrenia is briefly stated with little elaboration. • The answer may include inaccuracies and be poorly organised. • Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- Cognitive behavioural therapy for psychosis (CBTp) helps patients deal with symptoms and improves their general functioning.
- CBTp is usually delivered on a 1–1 basis but is sometimes delivered in a group.
- The National Institute for Health and Care Excellence (NICE) recommends 16 sessions.
- CBTp aims to help change the faulty, irrational thoughts associated with the positive symptoms of delusions and hallucinations. Patients often find it helpful when they understand where the symptoms come from. By monitoring their thoughts, feelings, or behaviours they can think of alternative explanations for them, which reduces distress and improves functioning.
- SCZ patients are encouraged to trace back the origins of their symptoms to gain insight into how they might have developed. They are also encouraged to evaluate the content of their delusions and/or hallucinations.
- Therapists then gently challenge the patients to identify how likely it is that their beliefs are true. This encourages the patient to develop alternative, less threatening possibilities to previous irrational and maladaptive beliefs.
- Although CBTp may not get rid of symptoms, it helps patients cope. Like regular CBT, patients are set behavioural assignments to improve their level of functioning.

Credit other relevant material.

4. Marks for this question: AO1 = 3

Note: whilst this may appear to be an AO3 evaluation question, it actually requires an AO1 content answer.

3 marks for a clear, coherent issue in the diagnosis of schizophrenia, using appropriate terminology.

2 marks for an issue in the diagnosis of schizophrenia that lacks some clarity or detail.

1 mark for a brief or muddled issue in the diagnosis of schizophrenia.

Possible AO1 content:

- Research suggests that diagnosis of SCZ is influenced by cultural factors. A study found that 69% of US psychiatrists but only 2% of UK psychiatrists gave a diagnosis of SCZ from the same description of a patient.
- African Americans and English people of Afro-Caribbean origin are much more likely to be diagnosed than white people. They may be more likely to report hearing voices due to a cultural belief in communicating with ancestors.
- Gender bias: more men than women are diagnosed with SCZ. Women may be under-diagnosed because they function better than men and their symptoms are masked by good interpersonal functioning.
- Symptom overlap: SCZ and bipolar disorder both include positive and negative symptoms (delusions and avolition). The same patient could be diagnosed with SCZ when using the ICD-11, but with bipolar when using DSM-5 criteria. Some even suggest that SCZ and bipolar may not be two different conditions.
- Co-morbidities: such as depression, PTSD, substance abuse, and OCD are common among patients with SCZ. If conditions occur together often, it causes an issue in their diagnosis because they might be a single condition and/or clinicians might just be incapable of differentiating between them.

Credit any relevant issue.

5. Marks for this question: AO1 = 4

This question is level-marked:

Level	Marks	Description
2	3–4	• Knowledge what is meant by negative symptoms of schizophrenia is clear and accurate. • The answer is mostly coherent with effective use of specialist terminology.
1	1–2	• Knowledge of what is meant by negative symptoms of schizophrenia is briefly stated, with little elaboration. • The answer may include inaccuracies and be poorly organised. • Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- Negative symptoms of SCZ refer to a loss of ability or function in certain areas.
- Speech poverty (alogia) refers to a decrease in speech fluency. A person may produce fewer words, speak in less complex sentences, and respond slowly. It's believed this is due to blocked thoughts rather than a reduced vocabulary.
- Avolition (apathy) refers to an inability to start and maintain goal-directed activities. People with schizophrenia have a sharp decrease in motivation in areas such as work, education, personal hygiene, and exercise, despite opportunities being present.

- Anhedonia is a loss of interest or pleasure in activities that used to bring joy. Physical anhedonia is the inability to experience physical pleasures, such as pleasure from food.
- Affective flattening is a reduction in the range and intensity of emotional expressions, such as facial expression, tone of voice, and eye-contact.

Credit other relevant material.

6. Marks for this question: AO1 = 2

2 marks for a clear, coherent outline of the role of symptom overlap in the diagnosis of schizophrenia, using appropriate terminology.

1 mark for a brief or muddled outline of the role of symptom overlap in the diagnosis of schizophrenia.

Possible AO1 content:

- Symptom overlap refers to when two different mental health conditions have some of the same symptoms. E.g. SCZ and bipolar disorder both include positive and negative symptoms (delusions and avolition).
- This makes it difficult to diagnose SCZ or classify it as a distinct disorder.
- E.g. the same patient could be diagnosed with SCZ when using the ICD-11, but with bipolar when using DSM-5 criteria.

Credit other relevant material.

7. Marks for this question: AO3 = 2

2 marks for a clear, coherent strength or limitation of cognitive explanations of schizophrenia, using appropriate terminology.

1 mark for a brief or muddled strength or limitation of cognitive explanations of schizophrenia.

Possible AO3 evaluation:

- Evidence for central control dysfunction: SCZ patients found thought suppression difficult on a range of cognitive tasks, such as the Stroop test.
- The effectiveness of cognitive therapies for SCZ suggests that faulty cognitions have a causal influence. The National Institute for Health and Care Excellence (NICE) reviewed treatments for SCZ and found cognitive behavioural therapy was more effective in reducing the severity of symptoms and improving levels of social functioning than antipsychotic medication.

Credit any valid strength or limitation.

8. Marks for this question: AO1 = 6

This question is level-marked:

Level	Marks	Description
3	5–6	• Knowledge of family dysfunction explanations of schizophrenia is clear and generally accurate. • Specialist terminology is used appropriately.
2	3–4	• Knowledge of family dysfunction explanations of schizophrenia is evident but there may be some omissions/lack of clarity. • There is some appropriate use of specialist terminology.
1	1–2	• Knowledge of family dysfunction explanations of schizophrenia is evident but there may be serious omissions and/or inaccuracies. • Specialist terminology is either missing or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- Double-bind theory is when a child receives contradictory messages from their parents, e.g. a mother saying 'I love you' but turning her head in disgust. The child's understanding of the world is one of confusion and danger, and it's difficult for them to develop a coherent sense of reality.
- The 'schizophrenogenic mother' is a psychodynamic explanation for SCZ; it identifies that the mother is cold, controlling, and rejecting of the child. This causes a tense atmosphere where the child feels they must be secretive and can lead to paranoia and SCZ.
- Expressed emotion refers to negative emotions being expressed towards a patient by their family. It includes verbal criticism, hostility, and emotional over-involvement, all of which are a serious source of stress for the patient. Expressed emotion may trigger symptoms in a genetically vulnerable person or could cause relapse.

Credit other relevant material.

9. Marks for this question: AO1 = 3, AO3 = 5

This question is level-marked:

Level	Marks	Description
4	7–8	• Knowledge of family therapy as a treatment for schizophrenia is accurate with some detail. • Discussion is thorough and effective. • Minor detail and/or expansion of argument is sometimes lacking. • The answer is clear, coherent, and focused. • Specialist terminology is used effectively.
3	5–6	• Knowledge of family therapy as a treatment for schizophrenia is present but there are occasional inaccuracies or omissions. • Discussion is mostly effective. • The answer is mostly clear and organised but occasionally lacks focus. • Specialist terminology is used appropriately.
2	3–4	• Limited knowledge of family therapy as a treatment for schizophrenia is present. • Focus is mainly on description. • Any discussion is of limited effectiveness. • The answer lacks clarity, accuracy, and organisation in places. • Specialist terminology is used inappropriately on occasions.
1	1–2	• Knowledge of family therapy as a treatment for schizophrenia is very limited. • Discussion is limited, poorly focused, or absent. • The answer as a whole lacks clarity, has many inaccuracies, and is poorly organised. • Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- The aim of family therapy is to prevent relapse of SCZ.
- Family therapy should be offered when a person with SCZ is in contact or lives with family members.
- Parents, siblings, and partners attend at least 10 therapy sessions between 3 and 12 months and are educated about SCZ.
- To help reduce the level of expressed emotions, the family find ways to support the person with SCZ and try to resolve practical problems.

- It's beneficial if the person with SCZ is included in therapy sessions because being active in the treatment helps them overcome any paranoid suspicions.
- Family therapy improves relationships within the household because family members are encouraged to listen to each other and provide solutions that suit everyone.
- Improved communication reduces expressive emotion in the home, which helps prevent relapse.

Possible AO3 discussion:

- A review of 53 studies from Europe, Asia, and North America on the effectiveness of family therapy found that when people with SCZ had family therapy, they were more compliant with taking medication and were less likely to relapse than if they were on antipsychotics alone. There was some improvement to general functioning, but not to being able to live and work independently. There were mixed outcomes for their mental state.
- It is suggested that family therapy is effective because it makes patients more likely to comply with their medical treatment, not necessarily because it improves communication and reduces levels of expressed emotion.
- As family therapy leads to lower relapse rates and reduces instances of hospitalisation, it has considerable economic benefits.
- Family therapy improves outcomes not just for the individual with SCZ, but also for family members, such as increased coping and problem-solving skills, and improved family functioning and relationship quality.
- A study found that when individuals with SCZ had carers who used low levels of expressed emotion and high levels of support, they fared the same as having family therapy, especially compared to those who had no support or carers. The study concluded that for many people, family therapy may not improve outcomes further than having good carers.

Credit other relevant material.

10. Marks for this question: AO1 = 3, AO2 = 2, AO3 = 3

This question is level-marked:

Level	Marks	Description
4	7–8	• Knowledge of the interactionist approach to schizophrenia is accurate with some detail. • Application is effective. • Discussion is thorough and effective. • Minor detail and/or expansion of argument is sometimes lacking. • The answer is clear, coherent, and focused. • Specialist terminology is used effectively.

3	5–6	• Knowledge of the interactionist approach to schizophrenia is evident but there are occasional inaccuracies/omissions. • Application and/or discussion is mostly effective. • The answer is mostly clear and organised but occasionally lacks focus. • Specialist terminology is used appropriately.
2	3–4	• Limited knowledge of the interactionist approach to schizophrenia is present. • Focus is mainly on description. • Any application/discussion is of limited effectiveness. • The answer lacks clarity, accuracy, and organisation in places. • Specialist terminology is used inappropriately on occasions.
1	1–2	• Knowledge of the interactionist approach to schizophrenia is very limited. • Application/discussion is limited, poorly focused, or absent. • The answer as a whole lacks clarity, has many inaccuracies, and is poorly organised. • Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- The diathesis-stress model is an interactionist approach to SZ because it identifies that an interaction of biological (diathesis) and psychological (stress) factors are responsible for onset.
- There isn't one 'schizogene' but many genes are responsible for increasing vulnerability.
- Family and twin studies support the role of genes in SZ, which as they show that the closer the genetic makeup, the higher the concordance rates.
- Psychological diathesis: childhood trauma can cause a diathesis, and also act as a stressor; childhood trauma alters the developing brain, which increases vulnerability to SZ.
- Stressors will trigger SZ in those with a diathesis.
- Stressors include trauma in childhood, urbanisation and cannabis use.
- A study found that children who experienced severe trauma before the age of 16 were three times more likely to develop SZ than the general population.
- A meta-analysis found that people living in densely populated urban areas were 2.37 times more likely to develop SZ than those living in rural areas.
- Cannabis use increases the risk of SZ up to seven times depending on the dose, which is thought be because cannabis interferes with the dopamine system.
- Interactionist treatment - advocates both biological and psychological therapies as an interactionist approach to treatment.

- Interactionist treatment includes combining antipsychotics with CBTp.
- The UK tends to adopt the interactionist approach to treatment, but the USA tends to focus on drug therapies.

Possible AO2 application:

- Dina may have had a biological diathesis for schizophrenia (SCZ) – her mum had SCZ so may have passed on genes increasing Dina's vulnerability.
- Dina's childhood would have been traumatic because of her abusive stepdad, and this trauma may have been a psychological diathesis for SCZ.
- Dina's abusive stepdad may have also acted a stressor to trigger her diathesis for SCZ.
- Dina moving to a highly urbanised area may have been a stressor that triggered her diathesis for SCZ. A meta-analysis found that people living in densely populated urban areas were 2.37 times more likely to develop SZ than those living in rural areas, which may have been due to adverse living conditions.
- Dina's cannabis use with her friend may have triggered SCZ. A study found that cannabis use increases the risk of SCZ up to seven times, which is thought be because cannabis interferes with the dopamine system.

Possible AO3 application:

- Evidence for the diathesis-stress model: Finnish children who were adopted by 'schizophrenogenic mothers' (cold, hostile, and low in empathy) developed SZ, but only if they had a genetic risk. This suggests that both genetic vulnerability and stress (childhood trauma from parenting style) are important in developing SZ.
- Evidence that diatheses are not always genetic in origin: individuals who experienced problems in their birth, such as prolonged labour which can cause oxygen deprivation, were four times more likely to develop SZ than those who did not have complications. This is evidence that life experiences can act as a diathesis for SZ.
- Evidence against urbanisation as a stressor: A New Zealand study found no urban/rural differences in mental health of women. Urban/rural area comparisons did find differences in SCZ, but these disappeared after adjusting for the socio-economic differences, which suggests that urbanisation as a risk factor for SZ is oversimplified.
- Support for the effectiveness of interactionist treatments: a comparison of medication + CBT, medication + supportive counselling, or just found that patients in the two combination groups showed lower symptom levels than those in the control group, which emphasizes the importance of an interactionist approach to treatment.
- It's unclear how diathesis and stress work: We don't yet fully know the mechanisms by which the symptoms of SZ appear. This limits the usefulness of the diathesis-stress model in explaining how schizophrenia actually develops.

Credit other relevant material.

11. Marks for this question: AO1 = 6, AO3 = 10

This question is level-marked:

Level	Marks	Description
4	13–16	• Knowledge of the use of antipsychotic medications as a treatment for schizophrenia is accurate and generally well detailed. • Discussion is thorough and effective. • Minor detail and/or expansion of argument is sometimes lacking. • The answer is clear, coherent, and focused. • Specialist terminology is used effectively.
3	9–12	• Knowledge of the use of antipsychotic medications as a treatment for schizophrenia is evident but there are occasional inaccuracies/omissions. • Discussion is mostly effective. • The answer is mostly clear and organised but occasionally lacks focus. • Specialist terminology is used appropriately.
2	5–8	• Limited knowledge of the use of antipsychotic medications as a treatment for schizophrenia is present. • Focus is mainly on description. • Any discussion is of limited effectiveness. • The answer lacks clarity, accuracy, and organisation in places. • Specialist terminology is used inappropriately on occasions.
1	1–4	• Knowledge of the use of antipsychotic medications as a treatment for schizophrenia is very limited. • Discussion is limited, poorly focused, or absent. • The answer as a whole lacks clarity, has many inaccuracies, and is poorly organised. • Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- There are two types of antipsychotic drugs to treat SCZ, called typical and atypical.
- Typical antipsychotics, such as chlorpromazine, are dopamine antagonists, which means they bind to dopamine receptors (particularly the D_2 receptors in the mesolimbic dopamine pathway) and block the action of the neurotransmitter dopamine.

- Typical antipsychotics are effective in treating the positive symptoms of SCZ quickly, such as hallucinations and delusions.
- Typical antipsychotics also block the action of dopamine in other areas of the brain, which leads to problematic side effects, such as movement issues resembling Parkinson's disease.
- Chlorpromazine has a sedative effect, so is sometimes used to calm SCZ patients if they are anxious when admitted to hospital.
- Atypical antipsychotics, such as clozapine, were developed to combat the side effects of typical antipsychotics. They are effective in treating hallucinations and delusions. There is some evidence they also treat negative and cognitive symptoms.
- Like typical antipsychotics, they bind to the D_2 receptors to block the action of dopamine, but they then rapidly dissociate to allow normal dopamine transmission. This combats the movement side effects experienced with typical antipsychotics.
- Clozapine also acts on serotonin and glutamate receptors, which is thought to improve mood, reduce depression, and improve cognitive functioning.

Possible AO3 evaluation:

- A meta-analysis of 65 studies from 1959–2011 found that when patients took a placebo rather than their antipsychotic, 64% relapsed within a year compared to 27% who stayed on their antipsychotic.
- A review of 13 drug trials found that chlorpromazine improved patients' overall functioning, reduced symptom severity, and lowered the relapse rate compared to a placebo.
- A review of atypical antipsychotics found that clozapine was more effective than typical antipsychotics and other atypical antipsychotics. It also found that it was effective when typical antipsychotics had failed in 30–50% of patients.
- Some successful trials had their data published multiple times, which exaggerates effectiveness.
- Sedative effects are used to demonstrate effectiveness, but that doesn't mean a reduction in symptoms of psychosis.
- Most published studies only assess short-term benefits and often compare patients who keep taking antipsychotics with those suffering withdrawal from them. It's unclear how patients would fare once withdrawal symptoms stop.
- Side effects of typical antipsychotics include dizziness, weight gain, and movement problems (including involuntary facial movements). Distress from these side effects could cause patients to stop taking the drugs, which is a serious limitation in their effectiveness.
- Patients are more likely to continue with atypical antipsychotics due to fewer side effects, which increases the likelihood of a reduction in symptoms. However, patients using clozapine must have regular blood tests to prevent agranulocytosis, which can be fatal.
- A meta-analysis found no evidence for atypical antipsychotics being less effective, but there were fewer distressing side effects.

Credit other relevant material.

12. Marks for this question: AO1 = 6, AO2 = 4, AO3 = 6

This question is level-marked:

Level	Marks	Description
4	13–16	• Knowledge of biological explanations for schizophrenia is accurate and generally well detailed. • Application is effective. • Discussion is thorough and effective. • Minor detail and/or expansion of argument is sometimes lacking. • The answer is clear, coherent, and focused. • Specialist terminology is used effectively.
3	9–12	• Knowledge of biological explanations for schizophrenia is evident but there are occasional inaccuracies/omissions. • Application and/or discussion is mostly effective. • The answer is mostly clear and organised but occasionally lacks focus. • Specialist terminology is used appropriately.
2	5–8	• Limited knowledge of biological explanations for schizophrenia is present. • Focus is mainly on description. • Any discussion and/or application is of limited effectiveness. • The answer lacks clarity, accuracy, and organisation in places. • Specialist terminology is used inappropriately on occasions.
1	1–4	• Knowledge of biological explanations for schizophrenia is very limited. • Discussion and/or application is limited, poorly focused, or absent. • The answer as a whole lacks clarity, has many inaccuracies, and is poorly organised. • Specialist terminology is either absent or inappropriately used.
	0	No relevant content.

Possible AO1 content:

- Family and twin studies have found that the closer the degree of genetic similarity, the higher the concordance rate for SCZ, suggesting there is a genetic basis for the condition.
- Adoption studies support the genetic basis of SCZ; adoptees born to biological mothers diagnosed with SCZ were more likely to have an SCZ diagnosis (6.7%) compared to those born to non-SZ mothers (2%).
- Schizophrenia is believed to be polygenic.

- Excess dopamine in subcortical regions, particularly the mesolimbic pathway, is thought to cause positive symptoms such as hallucinations. This was highlighted by drugs that either increased or decreased dopamine.
- A deficit of dopamine in areas of the brain such as the prefrontal cortex (PFC) is thought to cause negative and cognitive symptoms. This was highlighted by PET scans that found lower levels of dopamine in the dorsolateral PFC in SCZ patients.
- Neural correlates are brain functions and structures that correlate with experiences. Neural correlates of SCZ experiences and brain functions/structures include:
    - Hallucinations correlate with lower activation levels in the superior temporal gyrus and anterior cingulate gyrus.
    - Avolition correlates with lower activity in the ventral striatum.
    - Developing SCZ correlates with grey matter loss in the frontal and temporal lobes, and increased brain ventricles.
    - Cognitive symptoms correlate with deficits within the PFC and its connections with other areas of the brain.
    - Working memory impairments correlate with deficits in the nerve connections between the hippocampus and the PFC.
    - Information processing correlates with reduced myelination of white matter pathways, particularly in the neural pathways between the PFC and hippocampus.

Possible AO2 application:

- Niamh is indicating that genetic factors are the cause of Lorenzo's SCZ, meaning that Lorenzo may have inherited one or more candidate genes from his biological mother who has SCZ.
- Abena is referring to the action of neurotransmitters in the brain, where an excess or deficit of dopamine in certain areas can cause positive and negative symptoms.
- Abena is also referring to neural correlates, such as the negative symptom of avolition correlating with lower activity in the ventral striatum.

Possible AO3 discussion:

- Evidence that genetics makes people vulnerable to developing SCZ include:
    - Adoption studies show that biological children of people with SCZ have a higher risk of SCZ.
    - Researchers found that the more genetically similar individuals are, the higher the risk of developing SCZ.
- Researchers have stated that MZ twins are treated more similarly and experience more identify confusion (being treated as though they are the other twin) than DZs. This suggests that higher concordance rates for MZ twins might not indicate a genetic heritability for SCZ but can instead emphasise the importance of environmental factors.

- Antipsychotic drugs do not stop hallucinations and delusions in about one third of people, and some people experience them despite levels of dopamine being normal. This suggests that abnormal activity of dopamine is not the sole cause of positive symptoms, and that other neurotransmitter systems may also be responsible.
- Neural correlates only show the relationship between brain functions and/or structures with experience, but not causation. E.g. rather than lower activity in the ventral striatum causing avolition, avolition could lead to less information passing through the striatum, causing lower activity in this area. This suggests that although neural correlates exist, they tell us little about explanations for SZ.

Credit other relevant material.

Questions on previous content

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1. Marks for this question: AO3 = 2

2 marks for a clear and coherent explanation of one limitation of the peer review process, using appropriate terminology.

1 mark for a brief or muddled explanation of one limitation of the peer review process.

Possible AO3 evaluation:

- Finding an expert to do the peer review isn't always easy.
- Peer review is usually anonymous so the reviewer can be objective and honest, but some reviewers may use this anonymity for their own gain. E.g. it could lead reviewers to sabotage good research because they are either a rival or they want to do the research themselves.
- Publication bias: journals tend to publish positive results to improve their reputation. This can lead to misperceptions and exaggerating some findings.
- If peer-reviewed research has been published that was incorrect due to ineptitude or fraud once the views are out in the world it's hard to retract them.

Credit any valid limitation.

2. Marks for this question: AO1 = 2, AO2 = 2

4 marks for the correct answer with or without working out.

If the answer is incorrect, marks awarded for correct working out:

$28 - 13 = 15$

$\left(\frac{15}{13}\right) \times 100 = 115.38\%$

115.4% to 4 significant figures.

3. Marks for this question: AO2 = 4

Means:

1 mark for the conclusion: when people watch a horror film before bed, it will increase the number of dreams they have compared to watching a comedy.

1 mark for justification/application: this is supported by the difference in the mean number of dreams per night between the conditions (horror/comedy), which show a higher mean number of dreams for horror (28) than watching a comedy (13).

Standard deviations:

1 mark for the conclusion: the mean number of dreams after watching a horror film is more varied/dispersed/spread out than when watching a comedy.

1 mark for justification/application: the higher standard deviation (5.6) for horror films shows the mean number of dreams were more varied than the standard deviation (1.2) for comedy films.