

Topic 1 Types of conformity and explanations for conformity

Discuss normative social influence and informational social influence as explanations for conformity. (12 marks AS)

Normative social influence is where you go along with the majority, even though you don't really accept their point of view. For example, we may laugh at a joke someone tells, even though we do not find it funny. This is likely to be because we want to be accepted by the group and not feel rejected by them. For normative social influence to happen, we have to believe that the group is watching us to see if we conform or not.

Informational social influence is where you go along with the majority because you think they have more information about a situation than you do. We want to feel confident that our perceptions and beliefs are correct, so we use the majority's opinion to check. This is more likely to happen if the situation is ambiguous or if others are experts. For example, if we are unsure about which piece of cutlery to use at a formal dinner, we might look to others for advice on which fork to use for each course.

There is a lot of research support for normative social influence. For example, Schultz *et al.* found that we can use normative social influence to make people behave more responsibly, as with energy conservation. They found that hotel guests who were exposed to a message about how 75% of guests reused their towels reduced towel use by 25%. These findings support the idea that people go along with the majority because they want to fit in.

Some studies have shown how exposure to the beliefs of others can affect our judgement. Fein *et al.* found that knowledge of other people's reactions can influence how people judge candidate performance in US election debates. When participants saw what they thought was the reaction of their fellow participants on a screen, there were large shifts in participants' judgements of the candidate's performance. This shows that people are affected by informational social influence.

The power of normative social influence can be seen in research on adolescent smoking. This research, done by Linkenbach and Perkins, found a relationship between the likelihood of people starting smoking and people's normative beliefs. When teenagers were told most of their peers didn't smoke, they were less likely to start smoking themselves. This shows that people do shape their behaviour to fit in.

Level 4 answer (10–12 marks)

Examiner's comments: There is no wasted content in this essay; everything is accurate and detailed, and above all, highly organised. There are two AO1 paragraphs and three AO3 paragraphs, which seems about right for an AS essay.

AO1 description of the two explanations of conformity is accurate and detailed with effective use of specialist terminology.

AO3 evaluation was well balanced across the two explanations, clearly organised and effective.

Examiner's comments

Always a good idea, as here, to get straight into answering the question rather than long rambling introductions that don't really contribute much. A good start.

This is another accurate and detailed description, this time of informational social influence. An appropriate example adds the right sort of detail.

The careful construction of this answer is obvious. Clearly dividing your answer into descriptive and evaluative paragraphs is an effective way of controlling what you write. This is a good example of the PEEL technique that we advocate throughout this book.

Another clear and effective paragraph, this time dealing with informational social influence. It states the point, provides evidence *and* elaboration then links back to the material being evaluated.

This answer keeps the effective development of AO3 points going right through to the end.

Topic 2 Variables affecting conformity

Outline and evaluate research into group size, unanimity, and task difficulty as variables affecting conformity. (16 marks A level)

Asch's research shows that there are many variables that affect conformity, including group size, unanimity and the difficulty of the task. He conducted several different experiments to see which variables had the most significant effects on conformity.

Examiner's comments

In questions such as this, it is better to stick to *findings* of research, but this context setting paragraph is appropriately brief.

Topic 3 Conformity to social roles

Discuss conformity to social roles as investigated by Zimbardo. (12 marks AS)

Zimbardo *et al.*'s prison simulation study investigated conformity to social roles, with participants being randomly assigned the role of a guard or a prisoner. They wanted to see how both groups would behave in their role when there was no authority figure telling them what to do.

The guards wore reflective sunglasses, which stopped the prisoners being able to see their eyes and prisoners wore a smock with an ID number on it. The prisoners were referred to by their ID number, not their name, and only allowed certain rights, such as toilet breaks and two visits per week. The guards quickly conformed to their role, becoming tyrannical and abusive, while the prisoners became passive and accepted their more lowly position. This showed that both groups conformed to their social role. Even though it was due to last for two weeks, Zimbardo was forced to stop the experiment after six days as it had become too abusive to allow it to continue.

Zimbardo believed that the guards' change in behaviour was an automatic result of them conforming to their social role. However, not all of the guards behaved in this way. Some of the guards did not degrade or abuse the prisoners, showing that the guards chose their behaviour and so conforming to social roles is not as automatic as Zimbardo claimed it is.

Zimbardo's experiment was conducted ethically, as participants were given fully informed consent, and it was approved by an ethics committee. But it is still controversial because of the extreme distress the participants experienced. Zimbardo did stop the study early, but he could have stopped it even earlier. Afterwards, he debriefed his participants time and found no long lasting effects of the study. This shows the importance of ethics in research.

It has been argued that demand characteristics may have affected the Stanford Prison Experiment, weakening its internal validity. This means that the behaviour of the participants was not due to the prison environment, but instead it was a response to powerful demand characteristics from the experiment itself. Banuazizi and Movahedi found that students unfamiliar with the experiment could accurately predict the behaviour of the prisoner and guards. This suggests that demand characteristics affected the study's internal validity.

Level 4 answer (10–12 marks)

Examiner's comments: AO1 Description is accurate, well-detailed and concentrating (mostly) on the findings from Zimbardo's research.

AO3 Three relevant critical points, each is elaborated appropriately although at times the conclusions drawn do not add that much to the critical nature of the point. The answer would just about make it to Level 4 of the mark scheme.

Examiner's comments

This is sufficient contextual information to explain what the study was attempting to do.

As a general rule, 'findings' work better in response to questions such as this rather than procedural details.

This is an effective point of evaluation, of an appropriate length and linking the critical point back to Zimbardo's claim.

Another clear AO3 point, well developed and used effectively. The conclusion was a little vague, but the point would still work if this sentence was ignored.

A little repetition between the opening identification of the critical point and the conclusion drawn. The latter might have been a bit more insightful, perhaps suggesting why this is such a problem for our interpretation of the findings.

Topic 4 Situational variables affecting obedience

Discuss **two or more** situational variables that affect obedience (e.g. proximity, location, uniform). (12 marks AS)

Milgram's research required people to give electric shocks to another person. He told his participants that this was a test of learning on memory and that they were the 'teacher' and the other person was a learner, although he was actually a confederate of Milgram's. Every time the learner got a question wrong, they were told to give him an electric shock by the experimenter. These shocks increased by 15V each time, going up to 450V. This research found that 65% of the participants went to 450V and all went to at least 300V.

Examiner's comments

This opening paragraph is too general. It doesn't really identify which of the situational variables is being discussed. Many students would make the same mistake, i.e. launching into their standard 'Milgram answer' without looking at the specific demands of the question.

Topic 8 Minority influence

Outline and evaluate the role played by consistency, commitment, and flexibility in minority influence. (16 marks A)

Minority influence is where members of the majority group change their beliefs and behaviours as a result of their exposure to a persuasive minority. In order for this to be effective, the minority needs to be committed to their message and consistent in their approach. At first, the majority often assume the minority is wrong, but if they are consistent, then others will reassess their point of view and consider the issue more carefully. If the minority stays consistent, then there must be a reason for it.

If the minority are committed to their message, then it is more likely to be listened to because it is difficult to ignore a group of people who are committed to their position. It suggests that they are confident in their belief and the minority demonstrate courage as they go against the norm, sometimes encountering hostility from the majority. The degree of commitment shown by minority group members is greater because of the cost involved in being in the minority and this commitment may persuade majority group members to change their position to that of the minority.

Minorities are relatively powerless so they need to be flexible in their approach, too. They need to negotiate their position with the majority, rather than try to enforce it. A rigid minority who doesn't compromise may be seen as narrow minded and unwilling to consider alternative points of view, which will not help them to change the opinions of the majority.

Minority influence is not always effective because we tend to believe we share majority beliefs. If the majority express a different view to ours, we might consider their view carefully to understand why they think what they do. However, we do not process a minority's message in the same detail as we may consider it a waste of time. Therefore, the minority's message tends to be less, rather than more, influential.

However, better quality decisions can be made by numerical minorities, for example in groups at work. Van Dyne and Saavedra found that better decisions were made when a dissenting minority was present. Nemeth argues that exposure to dissenting opinions makes us search for more information and think about more options. This shows that, even if dissenters are wrong, they liberate people to think more about an issue.

Flexibility is important in minority influence. This is supported by Nemeth and Brilmayer who found that confederates holding a minority view who compromised were more influential. However, they also found that being too flexible too early on weakens the minority's position because it looks like they have simply conformed to the majority view, rather than being seen as being flexible.

One problem with minority influence is that convincing people dissenting minorities are valuable remains difficult. We may superficially accept dissent to appear tolerant. However, persistent dissent is seen as disrupting group harmony. Nemeth argues majority viewpoints persist because a minority viewpoint is often belittled, and dissenters are marginalised. This means opportunities for innovative thinking, which minority influence brings, is often lost.

There is a tipping point for commitment where the number of people holding a minority position is sufficient to change majority opinion. Xie et al. found 10% of committed opinion holders was necessary to 'tip' a majority into accepting the minority position. The minority were only successful if they were also consistent in their viewpoint, showing that commitment and consistency are both needed if minority influence is to be effective.

Examiner's comments

Three very effective AO1 paragraphs that cycle through the required topics of consistency, commitment and flexibility. Each is covered in appropriate (and accurate) detail and having three distinct paragraphs makes it easy (for the examiner and the student) to check that the different requirements of the question are being met.

Good AO3 paragraph, following the PEEL route. Whilst this is not the only way to elaborate evaluative material, it does work well here.

Both these AO3 paragraphs begin by identifying the critical point, showing evidence to support it and then offer further elaboration to make the point effective. It is not required to draw a conclusion (as in the first of these two paragraphs) but if it says something new (as here), then it is an excellent way of rounding off a critical point.

These last two paragraphs extend the overall quantity of AO3 evaluation to justify the 10 marks nominally assigned to AO3 in this question. In an A level extended writing question worth 16 marks, there should be proportionately more AO3 than AO1, which is what has happened here.

Level 4 answer (13–16 marks)

AO1 Lots of detail, accurate and well-organised places this clearly in the top level of the mark scheme.

AO3 Appropriate proportion of AO3 to AO1. Each of the five paragraphs is clear and effective and, like the AO1, puts it well into the top level of the mark scheme.

Topic 9 Social influence processes in social change

Discuss the role of social influence processes in social change. (12 marks AS)

If an individual is exposed to a persuasive argument, they may change their position to match that of the minority. If the minority draws attention to the issue, and the majority holds a different view, then there is a conflict, which the majority are motivated to reduce. This cognitive conflict doesn't always result in the majority changing their position, but it does mean that they think more deeply about an issue. It's been found that if the minority is consistent in their message, then they are more influential and so it is important for the message to be consistent over time. Initially, the minority's influence has a relatively small effect, but over time, it spreads more widely as more people consider the issues being considered. When it reaches a tipping point, there is a wide-scale social change, such as the vote being given to all adults in the UK due to the minority influence of the Suffragettes.

However, the majority can affect social change, too. Behavioural choices are often related to group norms and so if people believe something to be the norm, then they are more likely to alter their behaviour to fit that norm. Behaviour is, therefore, based more on what people think others believe or do, rather than what they actually believe or do. Social norms interventions typically start by identifying a risky behaviour in a target population. Perception correction strategies can then be used to help change people's behaviour. The aim of these strategies is to tell the target population the actual norms, rather than the perceived ones.

History has shown us that social change happens gradually if it is done through minority influence. People have a strong tendency to conform to the majority, so groups are less likely to engage in social change. The influence of the minority is frequently more latent than direct, so minorities influence the *potential* for social change rather than direct social change.

Another problem with minority groups influencing social change is that minority groups are often considered deviant by the majority, which limits their influence. The majority may avoid agreeing with minorities to avoid being seen as deviant themselves. The message of the minority might, therefore, be less influential because the majority are focusing on the source of the message rather than the message itself.

Social change does not always happen after social norms interventions. For example, some students were given normative information that corrected their misperception of how much students drink. DeJong et al. found that students' perceptions didn't change and they did not change their drinking habits. This suggests that social norms interventions alone are not sufficient for social change to occur.

Level 4 answer (10–12 marks)

AO1 First paragraph could have been more explicitly linked to social change but rest of the material was clear and well-detailed.

AO3 Three very good AO3 paragraphs, well developed and clearly effective.

Examiner's comments

Good clear description of how minority influence works, but apart from a brief mention of the Suffragettes, this isn't explicitly linked to social change. It would have been more effective to choose a couple of aspects (e.g. cognitive conflict and consistency) and show how these related to the actions of the Suffragettes and the ensuing social change).

This is marginally better as the link to social change (through social norms interventions) is made more explicit.

Good clear AO3 point, that highlights that minority influence may only have the *potential* for social change.

Another limitation of minority influence is the problem of deviance. This is explained well and appropriate argument used to support the claim being made.

A final limitation is identified (social norms interventions don't always work) with evidence to support it and an appropriate conclusion drawn at the end.

Topic 4 Explanations of attachment: Learning theory

Describe and evaluate the learning explanation of attachment. (12 marks)

Learning explanations of attachment suggest that attachments are learned through classical and/or operant conditioning. According to classical conditioning, children associate the pleasure from food with the person who feeds them and thereby form an attachment. Classical conditioning claims that food is an unconditioned stimulus (UCS) which produces an unconditioned response (UCR) of pleasure. During the infant's early weeks, certain things become associated with food because they are present when the infant is fed, most notably the mother, who is referred to as a neutral stimulus (NS).

If a neutral stimulus is associated regularly with the UCS, it will produce the same response as the UCS which is pleasure. At this stage, the NS becomes a conditioned stimulus (CS) which produces a conditioned response (CR). Learning theorists called this newly formed stimulus-response 'mother love'.

One criticism of learning theory is that the research is based on animals. Learning theory is based on studies with non-human animals, such as Pavlov's research on dogs. This matters because behaviourist explanations may present an oversimplified version of human behaviour and attachment.

Another criticism of learning theory is the emphasis placed on food. Research by Harlow (1959) demonstrates that infant rhesus monkeys were most attached to a wire monkey that provided contact comfort and not food. This suggests that the learning explanation of attachment is oversimplified and ignores other important factors, such as contact comfort.

However, one strength of learning theory is its explanatory power. According to learning theory, infants do learn through association and reinforcement, however food may not be the main reinforcer. This shows that even though learning theory does not provide a complete explanation of attachment, it still has some value.

Examiner's comments

The answer provides a detailed and accurate explanation of classical conditioning, using all of the key terminology correctly.

The first evaluation point is effective, outlining the issue with animal research.

The second evaluation point is also effective, outlining an alternate explanation to learning theory.

The final evaluation point is also effective, outlining a strength of learning theory in terms of explanatory power.

Level 4 answer (10–12 marks)

Note: It is possible to explain the learning explanation of attachment at AS level by describing either classical or operant conditioning in detail. However for A-Level, it is advisable to describe both classical and operant conditioning.

Examiner's comments: AO1: The answer provides a detailed explanation of the formation of attachment through classical conditioning.

AO3: All the evaluation is thorough and effective and the answer includes a broad range of in depth evaluative evidence. A good range of specialist terms have been used throughout.

Topic 10 The influence of early attachment

Discuss research into the influence of childhood on adult relationships. (12 marks)

Hazan and Shaver (1987) conducted a study to investigate the influence of childhood on later adult relationships, and to test the internal working model. Hazan and Shaver created a questionnaire called the 'Love Quiz' which examined current attachment experiences and attachment history. The questionnaire, which was placed in a local newspaper, also asked about attitudes towards love to assess the internal working model.

620 participants responded to the questionnaire and Hazan and Shaver found a positive correlation between attachment type and love experiences. Securely attached adults described their love experiences as happy, friendly and trusting. In addition, a relationship was found between the conception of love and the internal working model. These results support the idea of an internal working model and demonstrate the influence of childhood, on later adult relationships.

However, one issue with Hazan and Shaver's research is that the findings are correlational. Although the 'Love Quiz' found a link between the internal working model and later adult relationships, the researchers were unable to establish a cause and effect relationship. This matters because researchers are unable to conclude that the internal working model determines later relationships, as there may be other factors which cause the differences found.

Another criticism of attachment research is the reliance on retrospective classification. Studies like Hazan and Shaver rely on adults answering questions about their early lives in order to assess infant attachment. This matters because the research findings may not be valid.

A final criticism of attachment research is it is overly deterministic. The research by Hazan and Shaver suggests that very early experiences have a fixed effect on later adult relationships and therefore our adult relationships are determined by early experiences. Therefore, a child who is insecurely attached at one year of age is doomed to experience emotionally unsatisfactory relationships as an adult.

Level 4 answer (10–12 marks)

Examiner's comments: AO1: The research of Hazan and Shaver is explained accurately and is detailed. The material selected is appropriate and tailored to the question.

AO3: The evaluation is generally thorough and effective and includes a broad range of evidence in reasonable depth. The evaluation could be improved by providing further elaboration in places.

Examiner's comments

The method section is accurately explained, containing an appropriate level of detail.

The results section is detailed and accurate.

Although this is an effective evaluation point, it could have been improved by providing an example of another factor that could influence adult relationships.

This evaluation point is reasonably effective. It could be improved by saying why the research findings may not be valid.

The final evaluation point has not explained why determinism is an issue. It would be worth noting that many psychologists disagree with determinist theories.

Topic 5 Localisation of function – A level only zone

Discuss localisation of function in the human brain. (16 marks)

The brain has different structures within it that have different functions, for example the brain stem regulates autonomic functions in the body like heartbeat, breathing and swallowing. The cerebellum is involved with coordination and balance. And the hypothalamus is a very small structure in the middle of the brain with a very important function of communicating with the endocrine system, mainly via the pituitary gland.

As well as these separate structures, the cerebral hemispheres have areas of localised function within them. The visual cortex is at the back of the cerebral hemispheres, and each one receives signals from the opposite eye. The auditory cortex receives information from the ears and it is at the side of the head. Near to this is the language centre of Wernicke's area, which processes language for comprehension. This is just in the left front lobe. Also in the left front lobe but a bit further forward is Broca's area which is involved in speech production. This is near to the motor region that controls the mouth. At the top of the brain are the motor regions that control muscle movements, and the somatosensory area that receives information from the touch receptors in the skin.

The idea about localisation of function first came from studies of patients with brain damage caused by strokes. Broca's area is named after Broca, who studied patients who all had damage in a similar area and had lost the power of speech. Wernicke's area similarly is named after Wernicke, whose patients could still speak but couldn't understand speech, and didn't make much sense. This shows that there are specific areas in the brain which are specialised for speech functions.

However, this evidence could have problems as Broca and Wernicke were only able to study their patients' brains after they had died, and strokes actually affect larger areas of the brain not just a specific area each time. In fact another researcher looked at some of Broca's patients preserved brains using MRI scans, and found that they had damage to larger areas. Also it seems that if the damage only affects Broca's area itself it only causes a temporary effect on speech. This shows it might be damage to networks that affects function, not just small areas.

More evidence that networks matter comes from a case where a patient lost the ability to read, and their brain damage turned out to be in a part that connects the visual cortex to Wernicke's area. This supports the idea that complex functions like reading involve a whole network of areas, not just a small area of the brain.

Another criticism of the idea of localisation comes from individual differences, as people have activation in different areas when they do the same task. And people can often recover some function after brain damage, by different parts of the brain taking over (plasticity).

Level 3 answer (top end) (9–12 marks)

Examiner's comments: Overall, a clear essay with a very logical structure and argument leading towards a conclusion in the last-but-one paragraph. Some of the description is a bit thin, so this is at the borderline between level 3 and 4.

Examiner's comments

6 marks available for A01, 10 marks for A03

This is an effective use of knowledge of larger brain structures and how they relate to different functions of the brain.

A clear, accurate paragraph of A01 describing localisation in the cerebral cortex. There is limited identification of the lobes in which the different areas as situated, but the student clearly has a visual image of the brain which they are using to describe the locations. The functions are simply described, without the pathways being explained, but the material is connected together into a concise, readable description.

A03 evidence for Broca's and Wernicke's areas. Well linked.

This evidence is successfully evaluated with later evidence from MRI scans, leading into a broader view of functional networks

Evidence for functional networks relating to a specific function. Again well linked.

A couple of brief criticisms, not unpacked but relevant still. This doesn't really add much to the evaluation.

Topic 10 Ultradian and infradian rhythms – A level only zone

Outline and evaluate evidence for infradian and/or ultradian rhythms. (16 marks)

Ultradian rhythms are natural body rhythms that are shorter than 24 hours, such as the stages of sleep. There is evidence from sleep research that the five stages of sleep generally fit roughly onto a 90-minute cycle that repeats through the night. Each stage, such as REM (rapid eye movement) sleep and Non-REM sleep, has typical EEG patterns. However, the patterns are not always identical and they do show individual differences. In a sleep lab study, individuals' sleep patterns were consistent over a ten-day period but different from each other. Sleep labs are able to control conditions so this has good validity. This shows that the particular sleep patterns of each individual may be genetically determined.

Even in the day, there is a 90-minute cycle of alertness alternating with fatigue and poor concentration. This is called the Basic Rest Activity Cycle (BRAC). Ericsson studied professional musicians and found that they tend to follow this pattern, with 90-minute practise periods alternating with a break or a nap. Many other musicians, athletes and chess players have the same ultradian pattern too. This means that there is strong support for the BRAC in different groups of people who choose how to spend their time, although it may not be the same in people who have fixed working hours.

Infradian rhythms have a cycle that is longer than 24 hours. These include the female menstrual cycle, which follows a roughly 28-day cycle, although it can vary from this in different individuals. It is regulated by oestrogen and progesterone, hormones that are produced by the pituitary gland, and ovulation takes place just after an oestrogen peak roughly half way through the cycle. As well as this endogenous regulation, there is some evidence of impact from exogenous factors. When women live together, like girls in a boarding school or nuns, their cycles tend to become synchronised with each other. In order to find out how this works, Russell put sweat samples from one group of women onto the top lips of women living in a separate group, so they would smell the sweat. Their menstrual cycles became synchronised with the first group, which suggests that there is a chemical in the sweat that triggers this effect. This is called a pheromone. This is evidence that infradian rhythms may have an interaction between endogenous and exogenous control.

The menstrual cycle has interesting effects on female psychology. For example, it is found that around ovulation women prefer more 'masculinised' faces, whereas at other times they would choose a more 'feminised' face. The suggestion is that a masculinised face represents healthy genes to be passed on to children at the time when there is an egg available for fertilisation, whereas the feminised face represents a better bet for a long-term partner, as they may be kinder and more cooperative. This would support an evolutionary explanation of the effect of hormones on female mate choice, as these choices would maximise survival off offspring.

Level 4 answer (13–16 marks)

Examiner's comments: This student has chosen to make a logical argument, addressing ultradian rhythms first, then infradian rhythms. Evaluation of the evidence fits fluently within this analysis rather than being broken up, and this addresses the question very effectively.

Examiner's comments

6 marks available for A01, 10 for A03

A clear first paragraph with a good conclusion to the point, and evaluation of the evidence.

Clear outline of the BRAC with supporting evidence, and evaluation of the evidence.

This paragraph is quite long, and might have been better broken up. However, it explains the menstrual cycle effectively and uses research evidence to support this too.

The final paragraph gives an interesting application of the evolutionary approach, and is clearly argued.

Altogether, a thorough and clear discussion.

Examiner's comments

The effect of demand characteristics on the findings is clearly explained. 3 marks.

Note that these answers needed to be written in the table, but you should still show some working in the place provided. Make sure you understand how to calculate percentages, as they are a really useful way of comparing findings from different sized subgroups of participants. 3 marks.

Correct, 1 mark.

Correct. (There were 12 people under 10, and 17 over 40, with 72 participants altogether. So $72 - (12 + 17) = 43$ between 10 and 40.) 2 marks for a bit of adding and subtracting. ii) correct. 1 mark.

Effective linking of findings to conclusions, and a suggestion about what might have caused this difference in conformity in children. There is no suggestion relating to older people or females, although the comment about significance is creditworthy. 4 marks.

b) Give **one** criticism with the method you described in a) (3 marks)

There is the possibility of demand characteristics, which might have more effect on some participants than others. For example, adults might be more likely to guess the purpose of the experiment and answer as they think they are meant to.

c) Calculate the percentage of each type of participant which conformed. Fill in the percentages in the right hand column of the table, giving your answers to 2 significant figures. (3 marks)

$$\text{Young: } 7 \div (7+5) \times 100 = 58\%$$

$$\text{Older: } 11 \div (11+6) \times 100 = 65\%$$

$$\text{Female: } 13 \div (13+23) \times 100 = 36\% \text{ Male:}$$

$$\text{Total: } 24 \div 72 \times 100 = 33\%$$

$$11 \div (11+25) \times 100 = 31\%$$

d) What fraction of the total sample of participants conformed? (1 mark)

$$33\% = \frac{1}{3}$$

e) i) What age group did most participants fall into? (2 marks)

Between 10 and 40 years

ii) How many participants in this age group conformed? (1 mark)

$$24 - (7+11) = 6$$

f) What conclusions can you draw from this study about conformity? (4 marks)

Only 6 of 43 people aged 10-40 conformed (14%) so people in this age group conform the least. Young children and people aged over 40 conform more, maybe because children are less certain what is required so follow the behaviour of others. Females conform more than males, although this is a small difference and may not be significant.

Examiner's comments

This question has two marks, so needed more than just the name of the design. 1 mark.

This answer is much too brief. It could have explained more about what order effects are. However, it does use correct terminology, so 2 marks.

The mean is correctly calculated, and can be used with this sort of data. However, the median would also be accepted. 4 marks.

The ranges are correctly calculated. Remember that the convention in psychology is to add 1 to the difference between the highest and lowest scores. 4 marks.

This is well explained and linked to the actual data. 3 marks.

Topic 18 Measures of central tendency and dispersion

A study was conducted to see how children aged between two and four years reacted to their mother's voice, compared with the voice of a stranger. The children listened to the voices through a headset. Some children heard their mother's voice first, reading a short passage, then the stranger's voice, reading the same passage. Other children heard the voices in reverse order. The children's responses were assessed through observation and a 'happiness' score was calculated. The results are shown in the table.

Child	Happiness score listening to mother's voice	Happiness score listening to stranger's voice
1	6	4
2	5	4
3	8	3
4	1	0
5	7	3
6	9	7
7	5	5
8	5	6
9	6	4
10	4	4

a) Explain which experimental design was used in this study. (2 marks)

Repeated measures

b) Explain why the researcher played the voices in different orders to some of the children. (3 marks)

To counterbalance, to avoid order effects.

c) Calculate a suitable measure of central tendency for each set of scores, and explain why you chose this measure. (5 marks)

Mother's voice: mean = 5.6

Stranger's voice: mean = 4

I chose the mean because it takes into account all the data, so it is a sensitive measure.

d) Calculate the range for each set of happiness scores. (4 marks)

$$\text{Mother's voice: range} = 9 - 1 = 8$$

$$\text{Stranger's voice: range} = 7 - 0 = 7$$

e) Why might the standard deviation be a better measure of dispersion than the range for this data? (3 marks)

The standard deviation takes all the values into account without being distorted by extreme values - here, there are extreme values which make the range very high even though most of the scores are bunched up in the middle, especially for the Stranger condition.

Chapter 1 Research methods

1 Read the item then answer the questions that follow.

A cooking supplies company wanted to extend the range of their customer base, and funded a psychologist to research the way that people of different ages cook. They advertised in their shop and chose 5 younger participants (participants 1–5) and 5 older participants (participants 6–10) from those that applied. They set up a kitchen containing 100 pieces of equipment, and gave participants two different tasks.

Task 1: Participants were given recipes to follow, with free choice of cooking equipment. They were scored on how many pots and pans and other utensils they used.

Task 2: They were then asked to make a dish of their choice in 30 minutes using a selection of ingredients that were provided. These were scored by two independent raters for creativity and nutritional value, with scores on a scale of 1 to 5, where 5 is highly creative or highly nutritious. The scores in the table below are the mean of these two ratings for each participant's dish.

The following results were obtained:

Participant	Age	Task 1 score	Task 2 scores	
		number of utensils	creativity	nutrition
1	18		4	3.5
2	20		4	3
3	22		3	3
4	25		5	4.5
5	19		3	2.5
6	45		3	4
7	53		2	3.5
8	49		4	4
9	56		2.5	4
10	48		3.5	3

a) Give **one** reason why the dishes in task 2 were scored by two independent raters. (2 marks)

So they could work out the average, and to check for reliability of the ratings.

b) Explain how the researchers could assess the reliability of the ratings for creativity and nutrition. (2 marks)

They could calculate the correlation of the scores from the two raters. A high correlation means a high reliability.

c) Write a suitable non-directional hypothesis for this investigation. (2 marks)

There will be no difference between the way that older and younger people cook.

d) The researchers wish to compare older and younger cooks' use of utensils. Suggest how they could use their data to compare these groups. (2 marks)

They could work out the average of each group and compare them to see which group used more utensils on average.

e) Calculate a suitable measure of central tendency for the creativity scores of older and younger cooks. Show your working. (3 marks)

Older: $(3 + 2 + 4 + 2.5 + 3.5) / 5 = 3$

Younger: $(4 + 4 + 3 + 5 + 3) / 5 = 3.8$

f) Identify a suitable graphical display for the data from task 2, and briefly explain why this display would be appropriate. (3 marks)

The means could be displayed on a bar chart, with bars for each age group for creativity and nutrition. This is because they are separate categories.

Examiner's comments

This is two reasons. One + elaboration needed here.

Clear answer, good elaboration.

This is a null hypothesis. No marks.

1 mark. They could also compare standard deviations, or they could carry out a statistical test of difference.

Means are correctly calculated, with working shown. 3 marks.

Correct chart, explanation of the bars, categories gets another mark. 3 marks.

Describe and evaluate the influence of culture and/or media on gender roles. (16 marks)

Children may learn gender roles through social learning (observation) and through acquiring gender schemas, but what they learn depends on the norms of the culture they live in. This is because they are learning from peers, parents and the media, who tend to conform to gender stereotypes which are embedded in the culture around them. There are cultural differences between expectations of male and female behaviour in different countries, so this shows that culture influences gender roles.

For example, Margaret Mead studied groups in Papua New Guinea and found that one group had gentle, cooperative men and women, another group had violent and aggressive men and women, whereas the third group had dominant women and submissive men. These cultural differences show that gender differences are not universal or innate, so they must be learned from a culture.

However, Mead's research has been criticised as she may have been biased and the people told her what they thought she wanted to hear (demand characteristics). Also, later on she changed her conclusions and decided that there were more similarities than differences between males and females.

Many people believe that women are more conformist than men, but actually conformity varies between cultures, and women in traditional, sedentary societies are more conformist than those who move about, so this shows that culture influences gender norms. Also, as societies change the norms can change, for example women in the UK do more housework than men but this gap is gradually decreasing. This means that cultural norms can change and evolve with time.

A lot of cultural influence comes via the media, which can reinforce stereotypes, or can present counter-stereotypes. Analysis of TV programmes shows that men are generally portrayed as independent and ambitious, whereas women are shown as dependent and unambitious (Bussey and Bandura). Also men are shown as controlling events whereas women are shown as passive. This reinforces gender stereotypes. The Notel study by Williams showed that children's views became more gender stereotyped after TV had been introduced, showing that media exposure can affect attitudes.

It may be possible to use the media to challenge these stereotypes, by showing adverts with women in non-traditional roles, but this doesn't always help to reduce stereotypes – Pingree found that young boys have even stronger stereotypes when they have been shown these ads. This fits with gender schema theory, which shows that schemas are very resistant to change and people's memories often distort what they see to match their schemas. So it may be possible to use the media to change cultural stereotypes, but it is not easy.

An alternative explanation is Eagly and Wood's social role theory, which looks at gender roles as a result of biological differences. Women have children and men are generally physically stronger, so traditionally there was a division of roles between men (doing physical work) and women (caring for children). Social role theory predicts that if there aren't any requirements for this division of labour any more, as jobs become less physical and childcare is available, then gender roles will get more similar. So gender differences in behaviour may be a result of biological requirements (nature) rather than culture (nurture).

Level 4 (13–16 marks)

Examiner's comments: Overall a thoughtful, well-argued answer.

Examiner's comments

A good introduction linking **how** gender roles are learnt (social learning and schemas) with **what** is learnt (cultural stereotypes) and **from whom** (peers, parents, media).

The evidence is brief but relevant and is very well linked back with a conclusion.

This research is then evaluated, although the second point is more relevant to gender differences than cultural influences.

Another relevant example of cultural differences, and how they can change.

This paragraph clearly explains the link between cultural stereotypes and the media's reinforcement, and links in some evidence.

This paragraph develops the relationship between the media and culture, examining how media can be used to challenge cultural stereotypes.

Finally a comparison with another theory allows the nature–nurture debate to be brought in.

Discuss the use of cognitive behavioural therapy in the treatment of schizophrenia. (16 marks)

Cognitive behavioural therapy for psychosis (CBTp) aims to identify and correct feelings and behaviours that are negatively influenced by distorted beliefs. The idea is that by monitoring their thoughts and behaviours, schizophrenics are more able to find alternative explanations for why their symptoms occur. CBTp has various phases and these start with assessment, where the person's current symptoms are discussed with the therapist and some realistic goals are set.

Then the therapist empathises with the person's distress and highlights how they will work with the schizophrenic. The faulty beliefs are challenged by rationalising and disputing them. Normalisation is when the person's own psychotic experiences are placed on a continuum with normal experiences. The idea is that if someone is told that their experiences are common, then they feel less alienated.

Gentle questioning is also used to help them to understand their false beliefs and the person is encouraged and helped by the therapist to find healthier explanations for their behaviour.

It is hard to work out how effective CBTp is. NICE's review of the research suggests that CBTp is more effective in reducing symptom severity than drugs alone, but CBTp is usually used as well as drug therapy, so it is hard to see how effective CBTp is independent of antipsychotic medication.

Studies of CBTp's effectiveness can't allocate participants to treatment conditions randomly. But the meta-analytic studies of CBTp's effectiveness that use these studies don't take into account the quality of each study. This means that claims about CBTp's effectiveness may be biased by methodologically weak research studies.

Also, when methodologically sound meta-analyses of CBTp's effectiveness have been done, they show it has very little therapeutic benefit. Jauhar et al. found that CBTp only has a very small effect on the positive symptoms, like hallucinations and delusions. They also found that when assessment of improvement is done by 'blind' judges, this small effect disappears, suggesting that CBTp's usefulness may be overstated.

Addington and Addington say that CBTp is inappropriate in the initial acute phase of schizophrenia, but it is more appropriately used following stabilisation of symptoms with antipsychotic medication. This means that CBTp should be used in conjunction with drug therapy rather than as a 'first choice' therapy.

CBTp isn't an established therapy for treating schizophrenia, and in the UK CBTp is only available to 10% of people who could benefit from it. Even when it is available, many who are offered CBTp either refuse it or fail to attend therapeutic sessions. This means that if CBTp is beneficial, more needs to be done to raise its availability and uptake.

Level 3 (9–12 marks)

Examiner's comments: AO1 Although this answer is characterised by accurate description, there are occasions on which more detail is necessary.

AO3 There is plenty of evaluation in this answer, and some of it is extremely effective. However, it is only effective some of the time. This is a clear Level 3 answer, which approaches, but does not quite reach, Level 4.

Examiner's comments

This is an effective AO1 paragraph, describing the rationale behind CBTp.

Further AO1, which shows sound knowledge and understanding of how CBTp is used.

This AO1 paragraph seems incomplete. An example would be useful here.

Although creditable as AO3, this point needs clarification for its importance to be appreciated.

The same comment applies here. This AO3 point would benefit from clarification.

This is an effective AO3 paragraph, which strengthens the point made in the previous paragraph.

A short, but effective AO3 paragraph discussing the appropriateness of CBTp.

This final paragraph is also creditable as AO3.

criminal responsibility, and lawyers have used this as a defence. It can't be the case as everyone with the MAOA gene variant becomes a criminal, so a diathesis-stress model offers a better explanation.

Level 4 (13–16 marks)

Examiner's comments: To improve this answer, the links could be expressed more explicitly; AO1 merges into AO3 at times, and conclusions of studies are not always linked back to explain how they support the theory.

However, it is a very competent Level 4 answer.

Topic 6 Psychological explanations of offending behaviour: Eysenck's theory

Briefly outline Eysenck's theory of the criminal personality. (4 marks)

Eysenck's personality theory measures traits on three dimensions: extravert/introvert, psychotic/normal and neurotic/stable, which are measured using the EPQ – Eysenck Personality Questionnaire. Criminals are likely to be high on extraversion as they need more stimulation and are likely to get into risky behaviour. They will be high on neuroticism as they can be unstable and reactive or stressy. This can be an over-sensitive fight-or-flight system. They will also be high on psychoticism as these people lack empathy and can be aggressive and impulsive and anti-social. This might relate to testosterone levels, which are higher in men than women. All these factors are mainly due to genes.

Examiner's comments: Still, enough for 4 marks.

Examiner's comments

This outline clearly explains the dimensions of Eysenck's theory and how each one links to criminal behaviour, via biological mechanisms. It also identifies the genes as a factor, but does not explicitly state that this is a biological approach.

Topic 7 Psychological explanations of offending behaviour: Cognitive

Evaluate levels of moral reasoning as an explanation for offending behaviour. (6 marks)

Criminals are likely to be at the pre-conventional level of moral development, thinking that crime only matters if you get caught, or that the rewards of crime outweigh the risks of getting caught. This is supported by research by Gudjonsson who assessed young male offenders using a questionnaire, and found that about a third of them didn't think about the consequences of being caught or didn't think they would be caught. This supports the idea that they are at the pre-conventional level.

However, people at higher levels could also commit crimes for different reasons; for example if they are at the conventional level they might think it's worth committing a crime in order to help someone, like the Heinz dilemma. And if they're at the post-conventional level they might think there's a higher good, like animal rights activists breaking into research labs and releasing animals.

Also, Kohlberg's stages were about moral reasoning, and it's not clear whether people actually behave this way in real life. He used theoretical scenarios and in real life people's decisions are much more complicated. And his research was all on males, so it is gender biased as females develop a different sense of morals based on caring.

Examiner's comments: A fluent and effective answer. 6 marks.

Examiner's comments

This answer gives a brief explanation of levels of moral development, but just enough to be able to evaluate them, which is the focus of the question. There is supporting research which is well linked, and several criticisms which are well organised.

criminal responsibility, and lawyers have used this as a defence. It can't be the case as not everyone with the MAOA gene variant becomes a criminal, so a diathesis-stress model gives a better explanation.

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Topic 5 Explanation for nicotine addiction: Learning theory

Outline and evaluate the learning theory explanation of nicotine addiction. (16 marks)

The learning theory of addiction attempts to explain the initiation, maintenance and relapse of smoking (nicotine addiction).

Social learning theory can explain why young people start smoking, through the observation of social models who smoke (e.g. family and peers). Furthermore, vicarious reinforcement causes young people to expect positive consequences from smoking, thus leading to the initiation of a smoking addiction. Furthermore, as nicotine is immediately rewarding, people are then positively reinforced (e.g. by feeling less stressed) for smoking, which encourages them to continue smoking further.

Operant conditioning then continues to reinforce a person's nicotine addiction, through positive and negative reinforcement. A person may continue smoking to 'look cool' (positive reinforcement) or to provide them with relief from unpleasant withdrawal symptoms (negative reinforcement).

Finally, classical conditioning can explain why a person who tries to quit smoking might relapse, as regular smokers associate specific moods, situations and environmental factors with the rewarding effects of nicotine and therefore these cues can trigger a relapse.

The learning theory is a comprehensive explanation of smoking addiction and has received a wealth of support from a range of research, examining the initiation, maintenance and relapse of smoking. For example, Karcher and Finn (2005) found that if a person's parents smoke they are 1.88 times more likely to smoke. However, this figure rose to 2.64 times for siblings and 8 times for close friends. This suggests that the closer the social model, the higher the chance of initiation, supporting the idea that social learning is implicated in the initiation of smoking.

Research has also provided support for the idea of classical and operant conditioning involved in the relapse of smoking. Shiffman and Waters (2004) found that a sudden increase in negative moods, rather than a slow change in stress levels, was associated with relapse. Furthermore, there is even evidence that changes in negative moods can increase nicotine cravings. This suggests that negative reinforcement contributes to the maintenance and relapse of smoking, as people are more likely to smoke when they experience a negative mood, to remove these unhappy feelings (negative reinforcement). In addition, Wiers et al. (2013) found that smokers showed a significant approach bias towards smoking related cues, compared to ex-smokers and non-smokers. This approach bias was positively correlated with their cravings scores, which was not the case for ex-smokers and non-smokers. This suggests that smoking cues are present in heavy smokers and that classical conditioning plays a significant role in the relapse of nicotine addiction.

Despite the wealth of research support, the learning theory is unable to explain the different patterns of smoking behaviour found in men and women. Lopez et al. (1994) found that women tend to start smoking later than men. Other research has found that women are more likely to light up in stressful situations and experience withdrawal effects sooner than men. This matters because the learning theory of addiction is unable to account for these differences and therefore other factors must also be involved in smoking addiction. For example, cognitive explanations which examine the underlying thought processes involved in smoking, may be able to explain these differences.

Level 4 (13–16 marks)

Examiner's comments: AO1: This answer provides a very detailed account of the initiation, maintenance and relapse of smoking, using specialist terminology throughout. AO3: A range of strengths based on research support have been outlined in addition to an effective criticism which explores other explanations.

Examiner's comments

A detailed outline of the initiation of smoking is presented, with a good use of specialist terminology.

A good explanation of the maintenance of smoking through reinforcement.

Finally, a good explanation of relapse in terms of classical conditioning.

This is an effective evaluation point, supporting the role of SLT, using relevant research.

This is a very effective evaluation point, clearly explaining support for the role of negative reinforcement in the maintenance of smoking.

Further support for the role of classical conditioning has been presented effectively.

The answer has provided a weakness and explored the possibility of other explanations effectively.

Topic 4 Explanation for nicotine addiction: Brain neurochemistry

Outline and evaluate the brain neurochemistry explanation of nicotine addiction. (16 marks)

The brain neurochemistry explanation of nicotine addiction focuses on the role of dopamine and the brain's reward pathways.

Nicotine is the main active ingredient in tobacco and can have a range of different effects. Nicotine attaches to neurons in the ventral tegmental area (VTA). These neurons trigger the release of dopamine from the nucleus accumbens (NAc). Nicotine also stimulates the release of glutamate, which triggers the release of even more dopamine. Dopamine produces pleasure and a desire to repeat the behaviours again, contributing to an addiction.

The reason why dopamine levels remain high after the nicotine stimulus ends can be linked to the role of glutamate and GABA. Glutamate speeds up the activity of neurons, whereas GABA slows down neuron activity. Nicotine causes glutamate to speed up dopamine release, but it also prevents GABA from slowing it down after the dopamine levels have raised. This combination amplifies the effect of dopamine and the rewarding properties of nicotine, further contributing to the addiction.

There is a range of research support for the neurochemical explanation of nicotine addiction, including research examining drugs for epilepsy and research on patients with Parkinson's disease (PD). Paterson and Markou (2002) found that GVG (an epilepsy drug) reduces the surge of dopamine in the NAc that occurs after taking nicotine. This reduces the addictive tendencies of nicotine and other drugs that boost dopamine levels in the brain. This research highlights the link between dopamine and nicotine and provides a method of treating nicotine addiction which has fewer side effects than most smoking treatments. Furthermore, PD is characterised by a gradual loss of dopamine producing nerve cells, causing symptoms of PD to appear. Research suggests that smokers are less likely to get PD, suggesting that nicotine may have a neuroprotective function against the development of PD. This provides further support for the link between nicotine and dopamine, while also providing some insight into possible treatments for PD.

Further support for the neurochemical explanation comes from animal research. D'Souza and Markou (2013) blocked the transmission of glutamate which resulted in a decrease in nicotine intake in rats, which is consistent with the role of this neurotransmitter. This is because glutamate enhances the dopamine-releasing effects of nicotine, so blocking it would decrease the effects of dopamine for longer. This highlights the link between glutamate and nicotine, allowing researchers to potentially devise treatments based on blocking the transmission of this neurotransmitter.

Despite the research support, the neurochemical explanation is unable to explain the different effects found in men and women. Cosgrove et al. (2014) studied the brains of men and women using PET scans, while smoking. For women there was a strong dopamine effect in the dorsal put a men, whereas men had a strong effect in the ventral striatum. These results suggest that men and women smoke for different reasons, men for the nicotine effect and women to relieve stress. Furthermore, if men and women smoke for different reasons this highlights a cognitive factor which is not taken into consideration in the neurochemical explanation.

Level 4 (13–16 marks)

Examiner's comments: AO1: An accurate and well-detailed outline highlighting the role of dopamine, glutamate and GABA, using specialist terminology consistently. AO3: A thorough and effective evaluation, drawing on a range of research support and highlighting the limitations from research evidence and other explanations.

Examiner's comments

An example of the effects would have been useful here.

The explanation of dopamine is generally well detailed and accurate.

The role of glutamate and GABA are both explained accurately and in detail.

An effective evaluation point, using research support from epilepsy drugs.

Further effective evaluation, using evidence from patients with PD.

Very effective evaluation, using research from animal studies.

An interesting criticism of the neurochemical explanation, plus further evaluation highlighting other explanations.