



MEM3 Eyewitness testimony: the effect of misleading information (leading questions and post-event discussion)

AQA 7182 · Calculators not allowed · about 95 minutes

Total Marks

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Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show all your working.

Scenario: the road junction collision

Original scenario written for Revision Library.

At approximately 4pm on a weekday afternoon, a silver car pulls out of a side road and collides with a cyclist at a busy junction. Four pedestrians on the opposite pavement witness the collision. Police later interview the four witnesses separately, but two of them, Marcus and Delia, had already discussed what they saw with each other while waiting for the police to arrive.

- 1** Eyewitness testimony (EWT) refers to the evidence provided by people who witnessed a crime or accident.
 - (a)** Define what is meant by 'misleading information' in the context of eyewitness testimony. (2)
 - (b)** Define what is meant by a 'leading question', giving an example. (2)

(Total for Question 1 is 4 marks)

- 2** Loftus and Palmer (1974) conducted a laboratory study into the effect of leading questions on eyewitness testimony.
 - (a)** Outline the procedure Loftus and Palmer (1974) used to investigate the effect of leading questions on eyewitness testimony. (4)
 - (b)** Outline the findings of Loftus and Palmer's study. (3)
 - (c)** Explain how Loftus and Palmer's findings could be applied to the police interviews of the witnesses to the road junction collision described at the start of this booklet. (3)

(Total for Question 2 is 10 marks)

- 3** Two explanations have been proposed for why misleading information (such as a leading question) affects eyewitness testimony: the response-bias explanation and the substitution explanation.
- (a) Outline the response-bias explanation for the effect of leading questions on eyewitness testimony. (3)
- (b) Outline the substitution explanation for the effect of leading questions on eyewitness testimony. (3)

(Total for Question 3 is 6 marks)

- 4** As well as leading questions, eyewitness testimony can be affected by post-event discussion with other witnesses.
- (a) Outline research (for example, by Gabbert, Memon and Allan, 2003) into the effect of post-event discussion on eyewitness testimony. (4)
- (b) In the scenario at the start of this booklet, Marcus and Delia discussed the collision before being interviewed by police. Using the concept of memory conformity, explain how this could affect the accuracy of their evidence. (4)

(Total for Question 4 is 8 marks)

- 5** Misleading information does not always have the same effect: timing matters.
- (a) Explain why misleading information is generally more likely to distort a witness's memory when it is encountered after a delay, rather than immediately after the event. (3)
- (b) Suggest one implication of this for how quickly police should interview eyewitnesses after an incident. (3)

(Total for Question 5 is 6 marks)

- 6** Research into post-event discussion, such as Gabbert, Memon and Allan's (2003) study, can be evaluated in terms of its methodology.
- (a) Outline one strength of the method used by Gabbert et al. (2003) to study post-event discussion. (3)
- (b) Outline one limitation of using a staged, filmed event, rather than a real crime, to study post-event discussion. (3)

(Total for Question 6 is 6 marks)

- 7** The four witnesses to the road junction collision, described at the start of this booklet, are due to be interviewed by police.
- (a)** Suggest one thing the interviewing officer should do to minimise the effect of leading questions on the witnesses' accounts, justifying your answer using research from this topic. **(3)**
 - (b)** Suggest one thing the police should do to minimise the effect of post-event discussion on the witnesses' accounts, justifying your answer using research from this topic. **(3)**
- (Total for Question 7 is 6 marks)**
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- 8** Not every witness is equally susceptible to the effects of misleading information.
- (a)** Outline one individual difference, other than anxiety, that research suggests can affect a witness's susceptibility to the effects of misleading information. **(3)**
 - (b)** Suggest why this might be an important consideration for an officer interviewing an elderly witness or a child witness to the road junction collision. **(3)**
- (Total for Question 8 is 6 marks)**
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- 9** Research into misleading information has been evaluated using real-world evidence and its implications for the criminal justice system.
- (a)** Outline the findings of Yuille and Cutshall's (1986) research into a real eyewitness event, and explain how this research challenges the validity of Loftus and Palmer's laboratory findings. **(5)**
 - (b)** Outline one practical, real-world application of research into misleading information for the criminal justice system. **(5)**
- (Total for Question 9 is 10 marks)**
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- 10** Discuss research into the effect of misleading information on eyewitness testimony. Refer to the scenario about the road junction collision, described at the start of this booklet, as part of your answer.
- (Total for Question 10 is 16 marks)**

Mark scheme · MEM3 Eyewitness testimony: the effect of misleading information (leading questions and post-event discussion)

Question 1

- (a) **B1** incorrect information given to an eyewitness, usually after the event, that has the potential to distort their memory or account of what happened oe
- (a) **B1** can take the form of a leading question or information picked up from another source, such as another witness oe
- (a) **Answer: Incorrect information (via a question or another source) given to a witness after an event, which can distort their memory or account.**
- (b) **B1** a question that is phrased in a way that suggests or encourages a particular answer oe
- (b) **B1** credit any suitable example, e.g. 'How fast was the car going when it smashed into the cyclist?' (implying a high speed by the choice of verb) oe
- (b) **Answer: A question phrased so as to suggest a particular answer, e.g. asking how fast a car was going 'when it smashed into' rather than 'when it hit' another vehicle.**

Question 2

- (a) **M1** student participants were shown film clips of car accidents oe
- (a) **M1** participants were then asked to estimate the speed of the cars, using a question that included one of several different verbs (e.g. 'smashed', 'collided', 'bumped', 'hit' or 'contacted') to describe the collision oe
- (a) **A1** each participant only heard one version of the question, so verb was varied between (independent) groups oe
- (a) **A1** in a later part of the study, some participants were also asked (a week later) whether they had seen broken glass at the scene, although no glass was actually shown in the film oe
- (a) **Answer: Participants watched car-accident films, then estimated speed using a question with one of several verbs; some were later asked about non-existent broken glass.**
- (b) **M1** participants' estimated speed was influenced by the verb used in the question oe
- (b) **A1** more severe verbs (e.g. 'smashed') led to higher average speed estimates than less severe verbs (e.g. 'contacted') oe
- (b) **A1** participants who had heard the more severe verb ('smashed') were also more likely to wrongly report having seen broken glass a week later oe
- (b) **Answer: More severe verbs produced higher speed estimates and more false reports of broken glass a week later.**
- (c) **M1** if police officers use verbs that imply a particular severity when questioning the pedestrians (e.g. asking how fast the car was going when it 'smashed into' the cyclist rather than a neutral term), this could distort the witnesses' speed estimates oe
- (c) **A1** in line with Loftus and Palmer's findings, a more severe verb could lead the witnesses to report a higher speed than they actually observed oe
- (c) **A1** this shows why officers should use neutral, non-leading wording when interviewing eyewitnesses such as those at the junction oe
- (c) **Answer: Using a severe verb (e.g. 'smashed') when questioning the pedestrian witnesses could inflate their reported speed estimates, so officers should use neutral wording.**

Question 3

- (a) **M1** the wording of the question influences how a witness chooses to respond, without actually changing their underlying memory of the event oe
- (a) **A1** e.g. hearing 'smashed' may simply bias an unsure witness towards giving a higher guessed speed oe
- (a) **A1** so on this account the original memory trace remains unaltered, only the reported answer changes oe
- (a) **Answer: Leading wording biases how a witness answers, without changing their actual underlying memory of the event.**
- (b) **M1** the misleading information is actually integrated into, and becomes part of, the witness's original memory of the event oe
- (b) **A1** so the witness's memory itself is distorted/altered (substituted), not just their response oe
- (b) **A1** supported by the broken-glass finding in Loftus and Palmer's second experiment, since the leading verb affected recall of a different, unrelated detail (glass) rather than just the speed judgement being asked about oe
- (b) **Answer: The misleading information becomes part of the actual memory itself, distorting it (rather than only**

Question 4

- (a) **M1** pairs of participants watched the same simulated event but filmed from different camera angles, so each partner could see certain details the other could not see oe
- (a) **A1** pairs then discussed the event together before individually completing a recall test oe
- (a) **A1** many participants who discussed the event went on to wrongly recall at least one detail they had not personally seen, but had only learned about from their co-witness oe
- (a) **A1** this effect, where witnesses' accounts become similar/contaminated after discussion, is known as memory conformity oe
- (a) **Answer: Co-witnesses who saw different details discussed the event together, and many went on to (wrongly) recall details they had only heard from their partner, demonstrating memory conformity.**
- (b) **M1** Marcus and Delia may not have seen exactly the same details of the collision, since they were standing in different positions oe
- (b) **A1** during their discussion, one witness may have mentioned a detail (correct or incorrect) that the other did not personally see oe
- (b) **A1** in line with memory conformity, the other witness could go on to incorporate this detail into their own account, believing they remember it themselves oe
- (b) **A1** this could make the two witnesses' evidence to police artificially similar/contaminated, reducing the independence and reliability of their testimony oe
- (b) **Answer: Details from one witness's account may be absorbed into the other's memory during discussion (memory conformity), making their two accounts artificially similar and less independently reliable.**

Question 5

- (a) **M1** as time passes, the original memory trace of the event weakens and becomes less accessible oe
- (a) **A1** this makes it easier for new, misleading information encountered later to be incorporated into, or to interfere with, the original memory oe
- (a) **A1** whereas a strong, freshly formed memory is more resistant to being altered oe
- (a) **Answer: A weaker, older memory trace is easier for later misleading information to distort than a fresh, strong one.**
- (b) **M1** witnesses should be interviewed as soon as reasonably possible after the incident oe
- (b) **A1** while their memory of the event is still comparatively fresh/strong oe
- (b) **A1** and before they are exposed to potentially misleading information from other sources, such as media reports or other witnesses oe
- (b) **Answer: Interview witnesses as soon as possible, before their memory fades or is exposed to misleading outside information.**

Question 6

- (a) **M1** using paired participants who watched the event from different camera angles let the researchers know exactly which details each participant could, and could not, have genuinely seen oe
- (a) **A1** so any detail a participant reported that they could not have personally seen must have come from the discussion with their co-witness oe
- (a) **A1** this gives the researchers confidence that any errors found were genuinely caused by post-event discussion (memory conformity), a strength of internal validity oe
- (a) **Answer: Because researchers knew exactly what each participant could not have seen, any such detail reported afterwards could confidently be attributed to post-event discussion.**
- (b) **M1** watching a filmed event lacks the stress, arousal and real personal consequences of witnessing an actual crime oe
- (b) **A1** participants' attention, emotional engagement and memory processes when watching a film may differ from those of a genuine eyewitness oe
- (b) **A1** so the findings may lack ecological validity and may not fully generalise to how real witnesses behave after discussing a genuine incident oe
- (b) **Answer: A staged film lacks the stress/consequences of a real crime, so findings may not generalise fully to real eyewitnesses.**

Question 7

- (a) **M1** the officer should use neutral, non-leading wording when asking the witnesses about details such as speed oe
- (a) **A1** justified by reference to Loftus and Palmer (1974), whose choice of verb (e.g. 'smashed' versus 'contacted') was shown to change participants' speed estimates oe
- (a) **A1** so avoiding suggestive verbs should reduce the risk of distorting the witnesses' accounts of the collision oe
- **(a) Answer: Use neutral, non-leading wording, justified by Loftus and Palmer's (1974) finding that verb choice altered speed estimates.**
- (b) **M1** the police should interview each witness separately, and should have kept the witnesses apart as soon as possible after the collision oe
- (b) **A1** justified by reference to research (e.g. Gabbert, Memon and Allan, 2003) showing that witnesses who discuss an event can go on to report details they did not personally see (memory conformity) oe
- (b) **A1** since Marcus and Delia had already discussed the collision, the officer should be aware their accounts may already have been influenced by each other oe
- **(b) Answer: Interview witnesses separately and be aware that Marcus and Delia's discussion may already have caused memory conformity between their accounts.**

Question 8

- (a) **M1** age is one such individual difference oe
- (a) **A1** research generally suggests that children and older adults tend to be more susceptible to the effects of misleading information than younger adults oe
- (a) **A1** possibly linked to differences in source-monitoring ability (correctly identifying where a memory came from) across the lifespan oe
- **(a) Answer: Age: children and older adults tend to be more susceptible to misleading information than younger adults.**
- (b) **M1** if the officer's own questioning is even mildly leading, an elderly or child witness may be more likely than a younger adult to have their account distorted by it oe
- (b) **A1** so the officer should take particular care to use neutral, open questions with these witnesses oe
- (b) **A1** and should be cautious about placing too much weight on any detail that could have been suggested rather than genuinely observed oe
- **(b) Answer: Extra care with neutral wording is needed for witnesses who may be more susceptible to suggestion, such as children or older adults.**

Question 9

- (a) **M1** Yuille and Cutshall (1986) interviewed real witnesses to an actual armed robbery/shooting several months after the event oe
- (a) **A1** the witnesses' recall remained largely accurate and detailed oe
- (a) **A1** misleading questions included in the follow-up interview had little effect on the accuracy of their accounts oe
- (a) **A1** this challenges Loftus and Palmer's conclusions, since it suggests real, significant and emotionally arousing events may not be as easily distorted by misleading information as a bland laboratory film of a car accident oe
- (a) **A1** so Loftus and Palmer's lab-based findings may lack ecological validity for real, high-stakes eyewitness events oe
- **(a) Answer: Real witnesses to a genuine, significant crime stayed largely accurate despite misleading questions, challenging the ecological validity of Loftus and Palmer's lab-based conclusions.**
- (b) **M1** research into misleading information has led to guidance that police officers should avoid using leading questions when interviewing eyewitnesses oe
- (b) **A1** officers are instead trained to ask open, non-leading questions (e.g. as part of the Cognitive Interview technique) to reduce the risk of contaminating a witness's memory oe
- (b) **A1** witnesses are also usually interviewed separately/kept apart where possible, to reduce the risk of post-event discussion contaminating their accounts oe
- (b) **A1** this is important because eyewitness testimony can strongly influence jury decisions, so distorted testimony risks miscarriages of justice oe
- (b) **A1** showing this research has real, valuable practical applications beyond the laboratory oe
- **(b) Answer: Research findings underpin practical guidance for police, such as avoiding leading questions and interviewing witnesses separately, to protect the accuracy of evidence used in court.**

Question 10

- **Level 4** (13-16): Knowledge of research into misleading information is accurate and generally well detailed. Discussion/evaluation is thorough and effective, showing a good range of relevant material used interactively, including material both supporting and challenging the research. The scenario is applied effectively and consistently throughout the answer. The answer is clear, coherent and focused, and specialist terminology is used effectively.
- **Level 3** (9-12): Knowledge of research into misleading information is evident, with some detail, although there may be occasional inaccuracy. Discussion/evaluation is apparent and mostly effective, and is partly interactive. Application to the scenario is present but may be less consistent or less well developed. The answer is mostly clear and organised, and specialist terminology is used, generally appropriately.
- **Level 2** (5-8): Knowledge of research into misleading information is present but limited, and may be muddled or only partly relevant in places. Discussion/evaluation, where present, is limited/superficial. Application to the scenario is attempted but may be brief, undeveloped or only loosely connected. The answer lacks clear organisation in places, and specialist terminology is used inconsistently.
- **Level 1** (1-4): Knowledge is very limited and answers may be simplistic, disjointed, or presented as a list. Discussion/evaluation, if present, is barely discernible. Application to the scenario, if attempted, is muddled or absent. The answer lacks structure. Specialist terminology is used inappropriately or is missing.
- **Level 0** (0): No creditable content.
- **Indicative content:**
 - AO1: Loftus and Palmer (1974) found that the verb used in a leading question (e.g. 'smashed' versus 'contacted') affected participants' estimated speed of a car in a film, and their later likelihood of falsely recalling broken glass.
 - AO1: two explanations exist for this effect: response-bias (the question wording biases the reported answer without changing the underlying memory) and substitution (the misleading information distorts the memory trace itself).
 - AO1: post-event discussion between co-witnesses can also distort testimony through memory conformity, where a witness comes to recall a detail they did not personally see but only heard about from another witness.
 - AO2 (application): the wording used by police when questioning the pedestrian witnesses to the road-junction collision (Marcus, Delia and the other two witnesses) could distort their speed estimates if a leading verb is used, as in Loftus and Palmer's study.
 - AO2 (application): because Marcus and Delia discussed the collision before being interviewed, memory conformity could make their two separate accounts artificially similar, reducing the independent value of their testimony as evidence.
 - AO3 supporting evidence: the broken-glass finding in Loftus and Palmer's second experiment supports the substitution explanation, since a leading verb affected recall of an unrelated, non-existent detail rather than just the specific fact being asked about.
 - AO3 challenging evidence: Yuille and Cutshall's (1986) study of real witnesses to an actual armed robbery found their recall remained largely accurate and resistant to misleading questions, challenging the ecological validity of lab-based findings like Loftus and Palmer's.
 - AO3 evaluation: this suggests the emotional significance/arousal of a real, high-stakes event (like the road-junction collision) may make witnesses more resistant to distortion than participants watching a bland laboratory film clip.
 - AO3 real-world application: findings on misleading information have shaped police guidance to avoid leading questions and to interview witnesses separately, directly relevant to how the road-junction witnesses should be handled.