Memory

Eyewitness Testimony - Anxiety
Eyewitness Testimony

Lesson Objectives:

- To **define** the term **eyewitness testimony**.

- To **outline** a range of factors that affect the accuracy of eyewitness testimony.

- To **outline** and **evaluate** research by **Johnson & Scott**.

- To **discuss** the role of **deception** in eyewitness testimony research.
Eyewitness Testimony

- Question – In your group, write an answer to the following question: What is meant by the term ‘Eyewitness Testimony’?

An eyewitness testimony is...
Eyewitness Testimony

Question – In your group, write an answer to the following question: What is meant by the term ‘Eyewitness Testimony’?

The evidence given in a court room, or in a police investigation by someone who has witnessed a crime or an accident.
Eyewitness Testimony

- 30 years of research suggest that EWT is unreliable. Wells (1998) studied 40 people who were convicted and then later released as a result of DNA evidence. More than 90% of the people studied were wrongly convicted on the basis of eyewitness testimony evidence.
Eyewitness Testimony

- Ronald Cotton spent 11 years in prison for two counts of rape which he didn’t commit. He was picked out of a line-up by two victims who misidentified him. Bobby Poole later confessed to the crimes.

Real pictures of Cotton and Poole can be found [here](#).
Eyewitness Testimony

- Task: You will now watch an experiment that the BBC conducted titled: Can YOU spot the murderer? Your task is to simply pay attention.
Eyewitness Testimony

- Task: In your group, write down everything you can remember about the murderer?
  - What did he/she look like?
  - What were they wearing?
  - Etc.

- Male
- Tall
- White
- Jeans?
Eyewitness Testimony

- Questions: How easy did you find it to describe the murderer?
- Do you think it would have been easier or more difficult if you were actually there? Justify your answer.

Unfortunately, I will be unable to show you a police line-up until after you have been trained in the cognitive interview technique.
Can you correctly identify the criminal...?

- Task: You will now witness a different type of crime. Pay close attention, because you will be asked to pick out the criminal from a police line-up at the end of the video.
Eyewitness Testimony

- TASK: In your group, consider why it is so difficult for an eye witness to accurately identify a criminal. Then write a list of factors that can affect the accuracy of EWT on your mini-whiteboards.

- Factor 1
- Factor 2
- Factor 3
Eyewitness Testimony

- Task: In your group, consider why it is so difficult for an eye witness to accurately identify a criminal. Then write a list of factors that can affect the accuracy of EWT on your mini-whiteboards.
  - Anxiety
  - Post-Event Discussion
  - Misleading Information
  - Age
  - Memory disorder
Eyewitness Testimony

For your exam, you will need to outline and evaluate factors that affect the accuracy of eyewitness testimony, including:

- Anxiety
- Misleading Information
- Post-event Discussion
Anxiety

- Question: What part of the picture do your eyes focus on?
- You will now see a series of pictures. Try to remember what part of the picture your eyes focus on, when you see each of the pictures.
What part of the picture do your eyes focus on?

- Question: Where was your attention drawn to in each of these pictures?
- Do you think the presence of a weapon would make an eyewitness account more or less reliable? Justify your answer.
The Weapon Focus Effect

The Weapon Focus Effect is where a witness focuses their attention on the weapon being used in a crime. This causes a state of anxiety which leads to difficulties in recalling the other details accurately.
Task: Read the summary of Johnson & Scott’s research and answer the questions on your handout.

Eyewitness Testimony – Anxiety

The study was carried out to investigate the effect of a weapon on eyewitness testimony accuracy. It had been hypothesized that heightened anxiety would increase the accuracy of eyewitness testimony. It was investigated in a lab study.

Participants were selected to take part in a (false) psychological study but whilst they were sat in a waiting room, the real experiment began.

- Group 1 overheard a heated argument in the next room, a crash of equipment and then a man emerged holding a weapon.
- Group 2 overheard a disagreement about lab equipment in the next room and then a man left holding a pen.

Each participant was then asked to identify the man they had seen emerge from the room, from a selection of 50 photos.

It was found that participants in the high anxiety group (Group 1) were significantly less accurate in selecting the man from the photos, in comparison with the control group (Group 2). From this study, it was proposed that anxiety decreased the effectiveness of eyewitness testimony and that participants were indeed focusing on the knife, rather than the man’s face. This has been deemed the ‘weapon focus’ phenomenon.

Questions
1. State the independent and dependent variable. (2 marks)

2. Write a directional hypothesis for Johnson & Scott’s study. (3 marks)

3. State which experimental design has been used in this investigation. (1 mark)
Johnson & Scott (1976)

- **Question 1:** State the independent and dependent variable. (2 marks)

- **IV =** Whether the participant overheard a heated argument followed by a man emerging with a knife, or a disagreement followed by a man emerging with a pen.

- **DV =** The number of participants who correctly identified the man who emerged from the laboratory, from a selection of 50 photos.
Question 2: Write a directional hypothesis for Johnson & Scott’s study. (3 marks)

- The participants who overheard a disagreement and witnessed a man emerging with a pen will be significantly more likely to identify the correct man from 50 photographs, in comparison to the participants who overheard a heated discussion and witnessed a man emerging with a knife.
Johnson & Scott (1976)

- Question 3: State which experimental design has been used in this investigation. (1 mark)
  - Independent groups.
Question 4: Outline one strength and one limitation of the experimental design outlined in question one. (4 marks)

Strengths are likely to focus on the avoidance of order effects, such as practice at remembering the man’s face or fatigue/boredom. Demand characteristics are also reduced, as the participants are less likely to guess the aim of the study compared to a repeated measures design.

The major limitation of an independent groups design is that participant variables may affect the result: some participants in one group may just have better memories than others.
Johnson & Scott (1976)

- Question 5: One problem with laboratory studies is the risk of demand characteristics. Explain how Johnson and Scott reduced the likelihood of demand characteristics in this experiment. (2 marks)

  - Johnson and Scott deceived the participants into thinking they were taking part in a different study, so they believed that the argument was real. Therefore, their recollection of the man’s face was unlikely to be affected by the concentration and focus from knowing they were involved in a study.
Johnson & Scott (1976)

- Question 6: Explain how demand characteristics affect the validity of a study. (2 marks)

  - Demand characteristics affect the trustworthiness of the study as it is not a participant’s real behaviour that is being observed. Therefore, a study which has a high chance of demand characteristics would lack in internal validity.
Ethical Guidelines

- Task: On a mini-whiteboard, make a list of all the ethical guidelines that Johnson & Scott broke.
  - Protection from harm
  - Deception
  - ...

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Deception

- On the one hand, deception is seen as a limitation; however, it was also necessary to ensure the validity of the results.

- Task: Write a burger paragraph explaining why deception is a limitation of Johnson & Scott’s study.
  - Extension: Can you include a counter-argument, explaining why the deception was also necessary?
One issue with Johnson & Scott’s study is that they deceived their participants. The participants were led to believe that they were sitting in the waiting room waiting for the experiment to begin, when in fact that was part of the real experiment. This matters because some of the participants may have not agreed to take part in an experiment, especially if they were aware that they may have been exposed to a knife, as this could have caused high levels of stress and anxiety. However, as outlined above, the deception was necessary and the participants were unlikely to have experienced extreme anxiety, as they were not put in any real harm or danger.

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<th>Point</th>
<th>Evidence/Example</th>
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<td>One issue with Johnson &amp; Scott’s study is that they deceived their participants.</td>
<td>The participants were led to believe that they were sitting in the waiting room waiting for the experiment to begin, when in fact that was part of the real experiment.</td>
<td>However, it was necessary for Johnson &amp; Scott to deceive the participants in order to reduce demand characteristics and obtain valid results. Furthermore, Johnson &amp; Scott would have debriefed their participants after the experiment, therefore justifying their use of deception.</td>
<td>This matters because some of the participants may have not agreed to take part in an experiment, especially if they were aware that they may have been exposed to a knife, as this could have caused high levels of stress and anxiety. However, as outlined above, the deception was necessary and the participants were unlikely to have experienced extreme anxiety, as they were not put in any real harm or danger.</td>
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Eyewitness Testimony – Anxiety

This study is often (incorrectly) reported as being a Loftus study when she just brought the study to fame by writing about it in her book on eyewitness testimony.

Task: Read the summary of Johnson & Scott below and answer the following questions.

Will the presence of a weapon make someone a better eyewitness? Or worse?

This study was carried out to investigate the effect of a weapon on eyewitness testimony accuracy. It had been hypothesised that heightened anxiety would increase the accuracy of eyewitness testimony. This was investigated in a lab study.

Participants were invited to take part in a (fake) psychological study but while they were sat in a waiting room, the real experiment began.

- Group 1 overheard a heated argument in the next room, a crash of equipment, and then a man emerged holding a paperknife.
- Group 2 overheard a disagreement about lab equipment in the next room, and then a man left holding a pen.

Each participant was then asked to identify the man they had seen emerge from the room from a selection of 50 photos.

It was found that participants in the high anxiety group (Group 1) were significantly less accurate in selecting the man from the photos, in comparison with the control group (Group 1). From this study, it was proposed that anxiety decreased the effectiveness of eyewitness testimony and that participants were instead focusing on the weapon rather than the man’s face. This has been deemed the ‘weapon focus’ phenomenon.

Questions
1. State the independent and dependent variable. (2 marks)

2. Write a directional hypothesis for Johnson & Scott’s study. (3 marks)

3. State which experimental design has been used in this investigation. (1 mark)
4. Outline one strength and one limitation of the experimental design outlined in question one. (4 marks)

5. One problem with laboratory studies is the risk of demand characteristics. Explain how Johnson and Scott reduced the likelihood of demand characteristics in their experiment. (3 marks)

6. Explain how demand characteristics affect the validity of a study. (2 marks)

Task: Write a burger paragraph, explaining why deception is a limitation of Johnson & Scott’s study. Extension: Can you include a counter-argument, explaining why the deception was also necessary?

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