

The effect of visual distractors on weapon focus effect in eyewitness memory

Investigating weapon focus effect when facial expression witness experience and the number of perpetrators vary.

Key details

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Research context

Despite being a regular feature in courtroom trials, eyewitness testimony has proven to be untrustworthy. 75% of wrongful convictions exonerated by the Innocent Project were due to inaccurate eyewitness accounts (Garrett 2011).

One phenomenon that has been proven to affect eyewitness memory and recall is the weapon focus effect. This theory concludes that an eyewitness will notice and remember fewer details about the crime if a weapon is present. This can include details about the individual holding the weapon. Weapon focus has been widely researched (Loftus 1979, Yarmey and Jones 1983, Loftus and others 1987, Kassin and others 2001) and evidenced.

Faces displaying an angry expression appear to enhance short-term memory, increasing

identification after a short break. This is in comparison to happy and neutral expressions (Jackson and others 2008, 2009). Therefore, the facial expression of the perpetrator may affect eyewitness recall.

Research has briefly explored whether individuals who have been trained to use weapons or deal with people who may carry weapons experience weapon focus differently. Police officers are a good example and were used in research to examine this. Hulse and Memon (2006) found that experienced police officers were more accurate but less complete in their account of a crime when a weapon was present.

They also appeared not to be affected by weapon focus while completing a photographic line-up. This is supported by Christianson and others (2011) who found police officers to be more accurate than university students, teachers and police recruits when recalling details about a crime. They theorised that through training and experience, police officers would improve their observation and accurate recall ability (the hypothesis of professionalisation), so would not be affected by the presence of a weapon or distractor. The proposed study aims to establish whether the weapon focus effect persists despite interference from visual cues.

Research methodology

Four mock crime videos were created for this study. The videos showed the perpetrators walking through the home, opening doors, and looking into rooms. The perpetrators walked into the dining room, where the victim sat at a table with a laptop and wallet. They approached the victim with a knife pointing vertically beside him, demanded the items and walked out of the house. All videos lasted on average 22 seconds and featured a visible weapon throughout.

Participants will be randomly allocated to one of the four conditions. Participants will watch the video, then rate their pre-confidence rating of their ability to identify the perpetrator from a line-up.

Participants will be presented with a memory recall questionnaire asking about person details, clothing details, object details and action details. They will be given the opportunity to provide the researchers with their gender, age and profession. They will be asked if they have to deal with violent or aggressive individuals as part of the job. They will also be asked if they have to deal with individuals who carry weapons or carry weapons themselves as part of their employment. If the

participant answers yes to either question, a text box will be provided to elaborate on their answer.

At the end, participants will be provided with a six-person lineup and asked to identify the perpetrator. At the end of the lineup, participants will be required to complete a post-confidence rating of their ability to identify the perpetrator from the line-up. Following this, they will be debriefed and thanked for their participation.

References

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- Yarmey D and Jones J. 1983. 'Is the psychology of eyewitness identification a matter of common sense?' In Lloyd S and Clifford B. 'Evaluating eyewitness evidence.' New York: Wiley. pp. 13–40.

Research participation

For further information about the study and a link to participate in an online questionnaire, please see the [participant information sheet](#).