TALK

NOSEWITNESS IDENTIFICATION: A REPLICATION STUDY

Rebecca McGrath*, S. Craig Roberts
University of Stirling, Stirling, United Kingdom
*rebeccamcgrath611@yahoo.co.uk

ABSTRACT

Recent studies have introduced the idea of nosewitness identification as a potential aid to criminal identification in cases where a victim has close contact with an assailant. Nosewitness identification requires both the ability to discriminate individuals using their body odour and olfactory memory for that odour. Alho et al. (2015) suggest that this is more likely to be possible when people experience negative emotion. Here, we attempted to produce a replication of their study, by investigating whether people could identify a criminal from a mock odour lineup at rates above chance. Participants watched a neutral interaction video and a video of a violent crime. They smelled a donated body odour and were instructed this was either the man (neutral condition) or the criminal (violent condition) from the video. After a 15-minute interval, the participants sampled a lineup of five body odours and were asked to identify which they thought to be the odour presented during the video. Results found that participants could identify the target body odour in both conditions above rates of chance, but that the rate of correct identification was higher in the violent video condition. Furthermore, female participants outperformed male participants for accuracy in the violent condition. Our findings suggest that nosewitness evidence could be considered as supplementary evidence in criminal investigations.