

Forensic sciences are 'fraught with error'

April 22 2013

A target article recently published in *Journal of Applied Research in Memory and Cognition (JARMAC)* reviews various high-profile false convictions. It provides an overview of classic psychological research on expectancy and observer effects and indicates in which ways forensic science examiners may be influenced by information such as confessions, eyewitness identification, and graphical evidence.

The target article authors, Saul Kassin and Jeff Kukucka, of John Jay College of Criminal Justice, and Itiel Dror, University College, London, point out that when the instrument of analysis is a human examiner, then even evidence considered by the public to be highly objective, such as [fingerprint evidence](#), is actually subjective in its judgment. Therefore, they argue, there is a potential for confirmation bias because psychological research shows that "people tend to seek, perceive, interpret, and create new evidence in ways that verify their preexisting beliefs."

The authors reveal that even DNA evidence, more famously known for exonerating wrongfully convicted people, has contributed to [false convictions](#), especially when other, flawed, evidence chronologically precedes it, such as a mistaken [eyewitness identification](#) or false confession.

"Popular TV programs, such as CSI: [Crime Scene Investigation](#), communicate a false belief in the powers of forensic science, a problem that can be exacerbated when [forensic science](#) experts overstate the strength of the evidence," explained leading author, Saul Kassin.

The study does not just point out flaws – it details many things that can be done to limit or avoid these problems, both during an investigation and during a trial. The authors propose various best practice recommendations to reduce confirmation biases. During the investigation, for example, an easy solution would be to shield [forensic examiners](#) from everything other than the evidence they are examining. This minimizes chances of fitting the evidence to a known suspect.

"The target article describes an important force that has the potential to erode the quality of our judicial system. Solving the problem will require psychological researchers, legal scholars and forensic scientists communicating with one another– a process that is fostered by the exchange of ideas," says Ronald Fisher, Editor-in-Chief of *JARMAC*, and Professor of psychology at Florida International University.

More information: The target article is "The Forensic Confirmation Bias: Problems, Perspectives, and Proposed Solutions" by Saul M. Kassin, Itiel Dror and Jeff Kukucka ([DOI: 10.1016/j.jarmac.2013.01.001](#)). It appears in the *Journal of Applied Research in Memory and Cognition*, Volume 2, Issue 1 (March 2013), published by Elsevier on behalf of the Society for Applied Research in Memory and Cognition.

Provided by Elsevier

Citation: Forensic sciences are 'fraught with error' (2013, April 22) retrieved 2 May 2024 from <https://medicalxpress.com/news/2013-04-forensic-sciences-fraught-error.html>

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