Book Review Credibility Assessment: Scientific Research and Applications

Raskin, D. C., Honts, C. R., & Kircher, J. C. (Eds.). (2014). *Credibility Assessment: Scientific Research and Applications,* Amsterdam: Academic Press. 393 pages. \$99.95. ISBN: 978-0-12-394433-7

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This book provides a current review of the scientific basis for credibility assessment. Because credibility assessment is a multidisciplinary endeavor, an edited volume provides the best opportunity for a broad view of the field. Together, these seven chapters provide a valuable resource for researchers, practitioners, and decision makers.

Strategic Use of Evidence During Investigative Interviews: The State of the Science

In the first chapter, Maria Hartwig, Par Anders Granhag, and Timothy Luke review the literature and address common misconceptions about deception and its detection. In particular, they provide a meta-analytic review of the strategic-use-of-evidence (SUE) technique for interviewing suspects. They conclude, "It appears that there is a strong tendency for guilty suspects to make statements that contradict known facts, compared with innocent suspects [which] produces a large effect size for statement-evidence consistency as a cue to distinguish between innocent and guilty suspects. When evidence is withheld from the suspect, this tendency to contradict the evidence becomes even greater. Indeed, when evidence is withheld from the suspect, the statement-evidence consistency cue's power to discriminate between innocent and guilty suspects [is particularly strong]. ... Although much work remains to be done, thus far the SUE framework has been shown to be a scientifically sound and effective method of eliciting cues to deception across a range of populations and settings" (pp. 30-31).

The SUE technique provides an organized framework and specific tactics for conducting an interview. For example, interrogators can withhold key details from a suspect, elicit a detailed statement from a suspect, question or challenge the suspect's statement, elicit additional details without leading the suspect, and eventually check for statementevidence consistencies or inconsistencies (DeClue & Rogers, 2012).

Credibility Assessment at Portals

The second chapter, by Charles Honts and Maria Hartwig, focuses on assessing credibility at portals that control entry to countries, public transportation, and public events and facilities. They note, "Little or no scientific research has focused on the specific psychological characteristics of portals, including the element of prospective credibility assessments" (p. 57). They present scientific theory and research and outline an approach for theory development and scientific validation.

Validity of Polygraph Techniques and Decision Methods

David C. Raskin and John C. Kircher provide the third chapter, which reviews the development and implementation of polygraph techniques for detection of deception. Comparison Question Tests (CQTs) "are the most commonly used and generally applicable techniques for the investigation of criminal cases" (p. 67). Although the CQT was developed by John Reid in the 1940s (the same person who developed the Reid Technique of police interrogation commonly used in the USA), it was not subjected to scientific laboratory study until the 1970s (p. 79), by which time a persistent body of lore had developed.

Raskin and Kircher present research regarding the accuracy of the polygraph. They note, "As the uses of polygraph techniques have grown in criminal investigation and evidence, there is increasing concern about factors that may adversely affect their accuracy and their uses in administrative and judicial proceedings" (p. 117). They reference "the official position of the NCCA [National Center for Credibility Assessment] that polygraphs are 90% accurate when properly administered by a competent examiner" (p.122) and acknowledge, "CTQ polygraph techniques are complex and controversial methods" (p. 122).

In Chapter 7 of this same book, Aldert Vrij focuses more narrowly on published reviews of CQT laboratory and field research that carefully established ground truth: conclusive exonerating or incriminating evidence that can corroborate test outcome. Those results do not support the NCCA claim of 90% accuracy, as presented by Raskin and Kircher. For the six published reviews of CQT laboratory research, "Accuracy rates ranged from 74% to 82% in guilty examinees and from 60% to 66% in innocent examinees. ... In six published reviews of CQT in field research ... accuracy rates ranged from 84% to 89% in guilty examinees and from 56% to 75% in innocent examinees" (p. 315).

One way to answer the question of how accurate polygraph techniques are for detecting deception is, *Not as accurate as polygraphers (typically) claim that they are.* For example, in a recent case on which I consulted, the polygrapher told the suspect:

Come back and have a seat for me. The only reason I went back to score it, I told you, you were easy to score, I just wanted to confirm what I saw [in the results of the polygraph]. I was kind of surprised, but there's

absolutely not a doubt in my mind that you put your fingers in her vagina. Not a doubt.

What puzzles me is generally speaking in these cases when we see that, you also have the person who has the propensity to, sociopathic tendency, to do that. That's what we would look for in a genuine predator. So I know that I'm not sitting here with a predator. I'm sitting here with somebody who got involved in a onetime thing and my question is why. Because if you're a predator, if you're a child predator and I have to worry about you for the rest of your life being a sociopathic predator, I want you in prison. You understand that?

I don't think that's the case though. What this means is that there is something that's occurred. ... Something happened that night that caused you to behave in a way that you ordinarily wouldn't. And if that's the case, the judge needs to know that. They need to know that you're not some sociopathic predator that this is a routine thing for you. ... A judge is going to see this six months from now or a jury will see this eight months from now ...

Does it matter whether "polygraphs are 90% accurate when properly administered by a competent examiner" (Raskin & Kircher, this book, p.122) or "accuracy rates ranged from ... 56% to 75% in innocent examinees" (Vrij & Ganis, this book, p. 315)? Probably yes, for some purposes; but for a suspect in a criminal investigation, not so much. Not all suspects are guilty, of course. If we allow police to use so-called lie detectors during interrogations, some innocent suspects, at the psychological moment created by the police, will decide that they'd better "confess" or else.

Because polygraphs are not 100% accurate at detecting deception, every time police say, suggest, or imply that the results prove that the suspect committed a crime, that is a false-evidence ploy. The polygraph is a particularly insidious, highly prejudicial ploy. If police use a different false-evidence ploy, such as telling the suspect that his fingerprints or DNA or an eyewitness or a video-recording proves that he did it, the defense can simply refute that if the case goes to trial. For example, if the police falsely told the suspect that his DNA was found at the crime scene, cross examination of the interrogator will reveal that the suspect confessed after being told that lie. When the polygraph is used to extract the confession, the defense is put in an unfair position. Because the prosecution would typically not be able to present the results of a polygraph test (because they're not sufficiently trustworthy), the defense would either (a) have to tell the jury that the suspect "failed" the polygraph or (b) fail to explain to the jury why the suspect confessed.

Additional Chapters

Chapter 4 is "Countermeasures and Credibility Assessment" by Charles R. Honts. Chapter 5 is "Detecting Deception Using Ocular Metrics During Reading" by Douglas J. Hacker and colleagues. Chapter 6 is "The Neural Basis of Deception and Credibility Assessment: A Cognitive Neuroscience Perspective" by Ray Johnson, Jr. The final chapter, Chapter 7, is "Theories in Deception and Lie Detection" by Aldert Vrij and Giorgio Ganis. All of these chapters are well written. I found Vrij and Ganis's chapter particularly relevant to my work as a forensic psychologist consulting on disputed confession cases.

Discussion

Sometimes people tell the truth. Sometimes people lie. Our evolved abilities to deceive and to detect deception are imperfect. The most important take-home message from this book is that, so far, specialized techniques for assessing credibility are also imperfect. We need to remember that every time we read or hear such words as "He passed a polygraph" or "She failed a lie-detector test."

Reference

DeClue, G., & Rogers, C. S. (2012). Interrogations 2013: Safeguarding against false confessions. *The Police Chief: The Professional Voice of Law Enforcement, October Issue,* pages 42, 44, 46.

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