

BOOK REVIEW

Credibility Assessment: Scientific Research and Applications

Review by Réjean Belley

Credibility Assessment: Scientific Research and Applications, by David Raskin, Charles Honts and John Kircher (Eds), Elsevier eBook, 2014.

ISBN: 9780123947826, Print Book ISBN: 9780123944337

The September 11, 2001 events have deeply impacted peoples' minds and heightened states' concerns for security. Huge efforts have been deployed by governments to counter terrorism and protect their populations and critical assets from terrorist acts through improved security practices. Perhaps this new reality is most perceptible at airports and border crossing checkpoints but, behind the scene, its ramifications are far more reaching. They already had a measureable impact on a range of programs pertaining to national security such as public safety and the protection of strategic infrastructures. This of course includes the vetting of all personnel who have access to sensitive assets, a process in which polygraph testing plays a predominant role. Prompted by this unprecedented security initiative, research received a significant boost to improve already existing credibility assessment methods and develop new ones.

In this context and a decade or so after the publication of Kleiner's mark-setting *Handbook of Polygraph Testing*, the recent publication by Raskin, Honts & Kircher of *Credibility Assessment* is timely. This book stands in a class apart, in that it spans the realm of credibility assessment methods and initiatives from a scholar and expert perspective. If it makes a significant place to polygraphy, its scope expands the boundaries of psycho-physiological detection of deception (PDD) to include assessment methods that evolved from other disciplines.

Chapter 1 poses the simple but important question, "How good are we at assessing the credibility of suspects based on behavioural cues?" and concludes that even we professionals, are not as good at it as we

might want to believe. Chapter 2 does an expert review of programs and methods implemented to assess credibility at portals (e.g., airports), acknowledging the complexity and unique challenges posed by real-time mass credibility assessments requirements. Chapter 3 speaks to the validity of polygraph testing and provides an in-depth comparative review of the methods currently used for diagnostic decision making. Chapter 4 addresses the delicate problems of countermeasures and provides an assessment of their effectiveness based on scientific evidences. Chapter 5 introduces a procedure for detecting deception using ocular metrics in conjunction with a structured reading task. And Chapters 6 and 7 point to slowly emerging chunks of understanding of the neuro-processes involved in acts of deception. As one progresses from chapter to chapter, a conceptual landscape with the following important landmarks progressively appears:

- * Behavioural cues, passively observed during the course of an interview or interrogation are, in and by themselves, poor indicators of deception.

- * Behavioural indicators when embedded in carefully planned actions dynamically delivered by the interviewer, such as strategic use of evidence or cognitive overload induction, allow for beyond chance-level discrimination between liars and truth-tellers.

- * Research on ocular metrics from reading can reliably discriminate between liars and truth-tellers, with accuracy rates up to and entering the 80% range.

- * Physiological indicators, such as those used in PDD, are generally more effective than

behavioural cues and ocular motor metrics to detect deception.

* The above holds only if credibility assessment protocols, which include the manipulations applied and indicators monitored for diagnostic decision-making, are consistent with psychological and psychophysiological principles pertaining to motivation, emotion regulation, cognitive processing of information and functioning of the central nervous system, as established by scientific research.

* The problems associated with credibility assessments are context-specific and demand for equally specific theorizations, modelizations and assessment methodologies. A refreshing reminder may be that the "one size fits all" approach to credibility assessment is at the very best ill-suited, when not simply inapplicable across contexts.

Beyond these general landmarks, it is for the reader to explore the chapters and topics that most speak to them to discover a well of well-founded information and expert views consistently delivered in a clear, concise, documented, never complacent nor passionate style. This book stands as a prime example of what a response to the National Research Council's 2003 report should be like, and constitutes a true scholar portal to the science, complexity and art of credibility assessment. It brings the reader to better

appreciate how much this domain like neurosciences overlaps with a number of already well established disciplines, each relying on its own conceptual and methodological paradigms to explore and model the problems specifically posed to credibility assessment in a given context. The purpose is to come up with assessment tools that are scientifically founded and present metric qualities that meet acceptability thresholds for their intended use.

Correlatively this book is also a portal for the practitioners, including us polygraphists, interested in drawing from this rich trans-disciplinary research effort to expand their understanding of the credibility assessment science and improve their practices. It also provides insightful reviews of a number of credibility assessment initiatives and issues of interest for field applications that may assist security managers and subject-matter experts responsible for providing advices and recommendations to shape up the credibility assessment programs in place in their organizations.

I enjoyed reading this work, *Credibility Assessment*, which I have no doubt will also capture the interest of all professionals seeking to expand their knowledge and understanding of this rich and important field of research and practice.

Good reading.