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## **Research Digest**

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LIMITED CRITIQUE OF BOOK: Detecting Deception: Current Challenges and Cognitive Approaches. Edited by Par Anders Granhag, Aldert Vrij and Bruno Verschuere. John Wiley & Sons, Ltd, 2015.

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## **James Allan Matte**

This critique is not designed to be a book review. It is limited to Section I, Chapter 3, The Polygraph: Current Practice and New Approaches. Ewout H. Meijer and Brujno Verschuere.

The aforesaid chapter on the polygraph reflects an unfavorable review of the Control Question Test (CQT). It does cite the Mangan, Armitage and Adams field study on the Quadri-Track Zone Comparison Technique published in *Physiology & Behavior* (2008). However, in its conclusion on The Future of the CQT, it states "if technological advancement would lead to an increased accuracy, a positive trend should be apparent. This was not the case. Erroneous outcomes of the CQT occur because the polygraph traces do not allow for distinguishing, for example, between an innocent's fear of false detection and a guilty' s fear of detection. This problem is not solved by technologically more sophisticated measuring devices or more advanced scoring algorithms. Without substantial changes to the CQT question format, polygraph tests will not reach extremely high accuracy (National Research Council, 2003)."

The cited Mangan et al field validation study on the Quadri-Track ZCT, addresses, in its question format, the innocent examinee's Fear of Error regarding the target issue, also referred by Dr. Paul Ekman (1996)<sup>1</sup> as the Othello Error. In the references section of Chapter 3, Verschuere's objection to publication of the Mangan et al study (2008) in *Physiology & Behavior* is also cited, most likely the reason for disregarding the related contents of Mangan et al's study, but Mangan's rebuttal to Verschuere's objection, also published in *Physiology & Behavior* (2008), was omitted from aforesaid references which reflects a bias and selective scholarship. It should be noted that there are three published field studies validating the Quadri-Track Zone Comparison Technique. (Matte 1989, Matte &

<sup>&</sup>lt;sup>1</sup> Dr. Paul Elman, Clinical Psychologist and Behavioral Scientist, in 2001 was named by the American Psychological Association as one of the most influential psychologists of the 20<sup>th</sup> Century based on publications, citations, and awards. In 2009 he was named One of the 100 Most Influential People in the World by Time Magazine.

Reuss 1989, Mangan, Armitage, Adams 2008, Shurany, Stein, Brand 2009). Remaining chapters of this book reviews various methods of lie detection, including lie detection tools such as Statement Validity Analysis, Reality Monitoring and Scientific Content Analysis. It also covers forensic application of Event-Related Brain Potentials to detect guilty knowledge and deception detection using neuroimaging.

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