

Tuvia Shurany*
Liecatcher Polygraph Series
Jerusalem, ISRAEL

Confirmed Mental Countermeasure Case in Costa Rica

There are mixed opinions in our profession about whether papers concerning deliberate distortions and countermeasures should be published. Whether they better educate those wishing to employ them, or help educate the seekers of truth. This paper is written of a confirmed examination where countermeasures were employed to assist the latter.

The use of physical countermeasures to defeat psychophysiological veracity (PV) examinations using the polygraph has been well promoted in various anti-polygraph literature and in some rare cases its use has been confirmed by the guilty examinee. Indeed, in one particular case (Matte 1991) an examinee was administered the Quadri-Track Zone Comparison Technique for a defense attorney which revealed a deceptive score of minus -22. During the posttest interview, the examinee confessed to his crime and produced a tack from the insole of his right boot, explaining that he had read a booklet with instructions on defeating the PV examination by primarily controlling his breathing and placing a tack in his shoe to cause pain on all of the test questions except the

* tuvia@liecatcher.com

relevant questions. A previous PV examination by the police had produced inconclusive findings resulting from his use of those physical countermeasures. The failure of those physical countermeasures in the above defense attorney case was due to the fact that the Quadri-Track ZCT employs the Matte “Dual-Equal Strong Reaction” Rule which dictates that when the red (relevant) and green (control) zones being inter-compared both contain timely, specific and significant reactions of maximum and equal strength, a minus one (–1) score is assigned to that Spot (Matte 1996: 406). The scores from this Rule are augmented by the minus scores acquired by the Inside Track’s Hope of Error question. However, the introduction of sophisticated motion sensors by manufacturers of computerized polygraph instruments¹ caused anti-polygraph entities to re-evaluate their countermeasure methods with instructions in the use of mental countermeasures which are immune to discovery by motion sensors. Needless to say, confirmation in the use of mental countermeasures by a guilty examinee is rare, and when it does occur, it is imperative that the method(s) used are reported to the polygraph community.

During December 2009 this author and his staff had to conduct a series of over 40 PV examinations in a company which had approximately 500 employees. The examinees were all college graduates and fluent in English. They were chosen by the management of the company based on their access and/or possible involvement in the matter under investigation. The tests were multi faceted Integrated Zone Comparison tests (IZCT) (Gordon et al. 2000).

The relevant questions were:

1. Did you XXXXXXXXXXXX?
2. Did you participate in any way in XXXXXXXXXXXX?
3. Do you hide the identity of anyone who was involved in XXXXXXXXXXXX?²

All tests were conducted using the IZCT with the 3-position scale and horizontal scoring system verified with the ASIT (Academy for Scientific Investigative Training) algorithm for chart interpretation (Gordon 2005). The ASIT was the tool which was used to determine the final score of the horizontal scoring. One of the examinees tested showed no signs of deception either during the pretest interview or the collection of his physiological data. His poly-

¹ Motion sensors were available in analog polygraph instruments which required the sacrifice of one of its channels, hence few analog instruments contained motion sensors except those with five channels. However the arrival of computerized polygraph systems permitted the use of motion sensors without sacrificing any of the four minimum channels needed to record the required data.

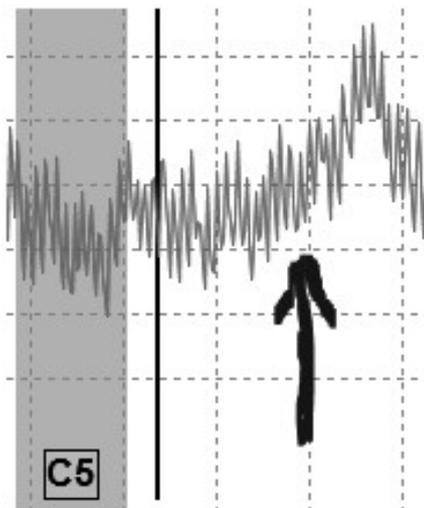
² Some of the examinees had different levels of suspicion. For various reasons, one of the examinees pointed at the person who was subsequently found the guilty.

graph charts appeared NDI (No Deception Indicated); (three-position scale evaluation – R6= +3 R9=+6 R12=+5. ASIT score R6= +8.75 R9= + 14.75 R12= + 11.5); (PolyScore version 6.3 declared: “No Deception Indicated” (the possibility of deception = R6 0.00, R9 0.01, R12 0.00(Objective Scoring System – Version 3 determined – No Significant Reactions).

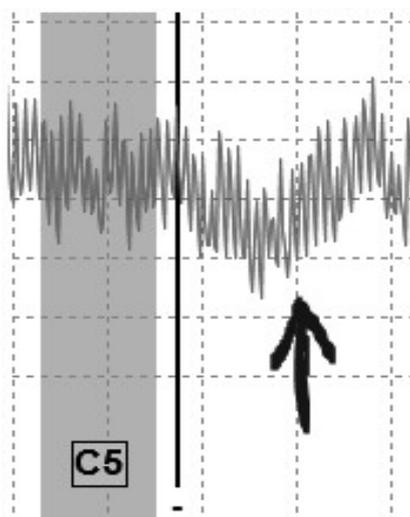
In spite of these scores, there were several points that raised suspicion that the examinee was employing countermeasures in an attempt to manipulate the outcome of the examination:

1. The reaction in the cardio component in comparison question C5 was too late.

- a. First Chart: 7.7 seconds

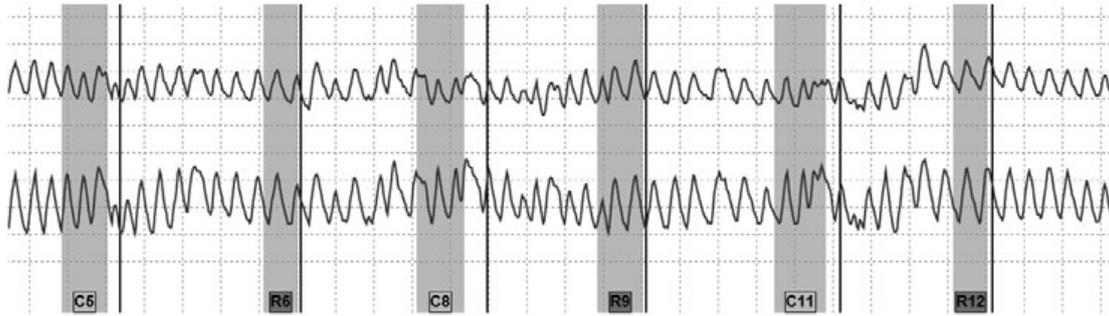


- b. Second Chart 6.3 seconds

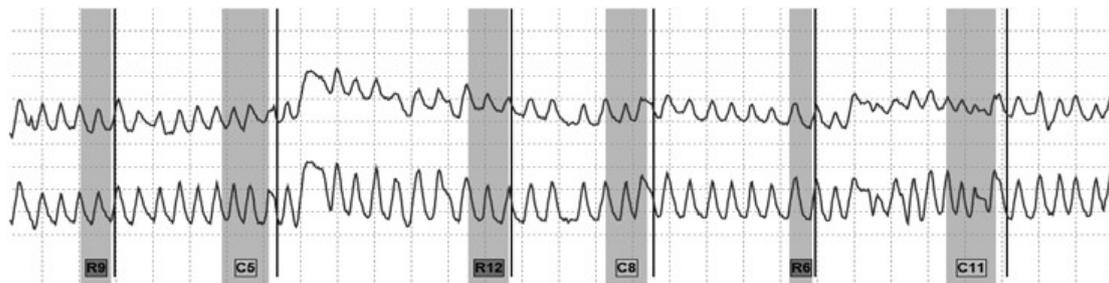


2. There were very unusual and relatively strong reactions observed in the pneumo component to the comparison questions in the first and third charts.

a. First Chart:

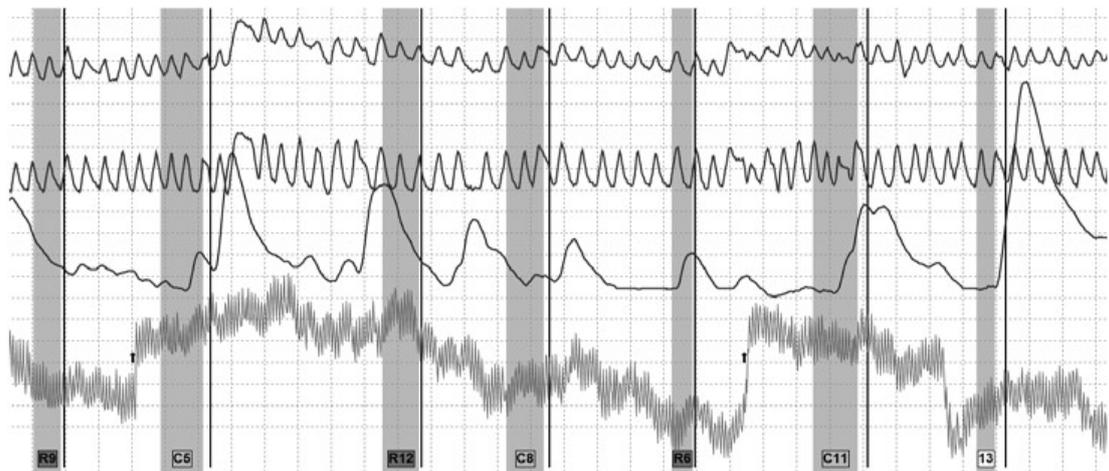


b. Third chart:



The reaction again starts too late compared to the critical zone.

a. Countermeasure Question #13 in Chart 3 of the IZCT:



In two of the charts, the IZCT Countermeasure (CM) question had a significant reaction. The strongest one was in the third chart (see question 13).

The combination of all these factors caused this author to stop the test and render a *No Opinion* test result.

Admission and Confirmation:

The examinee was brought to a second interview and was explained that some reactions existed which caused a noise in the test. He was asked to explain those reactions and the method he used to produce them. After a short hesitation, the examinee asked how this author had managed to detect his use of countermeasures, inasmuch as he had been promised that the things he had been taught to defeat the PV examination were perfect and could not be detected. This author's reply was that his vast experience in interpreting polygraph charts far outweighed the value and effectiveness of his countermeasures.

The examinee admitted that he contacted a friend and explained that he is about to take a polygraph test and needed to pass it. The next day his friend called him back and told him that there are three types of questions:

- Questions related to the case
- Neutral questions which the answer is known to him and to the examinee
- A third type known as a control question which usually has an exclusion which will start with the any of the words (between, before, beside, until). With these questions he must tell himself (I am innocent repeating it 3 times) and in the third chart he has to try and inhale and exhale less (4 times).

He said that he was very focused in trying to find these questions (exclusive comparison question used only in C5).

In addition to the above declarations in the use of mental countermeasures, the examinee confessed to the crime which generated the PV examination.

Discussion

In the many years that this author has been teaching, conducting PV examinations and performing quality control reviews, I have found 4 or 5 test which

I suspected of countermeasures (non in Costa Rica). This is the first time I received a confession regarding the use of countermeasures.

On the 14th of January 2009, this author and his staff saw an advertisement in one of the newspapers from someone naming himself, the “center for training to pass the polygraph”.



We called the center which provides two cellular numbers. Maybe the level of the questions made them suspicious of us and they never returned the call as they promised.

It should be noted that If this author had used the conventional vertical scoring system and Matte’s “Dual-Equal Strong Reaction” Rule, it would had resulted in a minus (−1) score at relevant question R6 which would have resulted in an Inconclusive finding.

Acknowledgment

I wish to thank Dr. James Allan Matte and Nate J. Gordon in their help and remarks to this paper.

References

Gordon N. J., Fleisher W. L., Morsie H., Habib W., Salah Khaled (2000), A field validity study of the Integrated Zone Comparison Technique, *Polygraph*, No. 29 (3), p. 220–225.

Gordon N. J., Mohamed F. B., Faro S. H., Platek S. M., Ahmad H., Williams M. (2005), Integrated zone comparison technique accuracy with scoring algorithms, *Physiology & Behavior*, PHB-07683, p. 1–4.

Matte J. A. (July–August 1991), A countermeasure that failed, *APA Newsletter*, No. 24 (4), p. 14.

Matte J. A. (1996), *Forensic Psychophysiology Using The Polygraph: Scientific Truth Verification – Lie Detection*, Williamsville, New York, J. A. M. Publications.