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## Testing a Deaf Mute Examinee in Costa Rica

**Key Words:** Silent Answer Test, examination of deaf-and-dumb subject, deaf-mute examinee

In March 2013, a good friend and client in Costa Rica contacted the first author (Shurany) and told him that he had heard some rumors that two of his employees were involved in theft from his company and one of them was a deaf-mute who had been employed at the company for many years, hence the employer did not want to take action against that employee without being sure of his guilt. Additional information indicated that the subject reads lips, knows sign language and can read and write. None of the examiners had any knowledge of sign language, so this option was not available.

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In order to learn from other examiners' experience, we looked for material pertaining to the testing of the deaf-mute and found very little. If we ask ourselves why there is almost no documentation concerning exams given to handicapped examinees, we can come up with a few answers:

1. The percentage of handicapped people is low, therefore the percentage of the handicapped that require polygraph tests is also low.
2. Handicapped people are less involved in issues requiring tests as their handicap makes it more difficult for them.
3. Examiners prefer to avoid conducting this type of test due to its difficulty.

In the past, the senior author of this paper had conducted many tests with translators and lectured about how to train a translator, set up an examination room and how to conduct these tests. When training the translator, we practiced in a language which the author knows to verify that the translation was accurate in terms of both words and meanings. During these trainings we found out that many times the translation did not exactly reflect what the examiner meant in the pre-test interview and/or the question formulation.

In the current case, one possibility was to hire a person who knows sign language; however, this was too expensive an investment and too problematic considering the time it would take to train an individual to serve in such a role for the administration of just one test.

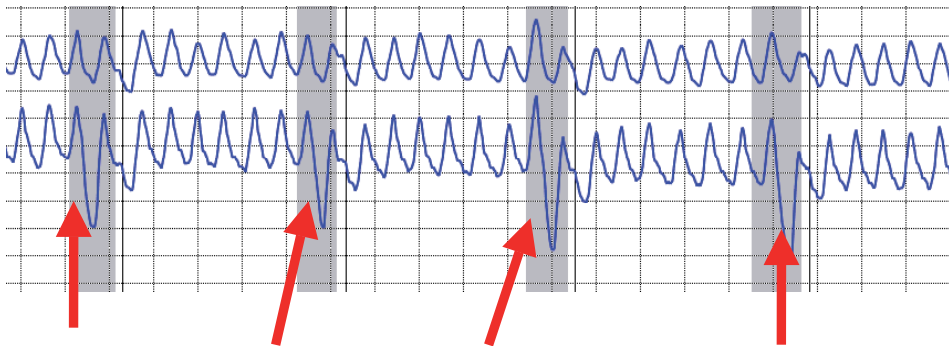
It was decided that using a coworker who is experienced with sign language was also problematic as they might be involved too, and we would have no control over the accuracy of the translation. We considered putting an examiner in front of the examinee, so he could read the examiner's lips, but we were still not sure if the examinee had the ability to correctly read the lips of a person that he is not used to communicating with, or, anyway, if we would be able to ascertain, on the basis of feedback from the examinee, that his interpretation of questions was the same as what we wanted to ask.

Based on this we decided to use the examinee's ability to read and write both during the pre-test interview and the actual examination (recording the charts).

Another very important question we encountered was how to have the examinee answer. The sounds he produces are very similar and appear to cause a great deal of effort and movements which are definitely conducive to the collection of valid polygraph data. Even a slight nod of the head in our opinion might cause movement that might affect the data.

In order to overcome this problem, we decided to conduct the examination using a S.A.T (silent answer test). One of the advantages of the S.A.T is it can overcome situations in which physical problems could interfere with valid data collection, and might cause inconsistent distortions.

In the Terminology Reference for the Science of Psychophysiological Detection of Deception by Donald Krapohl & Shirley Sturm (Polygraph V31, 2002, No 3, p 216) : “The use of the SAT is prescribed by some PDD experts to help avoid distortions to the pneumograph tracing attributable to speech disorders”



These distorted answering cycles can cause changes in the other tracings and of course affect the examiner’s ability to properly evaluate the data.

In 1972, Dr. Frank S. Horvath and John E. Reid conducted research regarding the SAT and revealed that the Silent Answer Test produces better respiratory patterns by eliminating causes of distortions from the examinee who prepares him - or herself to answer each question aloud by inhaling a great amount of air; and from the examinee who strongly emphasizes his or her answer in order to emphasize his or her denial.

Dr. James Allan Matte describes in his book (Forensic Psychophysiology using the Polygraph, Chapter 22, p 549-553,) a method of conducting tests for the deaf or hearing impaired and the use of interpreters.

Nate Gordon with his IZCT uses the SAT in each of his exams as the first chart. Nate found that sometimes when using the Positive Control technique (each question asked twice with the examinee instructed to first answer with a subjective lie and then with a subjective truth) when a person was lying in answer to a single question in a multi-issue test, just hearing the ques-

tion with the greatest saliency asked for the first time would elicit a reaction, regardless of whether the sequence was TRUTH-LIE, or LIE-TRUTH. To identify this problem, he started using a single chart of the SAT of each of the questions to be used in the Positive Control sequence. He found that this helped identify issues that were extremely salient. He then realized that very few people attempted countermeasures or mental rationalizations during SAT charts, because they thought if they weren't telling a lie yet it wasn't necessary. They also realized that often this chart was very productive. It is not the verbalization of a "yes" or "no" that causes a reaction, but whether the mind recognizes the saliency of the question.

Richard Golden actually reported that verbally telling a lie may actually create relief, where not being able to tell the lie could actually generate greater reactions. He compared not being able to lie with stubbing your toe and not being able to scream! The pain is even worse.

Gordon also published in the AAPP Journal, in September, 1984, a document regarding a test he conducted with a handicapped examinee in which he used both SAT and VAT charts. The examinee was a severe stutterer, so only SAT charts could be properly evaluated.

This knowledge and findings led us to the following solution:

Preparation for the test:

Many times accent can be an obstacle to understanding, so trying to read lips might create the same problem. Another possible problem we perceived was the examinee's vocabulary (number and type of words known to the examinee).

Therefore we prepared 2 computers: one with a 21' screen to communicate with the examinee and the other to conduct the test. We also prepared a pad and a pen for the examinee to write on.

Prior to the test, we prepared a PowerPoint presentation containing the different parts of the pre-test interview. We also had another PowerPoint slide presentation open for communication with the examinee, and we moved from one computer to the other based on need.

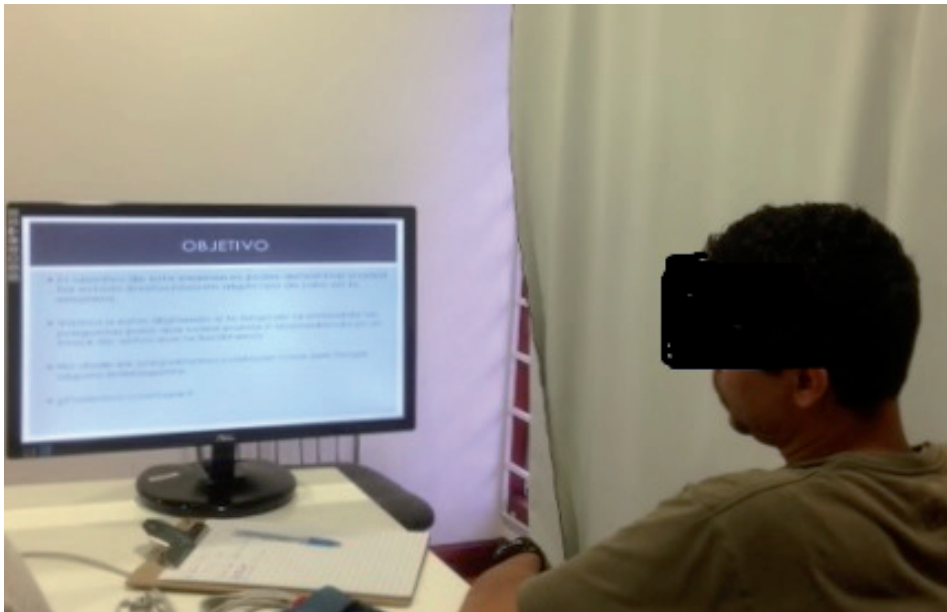
### Pre-test interview:

At the beginning of the pre-test interview, we reviewed the case with the examinee and found that he was aware of the problem and the reason for the examination. Furthermore, the examinee explained to us (in writing) that his boss had asked him to try to find out for him who was stealing.

The pre-test presentation was presented to the examinee. When we started to review the test questions we encountered some problems as the examinee was not familiar with some of the words we wanted to use. We realized we needed to simplify the questions and use words the examinee could comprehend.

The questions were presented to the examinee in the traditional order (Relevant, Comparison and Irrelevant).

At this stage, we allowed the examinee to take a break while we prepared a PowerPoint presentation with the correct sequence of a UTAH CQT for 3 charts.



Reading the pre-test presentation



### Communicating during the pre-test

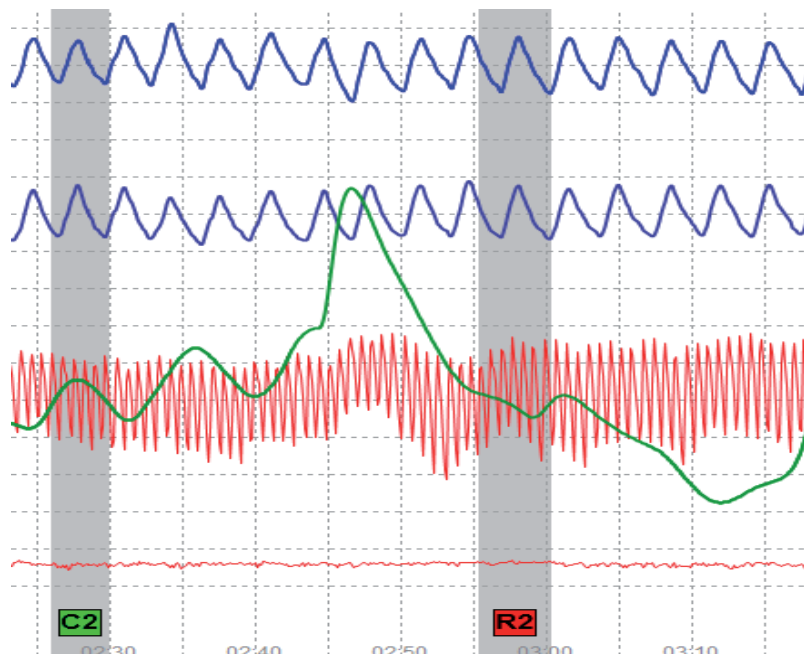
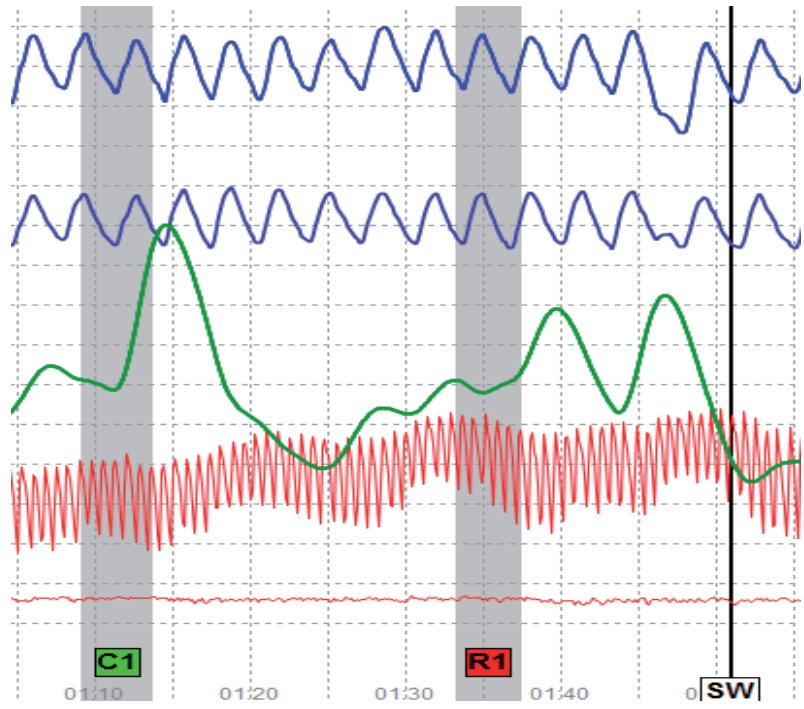
After finishing the pre-test we explained to the examinee (via a slide presentation) that he didn't have to answer us as his body would answer each question perfectly for us. He was instructed that he only needed to sit still and watch what was written on the screen in front of him.

### Conducting the test:

While recording the charts, we had 2 examiners sitting in the room. One handled the computerized polygraph and the other the PowerPoint presentation. As the examinee was deaf, the communication between the examiners was verbal (timing of changing slides).

3 charts were recorded and the final call was NDI

2 charts segments



These charts were easy to read and we could see that the examinee was focusing his “psychological set” on the comparison questions, which held the greatest saliency for him.

### Conclusions:

Based on Dr. Frank Horvath’s research on the Silent Answer Test, the writings of James Allan Matte, and the examination conducted by Nate Gordon, we conclude that there is no problem in conducting an examination with a deaf-mute examinee or other handicapped individual intelligent enough to understand the process and the difference between right and wrong.

The Silent Answer Test (SAT) serves the polygraph examiner as well as the Verbal Answer Test (VAT). All we need to do is establish a good line of communication with the examinee and follow the proven protocol of the polygraph procedure.

### References

- Gordon, N. J. and Cochetti, P. M.: A Polygraph Examination of a Handicapped Man. *Journal of American Association of Police Polygraphists*, (pp. 18–28), 1984.
- Horvath, F. S. and Reid, J. E.: The Polygraph Silent Answer Test. *The Journal of Criminal Law, Criminology and Police Science*, Vol. 63, No. 3, 1973.
- Krapohl, D. and Sturm, S.: Terminology Reference for the Science of Psychophysiological Detection of Deception, *Polygraph*, Vol. 31, No. 3, 2002.
- Matte, J. A.: The Deaf or Hearing Impaired and The use of interpreters. *Forensic Psychophysiology using the Polygraph*, Chapter 22, pp. 549–553, 1996.