# Reliability for legality, consistency and expertise essay

Health & Medicine, Stress



## **Voice Stress Analysis**

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Polygraph is to elicit admissions even before the exam

Although courts have not generally allowed polygraph evidences, there are cases when they can be complimentary to the court's findings. However, the court should qualify its expert examiners, device and the conditions under which the examination will take place. The polygraph tests are done in advance because the jury does not want being usurped by their findings. As the findings from polygraph can be erroneous, courts are normally reluctant to endorse them, because they are taken as close to calculated gamble. Therefore, they should come even before the court's findings to elicit the admission of the evidences that the court would approve after its examination (Alder, 2007).

## **Countermeasure to the Polygraph**

Some of the countermeasures that one can hone himself while expecting the polygraph test are the Machiavellian lies. In this regard, the subject can practice abilities that will enable him to make an advantageous lie during the tests. Some people like Aldrich Ames, courtesy of the advice he got from Soviet leaders, went and had enough rest, controlled breath, became nice to the examiner by smiling and developed rapport by being cooperative while testifying. Thus, confidence and friendliness with the polygraph administrator can make one to pass its tests (Alder, 2007).

## **Bogus Pipeline**

This was a technique employed in criminology by social psychologists when measuring individuals' attitudes or affect towards a certain stimuli. In the polygraph technique, a person whose emotions and attitudes are being measured will be connected with fake wires and electrodes and told that he is being monitored by a machine or a lie detector. In this way participants will end up telling true answers because they will be sure that their true feelings will surface regardless their efforts to hide them. Thus, the examiners will be able to solicit more truthful answers (Alder, 2007).

# Endogenous factors that could threaten the validity of a polygraph

Temporal physiological conditions such as increased blood pressure, sleeplessness, and illegal drug use are the first endogenous factors that can affect the results of the polygraph examinations. Other factors include chemistry reactions between the examiner and the examinee, some medical conditions for instance tachycardia and countermeasures which will affects ascertainment of individual's level of guilt(Alder, 2007).

#### What and How the CVSA Measures Stress

The CVSA has been introduced as a perfect substitute for polygraph. No wires will be connected to the subject, as it only uses a microphone plugged into a computer to analyze the subject's voice patterns as he speaks. The voice patterns will form charts that will be analyzed by investigators. As the CVSA will be recording, quantifying and analyzing changes in frequency of

the human voice during examination, an individual's changes in stress will be correlated to deception or truth (Alder, 2007).

# US Government to develop the scientific basis for the psychophysiological detection of deception

Generally, the US government has shown no serious efforts to develop psycho-physiological techniques for detecting lies and deception. However, the government's security and law enforcement agencies such as CIA and FBI have been adopting techniques from independent researchers or those sponsored by Universities and private organization to detect criminals. In this regard, the detecting machines have been used when recruiting army men, interrogating prisoners of wars and identifying terrorists and conspirators against the government. In another show of no seriousness, the government through Employee Polygraph Protection Act has reiterated that no employee should be forced to undergo such tests to be employed (Alder, 2007).

#### The research that has either proven or disproved the CVSA

According to the Haddad and colleagues' 2001 study at the Air force Research Laboratory, the CVSA depends on variances in voice tremors to render data so that associated stress can be analyzed. It works on an assumption that in normal sense, the human being's vocal codes modulate voices by 8 to 12 Hz microtremours. Therefore increased level of stress or arousal may contribute to the increase or decrease of tensions in the vocal codes and hence the frequency. However studies have shown that varieties of factors could influence the absence or increase of micro tremors during speech production, and therefore it is unlikely that a single measure could be

produce universally acceptable results. Other researchers have cited that conditions such as throat cancer could also affect one's voice production and hence the expected results (Alder, 2007; Haddad et al., 2001).

#### Law Enforcement Agencies and the Use the VSA

A number of police departments have resorted to using the device ostensibly to catch lying suspects. In fact some police swear that the device has been much instrumental for them to detect lying criminals, and it is better than the polygraph because it is portable. In some states, police officers can just record the suspect's voice and then run the tape through the portable computer analyzer. The National Institute for Truth Verification, the company that manufactures the device, has said that it has sold the VSA devices to 1, 100 law enforcement agencies in the country. However, legal analysts note that the device has been banned in some states, and just like the polygraph, its findings are not admissible in courts. Other law enforcers have argued that the device is not as popular as polygraph is, and in fact its results cannot lead to one's arrest. Otherwise its manufacturer is not becoming enthusiastic in new researches to innovate it (Alder, 2007).

# The polygraph utilizes one of only two responses. "YES" or "NO"

While one is taking up a polygraph examination, he will be asked by the examiner a set of question that he will respond to by answering "yes" or "no". The same questions will be repeated on other separate polygraph charts. After the completion of the third chart, the scoring will begin so that the examiner may note if the subject was saying the truth or not. Using the

polygraph charts, the examiner will determine if the results actually reveal the truth or not. In this regard, they will be explained to the subject who may be required to explain cases of deception (Alder, 2007).

## The higher meaning of "Machine vs Machine

It refers to the scenario that was characterized by competition between Larson and Keeler in making their lie detection machines to fight crimes in Chicago and elsewhere. While Larson pursued the strategy of objective science for his machine, Keeler wanted to reap profits out of his machine. For Larson, his invention could be sound if it was vetted by experts, accepted by the society and meritocratic institutions that would continue research on it so that it can continue improving livelihood. For Keeler, his proprietary strategy put into consideration social utility as the starting point. Therefore he was to keep his knowledge secrete to gain a relevant value in the market. In this regard he went on to patent it so that it could be rented.

Consequently, as Keeler kept on touting the success of his machine, Larson could openly say that its findings could not be relied on to detect lies and indict someone (Alder, 2007).

#### **Demonstrate how Keeler and Larson were successful**

As Keeler pursued the market side of his machines, he made sure that his students also underwent commercial trainings of operating them. Further he even cultivated the same to those who bought them to ensure easy examination. However, the courts have failed to accept them as their findings cannot be admissible; this is simply because most polygraph administrators lack self control norms and working standards, and they may

intimidate the subjects to just to extract their confessions. On the other hand, as Larson took objective path, he insisted that Polygraph should not be used as a basis of prosecuting someone, nor to force him to confess.

Throughout his life he was objected to Keeler's efforts of introducing it in the courtroom. For him it was better if it could just be used for psychiatric purposes (Alder, 2007).

#### **Conditional response theory**

This is a classical theory that states that an individual can be conditioned to respond to a particular stimulus by eliciting certain behaviors. In the case of administration of polygraph, it has been noted that since the police force is associated with false accusations, if the examinee is put under the same police personnel, it is possible that the biomarkers may be affected differently. Moreover, due to one's culture, it may be prohibitive to answer some questions. Both cases can elicit dramatic automatic responses from the examinee that may be interpreted as signs of lying (Alder, 2007).

# August Vollmer's transition into the LAPD

The invention of the polygraph machines by Keeler and Larson also got attention of August Vollmer, an American leader in charge of interwar professionalization of the police force. As many municipal police forces had grown to the point of becoming paramilitary, they were widespread inequality and diversity, and the police could just conduct their own investigation to render evidences that were admissible in courts. When Vollmer was moved to be the police chief in Los Angeles, to clean up corruption that was there, his efforts to improve police recruitment and

promotion based on IQ and institute the polygraph forensic expertise met a snag. Due to passionate resistances from high ranking politicians and police corps who felt threatened with his changes, he was transferred back to Berkley (Alder, 2007).

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