



Specialist Integrity Service Provider

WHO • WHAT • WHERE • WHEN • WHY • HOW

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The Polygraph as a valuable aid in an investigation

The nature of an investigation

The quest to know what has happened is as old as humankind. We investigate to learn, to grow, to absolve blame, to accord blame, to effect retribution, and much more.

To define investigation:

It is a systematic, minute, and thorough attempt to learn the facts about something complex or hidden. It is often formal and official.

The following elements are found in any investigation:

Examination: An examination is an orderly attempt to obtain information about or to make a test of something, often something presented for observation and investigation.

Inquiry: An inquiry is an investigation made by asking questions rather than by inspection, or by study of available evidence.

Research: Research is a careful and sustained investigation.

(Dictionary.com)

A characteristic of most investigations is the vast amounts of information that the investigator has to deal with during the investigative process. It, therefore, makes sense to use aids and specialist services to assist in the investigative process.

The use of the Polygraph as a tool in the investigative process

Historical development

The polygraph, or better known as the 'lie-detector', has been used to assist with investigations for many decades in various countries, but predominantly so in the USA. The FBI and Secret Service, the USA Military, the CIA, and most Police Services in the USA use the polygraph for investigative purposes. This relationship dates back to the early twentieth century.

The Employee Polygraph Protection Act of 1988 (EPPA) did curtail the use of the polygraph to a significant extent in the private sector in the USA. A notable characteristic of the legislation is that it excluded Federal government and Agencies, as well as key industries, from the stipulations of the act. Ironically, this exclusion actually emphasised the value of the polygraph as an investigative tool and exposed the cynical nature of the legislation.

As far back as 1923, the District Court of Columbia, USA, expressed itself about the admissibility of scientific evidence in general and polygraph evidence in particular with the well-known Frye decision. (*Frye v United States* 293 Fed. 1013 (1923)). This decision has governed the acceptance of expert scientific evidence in the US courts for many years.

With the *Daubert v. Merrell Dow Pharmaceuticals*, 509 U.S. 579 (1993) decision, the Frye decision was overturned, paving the way for expert scientific evidence to be presented to the court, and empowering the presiding judge to assess and decide on the scientific validity of the evidence presented to the court. This paved the way for polygraph evidence to be placed before the (USA) courts more readily.

It is trite law however, that polygraph evidence is in essence opinion evidence. It follows that the value of any polygraph evidence submitted, irrespective of where it is presented and how it is intended to be used is directly linked to the knowledge, ability, professionalism and experience of the polygraph examiner.

The polygraph examiner

Most polygraph examiners receive training in the USA or elsewhere from schools accredited by the American Polygraph Association, which, almost by default, has become the standard-bearer for the polygraph industry worldwide. (Unfortunately, there is the fly by night variety as well!)

General minimum requirements for admission to the training schools are

- A three year college degree;
- Investigative experience; and
- Sound character.

As with all vocational training, experience and continuous education are of paramount importance.

Nature of a polygraph examination

A polygraph examination is a process. It is not a simple exercise of hooking a person up to an instrument, popping a few questions and pressing a button to get a result.

The three phases of a polygraph examination:

- *Pre-examination phase*

Most important in this phase is the pre-examination preparation by the examiner and the pre-examination interview, during which information is collected and the test questions are prepared with the examinee and agreed to.

- *Examination phase*

The prepared questions are put to the examinee using a validated question technique. The examinee's physiological responses are recorded with a number of sensors placed on the body of the examinee. (Blood pressure cuff on the upper arm, respiration sensors on the chest and abdomen, and sensors on the fingers or hand palm to record electro dermal activity. Supplementary sensors may also be used.

The questions would be repeated several times (at least three times), and the physiological responses recorded.

- *Post examination phase.*

The examinee will be questioned about the responses he/she had displayed, and provided the opportunity to provide explanations. If tactically acceptable, the examinee is informed of the results (only after thorough analysis of the test data). The report is compiled and presented to the client.

Results:

Only three results are available: Deception Indicated **(DI)**

No Deception indicated **(NDI)**

No Opinion can be expressed. **(NO)**

Some examiners prefer to 'interrogate' the subject upon completion of the examination in the event of a deceptive result. (*Interrogation is a strong term in this context, as interrogation implies that the subject must be under control of a person with executive powers, i.e. a Police officer. In the private sector, this is rarely the case. It would be more correct to refer to a structured interview or a forensic interview.*) This remains a contentious issue and is dependent on local legislation and Human Rights Manifests.

Value a polygraph examination may add to an investigation

Can the polygraph add to any investigation? The answer is an unequivocal *yes!* It can and it does. In essence, a polygraph examination has the sole purpose to ***confirm or reject critical elements of information***. Investigators do the same. Obviously, the methodology and criteria differs. The polygraph examiner expresses an opinion, while the investigator needs *prima facie* evidence to conclude the investigation.

What value does the polygraph examination add?

Firstly, it enables the investigator to eliminate honest individuals from the list of possible suspects.

With most investigations, there are more than one possible suspect. The polygraph is regularly used to identify the perpetrator(s) and to confirm the non involvement of the other possible suspects.

Secondly, it can confirm or reject alibis or 'fall back' positions.

Quite often, when a suspect is confronted with certain facts obtained during the investigation, the suspect will offer explanations or alibis to frustrate the investigation. The truthfulness of the statements can quickly and effectively be confirmed with the polygraph.

Thirdly, it can confirm suspicion or disbelieve.

Investigators often find themselves in a position where they may entertain strong suspicion of disbelief about a particular suspect, but have no evidence at that moment to warrant their suspicions and further action. The polygraph can quickly indicate if their suspicions are correct.

Fourthly, it can give direction to an investigation.

Investigators are often faced with a number of possible motives. The polygraph assists to identify the real motive or story.

Fifthly, it is an excellent way to obtain information.

Polygraph subjects are encouraged to air their views and opinions during an examination. Frequently useful information is collected over and above the polygraph result, which adds significant value to the investigation.

Ultimately, it saves time and money, and increases probability.

The polygraph enables an investigator to save time and money. Clients always respect and appreciate a quick resolution to their problems. The opinion expressed by the examiner adds to the probability of the evidence at hand.

A selection of interesting cases where the polygraph proved its worth...

In my thirty years as a polygraph examiner, I have assisted with a variety of investigations. These ranged from assisting the Police with serious criminal investigations, the business environment with examinations into theft, fraud, industrial sabotage and private individuals with various problems including fidelity matters. Some of these are:

1. *The suicide that went wrong.*

Some years ago, a Police officer found an abandoned car, partly burned, next to the road with a body of a man inside.

At the address of the owner of the car, the Police found blood spatter, which matched the blood of the victim. They questioned the wife, who initially denied any knowledge. She was asked to do a polygraph examination. The result indicated possible involvement in the death of her husband. She eventually admitted that she was involved in the killing of the husband.

She was involved in an extra-marital affair and planned with the boyfriend to kill her husband. They drugged him and intended to put him in his car with a hosepipe connected to the exhaust to make it look like suicide. Apparently, the victim woke up when they tried to put him into the car, and the boyfriend hit him over the head with a blunt instrument. For obvious reasons, they could no longer 'engineer' the suicide!

2. *The killer was not a communist.*

Twenty years ago the Indonesian Special forces requested assistance with an investigation. A young officer killed the commander and eight other members of a unit stationed on one of the more remote Indonesian islands. He wounded seventeen more. He was eventually shot and surrendered.

A subsequent investigation discovered that his father and uncle were members of the Indonesian Communist party. At the time, Indonesian law prohibited any person with any connection to the Communist party to serve in the armed forces or the police. This gave rise to fear that there may be a communist supported effort to infiltrate the armed forces. I was invited to assist with the investigation into this matter.

A large number of people were polygraphed, among them the shooter. No indication could be found of any communist-inspired plot. It was however, clear from information collected during the investigation that the young officer suffered from paranoid episodes and that he had on occasion consulted an Indonesian 'Shaman' who had given him an undisclosed potion to use. The investigation team concluded that the young officer was most probably mentally disturbed and suggested that he should be institutionalised. He apparently faced the firing squad

3. *The money that went missing from the moneybag.*

Bulk money transportation is a high-risk business. Special measures are taken to ensure that the amount of money collected is the same as the amount delivered.

In this case, because of the distance involved, a light airplane was used to transport bulky canvas money bags with thick leather straps all locked and sealed. It happened from time to time that money was found missing from these bags when checked at arrival. The amounts were never large and the loss frequency not high. It was accepted as normal human error.

That was until the day a vast amount of money went missing from the bags. All those involved were polygraphed and it turned out that the crew who looked after the bags in flight was involved. They denied this vehemently. The

bags were still sealed, and no indication of collusion could be found between the crew and the dispatching or the receiving side.

Eventually, the bags were carefully investigated. They discovered that the canvas stitching on some of the bags was cut open with a sharp blade, and re-glued, apparently in-flight. After interrogation by the Police, the crewmembers admitted and some of the money was recovered.

4. *The role of the photographer*

It often happens that people in relationships start to doubt the fidelity of their partners. Usually, it is a very sad situation with both partners highly emotional. The polygraph examiner has to deal with the situation with great circumspection. Sometimes though the situation, in retrospect, can be very amusing.

The husband brought his young wife for an examination. He complained that his wife seems to have developed other interests and he is not sure that their baby was actually his. He believed that a photographer might be involved. He also mentioned that shortly after their marriage she was involved in an affair with two men at the flats where they lived at the time. However, after admitting to the indiscretion everything seemed to be fine until recently.

When I interviewed the wife, she denied any involvement with the photographer but she confirmed that he took photographs of her. She hastened to add that she was not completely naked, as she had worn a G-string during the sessions. She denied that she had 'serviced' any man since their marriage except the two men at the flat some years ago.

Intrigued by her choice of words, I asked the woman what work she did before her marriage. She replied that she had worked for her husband, who operates an 'Escort Club' (euphemism for a brothel). Her use of words then started to make more sense! In the end, she admitted that she had sex with the photographer but did not believe he was the father of her child. I never heard from the couple again.

5. *Contaminated sugar*

Some time ago, I was requested to assist with a case where gross contamination of sugar was discovered. An industrial client found a used condom when opening a bag of sugar. (It was passed through a strainer)

The discovery raised serious questions about the health and safety issues as well as quality control practices at my client's packing operation. An in-house investigation seemed to indicate that accidental contamination was highly unlikely, more so in this particular case.

The staff involved were polygraphed and a number of possible perpetrators were identified. After further investigation, the real motive for the contamination was identified. The workers were dissatisfied with the pay increase management was willing to agree to and it was decided to 'punish' management!

Conclusion

A well-trained and experienced polygraph examiner can add tremendous value to any investigation. When the polygraph examiner is accepted as part of the investigative team, the effectiveness of the investigation is definitely raised significantly.

The polygraph examiner, in my opinion, should preferably not be the primary investigator. An independent polygraph examiner ensures that vested interest from whichever side does not cause a distortion of the facts and ultimately the investigation.

The truth must always be triumphant!

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