

Validity of Polygraph



* Bhagyashree Kulkarni

ABSTRACT

Research Paper- Forensic Psychology

Because of its uniqueness, Forensic psychology practice perhaps receives more scrutiny than does any other area of Psychology. The opinions given by the Forensic psychologists in the court, their reports and testimony are open to both criticism and formal cross-examination. The report based on Forensic assessments does have influence in deciding the sentence to be pronounced in regard to an accused. The following paper is an attempt to understanding the nature, definition, scope, validity, limitations of the technique Polygraph.

INTRODUCTION

Forensic Psychology is the interface between psychology and law. It is the application psychological principles and knowledge to various legal activities ranging from crime against children, such as child abuse, child custody disputes, to assessing the mental and physical condition of a person's own capacity to manage his or her affairs, ability and competency to stand trial, to advise judges in matters relating to sentencing.

POLYGRAPH

Polygraph examinations are popularly known as "Lie-detection test" and can also be named as truth verification test. They are used for detection of deception based on the principle of Psychosomatic interaction within an individual that is Psychologically, a change in the person's consciously held feelings produces a defense reaction in the form of Physiological changes in respiration, blood pressure, pulse-rate and galvanic skin responses(GSR).

A fear of detection and entrapment induces a person to lie, which produces such physiological responses. When a person deliberately attempts to deceive, his fear of detection produces inner conscious conflicts and certain involuntary (autonomic) physiological responses which can be precisely measured.

OBJECTIVES OF POLYGRAPH EXAMINATION

- 1) To verify the veracity of the statement of suspect, witness and complainant in all types of crime.
- 2) To replace the third degree method of interrogation in a scientific manner
- 3) To examine white-collar criminals, economic offenders, cyber criminals and other offenders.
- 4) To economize the process of investigating by screening large number of suspects by differentiating between the guilty and the innocent.
- 5) To corroborate or to refute the findings of the investigation.

PSYCHOLOGICAL PARAMETERS:

There are three types of parameters:

- Suspects,
- Complainant
- Witnesses

PHYSIOLOGICAL ASPECTS:

Tension: It is the amount of physical activity

Liability: It is the change in tension level resulting from a change in Perception or feelings consciously held.

Non-specific activity: It is a spontaneous activity.

Respiration, blood pressure pulse rate, Galvanic skin resistance, are not under the voluntary control of any living being but are being controlled by the autonomic nervous system (ANS) of the nervous system (NS)

HOW DOES A POLYGRAPH WORK?

The polygraph measures and records several physiological indices such as blood pressure, pulse, respiration and skin conductivity while the subject is asked questions and he answers a series of questions when conducted by a competent and experienced Polygraph examiner, deceptive answers will produce physiological responses that can be differentiated from those associated with non-deceptive answers.

At the outset, the examiner obtains complete information on the case. Polygraph examination consists of three phases. During the first phase, the Pre-test phase, the examiner discusses with the subject the test issue, thorough reviews all of the test questions that will be asked during the test and assesses the subject emotional and physiological suitability to undergo the polygraph test.

The Testing phase consists of a series of tests where the subject's physiological responses are recorded as the subject answers a set of questions reviewed earlier, i.e. when the subject hears a question which he intends to lie, the Brain interpreters and triggers autonomic and uncontrollable physiological changes captured by the polygraph.

During the Post-test phase the examiner reviews all test data obtained and interprets the polygraph charts from which the examiner will reach one of three conclusions:

- 1) The Subject is telling the truth
- 2) The subject is not telling the truth
- 3) The results are inconclusive.

Upon completion of the test a Verbal report will be given to the client, followed by a written report which consists of a synopsis of the case information, a list of the relevant test questions, the Subjects answers, and the examiners opinion as to be the subject's truthfulness or deception.

THREE MAIN PURPOSES OF POLYGRAPH TESTING:

- 1) Event-specific investigations (e.g. After a crime)
- 2) Employee screening
- 3) Pre-employment screening

ADMINISTRATION OF THE QUESTIONNAIRE:

Each questionnaire is administered minimum three times except in stimulation test or POT where only one run is sufficient. While asking the questions on the equipment, each question is asked after a gap of 25 seconds. This gap is allowed in order to activate and normalize the sympathetic and parasympathetic components of the autonomic nervous system. Marking should be made on the chart at the time of starting of question and end of the question and also indicate the responses of the subject on chart.

The examiner records the artifacts like Swallowing, Coughing, Movement, external factor and other non-verbal clues on the observed on the chart during the polygraph examination.

ADMISSIBILITY IN COURTS:

When courts have been called on to resolve disputes concerned with use of polygraph examinations, they have to consider both the techniques validity and whether its use, however, valid, interfaces with other values that the law seeks to protect.

A closely related question for the courts has been who should determine whether some procedure has gained general acceptance in its field, some have held that the courts must look to the judgment of scientific community or that a determination of reliability cannot rest on a process of counting scientific noses.

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IT'S STATUS IN INDIA:

There are two aspects pertaining to the issue of legal admissibility of polygraph test results in India. One pertaining to its application and other relates to legal provisions regarding acceptance of the results by the courts as evidence. Still, the matter of Polygraph test results to be admitted as an independent evidence during trial remains to be decided, but the Indian courts have considered the Lie-detection tests as an useful scientific aid to investigate. Further, there is no law which forbids the use of Lie-detector test with the prior consent of the accused or suspect.

VALIDATION OF POLYGRAPH TESTS:

To put it in simple words it means to question your own results of some cases in the past. Like it may have been considered that the results were correct, however failed to confirm them with a confession because you are unable to overcome the obstacle the examinee presented with their alternative explanation as to why they failed the test.

The greatest fear of the 'seeker of truth' is misidentifying an innocent person as the perpetrator (false/positive). example: If the sexual molestation case is over and the first thing he says is, "I didn't do it, but every time I heard her name I could feel my blood pressure soar or "I felt a rush of anger that after all these years my company doesn't trust me, every-time you asked me if I took the missing money." The validity of the Polygraph examination is to detect deception has a long controversial issue.

These examinations have been advocated as a way to ascertain guilt of criminal suspects, to exculpate innocent suspects, to protect national security and to maintain employee honesty. Criticisms have been given regarding the validity of the administration of the controlled questions technique. The CQT may be vulnerable to being conducted in an interrogation like fashion. This kind of a interrogation style would elicit a nervous response from innocent and guilty suspects alike. An alternative is the GKT, or the concealed information test (CIT), is used in Japan. This test prevents potential errors that may arise from the question style.

Polygraphs measure arousal, which can be caused by anxiety, anxiety disorders such as the PTSD, nervousness, fear, confusion, hypoglycemia, psychosis, depression, substance induced (nicotine stimulants), substance withdrawal state (alcohol withdrawal) or other emotions, polygraphs do not measure "lies". A polygraph cannot differentiate anxiety caused by dishonesty and anxiety caused by something else.

One important technique to validate is: PVT (Polygraph validation technique); While still in the experimental stage, the PVT, appears to be an effective testing method of validating prior deceptive polygraph tests. In addition to protecting against false/positives, it also gives the examinee an additional tool in overcoming denials and ascertaining admission from deceptive suspects.

GOALS OF THE PVT:

It is an innovative testing method to help protect against false positive outcomes. To assist the examiner in overcoming denials from deception, as later verified, individuals.

WHAT IS YOUR GREATEST FEAR?

The greatest fear of the "Seeker of Truth" is misidentifying an innocent person as the perpetrator (false/positive). With the high accuracy rates of Forensic psychophysiology and the innovations of computerized systems and algorithms to offer the examiner a second opinion, there are still times when our conclusions are subjective.

ADMINISTRATION OF THE PVT:

PVT is administered in a peak of tension (POT) format, where the issue of each question concerns their previous comparison question test (CQT)

ANALYZING BEHIND THE PVT:

The PVT is a searching POT test with the addition of two comparison questions, the regular question at C4 and the specialized directed lie comparison at C6.

PVT appears to be an effective testing method of validating prior deceptive polygraph results where:

Concerns arose about the possibility of a false/positive Where the examinee introduced an argument to why he failed the CQT which the examiner had difficulty overcoming.

LIMITATIONS OF THE POLYGRAPH EXAMINATION:

There are some limitations of polygraph examination for which precaution have to be taken by the examiner, in order to avoid wrong opinion formation:

- 1) Mental tension of the subject e.g extreme nervousness, fear of guilt due to offences committed earlier.
- 2) Unresponsiveness of the subject
- 3) Some unobserved muscular movements.
- 4) Physiological defects like hearing impairment, neurological impairment, which can interfere in proper administration of the polygraph examination procedure.
- 5) Mental abnormalities

CONCLUSION:

PVT appears to be an effective testing method of validating prior deceptive polygraph results where: Concerns arose about the possibility of a false/positive Where the examinee introduced an argument to why he failed the CQT which the examiner had difficulty overcoming.

SUGGESTION:

Thus, “a Forensic Psychology Evaluation” involves more than a standard psychological evaluation. The goal of Forensic Psychology is to provide information in the form of a report or testimony, to judges, jurors, attorneys, and related others.

The information provided by the forensic psychologist is unique as it contains materials which are not known to many law enforcement agencies and hence these reports help the judges, jurors and related others to arrive at the most appropriate conclusion regarding a case. The current paper aimed to brief the readers about the polygraph technique in detail which the Indian courts have considered as a useful scientific aid to investigation.

***Institute of Forensic Science, Fort, Mumbai**

R E F E R E N C E

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