

■ ORIGINAL ARTICLE

Lie Detector Test and Its Admissibility in the Court

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ABSTRACT

Law enforcements round the world have always been inclined to the use of Lie Detectors. Lie Detector or the Polygraph test is one of the results of technological advancements. The Indian Law although doesn't allow the application of the Lie Detectors in the courts to be used as an evidence. This paper will give you a background check of lie detectors and despite of the fact that it isn't allowed, how effective has this been proved in cases. If we look at our ancient sciences also, the Ayurveda the technique to identify if a prisoner is at fault or not is the change in behavior, body language. We now call it in the modern language as psychology of an individual. This will also give a comparison of the admissibility rules of the same in different countries and how is it useful or not in their individual scenarios. Let us look at a brief history of how it was developed, the first application in a case and in the coming years do we see any changes in our Indian system of law for its application.

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INTRODUCTION

THE concept behind lie Detectors is that when a person is trying to deceive the investigator of his crime, his body tends to react under stress. The individual undergoes physiological and psychological changes such as happiness, sadness, anxiety etc. These different emotions produce different physiological and psychological responses. Talking about physiological responses, here we talk about the pulse rate, respiration rate, blood pressure, skin temperature, perspiration, etc. The physical responses indicate the body posture, the body movements,

movements of limbs, facial expression, etc. This is what we put together in a test known as Polygraph Test. In a polygraph test when the accused is interrogated of his crimes, his body tends to produce a hyper arousal state/stress/fight and flight mode of his body will be turned on. This in turn will result into physiological and psychological changes. Hence, the intent of using this test is based on the fact that the suspect would show unusual psychological and physiological responses while the innocent will show none of these responses, which can be identified in a polygraph test.¹



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HISTORY

The first polygraph is based on the works of an Italian Psychologist, Vitorio Benussi, whose seminal work on the respiratory system of the lie was published in 1914 following which, William M. Marston, a psychologist, lawyer and author of *Detection of Deception* using the concept of discontinuous systolic blood pressure invented the first prototype of Lie Detector. In 1921, the first polygraph was invented by John A Larson, a physiologist and a California-based policeman utilizing the above mentioned inventions. Device, which monitors ceaseless alterations in respiration rate, blood pressure and heart rate are an add-on in detection of deception. Larson's early research on polygraph became the basis of the Relevant/Irrelevant Question Techniques of the polygraphy testing procedure by Leonarde Keeler.

Using the researches of Fordham University Graduate School Psychologist Reverend Walter G. Summers, Keeler created transportable polygraph and in 1938 seasoned the same with Galvanic Response channel(GSR).

The practice of new testing procedure and use of polygraphy did not seek a peer review of their published work, hence the practice was not in alignment to the academic advancements in the field. The limited researches in the field of polygraphy or deception detection in the later years became a basis for the academicians to question on techniques and principles for the same.²

INDIAN HISTORY

Going back to the Vedic times about 900 BC, vedic texts mention the identifiable behavior of prisoners that made them confess to their crime.³ In ancient India, according to Vedas, we had a complete system of criminal investigation, the investigators, and jails. They even had to defend themselves in cases of self-defense, in defense of women or of weaker section who cannot take a stand for themselves.⁴ Manusmriti, which is considered to be an ancient guide to legal laws and constitutions in the Dharamshastras of Hinduism, specifies the role and responsibilities of a judge to identify the accused and the witness by specifically analyzing their posture, mind, changes in tone of

voice, movement of eyes. Chapter seven, twenty fifth paragraph of the Manusmriti states that, the judge should analyze the internal character of the person by examining his external signs for example, voice, their color, movements, aspects, movement of eyes, gestures, etc. Twenty sixth paragraph states that psychological aspect is apprehended by the aspect, motion, gait, speech, changes in the eyes and facial expressions. This ancient legal of law was one of its first to take into account the psychological aspect into judicial systems. Even flattening of voice, licking corner of lips, speaking in an unclear tone, paleness of faces, constant coughing are the manifestations of the guilty as per Mitaksara of the Yajanvalkyya Smriti.⁵

INDIAN STATUS

Set of rules by the National Human Rights Commission, 12 November 1999, post collecting after receiving numerous grievances in opposition to the Polygraph Test, set of regulations, including non-compulsive and consented behaviors were constructed to deliver the test. The guidelines, weren't regulated by any law and could suggest to make a subject dragoon into becoming a witness against himself, as per The Indian Constitution Article 20 (3) "No person accused of any offence shall be compelled to be a witness against himself." Polygraph tests are still legal if the defendant requests one, which violates the constitutional immunity from testimonial compulsion. The Commission, after bestowing its careful consideration of this matter of great importance laid down, the following guidelines relating to the administration of Lie Detector Test:

- The Accused cannot be delivered without informed consent of the accused.
- If the accused volunteered, access to a lawyer to be given.
- The police and the lawyer should explain the physical, emotional and legal implication of the test.
- The procedure of consent towards the test be made in the presence of Magistrate, wherein the accused is represented by the lawyer.
- During the hearing it should also be explained to the accused that the statement made isn't "confessional" but a statement made to the police and not to the judge.

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- The Magistrate has to look into the points considering duration of detention and the type of interrogation
- The real-time procedure to be recorded in a separate unit like a hospital, in the presence of a lawyer
- An account of a complete medical and unprejudiced information must be recorded
- Test cannot be enforced on the subject on compulsion
- The material and other evidence procured of the polygraph interrogation can be used as evidence under the Section 27 of the Indian Evidence Act
- Proof from a polygraphic examination cannot be individually admissible until supporting evidences are there
- Unconsented examinations results into third degree methods which aren't permitted by the court of Law
- The importance of undermining the accused cannot be done on the cost of witnessing against self
- The members of the parliament can consider formulating a law relating to the admissibility of the involuntary tests considering cases of public interest¹

Effectiveness of Polygraph

Effectiveness of polygraph has contradictory statements by the various associations. The American Polygraph Association calls it "highly accurate" declaring the accuracy rate to be 90% considering the usage, methods and techniques to be correct. On the contrary, experts by their critical analysis say the accuracy rate is only 70%.⁸ Prof. Don Grubin, a trainer of polygraph examiners, UK, states the same in agreement to the American Polygraph Association that a well-trained examiner, correct methodology, and quality controls contributes the test to be 80%-90% accurate which is more than the ability of even an experienced personnel to identify if someone is lying.⁹ A contradictory work by Verschuere, B., Ben-Shakhar states that the polygraph are based on stress levels and thus point out that an individual can feel stressed even while he is stating truth during the process of interrogation during a Lie Detector test. They have alternatively proposed to rely on emotional responses during interrogation, called the Concealed Information Test.¹⁰ In alignment to the above mentioned work, an article reviewing 16 empirical studies on the utilization of MRI to detect lie concludes that this technology is not scientifically reliable as it marks the absence of consistency amongst the findings and deprivation of.¹¹ In another book by Rutbeck-

The Commission disseminated the regulations to the Chief Secretaries and DGPs of States as well as Administrators and IGPs of UTs by a letter dated 11 January 2000.⁶

A woman was sentenced in 2008 based on the Brain Oscillation Signature Profiling as evidence in the court, it was a first of its kind of attempt.⁷

According to the Article 20(3) of the Indian Constitution : "No person accused of any offence shall be compelled to be a witness against himself." And Polygraph tests applicable on consideration of the requests of the defendant.¹

The Criminal Procedure Code, Evidence Act and the Constitution nowhere accepts the results of polygraph as the only evidence in a court of law in India as the scientific basis is prone to error. Regardless of this, it is been immensely utilized as an abet to probing an accused.¹

Again a bench, lead by the Chief Justice of India 2010, of the Hon'ble Supreme Court stated in a decree on polygraph and other new branches of forensic psychology. The salient features of this judgment, vis-à-vis polygraph interrogation are:

- Polygraph can only be disseminated to the accused on an informed consent in the presence of a magistrate

Goldman, discusses the negative implications and civil rights concerns in the usage of polygraphs.¹²

The editor of the *Journal of Indian Academy of Forensic Medicine* points out that all the Deception Detection Tests as modern techniques in forensic medicine are fruitful in interrogating the criminals.

Instances of Use in India

A few of the high profile cases where polygraphy was applied:

The ₹3,000 crore stamp paper scam mastermind Abdul Karim Telgi was put through a truth serum or narco analysis test, the P-300 brain mapping test and a polygraph test by the Maharashtra police.

In the Aarushi-Hemraj murder case, the CBI had subjected her parents, Rajesh Talwar and Nupur Talwar, to a polygraph test in 2008. Three men, Krishna, Raj Kumar and Vijay Mandal – all servants from their neighborhood – were also put through the test.

In the Nithari Serial Murder case, in which skeletons of 17 missing children were recovered from inside a house in Noida, house owner Moninder Singh Pandher and his servant Surinder Kohli were arrested and were administered brain mapping and polygraph tests in 2007.¹³

Another case in the Kerala Court, *Rojo George vs Deputy Superintendent* for allowing the narco analysis test it was stated that traditional methods of interrogation could not give any result. So the Deception Detection Test are used in investigations. And tests conducted in supervisions guarantee the fundamental rights of the citizen of India, not violating them.

In a major judgment by Madras high court in *Dinesh Dalmia vs State*, the court stated that where the accused didn't confess to a crime the scientific tests are utilized by the agencies.

In case of *Santokben Sharma bhai Jadeja vs State of Gujarat*, the Gujarat High court held that "Narco analysis test is conducted under the supervision of doctors and proper care is taken and there is consent, with the observation of physical and mental state of the accused".

The Andhra Pradesh High Court in the *State of Andhra Pradesh Vs. Inapuri Padma*, relying on the previous decision by various courts on Deception Detection Tests, above decisions,

another time upheld the constitutionality of Brain mapping and Polygraph tests, it was observed until the accused is apprehended by administering scientific methods, it gives them strength to accept that they cannot be taken down to make them answerable for the commission of the crimes. By administering Brain mapping, Narco analysis and Polygraph tests, it is not known what statement comes from the person who undergoes the test, implicating or not. Therefore, the protection given under Article 20(3) from compulsory testimony cannot be applied in respect of these tests.

In a recent judgment in July 2020, Haryana court in 2019 had allowed Rud and Baljinder to undergo Forensic Psychological test at DFSL Gujarat in Maninder Singh murder case. Maninder Singh, a resident of Radur village in Yamunanagar district, Haryana, was found missing after he stepped out with his friends - Rud and Baljinder. The two claimed that Maninder had drowned near Darbar Ghat. As Maninder was a swimmer, his family refused to accept the statement of his friends. The court admitted results of the forensic psychological test of BEOS (Brain Electrical Oscillation and Signature Profiling) and established the evidence that the friends had no participation in Maninder Singh's drowning in the canal of Yamuna and it could be accidental. The forensic report validating no role of the duo in the drowning of Maninder was held valid in the court. It was revealed by the court that Maninder was in an intoxicated state when he jumped into heavy flow of water, which then led to the death of Maninder Singh. Thus, the court upheld the Forensic psychological test findings.¹⁴

DISCUSSION

The utilization of deception detection techniques has been a common practice. The utmost requirement is the growth of researches and hence developing of the best practices for this technique. And with the scientific basis of this technique, the acceptance will have solid grounds in the court of law. There will be more wide approval and fair usage of DDT all over the world.

CONCLUSION

Despite the fact that the Deception Detection techniques are extensively used by the police

interrogation, it still holds back its worth of being an individual evidence in the court of law. Over a century of utilization of these techniques, still the validity and extensibility remain questionable. An extensive research and objective evaluation of the new techniques should be available for the federal agencies. In the present era of developing new techniques, they will be developed and oversold by entrepreneurs. In addition to the above mentioned, the slow and progressive acceptance as evidenced by many cases in the court of Law states that there is still room for DDT being valid and accepted. Many journalists, officers accept the

true utilization and acceptance of the same.

Though the use of lie detectors is pretty common, it remains the least researched area of forensic science. Considering this fact, it is to be stated that it still remains a vague area which need to be explored further. **IJFMP**

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