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LIE-DETECTION AS A METHOD FOR CRIME- SOLVING IN INDIA

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I. ABSTRACT

“If the police had to adopt any lie-detection technique as a measure to facilitate a criminal investigation then it should be presumed that all other attempts to gather evidence or information such as getting a confession have not been successful and that the investigation has come to a standstill”². These are the words of the former additional solicitor general of India, Mr. KN Bhatt. As far as the equation of Indian law and lie-detection is concerned, the use of such methods has been a topic of controversy. A number of professionals both from the field of science and law have for a long time contested against usage of lie detection methods as a part of criminal investigation contesting its lack of precision and probability of erroneous results. Moreover, institutions and individuals dedicated to promotion of human rights have criticized the test stating that it infringes the fundamental rights of the suspects, witnesses or any other person on whom the test is being conducted. This paper talks about the various techniques of lie detection such as brain mapping, polygraph tests and Narco-analysis, along with their flaws, conditions and mechanisms. It will then be followed by the relationship between lie detection methods and the National Human Rights Commission. The paper then elaborates on the legal provisions in India that support or go against the concept of lie detection followed by some Judicial Pronouncements by the Supreme Court of India where it made an attempt to ascertain and elaborate the concept of lie detection’s evidentiary value. Finally, the paper concludes with the

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² “Why Are Lie-Detector Tests Still Being Used in Criminal Investigations”, available at <https://caravanmagazine.in/vantage/lie-detector-test-criminal-investigation> (last visited on November 20, 2023)

author's personal opinion on the present condition of the usage of lie-detection in India and its future possibilities.

II. KEYWORDS

Lie-Detection, Brain Mapping, Narco-analysis, Polygraph Tests, Criminal investigation.

III. INTRODUCTION

With the evolution in time, both the crime and the criminal have become smarter. Criminals are finding newer ways to commit offenses. For instance, a decade back there were hardly any cyber-crimes. Still, in the present times due to technological advancements and everybody's access to the internet, there has been a sudden increase in the rate of cyber-crimes resulting in all the investigating agencies having a separate division for cyber-crimes or opening of new forums specifically dealing with cyber-crimes. Since criminals have become smarter, it is now essential for law enforcement to adopt newer methods that could speed up the investigation and justice process. One such method of crime solving is lie detection tests which involve analyzing if a person is speaking truth or not based on the physiological and psychological changes in that person's body. As mentioned above, one of the recent tactics the police are using to expedite the investigation process is the polygraph test. It's also known as the Deception Detection Tool (DDT) and includes novel methods like brain mapping and Narco-analysis. These contemporary methods are less brutal than more traditional ones like third-degree interrogation since polygraph tests don't hurt the suspects and help them with more precise investigations.³ All these techniques have their merits and demerits. There are no specific legal provisions dealing with lie detection, but certain provisions indicate the same usage. The Supreme Court in various circumstances has elaborated on the evidentiary value of these lie detection methods.

IV. TECHNIQUES OF LIE DETECTION

³ Constitutional validity of the Deception Detection Tests (DDTs), available at <https://blog.iplayers.in/constitutional-validity-of-the-deception-detection-tests-ddts/> (last visited on November 20, 2023)

There are 3 major techniques of lie detection adopted in crime investigation i.e. Narco-analysis, Brain Mapping and Polygraph Test. These tests have been explained below in an elaborate manner: -

1. Narco -analysis

This test involves providing a subject with a drug that induces different stages of anesthesia. The subject becomes slightly less conscious in the hypnotic stage which generates the possibility of the subject revealing information which he might not typically reveal with his conscious intact.⁴The fundamental issue of this technique is that a lot of people can remain deceitful even when they are less conscious in a hypnotic stage implying that there is still a chance of them not telling the truth. Another issue with this approach is that many times, when asked a question a lot of people are likely to act highly indicative i.e. the administration of the drugs on the subject doesn't guarantee they will only speak the truth as there is always a doubt w.r.t the accuracy of the statements made while the person is in a hypnotic stage. It is important to ensure that this test is conducted with the permission of the relevant person or authorities as in the absence of such consensus the subject could be exposed to both physical and mental abuse. This is because receiving injections exposes the patient to physical abuse which could have additional detrimental effects. Apart from this, the test also involves usage of painful stimuli such as clinching, shoving and shaking the body etc. The subject could suffer mental abuse as while conducting the test when he is under a hypnotic stage, the subject is being trapped while his thoughts are being read by the investigating officer which brings up a lot of concerns w.r.t the subject's privacy.⁵

2. Brain Mapping

As per this test, in order to assess the subject's neurological activity, involves the use of electrodes applied on the subject's face and neck to record the subject's brainwaves. The

⁴ Pooja Vatsh, Narco-analysis – A volcano in Criminal Investigation, Legal Service India, (November 20th , 2023), <https://www.legalserviceindia.com/article/1410-Narco-Analysis.html>

⁵ Oishiki Bansal, Validity of narco-analysis in India : crime detection technique, I pleaders, (November 10th , 2023), <https://blog.iplayers.in/validity-narco-analysis-india-crime-detection-technique/>

test's premise is that, in reaction to a known stimulus like a picture or audio, the brain will produce distinctively differing patterns of brainwaves. The brain mapping method used in India is called the Brain Electrical Activation Profile Test (P300 Waves Test). The test exposes the participant to a number of relevant visual and aural stimuli linked to the issue under investigation, in addition to irrelevant texts and pictures. The basic notion behind this test is that if an accused is guilty of an offence and he comes across a particular investigative probe then it will cause the P300 wave to generate which will then be recognized by the lie detector.⁶

3. Polygraph Test

A polygraph is a machine or procedure to evaluate and track the numerous physiological parameters in a subject when responding to a range of questions asked to him. These physiological markers consist of skin conductivity, Heartbeat, respiration rate, GSR and blood pressure. Although there aren't any distinct physiological responses that are just associated with lying, it might be difficult to distinguish between lying and telling the truth. This challenge stems from the false belief that dishonest answers produce distinct physiological responses in contrast to when a person speaks the truth, which served as the foundation for the use of polygraphs. Although this test has been in usage in cross examinations and inquiry since 1924, psychologists continue to disagree over the lie detector's veracity, and the court of law has not always accepted it. The initial endeavor to develop a lie-detection gadget was extremely simple as the initial device was made in a manner that it only detected alterations in the subject's blood pressure. After that a scientist named John Reid, improved the device and described the process for successful administration of the test. The polygraph machine thereafter experienced improvements and developments, becoming more adaptable and reliable with the passage of time. In the present time, when seen in contrast to other

⁶ *Soham Goswami*, Brain fingerprinting and evidentiary analogy, Ipleaders, (November 20th, 2023), <https://blog.ipleaders.in/brain-fingerprinting-and-evidentiary-analogy/>

techniques, the polygraph test is considered more realistic and stable. The mechanism of a polygraph test is as follows:-

The theory of psychosomatic interaction which addresses slight alterations in the body is the foundation upon which the lie detector test operates. Alterations in the body can take the form of an elevated heart rate or pulse, a change in body temperature, or other comparable symptoms. This theory is based on the idea that when someone is not telling the truth, their body goes through physiological changes due to fear of being caught. These changes are picked up by the lie detector, which enables the investigating authorities to determine whether the subject's statements contain any false information.⁷

The lie detector test is attached to the accused person in the following manner-

1. A pneumograph tube is tied and the other around the suspect's chest and the other around the suspect's abdomen for assessment of any alterations in the suspect's breathing patterns.
2. The upper arm of the suspect has a standard blood pressure cuff tied to it
3. For the measurement of the galvanic skin reflex, affixation of the electrodes to the suspect's fingers is done after which electric current is transmitted through the fingers.
4. The suspect is made to sit on a specially made chair in order to monitor his/her body movements and pressure.

The questions in a polygraph test are posed by a polygraph expert who is also referred to as an examiner. While the test is going on, a chart is used for monitoring of the subject's physical alterations. It is essential for the examiner to receive all the information required for the subject or suspect's questioning. There are certain aspects

⁷ Jasleen Sabherwal, *Analysis of the Use of Lie Detectors in Criminal Justice*, Juris Centre, (November 18th, 2023), <https://juriscentre.com/2023/01/10/analysis-of-the-use-of-lie-detectors-in-criminal-justice/#:~:text=Polygraph%2C%20narcoanalysis%2C%20and%20brain%20mapping,tests%20uses%20a%20different%20strategy>

to be ensured to get better results in this test such as, the environment in which the test is conducted should be calm, presence of minimal number of people in the testing room i.e. the subject, polygraph expert and the case manager and while the test is being conducted, the subject will be presented with brief, straightforward questions to which they must respond with a yes or no.⁸

V. NATIONAL HUMAN RIGHTS COMMISSION SPECIFICATIONS⁹

Responding to a growing number of complaints about the way the test was conducted, which included giving the suspect a drug, the NHRC developed a set of instructions for the polygraph and lie detector tests on Nov. 12, 1997. These specific instructions by the NHRC are mentioned in the following-

1. Presence of suspect's Consent – the lie detection test can be conducted only when there is consent from the suspect to do so or otherwise if the suspect denies then no such test could be conducted.
2. Knowledge of implications to the suspect – after receiving the consensus of the suspect to conduct the test, he will be provided with legal assistance and will be informed regarding the test implications including any legal, physiological and psychological implications via the police or the advocate.
3. Subject's consensus has to be recorded in front of the judicial magistrate
4. The subject should be informed prior to the test that the statements made by him during test won't be considered as any confession but will be allotted with the treatment which is given to any statement given in-front of the police.
5. While ascertaining as to whether a polygraph test should be ordered or not, the court shall consider many factors such as the duration of the subject's confinement and the style of questioning.¹⁰

⁸ Thota Raghvendra, Polygraphy Test and its Legal Admissibility in India, Volume 2 Issue 3, Journal for Law Students and Researchers, (November 20th, 2023), <https://drupal.alliance.edu.in/drupal/node/4817>

⁹ National Human Rights Commission, Guidelines for the Administration of Polygraph Test (Lie Detector Test) on an Accused, (1997, November 12).

VI. LEGAL PROVISIONS

As per the legal maxim 'nemo tenetur se ipsum', no person is required to accuse themselves. This maxim created the right against self-incrimination according to which provides the guarantee that no suspect will be coerced into testifying against themselves. However, the main goal behind these lie detection methods is to coerce the suspect into disclosing the information which might be used against the suspect i.e. the suspect himself is freely revealing the information which could be used against him in the court of law. As per Art. 20(3) of the Indian Constitution, a person is not compelled to testify against themselves. Therefore, as far as the evidentiary value of the lie-detection tests are considered, they are not accepted as evidence in the court of law as it violates the Art. 20 (3).¹¹ Although there aren't any legal provisions in the Indian legislations which explicitly talk about the usage of lie detection methods, yet there are certain provisions under which the application of such tests could be possibly made. For instance, S.53 CrPC, which talks about examination of an accused by medical practitioner at the request of police states grants the medical practitioner with the authority to examine a patient if the police ask for it.¹² Another provision is S. 161(2) CrPC under which the suspect has the right to remain silent and such suspect can't be forced to make a statement. This provision also leaves it open to interpretation as to whether the statements given by the suspect in a lie detection test could be used as evidence if such tests are conducted with the consent of the suspect.¹³

VII. JUDICIAL PRONOUNCEMENTS

As mentioned above, there is absence of any legislations which specifically talk about any lie detection tests but the Supreme court of India in many of its judgments have

10 The Use Of Lie Detectors In Criminal Justice In India, available at <https://www.legalserviceindia.com/legal/article-9029-the-use-of-lie-detectors-in-criminal-justice-in-india.html> (last visited on November 20, 2023)

¹¹ India Const. art. 20, cl. 3

¹² Code of Criminal Procedure, 1973, §53

¹³ Code of Criminal Procedure, 1973, §163, cl.

made an effort to ascertain the scope of lie-detection methods as evidence in the Indian courts. Some of these landmark judgments are mentioned here –

Nupur Talwar v/s CBI & Anr 2012¹⁴

- Basic Facts – A 13-year-old girl, Arushi Talwar was found dead in her home on 16th May 2008 after which a report was filed at the police station by Arushi’s parents. As per the details, the victim’s corpse was found in her bedroom. In the FIR filed by the victim’s parents, her father mentioned a servant named Hemraj who used to work in their household as the prime suspect, but Hemraj’s body was found on the terrace of Arushi’s home 2 days after Arushi’s body was found.
- The investigation conducted by the police revealed certain points such as, there was absence of any stain of Hemraj’s blood on Arushi’s pillow and bed sheet negating the notion that Hemraj might have been murdered in Arushi’s room, presence of traces of dragging shows that crime did not occur on the terrace but somewhere else, presence of only Arushi’s blood on her father’s garments and not the blood of Hemraj, there was no blood on victim’s mother, Nupur Talwar’s garments after forensic tests were conducted over it, absence of any blood stain or DNA on the murder weapon and lack of eye witnesses at the time of commission of the crime due the offence being committed in a restricted space etc.¹⁵
- The information mentioned above raised the doubt as to whether the victim’s parents could be held accountable for her murder. The victim’s parents were taken into custody by the police and instructed to appear for forensic testing where they were subjected Narco-analysis, brain mapping and polygraph examination. Although when the results came, they came empty and inconclusive due to which they couldn’t be used as evidence in the court.¹⁶

¹⁴ Nupur Talwar v. Central Bureau of Investigation & Anr., REVIEW PETITION (CRL.) NO. 85 OF 2012, Supreme Court of India (2012)

¹⁵ Id. Para 4

¹⁶ Id. Para 15

- **Supreme Court's ruling** - Even when the victim's parents went through a Narco-analysis test, no concrete evidence was obtained to support additional case inquiry. In an attempt to find out more, the suspects were questioned, however neither of them had any information regarding the adolescent girl's murder.

Selvi v. State of Karnataka¹⁷

- **Brief Facts** - After a series of criminal appeals were filed by Selvi and his associates from 2004 to 2010, the Supreme Court permitted the filing of a SLP in cases with contentions that the investigators' suspects or witnesses have been forced to go through lie detection tests such as, polygraph, BEAP, FMRI and Narco-analysis without seeking their consensus. These appeals challenged the constitutionality of these lie-detection tests.
- **Issues:** The issues raised in this case were 3-fold i.e.,
 - Whether these lie-detection tests are valid under the Constitution of India?
 - Whether these lie detection tests infringe the right against self-incrimination guaranteed under Art.20 (3) and S.161 (2) CrPC?
 - Whether the right of individuals under Art.21 will be infringed if lie detection tests have been conducted on them without seeking their consensus?
- **Supreme Court's ruling** - It was held by the court that no person shall be forced to go through the above-mentioned lie-detection test without seeking their consensus as it would result in infringement of their right of personal liberty under Art. 21 of the Constitution of India. The court did rule, although those suitable precautions should be taken in cases where the conduct of these tests is with the consensus of the suspects. The court further held that even when the assent of the suspect or witness has been received to conduct the tests, the result of such test won't have any evidentiary value in the court of law due to the

¹⁷ AIR 2010 SC 1974, (2010) 7 SCC

absence of consciousness in the suspect and witness while going through these tests. But the court also stated that the information found through such tests conducted with the consensus of the suspects can be admitted under S.27 IEA. The court regarding the guidelines of NHRC also mentioned the investigating agencies have to follow the guidelines provided by NHRC w.r.t polygraph tests.¹⁸

VIII. SUGGESTIONS & CONCLUSION

In order to sum up what has been stated so far, the status of legality or constitutionality of lie-detection in India as part of criminal investigation is extremely ambiguous. Although the court in the cases mentioned above, allowed for a small exception i.e. evidence may be presented in court of law if the test is administered with the subject's voluntary consent but it left opens the possibility that these tests might be misused. The problem lies in the fact the even if the individual provided their agreement voluntarily and is aware of the consequences, it still cannot be considered freely granted as while performing the tests the subject would not be in his complete senses due to which it is difficult to ascertain if the subject has mere information of the crime of he is involved in the crime. These various techniques of lie detection if performed accurately can be an effective method in crime solving in India. The government should encourage research and development in the field of forensic sciences, especially lie-detection to ensure it successful implementation. Even though we have international guidelines, it is essential for the legislation to have guidelines and laws w.r.t usage of lie detection techniques at a domestic level. Presently, there is lack of any proper legislation and courts always have to give broad interpretations to decide cases where lie-detection is even remotely essential. This not only creates more ambiguity but also fails to speed up the investigation process i.e. the primary goal for introduction of lie detection methods as a part of the criminal investigation system in India. Therefore, Legal breakthroughs and

¹⁸ Id. Para 223

innovations are the need of the hour to align with the rapid technological and scientific developments in the society.