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# Testing the Legality of Polygraph Test and Narco-Analysis Test under the Indian Legal Framework

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## ABSTRACT

*Polygraph test is famously known as the lie detector test which is used by the law enforcing agencies to find the culprit. It involves noticing the change in a person's blood pressure and heartbeat in order to figure out whether the statement made by him is true or false. Narco Analysis Test on the other hand serves the same purpose but the method used here is different. It involves administration of a drug under the influence of which the person answers the statements truthfully. With the evolution of science and technology these scientific tests have also been innovated in order to help serve justice better. The use of these tests by the law enforcing agencies sparked a debate across the world relating to the validity of these tests. There were proponents for these tests who argued that these eased the process of finding the truth and helped in putting accused behind the bars. The opponents of these tests argued that these tests were a violation of the Constitution and the principle of self-incrimination. They also argued that these tests were not reliable and also has the possibility of giving false results in few cases. These tests also did not take into consideration other factors like fear, stress and coercion or duress into account. Under any of these circumstances the person's blood pressure or heart rate could increase, even if he was not lying. Hence, they argued that these tests should not be admissible as evidence in order to sentence a person. This paper tries to critically analyse the process used in these tests and showcase why they should not be used under the Indian laws to trace the accused person. It mainly highlights how these tests violate the Indian Constitution and hence should be rendered invalid in India.*

## I. INTRODUCTION

In Science and technology have seen a huge boom in the past century. New scientific innovations have been made and these innovations have opened the doors of science to the civil as well as criminal wing of legal studies. On one hand, scientific methods of committing crimes have been found while on the other, scientific ways to solve crimes have also been implemented. With this advancement in scientific techniques, the most commonly used

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scientific technique to find the guilty person has been that of lie detector test (polygraph test) and narco analysis test. These tests are mainly used to figure out whether the person under investigation is speaking the truth or is leading the investigating authorities in the wrong direction.

Polygraph Test famously known as the lie detector test was first invented in 1921 and first used in 1935 to convince two accused persons in Wisconsin. Polygraph machine records various metabolic activities of the human body in order to show the psychological effects of the statement made by the person. It records blood pressure, pulse, breathing rate and perspiration rate in order to show the psychological changes in the person in respect to the answer given.<sup>2</sup> “The “lie detector” simply indicates various physiological functions, as well as any sudden changes in these functions. Such body functions become momentarily disturbed by either physical stimuli or emotional stimuli. In “lie detection” work the machine detects, not lies, but emotions. No machine exists which can detect the act of lying. The machine merely detects the arousal of emotion, and only indirectly: it is not even the mental or feeling aspect of emotion that is detected, but only the physiological changes which immediately follow any sudden stress emotion.”<sup>3</sup> Hence it can be seen that the machine does not record lies but psychological changes on the basis of which experts figure out whether the answer was truthful or not.

Narco Analysis test on the other hand uses administration of drugs to the accused in order to induce him to speak the truth. It was first used in India in the Godhra case in 2002. The term Narco-analysis is derived from the Greek word *narkç* (meaning “anaesthesia” or “torpor”) and is used to describe a diagnostic and psychotherapeutic technique that uses psychotropic drugs, particularly barbiturates, to induce a stupor in which mental elements with strong associated affects come to the surface, where they can be exploited by the therapist.<sup>4</sup> The statements made by the person here are in a half conscious state only and hence cannot be used as confessions in the court.

Polygraph and Narco analysis test both fall under section 45 of the Indian Evidence Act.<sup>5</sup> Section 45 of the Indian Evidence Act talks about expert opinion and since these tests are conducted by the experts and its results are also interpreted by the experts in that field, courts

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<sup>2</sup> Benjamin Burack, Critical Analysis of the Theory, Method, and Limitations of the Lie Detector, A, 46 J. Crim. L. Criminology & Police Sci. 414 (1955-1956)

<sup>3</sup> Benjamin Burack, Critical Analysis of the Theory, Method, and Limitations of the Lie Detector, A, 46 J. Crim. L. Criminology & Police Sci. 414 (1955-1956)

<sup>4</sup> Singh P, 'Narco-Analysis Test And Law In India' (<http://www.madhavuniversity.edu.in/>, 2019), <https://madhavuniversity.edu.in/nacro-analysis-test.html>, accessed 29 October 2019

<sup>5</sup> The Indian Evidence Act, 1872, Section 45

have interpreted them to be a part of Section 45 of the Indian Evidence Act.<sup>6</sup>

With the evolution of both these tests, the law enforcement agencies in India also felt the need to keep up with the scientific progress and hence started to use these tests during investigation. The use of these tests soon became a bone of contention as there were people arguing on either side. The key issues with using these tests to find the accused are firstly, these tests are self-incriminatory and hence against the Constitution of India and the common law jurisprudential principle of right against self-incrimination. Secondly, the accuracy of this test is only about 80% with studies showing that it could also be lesser. These tests have no scientific reasoning behind their mechanism and hence need to be seriously looked at. Thirdly, these tests use psychological changes to figure out a lie. It is really common that an innocent person could also feel anxious and this could lead to a high blood pressure, etc. Lastly, there are many ways available and scientifically proven which fool the machine and lead it to conclude a false statement to be true. These deficiencies are not something that can be ignored and hence the use of these tests need to be given a second thought.

## II. CRITIQUE OF POLYGRAPH AND NARCO ANALYSIS TEST

### *Contravenes provisions of the Indian Constitution*

Article 20(3) of the Indian Constitution states that “No person accused of any offence shall be compelled to be a witness against himself.”<sup>7</sup> This article enshrines the common law criminal jurisprudential concept of self-incrimination. Under this article the person has the right to remain silent and not answer any such questions which might incriminate himself and might be used against him in the court. This principle was established in order to preserve the rights of an accused and to avoid situations where the police might use force or coercion on an accused to make him make a statement which could be used against him. This clause is based on the legal maxim *nemo tenetur prodere accusare seipsum*, which means that no man is bound to accuse himself.

The Polygraph and Narco Analysis tests clearly violate Article 20(3) of the Indian Constitution as they make the person self-incriminate himself and give information against his own interest. Under the polygraph test, the accused is made to answer questions which he does not need to answer during the course of normal investigation and on the basis of his psychological changes those answers are adjudged to be true or not. His own answers if found to be false are used as

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<sup>6</sup> State v. S.J.Choudhary, 1996 AIR 1491

<sup>7</sup> Constitution of India 1950, Article 20(3)

evidence against him in the court of law to prove that he is guilty of the crime to commit him. This clearly violates the rights of the accused and in a way lead him to self-incriminate himself. Under the Narco Analysis Test, the accused is asked self-incriminating questions and under the effect of the drug and due to his half-conscious state, the accuse answers those questions. However, the accused would not have answered these questions in a conscious state as those would self-incriminate himself. The answers giving by the person under the effect of the drug are then used against him in the court of law to prove his guilt. It is clearly visible in both these tests that the accused is made to answer questions which self-incriminate him and hence these tests violate Article 20(3) of the Constitution of India.

Judiciary has been presented with this question on numerous occasions and the answer to this question has varied from case to case basis and no unanimous opinion has been seen. In most of the cases courts gave erroneous judgments and upheld the validity of these tests. In the case of *State of Bombay v. Kathi Kalu Oghad*, the court ruled that protection under Article 20(3) is only for accused and hence a person who is just a suspect and is compelled to undergo these tests cannot claim the protection of Article 20(3) as he is not an accused at the time of the test.<sup>8</sup> It also ruled that it is immaterial if the suspect then becomes an accused on the basis of the results of the test.<sup>9</sup> This is such an erroneous interpretation of Article 20(3) as this renders the whole provision useless. It nullifies the purpose of this provision and hence leave no person protected from such a test as every person is considered innocent until guilty. Hence, every person who is a suspect can't take the protection of this article and will have to undergo such tests and the answers given during the test could be used against him in order to hold him guilty. Similar way of holding these tests valid was seen in the case of *M. P. Sharma v. Satish Chandra*, wherein the court held that Article 20(3) is not applicable in cases where any sort of recovery is made, be that an object or evidence, from the possession of a person.<sup>10</sup> This judgment again illustrates that any statement made, which leads to a discovery which then can help hold the person guilty, is not barred by Article 20(3) and hence the result of the tests will be admissible. This is a grave interpretation and again violates the purpose of Article 20(3) as this too in a way is self-incriminating oneself by leading the police to evidence which is against oneself. Such tests were again considered to be valid by the courts in many subsequent judgments like that of *Veera v. State of Maharashtra* wherein the court ruled that General statements given by any person at some regular inquiry or investigation without formal charges being framed

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<sup>8</sup> *State of Bombay v. Kathi Kalu Oghad*, AIR 1961 SC 1808.

<sup>9</sup> *State of Bombay v. Kathi Kalu Oghad*, AIR 1961 SC 1808.

<sup>10</sup> *M.P. Sharma v. Satish Chandra*, AIR 1954 SC 300

against accused would not attract Article 20(3) even if that statement turns out to be incriminatory at some later stage.<sup>11</sup> The rationale given by the courts to hold these tests valid is that “Considering Brain-mapping and Polygraph test, in these tests no statement is made, neither oral nor written. In polygraph test physiological changes are gauged and in brain-mapping, brain impressions are measured, so, these tests are not violative of Article 20(3)”<sup>12</sup>.

Even when these tests are clearly in violation of the Indian Constitution, the courts kept on ruling in favour of validating these tests until recently when the Supreme Court of India passed its judgment in the case of *Selvi v. State of Karnataka*<sup>13</sup>. Even in this case, the court did not completely invalidate these tests but just narrowed down the scope of its use. However, what the courts have failed to see is that these tests are against the common law principles and cause grave injustice to the accused person. Hence, such tests should be completely banned and invalidated as they clearly violate Article 20(3) along with a person’s privacy under Article 21. Though the judiciary’s view has evolved, they have still held these tests to be a collaborative evidence which still leads to self-incrimination. Hence, completely invalidating such tests would be the only solution to protect the rights of the accused and uphold the sanctity of the Indian Constitution.

### ***Tests are not fully accurate***

Many studies by various scientific organisations have showed that these tests are not fully accurate. The accuracy of these tests is claimed to be at 90% however there is no proof to back this stat up. In a research conducted by National Research Council, it found no evidence of the effectiveness of these tests and concluded that it found no scientific basis or evidence to back the stats presented.<sup>14</sup> *The American Psychological Association states “Most psychologists agree that there is little evidence that polygraph tests can accurately detect lies.”*<sup>15</sup> In 2003, the National Academy of Sciences (NAS) issued a report entitled “*The Polygraph and Lie Detection*”. The NAS found that the majority of polygraph research was “unreliable, unscientific and biased”, concluding that 57 of the approximately 80 research studies that the American Polygraph Association relies on to come to their conclusions were significantly flawed.<sup>16</sup> From the above mentioned research studies it can be clearly seen that these tests are

<sup>11</sup> *Veera v. State of Maharashtra*, AIR 1976 SC 1167.

<sup>12</sup> Chaudhary A, 'Admissibility Of Scientific Evidence Under Indian Evidence Act 1872' (*Sg.inflibnet.ac.in*, 2019) <[https://sg.inflibnet.ac.in/bitstream/10603/102549/11/11\\_chapter%204.pdf](https://sg.inflibnet.ac.in/bitstream/10603/102549/11/11_chapter%204.pdf)> accessed 29 October 2019

<sup>13</sup> *Selvi v. State of Karnataka*, AIR 2010 SC 1974.

<sup>14</sup> "Monitor on Psychology – The polygraph in doubt". American Psychological Association. July 2004. Retrieved 2008-02-29.

<sup>15</sup> "The Truth About Lie Detectors (aka Polygraph Tests)". *apa.org*. American Psychological Association.

<sup>16</sup> "Conclusions and Recommendations". *The Polygraph and Lie Detection*(2003), National Academies Press. p.

not completely reliable and leave a scope for error. Since these tests leave a scope for error, the results cannot be used to convict a person as there is a possibility that these test results are wrong and the convicted person might actually be an innocent. Also, the crime of the accused has to be proved beyond reasonable doubt in order to convict him. But since the results are doubtful and cannot be relied on there will always be a doubt in the court's mind about its accuracy and hence the courts cannot rely on these tests to convict a person. As seen from these studies that these tests are flawed and might cause grave miscarriage of justice. These tests should be rendered invalid until they are proved to be fool proof by further technological advancements and researches.

### ***Tests only take psychological changes into consideration***

*Polygraphs measure arousal, which can be affected by anxiety, anxiety disorders such as posttraumatic stress disorder (PTSD), nervousness, fear, confusion, hypoglycaemia, psychosis, depression, substance induced states (nicotine, stimulants), substance withdrawal state (alcohol withdrawal) or other emotions; polygraphs do not measure "lies".<sup>17</sup> Polygraph machine does not directly record lies but it records the psychological changes. However, it does not take into consideration that the change in these psychological factors are also dependent on emotional factors like fear, anxiety, coercion, etc. The reasoning behind the machine is that, if a person lies than a change will be seen in his blood pressure, breathing and other psychological factors. For e.g. if a person is asked about a committing a murder and if he is lying by denying it, his blood pressure will show a spike and this spike will prove that he is lying. However, it does not take into consideration that this change in blood pressure could also be due to anxiety or fear or intimidation. As stated by Burack that "An innocent person who answers a question truthfully, but who recognizes (or guesses) that the question is relevant to the crime, may show emotion for any of several reasons: a. Fear that the machine may fail to affirm his innocence; b. Sudden anger and resentment that he is suspected of this crime; or c. Sudden acute distress or grief at the great personal loss he has sustained."<sup>18</sup> These reasons will show a spike in the different parameters being measured even when the statement made was true leading to an expert concluding that the person is lying. Due to such inabilities of these tests, such tests should be disregarded as they could lead to an innocent being punished for the crimes of another.*

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<sup>17</sup> Eggen, Dan; Vedantam, Shankar (May 1, 2006). "Polygraph Results Often in Question". *The Washington Post*.

<sup>18</sup> Benjamin Burack, Critical Analysis of the Theory, Method, and Limitations of the Lie Detector, A, 46 J. Crim. L. Criminology & Police Sci. 414 (1955-1956)

### **III. CONCLUSION**

To conclude, I would like to say that though these tests might be a quicker and faster way to serve justice, these tests need to be rendered invalid due to the various reasons mentioned throughout the paper. These tests are in direct contravention of the Constitution and undermine its value. They are against the principles of common law which have served as a basis for modern day laws. Even if the Constitution is amended to bring these tests under its purview, they still need a lot more of research and advancement as they are not fully accurate. The task of serving justice is an integral part of the modern day world and needs to be conducted with full accuracy and effectiveness. It cannot rely on an inaccurate result to serve justice as this might cause a reverse effect and inflict injustice on the people. Hence, these tests create a lot of ambiguity in their current state and need more refinement. These tests might be the future of legal investigation with better research and advancement but at present they do not serve their purpose and need to be rendered invalid as they amount to cruelty rather than serving justice.

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