FROM THIRD DEGREE METHODS TO PSYCHOLOGICAL TESTS: SAGA OF INDIA'S CRIMINAL JURISPRUDENCE

¹SAMANVI NARANG, ²SUNIDHI SETIA, ³SUHAIB SALMAN, ⁴SAUMYA SINGH

¹TRIP FELLOW, JGLS, SONIPAT, snarang@jgu.edu.in

Abstract

With the increasing dependence on technology in the globalizing world, the number of crimes related to or originating from use of technology is on a surge. Rising complexities in the administration of the criminal justice system in the larger context and subsequently, identification of the 'intention' for a particular crime and the accused has forced changes in the techniques to be used for evidence finding. Historically, third degree methods have been the most common techniques to seek information from the accused and the arrested. However, with rising human rights claims, invocation of Article 21, fundamental right to life and liberty and Supreme Court's judgments in cases like Hussainara Khatoon, D.K. Basu has raised questions on the use of third-degree methods.

For long, psychologists and legal researchers have been proving an alternate technique of fact finding viz. psychological testing is a safe and sound option. This paper is dedicated to understanding the history and growth of psychological testing to indicate its importance and relevance in the Indian legal system.

Keywords: Crimes, evidence finding, judgments.

INTRODUCTION

History of psychological testing

Psychological testing is not development. Its origins can be traced back to China over 3000 years ago when the emperor wanted to assess/test if his officials were fit for office (Gregory, 2014). How Much Soever, rudimentary form of testing the Chinese tests may be found, the selection criteria that were incorporated were and are still relevant in this domain. In the fourth century, another form of psychological testing, physiognomy was found. Physiognomy was developed fundamental premise that people's bodily appearance, especially face, can be used to test/judge their inner character. This contributed as much to development of psychological testing as much as it helped in development of phrenology. Franz Joseph Gall is known to have found 'phrenology' which is based on the notion that 'bumps' on the head can tell a lot about the character/nature of an individual. With growing popularity of this method and others, experimental psychology as a discipline and practical started to proliferate in Continental Europe and Great Britain in the late 1800s. The profusion of tests developed early in the twentieth century helped shape the character of contemporary tests.(DuBois, 1970)

Lequerica et al. (2002) observed that research evidence consistently shows target measures such as tests and questionnaires provide more accurate evaluations of individuals than subjective approaches such as interviews or

²TRIP FELLOW, JGLS, SONIPAT, ssetia@jgu.edu.in

³Creative Head, Lawctopus, Suhaibsalman.nalsar@gmail.com

⁴Ph.D. Scholar, CNLU, Patna, saumyasinghllb@gmail.com

evaluating CVs. While these subjective methodologies can provide valuable information, particularly in skilled hands, the reliability and exactness of target measures is difficult to coordinate.

Psychological Assessment Methods

Aptitude tests are one example of a more general category of assessment methods referred to as psychometric tests. Psychometric tests, which also include tests of personality, interests, motivation and others, are systematic and standardized methods for assessing the psychological and behavioral characteristics of people (Vitoratou & Pickles, 2017). The term "aptitude" is not always used in the same way. It can refer to different types of cognitive ability (e.g. verbal and numerical ability), may be extended to include areas outside of cognitive ability (e.g. aspects of personality or physical coordination), and is sometimes used interchangeably with the concept of ability (Slaney et al., 2010). Here the word aptitude will be used to refer to the extent to which an individual has 7 the psychological and behavioral characteristics necessary to perform at a high level in a particular environment (including task, job, training, or educational programme) in the long term. Tests of aptitude are usually composed of two types of assessment. One is concerned with measuring two or more areas of intellectual ability (e.g. spatial ability and numerical ability). The other focuses on areas of attainment considered relevant to the job or training that a candidate is being considered for examples of sub-tests of attainment are knowledge of the physical sciences, knowledge of spelling, and motor coordination (Slaney et al., 2009). The concept of aptitudes and the procedure of aptitude testing are based on critical assumptions about the structure of human ability

PSYCHOLOGICAL TESTS IN CASES OF CRIMINALS

The deception detection tests (DDT) such as polygraph, narco-analysis and brain-mapping have important clinical, scientific, ethical, and legal implications (Math, 2011). The DDTs are

useful to know the concealed information related to crime. This information, which is known only to self, is sometimes crucial for criminal investigation. The DDTs have been used widely by the investigating agencies. However, investigating agencies know that the extracted information cannot be used as evidence during the trial stage (Borum & Grisso, 1995). They have contested that it is safer than 'third-degree methods' used by some investigators. Here, the claim is that using these so-called, "scientific procedures" in factfinding, will directly help the investigating agencies to gather evidence, and thereby increase the rate of prosecution of the guilty and the rate of acquittal of the innocent. Recently, these methods are being promoted as more accurate and best to none, without convincing evidence. In a landmark judgment, the apex court of India clearly stated that DDTs cannot be administered without consent.

The narco examination test is led by blending 3 grams of Sodium Pentothal or Sodium Amytal broke down in 3000 ml of refined water. Narco Test alludes to the act of regulating barbiturates certain other concoction substances, regularly Pentothal Sodium, to bring down a subject's restraints, with the expectation that the subject will all the more openly share data and emotions (Brown & Murphy, 2010). A man has the capacity to lie by utilizing his creative ability. In the Narco Analysis Test, the subject's restraints are brought down by meddling with his sensory system at the atomic level. In this state, it gets to be troublesome however not inconceivable for him to lie (Dickson & MacMohan, 2005). In such a rest-like state, endeavours are made to acquire "probative truth" about the wrongdoing. Specialists infuse a subject with hypnotics like Sodium Pentothal or Sodium Amytal under the controlled circumstances of the lab. The measurement is subject to the individual's sex, age, well-being, and physical condition.

The subject who is placed in a condition of Hypnotism is not able to talk up all alone yet can answer particular yet straightforward inquiries in the wake of giving a few recommendations. The subject is not in a position to talk up all alone however can

answer particular yet straightforward inquiries. The answers are accepted to be unconstrained as a semi-cognizant individual is not able to control the answers.

The wrong measurement can send the subject into unconsciousness or even result in death. The rate of the organization is controlled to drive the denounced gradually into a sleepinducing daze. The impact of the bio-atoms on the bio-action of an individual is apparent as the medication discourages the focal sensory system, brings down circulatory strain, and moderates the heart rate, putting the subject into an entrancing stupor bringing about an absence of restraint (Wolpe el al., 2005). The subject is then examined by the exploring organizations in the specialists' vicinity. The disclosures made amid this stage are recorded both in feature and sound tapes. The report arranged by the specialists is what is utilized as a part of the procedure of gathering proof. This strategy is led in government doctor's facilities after a court request is passed teaching the specialists or healing centre powers to lead the test. Individual assent of the subject is additionally needed.

For a long time, science has been utilized in the examination of the guiltiness of crooks as evidential verification with regards wrongdoing perpetrated by them like Forensic Science examination. Presently this obstruction of science has taken enormous structure when this Narco Analysis test is utilized in the examination of stubborn criminals. While strolling on the way of innovation we can't fail to remember that we are people, manifestations of God not Robots. Memory is the endowment of God and science has no option to infringe upon personal space. Whenever we test the legitimacy of this test on the standard of the Constitution, long-laid out criminal statute and privileges of the charged then the issue emerges. On one hand, evidences collected are true, simple for the adjudicators to impose capital punishment, guilt is proved beyond all reasonable doubts and law should change according to the need of time on the path of progress.

Science has played a crucial role since time immemorial in the investigation of criminals and in the context of crime committed by them as evidential proof which also led to the inception of Forensic Science Investigation. Every coin has two sides, and the other side of science has taken a monstrous form with respect to the interference that is now extended to the hardened criminals when they are subjected to Narco Analysis. While embracing the development of technology, we should not forget that after all we are human beings and not robots. Therefore, personal property should not be encroached by these scientific tests as they won't be able to withstand the validity on so many grounds of criminal jurisprudence and rights of the accused that have been laid down by the constitution. (Narendra Singh v. State of M.P., (2004) 10 SCC 699)

Ramachandra Reddy v. State of Maharashtra, Maharashtra High Court, while upholding the constitutionality of the psychological tests held:

"It is also to be considered in the light of other equally important provisions of the Constitution. Article 51(A) which has been added to the Constitution by subsequent amendment provides via Clause (1) which says that it shall be the duty and the duty cannot be properly done by the State, if large protection is unnecessarily spelt out from other provisions like Article 20(3). Prevention of crime is a sole prerogative of the State and the punishment of the crime if proved is also the duty of the state. Fetters on these duties can be put only in extreme cases where the protection fundamental rights weighs more than the fundamental duty casts on the State. However, we need not further deal on this aspect for the reason that in our opinion administration of these tests against the will of the person to whom it is sought to be administered does not violate the guarantee of Article 20(3) as information obtained through Brain-mapping and Polygraph is not a statement and that it is not incriminatory in any manner. It is in Narcoanalysis where it is a statement and unless it is shown to be incriminating to a person making it, it does not give rise to the protection under Article 20(3). The petitions are premature in relation to the third test."

The Bombay High Court upheld the legality of the use of P300 or Brain finger-printing, liedetector test and the use of truth serum or narco analysis. The court upheld a special court order given by the special court in Pune, allowing the SIT to conduct scientific tests on the accused in the fake stamp paper scam including the main accused, Abdul Karim Telgi. The verdict also said that the evidence procured under the effect of truth serum is also admissible. In the course of the judgment, a distinction was drawn between "statement" (made before a police officer) and "testimony" (made under oath in court). Justice Kakade and Justice Palshikar, said that the lie-detector and the brain mapping tests did not involve any "statement" being made and the statement made under narco analysis was not admissible in evidence during trial. The judgment also held that these tests involve "minimal bodily harm".

Dr. Rajesh Talwar and another v. CBI, commonly known as Arushi murder case, the Narco test cracked the case and played the crucial role to find out the Innocents and the accused. The High Court of Andhra Pradesh in State of Andhra Pradesh v. Inapuri Padma, relying on the above decisions, again upheld the constitutionality of Brain mapping and Polygraph tests as it was felt that unless the culprits are nabbed by applying the scientific methods, there is every danger of the criminals gaining an impression that there is no agency that can bring them to the book making 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, whether incriminatory or not. Therefore, the protection given under Article 20(3) from compulsory testimony cannot be applied in respect of these tests.

With respect to constitutionality of involuntary administration of Narco analysis, in Shailender Sharma v. State, Delhi High Court while upholding the validity of the same observed that having regard to the proliferation of crimes against society, it is necessary to keep in mind the need of the society at large and the need of a proper investigation while ensuring that constitutional rights are not infringed. The

court observed that the Narco analysis Test is not constitutionally infirm since it is an aid to investigation. When an investigation authority does not find any material leads, use of Narco Analysis is of particular relevance in the context of terrorism and its related cases, conspiracy to murder and in serious offenses. During Narco analysis any self-incriminatory statement, if made by the accused, cannot be used or relied upon by the prosecution.

involuntary administration of impugned techniques prompts questions about the protective scope of the 'right against selfincrimination which finds place in Article 20(3) of our Constitution. In one of the impugned judgments, it has been held that the information extracted through methods such as 'polygraph examination' and the 'Brain Electrical Activation Profile (BEAP) test' cannot be equated with 'testimonial compulsion' because the test subject is not required to give verbal answers, thereby falling outside the protective scope of Article 20(3). It was further ruled that the verbal revelations made during a narco analysis test do not attract the bar of Article 20(3) since the inculpatory or exculpatory nature of these revelations is not known at the time of conducting the test (New Delhi 2005). To address these questions among others, it is necessary to inquire into the historical origins and rationale behind the 'right against selfincrimination. The principal questions are whether this right extends to the investigation stage and whether the test results are of a 'testimonial' character, thereby attracting the protection of Article 20(3). Furthermore, we must examine whether relying on the test results or materials discovered with the help of the same creates a reasonable likelihood of incrimination for the test subject.

This development must be noted because the unqualified acceptance of 'Lie-detector tests' in India's criminal justice system could have the unintended consequence of encouraging their use by private parties. Polygraph tests have several limitations and therefore a margin for errors. The premise behind these tests is questionable because the measured changes in physiological responses are not necessarily triggered by lying or deception. Instead, they

could be triggered by nervousness, anxiety, fear, confusion or other emotions. Furthermore, the physical conditions in the polygraph examination room can also create distortions in the recorded responses. The test is best administered in comfortable surroundings where there are no potential distractions for the subject and complete privacy is maintained. The mental state of the subject is also vital since a person in a state of depression or hyperactivity is likely to offer highly disparate physiological responses which could mislead the examiner. In some cases, the subject may have suffered from loss of memory in the intervening time period between the relevant act and the conduct of the test. When the subject does not remember the facts in question, there will be no self-awareness of truth or deception and hence the recording of the physiological responses will not be helpful (Rosenfeld et al., 2004). Errors may also result from 'memory-hardening', i.e., a process by which the subject has created and consolidated false memories about a particular incident. This commonly occurs in respect of recollections of traumatic events and the subject may not be aware of the fact that he/she is lying.

PSYCHOLOGICAL TESTS FOR WORKPLACES

It is pertinent observation that since the birth of the cosmos the instinct to commit a crime, commonly known as 'criminal instinct' has been present in human nature. Researchers and researchers for long have failed to reach the root cause of this instinct that is now implied to be an inherent element of human being's nature (Ipleader, 2021). It is natural that when the number and variety of crimes are increasing in every developing sphere across the globe, psychologists and researchers have been looked upon to take steps to control the rising number.

While this rise is seen and understood in the context of growth in the globalized and globalizing world, the crimes and the psychological study of crimes is looked upon with the lens of technology. The revolution in scientific technology is waving like fast-

flowing air and water in the advancing world. On one hand, we intend to increase time, efforts and investment in scientific innovations and discoveries. It brings along a catena of opportunities for those whose criminal instincts are uncontrolled. The importance of science in law can be understood at the intersection of law, science and technology. While it is difficult to understand the three together, it is important to keep in mind the multi-nodal perspectives while resolution of issues viz. scientific evidence, cloning and privacy issues, genetic and biological research. It is thus undebatable that science and law interdependent and inter-dependable. The field of law is also under the shadow of scientific advancement. Judicial system, particularly the criminal justice system, is not untouched with the advancement of science. A volcano has emerged in the age-old laws of crime detection (investigation), long established laws of evidence and criminal jurisprudence with the introduction of view techniques of crime detections like Brain Mapping, Narco-Analysis, Hypnosis, P-300 and Polygraph Test. These advanced crime detection tools have emerged as the most powerful branch in law which are termed as Neuro Law helping the Law Enforcement Agencies in administration of the Criminal Justice System (Faulkner et al., 2012).

It requires a burden of proof upon the appellant. This can be done using what the court calls a reasonable person test that measures the behaviours of the accused against what a reasonable person would do (Tobia, 2019). This means, if most people would see a situation the same way, it is reasonable that the accused did too. If not, then it may just be an abuse of discretion.

Because of the fact that inside of law the 'reasonable individual' has a hypothetical vicinity in work environments, schools, homes, lanes and venues, it pays to comprehend the fundamental thoughts and applications implanted inside of this legitimate standard. Furthermore, in the connection of work environment dangers and potential suit, it is an especially valuable benchmark for employers and supervisors to remember.

Risky and unfortunate situations arise everywhere in life - and of course the workplace is no exception. Injuries happen, enmity arises, harassment can occur, and unwanted advances are made. And the possibilities for damage, loss and distress to workers, contractors, visitors and clients are so extensive that some days, business owners can question their decision to open the doors! Yet in remembering the careful and prudent ways of the 'reasonable person' when it comes to workplace risks, employers can successfully prepare for and respond to hazardous scenarios (Teeboom, 2019). Importantly, remember that 'action' by an employer also includes 'inaction'. Turning a blind eye to harassment between co-workers, putting off fixing the air conditioner in summer due to cash flow, and forgetting to wind up the extension cord in the hallway are the sorts of omissions that our 'reasonable person' in your situation wouldn't neglect. Positive actions to prevent harm, such as sexual harassment training and reasonable warning of organizational changes, examples of the way the 'reasonable person' carries on their business (Enright, 2020).

Numerical reasoning is less popular, but is used by some commercial firms and financial institutions recruiting for in-house legal roles. Again, the challenge is to draw conclusions from information presented to you, in this case in the form of numbers. These are usually presented in simulated 'real world' situations, such as tables of sales figures. Mathematics rarely gets any more complicated than addition, subtraction. multiplication. division percentages. Calculators are sometimes allowed - check the instructions. Even if you are allowed a calculator, it is worth practicing mental arithmetic if you have not done any for a while (Arora & Mukherjee, 2016).

Abstract reasoning (also called diagrammatic or logical reasoning) involves working out the logical next step in a sequence — usually presented as a series of shapes or diagrams — hence the name 'diagrammatic' reasoning. According to Rana (2022), as no calculations or language are needed, these tests aim to uncover your ability for 'pure' logical thinking. However, it is unlikely, if you are applying for

jobs in the legal field, that you will be asked to take one of these tests. Integrity tests, work sample tests, job knowledge tests, cognitive ability tests and many other such tests are performed at the workplaces by the employer so as to ensure that the right people work at the right place with right social and mental stability.

CONCLUSION

With the changing dynamics of the criminal system justice administration and perspectives of criminality in the social milieu, there is a significant shift from third degree information seeking techniques psychological testing. The origins of psychological testing can be traced back to 2200 BC in China. However, the purposes for which they were made were different from the present use of these techniques in the Indian legal system, they still offer relevance to their use for finding truths in the criminal justice administration system. The attention different courts around the country and significant accounts of the Supreme Court on the issue of constitutionality of these psychological tests, has led to a vital development in the criminal jurisprudence. This research work has been an effort to present a comprehensive account of the evolution. growth and proliferation psychological tests including Narco analysis, polygraph test to understand its significance and use in the criminal justice administration system.

Reference

- [1] DuBois, P. H. (1970). A history of psychological testing. Boston: Allyn & Bacon.
- [2] Foxcroft, C. & Roodt, G. (2005). An Introduction to psychological assessment in the South African context. Cape Town: Oxford University Press Southern Africa.
- [3] Lequerica, A., Rapport, L., Axelrod, B.N., Telmet, K., Whitman, R. D., (2002). Subjective and objective assessment methods of mental imagery control:

- construct validation of self-report measures. J Clin Exp Neuropsychol, 24(8), 1103-16. 10.1076/jcen.24.8.1103.8370
- [4] Vitoratou, S., Pickles, A. (2017). A note on contemporary psychometrics. Journal of Mental Health, 26(6), 486-488. https://doi.org/10.1080/09638237.2017.13 92008
- [5] A Review of Psychometric Assessment and Reporting Practices: An Examination of Measurement-Oriented Versus Non-Measurement-Oriented Domains
- [6] Slaney, L. K., Tkatchouk, M., Gabriel, S.M., Ferguson, L. P., Knudsen, J. R. S., Legere, J. C. (2010). A Review of Psychometric Assessment and Reporting Practices: An Examination of Measurement-Oriented Versus Non-Measurement-Oriented Domains. Canadian Journal of School Psychology, 25(3). https://doi.org/10.1177/082957351037554
- [7] Slaney, K., Tkatchouk, M., Gabriel, S. M., Maraun, M. D. (2009). Psychometric Assessment and Reporting Practices: Incongruence Between Theory and Practice, Journal of Psychoeducational Assessment, 27(6),465-476. 10.1177/0734282909335781
- [8] Borum, R., & Grisso, T. (1995). Psychological test use in criminal forensic evaluations. Professional Psychology: Research and Practice, 26(5), 465–473. https://doi.org/10.1037/0735-7028.26.5.465
- [9] Math, S. B. (2011). Supreme Court judgment on polygraph, narco-analysis & brain-mapping: A boon or a bane. Indian J Med Res,134(1), 4–7. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3171915/#ref2
- [10] Brown, T., Murphy, E. (2010). Through a scanner darkly: functional neuroimaging as evidence of a criminal defendant's past mental states. Stanford Law Rev. 62(4), 208. https://pubmed.ncbi.nlm.nih.gov/2042913
- [11] Dickson, K., McMahon, M. (2005). Will the law come running? The potential role of "brain fingerprinting" in crime investigation and adjudication in Australia. J Law Med, 13(2), 204–22.

- https://pubmed.ncbi.nlm.nih.gov/1630476
- [12] Wolpe, P. R., Foster, K. R., Langleben, D. D. (2005). Emerging neurotechnologies for lie-detection: promises and perils. Am J Bioeth, 5(2), 39–49. https://pubmed.ncbi.nlm.nih.gov/1603670
- [13] New Delhi (2005). Directorate of Forensic Science, Ministry of Home Affairs, Government of India. Laboratory procedure manual. Brain electrical activation profile.
- [14] Rosenfeld, J. P., Soskins, M., Bosh, G., Ryan, A. (2004). Simple, effective countermeasures to P300-based tests of detection of concealed information. Psychophysiology, 41(2),205-19. 10.1111/j.1469-8986.2004.00158.x.
- [15] Tobia, K. (2019). The law in India and other countries rests on what 'reasonable person' would do. Who is this person?. Scrool.in. https://scroll.in/article/911131/the-law-in-india-and-other-countries-rests-on-what-reasonable-person-would-do-who-is-this-person
- [16] Ipleader, (2021). Relationship between law, science, and technology in modern society. Ipleader Intelligent Legal Solutions. https://blog.ipleaders.in/relationship-law-science-technology-modern-society/#:~:text=Law%20plays%20an%20 essential%20part,interacts%20with%20sci ence%20and%20technology.
- [17] Faulkner, A., Lange, B., Lawless, C. (2012). Introduction: Material Worlds: Intersections of Law, Science, Technology, and Society. Journal of Law and Society, 39(1), 1-19. https://www.jstor.org/stable/41350295
- [18] Teeboom, L. (2019). Three Different Types of Psychological Testing Used in the Workplace. CHRON. https://smallbusiness.chron.com/three-different-types-psychological-testing-used-workplace-25537.html
- [19] Arora, V., Mukherjee, D. (2016). The state of psychometrics in India. Peaople Matters. https://www.peoplematters.in/article/asses sments/the-state-of-psychometrics-in-india-14123

[20] Enright, M. (2020). Identifying and preventing harassment in your workplace. Wolter Kluwer, Compliance. https://www.wolterskluwer.com/en/expertinsights/identifying-and-preventing-harassment-in-your-workplace

[21] Rana, A. S. (2022). Should companies use psychological tests to assess employees' mental health?. HRKatha. https://www.hrkatha.com/features/should-companies-use-psychological-tests-to-assess-employees-mental-health/