

## **Forensic Psychology and Its Role In Criminal Investigation**

Sharon Dinil Kumar<sup>1</sup>, Shreenya Sharma<sup>2</sup>, Sneha Ilame<sup>3</sup>, Sonali Singh<sup>4</sup>, Vaishnavi Bhedodkar<sup>5</sup>

### **AIM OF THE REPORT**

The main purpose of this report is to highlight the current scenario of Forensic Science and Criminology in India by focusing on one of the many fields i.e. Forensic Psychology. We aim to find out whether the public of India is aware of applications of Psychology in Forensic Investigation, how common is mental illness in India and what is the status of forensics worldwide and in our own country. By the means of this report we try to attract attention of authorities towards the significance of need for Forensic Psychologists, regulations, and training facilities, to aid in Criminal Investigations.

### **INTRODUCTION**

Psychology is the scientific study of behaviour and mental processes of both human and animals. The four basic goals of psychology are i) Description -What exactly is happening ? ii) Explanation-Why did it happen? iii) Prediction-When can it happen again ? iv) Control - How can it be changed ? (Ciccarelli and White, 2012)

The word forensic is derived from Latin term “forensis” meaning platform or forum. Forensic science in general is application of scientific methods and techniques for the purpose of administration of justice (Veeraraghavan, 2009).

Psychology and Criminology are two different terms and fields, but they are equally important and interdependent. Psychology is the scientific study of Behaviour, includes criminal acts and behaviour while Criminology is generally defined as the scientific study of crime and criminals (Patherick, Turvey and Fergusson, 2009).

Various schools of thoughts of Psychology enable and encourage the understanding of behaviours. The school of thoughts in psychology: 1) Psychoanalysis 2) Behaviourism 3) Humanistic (Veeraraghavan, 2009). Many psychological factors affect criminal behaviour,

---

<sup>1</sup> Completed MSc. Forensic Science from Gujrat Forensics Science University, Gujrat

<sup>2</sup> Pursuing MSc. Forensic Science from Teesside University, UK

<sup>3</sup> Pursuing BSc. Forensic Science from Government Institute of Forensic Science, Nagpur

<sup>4</sup> Completed MSc. Forensic Science from Galgotias University, Noida

<sup>5</sup> Pursuing BSc. Forensic Science from Government Institute of Forensic Science, Aurangabad

according to various psychological theories, when a person does an act it is the reflection of their own thoughts and feelings. Problems in the thought process give rise to criminal behaviour and many various reasons may include committing a crime like greed, revenge, jealousy, anger, or pride (Bartol and Bartol, 2008).

Forensic psychology covers all the aspects of psychology which are relevant to the whole legal and criminal process , here we apply the psychological principles and knowledge to various legal activities from crime against children , in case of child abuse ,child custody disputes to assessing the mental and physical conditions of a person ability and competency to stand trial, to advise judges in matters relating to sentencing to name a few (Veeraraghavan, 2009).

As per the American Psychological Association (APA) ,2000. “Forensic psychology is the professional practice done by the psychologists in the area of clinical, counselling, neuro and school psychology, when they are engaged regularly as experts and represent themselves as such. Mainly to provide professional psychological expertise to the judicial system.” (Veeraraghavan, 2009)

The American Board of Professional Psychology (ABPP), defines forensic psychology as “Application of science and profession of law to questions and issues relating to psychology and the legal systems.”

It draws attention towards diverse disciplines such as law, sociology, political science, anthropology, philosophy, medicine, and linguistics (Veeraraghavan, 2009).

Forensic psychologists have indeed various responsibilities in the Criminal justice system. The roles played by them can be broad and varied.

- Forensic psychologists provide information and advice to officials in the legal system such as lawyers/judges.
- They act as expert witnesses.
- Diagnose and treat criminals within the prison system.
- They administer psychological tests to criminal defendants.
- Forensic psychologist may help either the prosecution or defence in a trial by helping determine which potential jurors (Ciccarelli and White, 2012).

As we look into we can see that forensic psychology includes all services of psychological nature as applied to the legal system and legal requirements .Psychology helps us to understand criminals and criminal behaviour ,without understanding the psychology of crime it is not possible to give proper judgement to any of the case (Veeraraghavan, 2009).

Specific areas of work where forensic psychology includes:

- Divorce and child custody mediation
- Determining insanity of a person and competency to stand trial.
- Jury selection and case strategy
- Expert opinion/testimony on questions of psychology nature.
- Psychology testing and evaluation

- Assessment of danger (in sexual predators' law).
- Selecting and placement of police officers, security, and military personnel.
- Explaining effects of psychological conditions and illness on a person.
- Designing and conducting treatment programs for offenders and people at risks.
- Preparing criminal profiles of various offenders.
- Providing counselling and psychotherapy services to individuals involved with the criminal courts.
- Counselling of juveniles and adults on probation.
- Handling of individuals who violate restraining orders.
- Dealing with victims of crime and persons awaiting trial.
- Examination of cases of sexual offenders and use anger management skills for violent offenders.

Forensic psychologists handle both criminal and civil cases in court of law thereby providing psychological expertise to the judiciary. As in the court room they just do not ask the psychological questions, but they ask the legal questions so as to make sure that the mental information of the person is within legal framework and for this they work from micro to macro level. The forensic psychologists' reports are used in deciding the sentence to be pronounced in regard to the accused (Bartol and Bartol, 2008).

## **BACKGROUND AND GROWTH OF FORENSIC PSYCHOLOGY**

In 1879 Wilhelm Wundt, often called the father of psychology found the world's first psychological laboratory in Leipzig in Germany where was the first seeds of forensic psychology planted. In 1893 James McKeen Cattell conducted some of the earliest research on the psychology of testimony. He also inspired many other psychology experts to conduct their research in eyewitness testimony which further raised serious issues about its validity in a court of law. Alfred Binet replicated Cattell's research and helped to find the first psychological laboratory in France at Sorbonne, Paris in 1889.

Louis William Stern of Germany established the first journal on the psychology of testimony (*Beiträge Zur Psychologie der Aussage* [Contributions to the Psychology of Testimony]) which was published in Leipzig in 1903. This journal was replaced in 1907 by the much broader *Zeitschrift für Angewandte Psychologie* (Journal of Applied Psychology), edited by Stern and his associate Otto Lipmann. *Psychology Applied to Legal Evidence and Other Constructions of Law* was published by George Frederick Arnold in 1906.

In 1908 the German-American psychologist Hugo Munsterberg published 'On the Witness Stand', arguably one of the first professional books on Forensic Psychology.

Psychologist Grace M. Fernald and psychiatrist William Healy established Clinic for juvenile offenders in 1909. One of the earliest psychologists to testify in a criminal trial, held in Belgium was J. Varendonck in 1911. In 1913 psychologist Eleanor Rowland offered

psychological services first time within a U.S. correctional facility. In 1917 the first “polygraph” was developed by Psychologist-lawyer William Marston which was rejected by a federal court (*Frye v. the United States*, 1923) because the polygraph lacked general acceptance by the scientific community.

Psychologist Louis Terman was the first American psychologist who used psychological tests in the screening of law enforcement personnel in 1917. In 1918 the New Jersey Department of Corrections established the first inmate classification and became the first state to hire full-time correctional psychologists regularly. In the case of “*State v. Driver*, 1921” an American psychologist first time testifies as an expert witness in a courtroom. In 1922 Karl Marble becomes the first psychologist to testify at a civil trial. The primary state to produce comprehensive psychological examinations of all admissions to its prison system and every application for parole was Wisconsin in 1924.

Howard Burt's Legal Psychology published his first textbook in the forensic area by 1931 as a psychologist. In the landmark 1954 case of *Brown v. Board of Education*, the U.S. Supreme Court cites social science research. D.C. Court of Appeals recognized psychologists as experts on the issue of mental illness in *Jenkins v. the United States* in 1962. The book *Crime and Personality* written by psychologist Hans J. Eysenck in 1964 formulates a comprehensive and testable theory on criminal behaviour. Martin Reiser, the first police psychologist within the United States employed by the Los Angeles Police Department in 1968. The University of Illinois established the first PsyD program in 1968.

In 1972 under the guidance and leadership of the American Association for Correctional Psychology (AACP), correctional psychology becomes recognized as a professional career.

In 1973 at the University of Nebraska–Lincoln the first successful interdisciplinary psychology and law program was developed.

In 1978 the American Board of Forensic Psychology provides board certification in forensic psychology and the APA approves a clinical post in corrections at the Wisconsin Department of Corrections. In 1991 the American Academy of Forensic Psychology and American Psychology-Law Society (Division 41 of the APA) publishes Specialty Guidelines for Forensic Psychologists.

Forensic psychology was acknowledged as a specialty by the American Psychological Association in 2001 that is reaffirmed in 2008. The Specialty Guidelines for Forensic Psychology are revised, renamed, and published in 2013. Police and Public Safety Psychology (PPSP) acknowledged by the American Psychological in 2013.

#### HISTORY OF FORENSIC PSYCHOLOGY IN INDIA

The growth of forensic psychology began in the year 1917 when Prof. Prafulla Chandra Bose wrote a thesis on how forensic psychology must be used in understanding criminals and their behaviour. He gave the idea that one cannot give judgment in any case without understanding the crime that has been committed.

For instance, in the Mental Health Act 2012, regarding the crime the crimes committed by mentally ill persons who labelled as insane were sent for treatment to the hospital.

The first lie detection division was set up at the Central Forensic Science Laboratory (CFSL) of the Central Bureau of Investigation (CBI) by 1968. In the very beginning, there were no proper training centers' for professionals to be trained for lie detection. That time to conduct the lie detection tests they followed the procedures and methodologies described by Reid and Inbau in the book "Truth and Deception: The polygraph (lie-detector) technique" published in 1966. Since 1972, many forensic science laboratories had been started polygraph machines in various states of India.

While the forensic psychology department as such by name was not established in many state FSL's instead many FSL had Lie Detection Division in which polygraph was used. Dr. S.L. Vaya conducted the first narco-analysis authorized by the court in 1989. But this was against the person in question. Later many more innovations had been taken place in the field of forensic psychology. This polygraph and narco-analysis are also used in many cases such as the Nithari killings, stamp scan, the double murder case of Noida. For forensic psychology to become one of the important parts of the criminal investigation a lot more work needs to be done and a lot more acceptance is essential.

## **GLOBAL PERSPECTIVE**

Forensic psychology has an important role in bringing about the parts of a criminal investigation. The role of psychology to learn behavioural reasoning is equally important aspects. According to the law stated in different countries, it is different for various places all around the world.

According to David Alan Landry (Retired DoD federal police officer Author for the United Kingdom) Stated that its confluences psychology, criminology, and criminal justice. The important aspects of criminal behaviour and motives do not have much value in the court of law when the crime itself has been committed. The importance of Forensic psychologies part to play is at post criminal trials. Trained criminal psychologists working with human behaviour closely with the entire justice department with intent to not only understanding as well as reduce and prevention of offending behaviour. They work in various wavelengths from being an expert witness for the victim to helping rehabilitate the offender to assisting in the selection of a jury. The importance of rehabilitation for the offenders to change and rebuilt themselves before they head out to the real world. They need to change their perception of themselves so that they limit the possibility of making the next generation into criminals. Very often criminal psychologist is required to determine the reasons what may have led to criminal behaviour. The state of mind requires a psychologist to deal with the meetings and interview.

Consider the work essential for a criminal psychologist to be extremely trained with law, human behaviour, sociology, biology, and forensics. The important part regards the forensic psychology is based on very important interaction with the different sets of criminals. The current possibility of the different psychopathic behaviour is highly seen and their different type of mode of crime. Their role to bring about the precise relates to the completion of their findings on how the criminal behavior may have the lead. Forensic psychology can assist in the integrity check of the witness as the witness is easily influenced by external factors and sometimes may give false convictions . As there are many aspects where forensic psychology is prominent ; the psychologist does counselling of police ,army and para-military personnels. Prisoners with mental disorders could be treated by forensic psychologists

Another response from Cloyd Steiger (who is a Police officer in the United States) has claimed that the importance of forensic psychology to learn about the behavioural pattern is quite critical. The important aspect of the different criminal behaviour is progressed with different scenarios and upbringing. The court of law in the United State do not give wide signification on criminal profiling. The personal history of the subject in its entirety, especially relating to psychological aspects, is important. The data is obtained from the members of the family, friends of the subject, their schoolmates, and colleagues. The types of personality tests are needful for criminal profiling to a certain extent. Forensic psychotherapy has come up in a big way to help the criminal in the criminal justice system. Culprits, victims, or witnesses who are dazed, may need psychotherapy to normalize them. Some accused persons are emotionally so upset that they are not able to stand trial. Psychotherapy stabilizes them and thus enables them to stand trial. Psychotherapy is assuming great importance and is being introduced in the jails for their inmates to make them useful citizens after their release from the jails. Court, about the dangerous potential of a criminal to the society, about the personalized punishment to the offender, to inflict minimum damage to his personality and hence to the society, yet justice is also done to the society at large. He is consulted to stabilize the accused, victims, and witnesses in trials.

Advocates, for their clients, to find out if the client is fit to stand trial or not. The plea of temporary insanity at the time of the commission of a crime can be taken or not. If the mental age of the offender can be proved to be such a punishment, an alternative to imprisonment could be pleaded. If the provocation of the victim, beyond tolerance limit, could be shown as a defence plea. The services of forensic psychologists are being utilized increasingly in handling and rehabilitation of the prisoners. Their services are becoming indispensable in the case of juvenile delinquents, to determine the patterns of treatment to normalize their psychological and social personalities. Psychological treatment is also increasingly envisaged for the impulsive criminal.

The need for consultancy in family problems is more pressing, especially relating to the custody of the subject. Whether the custody of the parents or of a third party would be in the interest of the child, often calls for the opinion of a forensic psychologist.

## INDIAN PERSPECTIVE

If you are hoping for a better society it is time to enter this field now, before we enter into the present scenario in the forensic psychology in India it is necessary to understand the discipline of psychology & it's application to the justice delivery system.

Recently, the Home Minister of India had announced that they were planning to upgrade six central forensic science laboratories to probe heinous crimes & six central forensic laboratories in the country to soon be upgraded for carrying out efficient & scientific investigation in serious & heinous crimes, the ministry of home affairs has decided to enhance the capacity of six CFSL's under directorate of forensic sciences services in the area of forensic psychology involving external experts.

### WHO KNOWS WELL ABOUT A CRIME?

Precisely none of the stakeholders of justice delivery system!

- Neither the judge
- Nor the advocates
- Nor the police investigators
- Nor the forensic experts
- Nor the media

It is only the victim & the offender who know in and out of the event.

Lie Detection unit in Cfsl, CBI, New Delhi from 1972 central forensic science laboratory of central bureau of investigation CFSL, CBI started lie detection division in the year 1972-73 by appointing three psychologists.

The instruments they used at that times were called "Machines"

- Two different types of polygraphs are under use in the lie detector division of the CFSL one is the Keeler polygraph model 6338 which has four channels to record respiration by plethysmograph & electrodermal response by Galvanograph.
- Another type is Lafayette polygraph model 76058. It has two channels to record respiration, one from thoracic region & other from abdominal region. Cardio-vascular changes & electrodermal responses are recorded by Sphygmogmograph & Galvanograph respectively.
- After that FSL Ahmedabad started the lie detection unit in 1982 & by 1984 they appointed three psychologists following the CFSL CBI pattern but there were a lot of obstacles in the Ahmedabad appointments because there was already a legislative assembly question going on regarding the purchase of lie detector in 1978 which was neither in use nor working condition.
- In 1986 CFSL CBI introduced the qualification of criminology as eligibility criteria for lie detector unit from 2011, though CFSL, CBI has moved on to Forensic psychology their recruitment rules seems like 1986 recruitment rules.

Actus Reus Vs Mens Rea (The guilty act vs a guilty mind)

- Actus Reus “the guilty act” refers to the physical aspect of the crime.
- Mens Rea: a guilty mind refers to the mental aspect defined as an element of criminal responsibility focusing on the state of mind of the accused.
- It refers to the psychological or mental state of a criminal at the time the crime was committed.

#### MODIFICATION IN RECRUITMENT RULES:

In 1986 CFSL, CBI introduced the qualification of criminology also as eligibility for lie detector unit, though from 2011 CfsI CBI moved on to forensic psychology their recruitment rules seems to be still continuing with 1996 rules the effect of which is seen now where in recently by conducting a written examination called F PACT & personal interview criminologists / Forensic scientists are recruited as forensic psychologists.

They are equipped for crime scene management with no exposure or practical training to interrogate, interview or conduct any psychological assessments on crime suspects. Either by qualification or by training they are not equipped to handle civil & criminal cases of forensic psychology for assessment, investigation, intervention & correction domain. This may hamper the future of forensic psychology domain or land them to legal complications in future.

#### CURRENT LAWS RELATED TO CURRENT LAWS & CRIMINAL RESPONSIBILITY:

- Section 84, Indian Penal Code act of a person of unsound mind— According to this act if a person has committed an offence because of unsoundness of mind and does not understand the nature of his/her act. He/she does not realize that he is doing wrong or contrary to law.
- Indian Lunacy Act, 1912, It is an act to consolidate and amend the law relating to Lunacy. There are certain definitions used in this act.

#### INSTRUMENT & TECHNOLOGY ADVANCEMENT:

- Instrumentation & technology advancement simultaneously IT revolution & technology advancement helped in user friendly less cumbersome, portable instruments for detection of deception.
- Mechanical “lie detectors” changed to “all electronic fact finders” with manual scoring. Now, computerized polygraphs are used.
- With advancement in polygraph technology, automated system based on combined analysis of physiological indications for screening suspects SDS, layered voice analysis LVA are added in lie detection.



## EXPERT COMMENTS

Expert comments in forensic psychology has become a convenient handmaiden of the criminal justice system. Forensic psychologist to analyse, explain and predict the facts in such and definite terms in some cases that it simply amazing. It is helpful to solve many types of legal problems whether they are criminal or civil in nature. The need for forensic psychologist can be judged from different type of cases that are involved. As in India, under sec 84 for IPC it talks about act done by person with unsound mind and for proving the fact that a person is insane we take help of psychologists or forensic psychologists. Greed, anger, revenge, jealousy, or pride can be reasons for committing crime.

Some people plan everything before committing crime to minimize the risk and maximize the gain. The desire for control, revenge, or power leads to violent crimes such as murders, assaults, and rapes. These crimes occur at that very moment due to a high run of emotions. There are many reasons for a person to commit the crime such as peer influence, economic problems, and their surrounding factors. In India due to the societal norms there are very few registered cases of rapes and sexual assaults so people must get the psychological assistance that they should come forward and fight with the injustice. There is high percentage of the drug abuse which can be a reason for building up a criminal behaviour. Drug use and addiction is the behavioural changes that starts to ultimately leads to mental illness. The amount of drug abuse might be a cause for greed for money and drug trafficking or drug abuse.

The important factor behind about forensic psychology is based upon the mental set of mind and drug abuse a actually a huge role to play. Around 90 percent of the cases in the current scenario of criminal behaviour is the reason or need for drugs. There high increase in juvenile cases reasoning the possibility of drug use is absolutely a desire for more of selling drugs for sustaining. The need for juvenile cases is to learn in a hug amount to clear the understanding of new criminal behaviours. The in-built behavioural changes and study of different behaviors is important in criminal justice system. Everyone should be aware of sex education in their schooling so they could deal with forth coming aspects.

As forensic psychology is an applied area of psychology - indeed a broad term it has many other branches of psychology included in it legal psychology and criminology which helps the legal system in the assessment of behaviour of the criminals. In every CFSL, there is a branch of forensic psychology Judiciary must get aware of the psychological conditions of the persons to give them the correct justice. Mental health acts, lunatic acts go with forensic psychology. It is important to analyse a person's social, biological, and psychological process that lie under their cognitive functions and behaviour. Forensic psychology is duly important at its help the judicial system improving and shaping its decision in a more accurate way and helps to picturise the human perception.

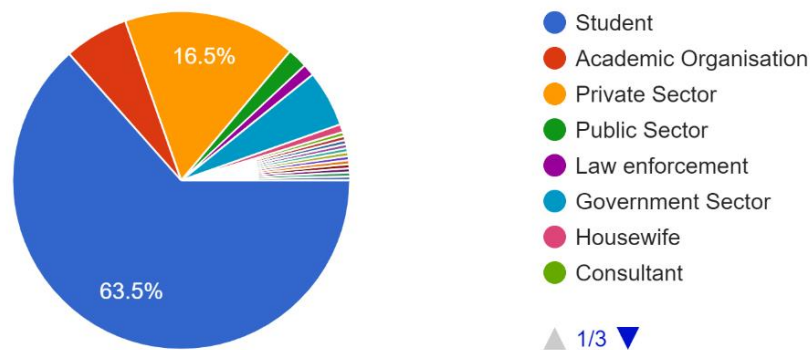
## SURVEY

The authors of this report conducted a survey wherein 260 people participated amongst which 88.8% were Indian (Rest 1.2% from Nigeria and England).

Among the participants 63.5% were students by occupation and 1.2% work with Law enforcement.

Which occupational group do you belong to?

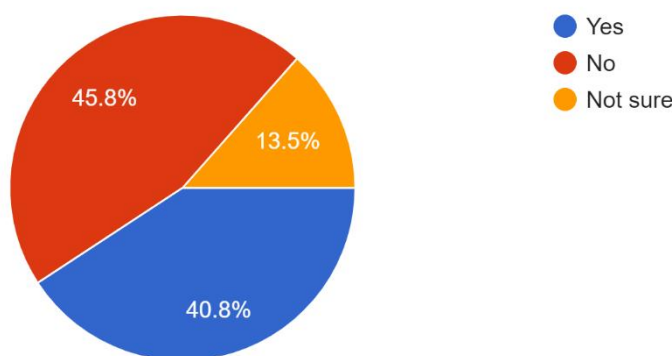
260 responses



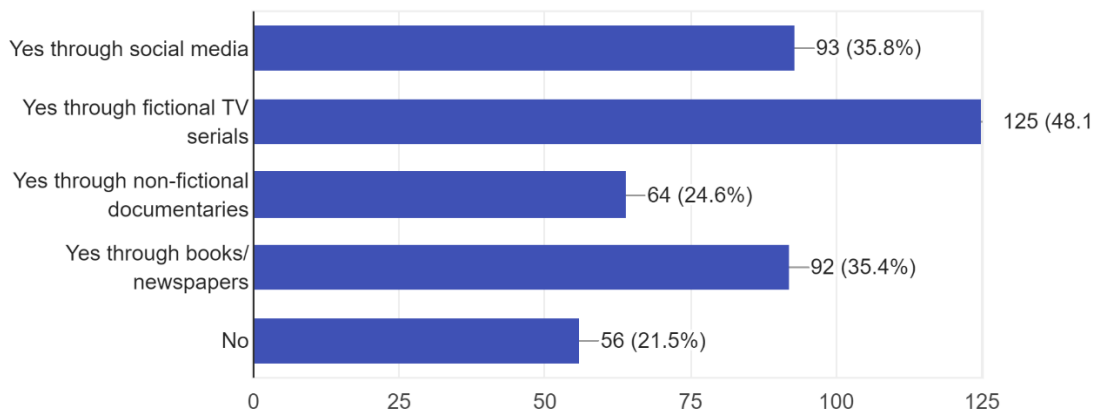
27.3% students and academicians were from Forensic Science area while 4.6% belonged Law area. A large percentage belong to other organisation including Science, Medical, Commerce, Hotel management, IT, and many other diverse courses. 2.4% of participants were related to Psychology as well.

Have you ever come across any case/ family member/ friend who is/was psychologically disturbed?

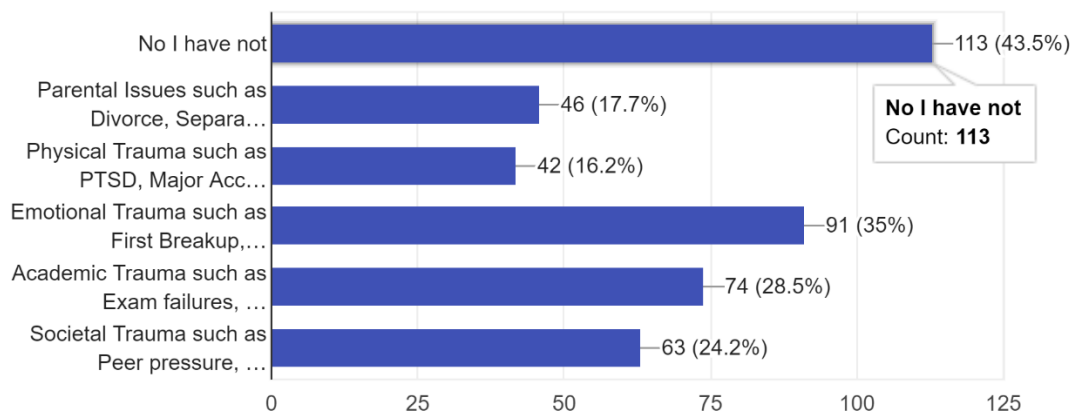
260 responses



Have you ever seen/ read a case where Forensic Psychologically played primary role in either conviction or acquittal of the accused? (You can choose more than one)  
260 responses

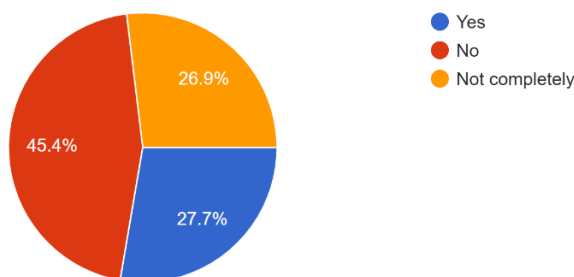


Have you yourself or seen anyone experienced/overcame any traumatic accident/ psychological/ behavioural issues? If yes, ... following? (You can choose more than one)  
260 responses



56.5%, comparatively a very large chunk of people have had experienced psychological trauma either themselves or seen someone going through it. Surprisingly, a large percentage of people 70.3% were not aware at all or were not completely aware of Mental Healthcare Act passed in 2017.

Are you aware of Mental Healthcare Act passed in 2017 as per Indian Legislation?  
260 responses



As per our survey, only 41.2% were completely aware of that Criminal Psychology is used by Investigative agencies while 87.7% think that Psychology plays an important role in crime.

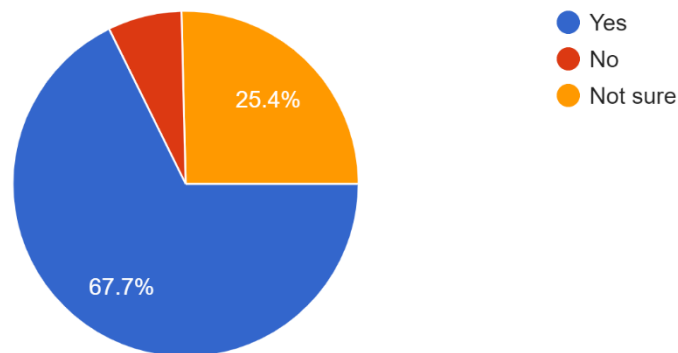
Moreover, 98.4% of the participants believe that maybe or definitely application of psychology in Forensic Investigations can help determine the cause of crime. Nearly half of the participating people (50.4%) feel that every criminal must have had a psychological issue undealt in past that led to commitment of crime.

However, only 16.2% people were not aware that IPC recognises 'Motive' as an important ingredient in occurrence of a crime.

Finally, as for if every accused and victim should be assigned a Forensic Psychologist by Court to aid in investigation, 67.7% agreed, 25.4% were not sure and 6.9% did not agree at all.

Do you think every accused and victim should be assigned a Forensic Psychologist by Court to aid in investigation?

260 responses



## **STATISTICS and NEED FOR ATTENTION**

Forensic Psychology not only involves criminal responsibility and fitness to stand trial, but mental health and proper treatment of mental illness also comes under this broad area. Ethically, a Forensic Psychologist is to inform the referral source as to whether there is known basis in either research or practice to answer the particular question and hence require awareness of legal and professional standards (Yadav, 2017). But why there is immediate need to address the issue of lack of Forensic Psychological and Psychiatric facilities in India? This is a pressing concern of requirement of adequate facilities and trained professional Forensic Psychologists in order to take care of mental healthcare of: General Public; Suspects and Victim during trials and proceedings and prisoners as well. We need to realise that mental health is equally important as physical health. People who suffer from mental illness are often dominated unknowingly, their illness is not acknowledged, and it not as uncommon as one would think. According to Mental Health Survey Report, that collected data across 12 states of India, prevalence of mental disorders is 10.6% (Murthy *et al.* 2016). In addition, according to survey performed by authors of this report as mentioned in the previous section, majority of public has gone through psychological trauma at least once.

There are not sufficient infrastructures and institutions for training in Forensic Psychology let alone for treatment and regular mental check-ups. There are hardly sufficient Forensic Laboratories and Medico-legal Labs because of which most of the psychological cases are dealt by clinical psychologists in hospital or psychiatric facilities. In many instances, the psychiatric and psychological facilities do not have separate wing for forensic purposes, consequently the forensic evaluation is performed by professionals not trained in forensic and medico-legal investigative areas. As an outcome of which, decisions are often based on trial and error method, instead of being based on expertise and proficiency (Murthy *et al.* 2016).

Nambi, Ilango and Prabha (2016) highlights that many young psychiatrists find it difficult to handle legal cases because now-a-days forensic psychiatry is not only about psychocriminology and mental health act but involves various interfaces of psychiatry and law. It is needed to be made sure that Psychiatrists and Psychologists are trained properly to assist their client therapeutically as well as legally. Hence the need for attention towards Forensic Psychology.

Government has taken some initiatives towards this issue, including the National Institute of Mental Health and Neuro-Sciences (NIMHANS), Bengaluru, established in 2016. The NIMHANS has Centre for Human Rights, Ethics, Law and Mental Health which deals with enhanced training with high standards in investigative approaches of Forensic Psychology and Medico-legal Psychiatry.

The Indian Council for Medical Research (ICMR) conducted a survey in 2009 according to which 12.8% of children suffer from mental illness out of which 1-20% have Attention deficit hyperactivity disorder (ADHD). According to the 2003 survey by NIMHANS 1.1% of total Indian population has prevalence of Schizophrenia. Some of the epidemiological studies performed in India show that 2-30% of adolescents possess psychological problems out of which 8% suffer from psychological distress (Virudhagirinathan and Karunanidhi, 2014).

Studies show that if a person suffers from psychological condition then it increases the chances for that person to commit crime, they are more prone to violence if they do not receive any treatment for their illness (Volavka and Citrome, 2011). Such people equally likely to either pursue crime knowingly/ unknowingly or become victim of violent crimes. The difference between need for psychologist and forensic psychologist for the abovementioned issues can be explained by an example illustrated by Shapiro (2016) presented in Yadav (2017). A psychologist was appointed by court to a child who was sexually abused in order to provide intermittent reports. The alleged abuser filed a report against the psychologist stating she was incompetent and did not follow ethical guidelines. In revert of this, the psychologist claimed that she was not bound to follow ethical guidelines as her role of only therapeutic and that her reports were not in consideration with forensic evaluation. Therefore, in order to avoid such chaos, there is need for Forensic Psychologist to assist the cases.

According to a survey conducted by NIMHANS in the Bengaluru Central Prison, 79.6% of the prisoners suffer from mental illness or substance use disorder. A random urine test for drug screening showed positive tests for at least one or more drugs. 9.1% of prisoners still go through major depression. Approximately, 2.2% of criminals in prison were suffering from psychosis and related disorders. Another survey from Tihar jail showed that 3.4% of criminals were undergoing psychiatric illness amongst which depression and schizophrenia were most commonly seen (Murthy *et al.* 2016). All these studies and survey show the very much attention needed for mental health facilities which can only be provided by Forensic Psychologists because they understand the legal framework, the science side of the law as well the curative side of the field.

In India 72% of the population resides in rural areas, and there are only 0.03 psychologists per 100,000 people in India that too working majorly in Urban areas (Virudhagirinathan and Karunanidhi, 2014). In this case there should not even be cross questioning in why there is need for adequate psychological and psychiatric facilities equipped with Forensic training. Requirement of this is because Forensics go in hand with Legal investigations, and treating psychiatrists are not able to deliver appropriate help required to offenders and victims as they are trained for court of law.

## CONCLUSION

There is high percentage of the drug abuse which can be a reason for building up a criminal behaviour. Drug use and addiction is the behavioural changes that starts to ultimately leads to mental illness. The amount of drug abuse might be a cause for greed for money and drug trafficking or drug abuse. The important factor behind about forensic psychology is based upon the mental set of mind and drug abuse a actually a huge role to play. Around 90 percent of the cases in the current scenario of criminal behaviour is the reason or need for drugs. There high increase in juvenile cases reasoning the possibility of drug use is absolutely a

desire for more of selling drugs for sustaining. The need for juvenile cases is to learn in a huge amount to clear the understanding of new criminal behaviours. The in-built behavioural changes and study of different behaviours is important in criminal justice system.

From studies read by the authors and survey conducted, we strongly propose that there is emergent need for India to pay attention towards the development of Forensic Science. As for Forensic Psychology, the survey proves that people of India suffer from Mental Illness but are not aware what to do about it. They are not aware of their rights. Therefore what can be done is:

- More graduate, post-graduate and specialised courses can be introduced like other countries in world, so that students have option of choosing Forensic psychology as their career prospective.
- Every organisation whether schools, universities, private institutions, offices, government administrations should have a mental health care facility in-built, where trained professionals can work. This way public if not treated, least will be aware of such issues. They would not have to go to big institutions where they are afraid to disclose their identity or feel shy to receive treatment. In such in-built facilities they can be looked after anonymously. For this to happen the psychologists should be taught to handle the cases ethically.
- In case the root cause is not treated completely, and someone winds up with a crime on their hands, and they are not aware what mental and emotional support they can receive, along with the provision which states every individual has right to lawyer, they should also be given right to a Forensic Psychologist and if they cannot afford they will be appointed with one. This way, the Forensic Psychologist can not only assess the mental fitness of the individual to stand trial, but also ethically and within regulations assess the state of offender when he/she commit crime. A forensic psychologist will be able to provide with not only therapeutic support but also take care that human rights are not getting violated during the proceedings and investigation
- By the means of aforementioned suggestions, we are not only spreading awareness but educating the people of India, training them and provide them with employment. It will be a win-win situation for everyone. All we need is adequate infrastructure, trained professionals not only in urban areas but especially in rural areas.
- Once a Forensic Psychologist is assigned to Criminal in prison, whether they pled insanity or were generally convicted, regular check-ups can be performed so as to make sure they do not pose threat to their inmates in addition to once they get out of prison, are mentally and emotionally fit and do not pose threat to public outside.

## REFERENCES

American Psychological Association (2015) *About APA*. Available at: <https://www.apa.org/support/about-apa#:~:text=How%20does%20the%20APA%20define,to%20care%20for%20the%20aged>.

Bami, H.L. and Ganguly, A.K.(1974) 'Polygraph (Lie detector) -Its application & legal status', *C.B.I. Bulletin*, 8, pp.1-8

Bartol, C.R. and Bartol, A.M. (2008) *Introduction to Forensic Psychology*. Research and application, 2 Edn, Barnes and Nobles New York.

Ciccarelli, S.K. and White, J.N. (2012) *Psychology*. Pearson Learning Solutions. Boston.

EI-shenawy, OE. (2017) 'Traditional Psychological tests usage in forensic assessment', *Journal of forensic, legal & investigative sciences*, 4(20).

Fernald, L.D. (2008) *Psychology: Six perspectives*, pp 12-15, Sage Publications, CA.

Ganguly A.K and Lahri S.K (1976) 'Application of the polygraph in the investigation of crime in India' *Journal of American Polygraph Association*. 5(3). Available at: <https://www.polygraph.org/assets/docs/APA-Journal.Articles/Vol.5.1976/polygraph%201976%20053.pdf>

Gordon, N. and Fleisher W. (2010) *Effective interviewing & interrogation techniques*. Third edition. Elsevier Publication.

Hockenbury, D.H. and Hockenbury, S.E. (2010) *Psychology*. 5<sup>th</sup> edn. Worth Publishers

McLeod, S. (2019) *What is Psychology*. Available at: <https://www.simplypsychology.org/whatispsychology.html>

O'Neil, H.F.; cited in Coon D. & Mitterer J.O. (2008) *Introduction to psychology: gateways to mind and behavior* 12th ed, Stamford, CT: Cengage Learning, pp. 15–16

Patherick, W., Turvey, B. and Fergusson, C. (2009) *Forensic Criminology*, Elsevier Academic Press. USA.

*The history of forensic psychology Part one* (2014) Available at: <https://www.all-about-forensic-psychology.com/history-of-forensic-psychology-part-one.html>

Vaya, S.L. (2015) 'Forensic Psychology in India', *International Research Journal on Police Science*, 1 (1). Available at: [https://www.researchgate.net/publication/303994858\\_Forensic\\_Psychology\\_in\\_India\\_published\\_in\\_International\\_Research\\_Journal\\_on\\_Police\\_Science\\_Volume\\_1\\_Issue\\_I\\_July\\_2015](https://www.researchgate.net/publication/303994858_Forensic_Psychology_in_India_published_in_International_Research_Journal_on_Police_Science_Volume_1_Issue_I_July_2015)

Veeraraghavan, V. (2009) *Handbook of Forensic Psychology*, Select Scientific Publishers, New Delhi.

Virudhagirinathan, B.S. & Karunanidhi, S. 2014, "Current status of psychology and clinical psychology in India - An appraisal", *International Review of Psychiatry*, vol. 26, no. 5, pp. 566-571.