



THE CHALLENGES OF FORENSIC PSYCHOLOGY IN CRIMINAL INVESTIGATIONS

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ABSTRACT

This paper examines the role of forensic psychology in criminal investigation. It explores how psychological techniques are applied across different stages of the investigative process. This further identifies how these psychological inputs are utilised to assist investigative understanding without substituting evidentiary requirements. The study also identifies key challenges that are associated with forensic psychological techniques, including concerns related to subjectivity, standardisation, and empirical support. This paper examines legal and evidentiary issues to assess how courts evaluate psychological inputs, with a focus on distinguishing investigative assistance from admissible proof. It discusses ethical and human rights considerations, such as mental privacy, protection against self-incrimination, and safeguards for vulnerable individuals. The paper also addresses institutional and practical constraints on implementation and provides a comparative overview of judicial approaches in select jurisdictions. This analysis offers a structured understanding of the scope, limitations, and judicial role of forensic psychology in the criminal justice system.

Keywords: Forensic Psychology, Criminal Investigation, Behavioural Analysis, Evidentiary Challenges, Ethical and Human Rights Concerns.

INTRODUCTION

Psychology plays a significant role in the legal field, particularly in criminal investigation. Forensic Psychology is the area of Psychology that deals with criminals, criminal investigations, and procedural processes. It dates back to the era when it was recognised that there is an interrelation between human behaviour and crime. The elements of the crime also have characteristics that need to be studied to establish authority better. Hugo Munsterberg was

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the first scholar to recognise forensic psychology formally and argued that informed psychology must ensure witness credibility, evaluate confessions, and collect evidence. Criminal Investigation is a behaviourist stage that involves human conduct, decision-making, and psychological responses to legal situations. This requires a well-established study that offers scientific insights about the processes that follow from suspect identification and interrogation to witnesses' evaluation and risk assessment based on cognition, intent, and memory. With the passage of time, Criminal Investigation has become reliant on Forensic Psychology as a tool to guide investigations, assess suspects, and decode the criminal intent behind the crime. While forensic Psychology plays a significant role in criminal investigations, its application is informal and discretionary. This paper discusses how the absence of standardised legal frameworks governing forensic psychological processes leads to risks of unreliable testimonies, false confessions, and evidentiary unreliability. These fundamentally unregulated processes raise questions about privacy violations, constitutional rights, and an unjust criminal justice process. In India, the absence of structured interrogation using psychological techniques often blurs into coercion, leading to involuntary confessions. This journal paper examines the challenges forensic psychology faces in criminal investigation, including the lack of a legal framework, the use of undefined methodological techniques, the potential for coercive practices, and implications for evidentiary reliability. Through this analysis, the essay seeks to highlight the need for more precise regulation, ethical safeguards, and legal integration to ensure that psychological insights serve justice rather than compromise it.

FORENSIC PSYCHOLOGY IN CRIMINAL INVESTIGATION: AN OVERVIEW

Forensic psychology is defined as a connecting field between psychology and criminal investigation. It involves understanding the elements of psychology in the legal system, such as analysing criminal behaviour, assessing mental states, evaluating witnesses and suspects, and investigating the evidence. Forensic psychology has a major focus on behaviour in relation to legal responsibility and criminal conduct, unlike any other field, which focuses more on treatment and care.¹

This field has emerged when psychological techniques started influencing legal procedures. Research shows that the earlier attention was given to issues such as eyewitness memory,

¹ ¹ Graham Davies and Anthony Heaton-Armstrong, *Forensic Psychology* (2nd edn, Oxford University Press 2011).

suggestibility and decision making, which highlighted that human perception and memory are not always reliable.² Over time, investigative processes such as offender profiling, interrogation techniques and behaviour analysis started using psychological knowledge. The role of forensic psychology in the criminal justice system in countries such as the US and the UK has gradually strengthened compared to India. In India, the development of forensic psychology is slow because it has not received the formal recognition through proper legal statutes, but is limited to forensic science laboratories and police investigations. This results in the informal application of psychological techniques without standard legal procedures.

The role of forensic psychology in modern criminal investigation is to assist police and investigative agencies in understanding behaviour by improving their investigative strategies. These psychological inputs are helpful in interpreting the behavioural clues, analysing crime patterns and identifying suspects. This is particularly useful in those cases where direct evidence and the right information are not available. The psychological inputs are also used during interviews and interrogations to infer how people react under stress, fear or pressure. These reactions help investigators to decide how questioning should be conducted more effectively and can assess correct responses. Forensic Psychology helps in decoding the thinking behind the criminal intention and the offences.

The interrelation between law and psychology is sometimes complex because psychology is more comprehensive, analytical, and subjective, whereas law requires precision, clear rules, and strict procedures to ensure fairness and consistency. Psychological methods depend upon professional judgement, but they may conflict with stringent legal procedures that demand evidence and proof. This tension highlights the need for proper regulation and standardisation so that forensic psychology can help investigations without compromising legal certainty, due process, and individual rights.

APPLICATIONS OF FORENSIC PSYCHOLOGY IN CRIMINAL INVESTIGATION

The application of Forensic psychology in criminal investigation operates at distinct functional stages of the investigative process. At the preparatory stage, forensic psychology is applied to plan and structure the investigation before direct engagements with suspects. This stage mainly focuses on anticipating behavioural patterns such as the nature of the offence, the pattern of the victim selection and situational behaviour. This stage decides the most appropriate approach

² Hugo Munsterberg, *On the Witness Stand: Essays on Psychology and Crime* (Doubleday, Page & Co 1908).

for assessment, such as timing, setting and personnel, based on psychological considerations like stress tolerance, vulnerability, and resistance.³ During the information-gathering stage, psychological techniques contribute to the systematic collection of information from witnesses, victims and suspects while safeguarding the accuracy and integrity of their statements. This stage involves structuring interviews, assisting cognitive and emotional state, managing memory recall and recording behavioural observation as factual data rather than an inferential conclusion.⁴ The main objective at this stage is to obtain the right information capable of supporting subsequent investigative and legal processes. At the analytical stage, psychological techniques are applied to interpret the information already collected. The objective of this stage is to identify the correlation across behavioural patterns, inconsistencies, statements, crime scenes and timelines across multiple incidents. The analytical stage distinguishes between stress-induced offences and intended offences.⁵ This stage helps in understanding the common underlying behavioural framework behind the serial offences. The next functional stage of criminal investigation is the decision-making stage. Psychological techniques assist in prioritising suspects, determining the necessity of further inquiry, surveillance, or corroborative evidence, and evaluating potential risks associated with investigative actions. Forensic psychology at this stage functions as a decision-support mechanism rather than a determinative tool, ensuring that investigative actions remain proportionate, legally justified, and guided by rational assessment rather than assumption or bias.⁶

CHALLENGES FACED BY FORENSIC PSYCHOLOGY

Scientific and Methodological Challenges in Forensic Psychology: Forensic Psychology faces reliability and validity concerns since there is uncertainty whether psychological techniques produce consistent results and whether they actually measure what they claim to measure.⁷ Suppose two experts assess the same behaviour but reach different conclusions; the method becomes subjective for investigative use. Behavioural indicators are not fixed, which has led to disagreements various times, and depend on the expert's interpretation.⁸ There is also a confirmation bias risk when personal beliefs or expectations influence analysis that supports their initial assumptions while ignoring contradictory evidence. Both can distort

³ Graham M Davies and Ray Bull (eds), *Forensic Psychology* (2nd edn, Wiley 2014).

⁴ Gisli H Gudjonsson, *The Psychology of Interrogations and Confessions* (Wiley 2003)

⁵ Andrew R Crighton and Graham J Towl, *Forensic Psychology* (Blackwell Publishing 2008)

⁶ Gisli H Gudjonsson and John Pearse, 'Suspect Interviews and False Confessions' (2011) 15 *Current Directions in Psychological Science* 33.

⁷ Graham M Davies and Ray Bull (eds), *Forensic Psychology* (2nd edn, Wiley 2014).

⁸ David Canter, *Criminal Psychology: Topics in Applied Psychology* (Hodder Education 2008)

investigative outcomes.⁹ The absence of standardised tools and protocols leads to inconsistency, making comparisons across cases unreliable and weakening confidence in psychological findings. These limitations undermine the acceptance of empirical evidence as scientifically sound methods.

Legal and Evidentiary Challenges: Legal and evidentiary challenges arise when forensic psychological techniques are subjected to judicial scrutiny. The court is founded on demonstrated evidences recognized by the laws and statutes. Law demands cognisable proof, and psychological conclusions are behavioural and inferential.¹⁰ This structural difference makes it challenging for the court to rely on psychological decisions as decisive evidence. The judiciary also lacks uniform statutory standards, which makes it more difficult for the courts to rely. Courts heavily depend on the discretion of judges to evaluate expert testimony. This dependence sometimes causes inconsistency in judicial outcomes and careful reliance on psychological inputs. The criminal trials expose psychological evidence to competing interpretations by opposing experts, which leads to subjectivity in the evidence. Therefore, courts understand psychological inputs as supportive material rather than conclusive proof. This cautious approach reflects the need to balance investigative assistance with the protection of due process and the rights of the accused.¹¹

Ethical and Human Rights Concern: The application of forensic psychology in criminal investigations raises important ethical and human rights concerns since they deal with an individual's autonomy and dignity. One of the leading issues relates to mental privacy and informed consent. Psychological assessments often involve the techniques that provide access to an individual's thoughts, emotions and cognitive processes. These interventions should be conducted with clear consent and informed consequences. The absence of informed consent violates personal autonomy and raises concerns regarding human rights.¹²

Psychological methods used during interrogation may indirectly compel individuals to reveal information that would otherwise be legally entitled to withhold. This sometimes raises concern regarding the blurred line between voluntary disclosure and compelled participation.

⁹ Gisli H Gudjonsson, *The Psychology of Interrogations and Confessions* (Wiley 2003).

¹⁰ Indian Evidence Act 1872, ss 3, 45–51.

¹¹ *Daubert v Merrell Dow Pharmaceuticals Inc* 509 US 579 (1993)

¹² Andrew R Crighton and Graham J Towl, *Forensic Psychology* (Blackwell Publishing 2008).

The protection of vulnerable individuals presents another ethical challenge as juveniles, persons with mental illness and individuals under medication are particularly subject to suggestion, coercion and misunderstanding. The use of forensic psychological techniques without adequate safeguards may result in unreliable statements. Therefore, there is a need to heighten the procedural protections and enhance the professional oversight. This will help in fulfilling investigative objectives while not overriding fundamental human rights.¹³

INSTITUTIONAL AND PRACTICAL CONSTRAINTS

The effective use of forensic psychology in criminal investigations is significantly limited by institutional and practical constraints. The concerns that form the major part of such limitations are the lack of structured training, accreditation and adequate infrastructure. Forensic psychology is still not accepted as a professional cadre within the justice system. The absence of uniform standards leads to inconsistent expertise and judicial outcomes.¹⁴

Another setback lies in the weak coordination between investigators and psychological experts. Investigative agencies and psychologists do not work hand in hand; rather, there is a delay in consultation, communication and underutilization of psychological insights. Psychological inputs can also be ignored without clear guidelines.¹⁵

A further challenge underscores the need for institutional checks that ensure psychological inputs complement legal and procedural safeguards.

COMPARATIVE AND JUDICIAL PERSPECTIVES

This perspective signifies differences in the institutional acceptance and regulation of forensic psychology across jurisdictions. Forensic psychology has achieved formal recognition within the criminal justice system in countries such as the United States and the United Kingdom.¹⁶ Psychological evidence in these jurisdictions is more systematically evaluated since there are clear professional standards, accreditation mechanisms, and judicial guidelines. This helps in the collaboration among investigators, psychologists, and courts. In India, the application remains largely confined to investigative assistance through forensic science laboratories and

¹³ Convention on the Rights of the Child 1989; Indian Evidence Act 1872, s 45.

¹⁴ Andrew R Crighton and Graham J Towl, *Forensic Psychology* (Blackwell Publishing 200

¹⁵ Graham M Davies and Ray Bull (eds), *Forensic Psychology* (2nd edn, Wiley 2014).

¹⁶ American Psychological Association, *Specialty Guidelines for Forensic Psychology* (APA 2013); British Psychological Society, *Code of Ethics and Conduct* (BPS 2018).

police consultations.¹⁷ This is because of limited and cautious engagement with forensic psychology. Forensic Psychology has still not got conclusive evidence of reliability. Indian courts emphasise constitutional safeguards, voluntariness, and evidentiary reliability, leading to a restrained approach.

FINDINGS AND RECOMMENDATIONS

The study found that forensic psychology offers valuable psychological and investigative insights. These techniques have not yet been integrated into the criminal justice system since they are constrained by multiple interrelated challenges. Scientific limitations affect the consistency and reliability of psychological techniques. Legal challenges restrict their evidentiary acceptances because of a lack of uniform standards. Ethical and human rights concerns raise questions regarding mental privacy and informed consent. Institutional weaknesses, including insufficient training, lack of accreditation, and poor coordination between investigators and psychologists, further limit its practical utility.¹⁸

To address these challenges, formal uniform standards are required to define their scope, permissible applications and limits within criminal investigations. The development of standardised, empirically validated tools and protocols should be prioritised to enhance scientific credibility and consistency. Training and accreditation mechanisms for forensic psychologists should be conducted to promote responsible and informed use. Clear admissibility guidelines and procedural safeguards are necessary to assist courts in evaluating psychological evidence and to strengthen the coordination.¹⁹

CONCLUSION

This paper examined the use of forensic psychology in criminal investigations, focusing on its operational stages, limitations, and broader implications. The study detailed its role in the preparatory, informative, analytical, and decision-making phases, demonstrating that psychological insights support investigations but do not replace legal proof. Key scientific and methodological challenges were identified, such as subjectivity, lack of standardisation, and limited empirical support, all of which affect the reliability of psychological techniques.

¹⁷ National Human Rights Commission, *Status of Forensic Sciences in India* (NHRC Report, 2017).

¹⁸ Constitution of India, arts 20(3), 21; *Nandini Satpathy v P L Dani* (1978) 2 SCC 424.

¹⁹ British Psychological Society, *Code of Ethics and Conduct* (BPS 2018).

The analysis addressed legal and evidentiary challenges, noting that courts treat forensic psychological inputs with caution and distinguish their investigative value from their admissibility as evidence. Ethical and human rights concerns, including mental privacy, self-incrimination, and protection of vulnerable individuals, were identified as significant constraints on psychological methods. The study also reviewed institutional and practical limitations, such as training gaps, coordination issues, and risks of systemic bias. Comparative and judicial reviews revealed varying acceptance across jurisdictions, with courts generally using psychological evidence in a limited capacity. Overall, the study highlights forensic psychology as a complementary investigative tool, effective only when applied within legal, ethical, and institutional boundaries.