

THE PSYCHOLOGY OF CRIMINAL BEHAVIOUR AND ITS IMPACT ON CRIMINAL LIABILITY: A STUDY OF INDIAN LAW

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Abstract: Criminal behaviour is a multifactorial phenomenon that cannot be adequately explained through legal doctrine or psychological theory in isolation. This article examines how psychological research can inform, but must not replace, determinations of criminal liability under Indian law. It uses a doctrinal analysis of the Bharatiya Nyaya Sanhita, 2023 (BNS) and Bharatiya Sakshya Adhiniyam, 2023 (BSA), integrated with a targeted narrative synthesis of peer-reviewed meta-analyses, umbrella reviews, authoritative research reports, and forensic-practice guidance. Published evidence indicates associations between youth offending and several individual, family, school, and social factors; however, effect sizes vary and do not establish causation or individual guilt. A 2024 meta-analysis of 37 studies found a mean difference in executive-functioning performance between justice-involved and comparison groups ($d = 0.55$), alongside substantial heterogeneity (84.8%), underscoring the limits of deterministic interpretation. The paper distinguishes clinical diagnosis from the legal test for unsoundness of mind, discusses statutory provisions on intoxication and expert opinion, and evaluates eyewitness memory, risk assessment, and rehabilitation. It proposes an evidence-to-law framework that requires relevance, methodological transparency, consideration of alternative explanations, and explicit limits on expert conclusions. The article contributes an interdisciplinary synthesis for Indian criminal justice and identifies research priorities for locally validated forensic assessment and outcome evaluation.

Keywords: criminal psychology; criminal liability; forensic psychology; Bharatiya Nyaya Sanhita; expert evidence; meta-analysis; eyewitness identification; rehabilitation

1. Introduction

Crime is both a legal category and a form of human behaviour. Criminal law identifies prohibited conduct, defines the mental elements required for particular offences, and establishes procedures through which allegations are investigated and adjudicated. Psychology studies the cognitive, emotional, developmental, interpersonal, and environmental processes that shape behaviour. Their intersection is important because legal decisions often require courts to assess intention, knowledge, memory, credibility, mental condition, and the prospects of rehabilitation. Nevertheless, these disciplines answer different questions: psychology may help explain behaviour, while the court determines legal responsibility by applying the governing law to admissible evidence.

Contemporary theories reject the idea that offending can be explained by one universal cause. Individual differences interact with family relationships, peer networks, opportunity structures, social learning, situational pressures, and developmental experiences. Social-learning accounts emphasise modelling and reinforcement (Bandura, 1977; Akers, 1998), while self-control and developmental perspectives examine how enduring traits and life-course pathways may be associated with offending (Gottfredson & Hirschi, 1990; Moffitt, 1993). These theories describe probabilistic patterns, not inevitable outcomes. A risk factor is neither a diagnosis nor proof that a particular person committed a particular offence.

The distinction becomes especially important in criminal adjudication. A defendant may have a history of mental illness, trauma, substance use, impulsivity, or emotional dysregulation. Such information may be relevant to a specific legal issue, treatment planning, or sentencing where permitted. It does not automatically establish that the person lacked the legally required mental element or satisfies a statutory exception. The Supreme Court of India has repeatedly distinguished medical illness from the legal standard governing the defence of unsoundness of mind (*Dahyabhai Chhaganbhai Thakker v. State of Gujarat*, 1964; *Surendra Mishra v. State of Jharkhand*, 2011).

India's criminal-law framework has undergone a major statutory transition. The Bharatiya Nyaya Sanhita, 2023 replaced the Indian Penal Code, 1860, and the Bharatiya Sakshya Adhiniyam, 2023 replaced the Indian Evidence Act, 1872, subject to their commencement and applicable transitional rules. For a paper addressing current Indian law, the relevant provisions should therefore be analysed under the new enactments, while earlier judgments remain important where their reasoning applies to materially corresponding provisions. This paper considers how psychological knowledge can be used responsibly within that framework.

2. Statement of the Problem

Criminal proceedings primarily determine whether the prosecution has proved the ingredients of an offence and whether any legally recognised defence applies. Yet the circumstances surrounding alleged

offending may involve complex psychological questions: what a person perceived, whether a witness's memory may have been affected, how a mental condition operated at the time of the act, or what intervention may reduce future risk. The challenge is not simply to introduce more psychology into legal proceedings; it is to determine when psychological evidence is relevant, how reliable it is, and what conclusions it can legitimately support.

Two opposite errors are possible. The first is psychological reductionism: treating a diagnosis, personality trait, adverse childhood experience, or social disadvantage as if it conclusively explains an offence. The second is psychological exclusion: ignoring reliable specialist evidence where mental condition, memory, suggestibility, or rehabilitation is genuinely relevant. Both can impair fairness. The central problem is therefore how Indian criminal justice can use psychological evidence without confusing explanation with justification, risk with certainty, or clinical categories with legal standards.

3. Research Questions

1. What psychological theories and empirical findings help explain patterns of criminal behaviour?
2. How do developmental, social, cognitive, personality, and situational factors interact in offending?
3. How does Indian criminal law address unsoundness of mind and intoxication, and what is the role of expert evidence?
4. How can psychological evidence assist investigations and trials without displacing the court's responsibility to decide legal issues?
5. What principles should guide prevention, risk assessment, and offender rehabilitation while protecting individual rights?

4. Research Objectives

6. To explain the scope and limits of criminal and forensic psychology.
7. To critically review major psychological theories of offending and relevant empirical perspectives.
8. To analyse the relationship between psychological conditions and criminal liability under Indian law.
9. To examine the BNS provisions on unsoundness of mind and intoxication and the BSA framework for expert opinion.
10. To consider psychological contributions to investigative interviewing, eyewitness evidence, assessment, and rehabilitation.
11. To recommend safeguards for scientifically responsible and rights-respecting use of psychological evidence.

5. Research Methodology and Scope

This paper uses a qualitative, doctrinal and literature-based methodology. The legal analysis focuses on the Bharatiya Nyaya Sanhita, 2023 and the Bharatiya Sakshya Adhiniyam, 2023, supplemented by selected Supreme Court decisions interpreting the former Indian Penal Code's unsoundness-of-mind provision. The psychological discussion draws on established theoretical works, empirical reviews, and professional guidance in forensic psychology and eyewitness memory. The method is analytical rather than experimental: no interviews, clinical assessments, original dataset, or statistical analysis were conducted.

The paper is not a systematic review and does not claim exhaustive coverage of all psychological theories, Indian judgments, or empirical studies. It is a narrative and doctrinal synthesis designed to clarify key concepts and identify practical implications. A limitation is that the relevance of an older judgment to the new statutory framework must be assessed provision by provision; continuity of wording or principle should not be assumed without checking the current statutory text and later judicial developments. The paper also does not offer case-specific legal advice.

5.1 Search and evidence-selection transparency

For this expanded draft, a targeted search of publicly accessible scholarly and official sources was used to identify high-value evidence syntheses and primary legal authorities relevant to the paper's scope. Search concepts included criminal behaviour/offending, meta-analysis, risk and protective factors, executive functioning, eyewitness identification, forensic psychology, rehabilitation, Bharatiya Nyaya Sanhita, and Bharatiya Sakshya Adhiniyam. Sources included publisher journal pages, PubMed-indexed records, National Academies Press, and official Indian government legal repositories. The evidence synthesis prioritised systematic reviews, meta-analyses, official statutory texts, and professional guidance. Because no reproducible database export, duplicate screening log, protocol registration, or full-text eligibility audit was performed for this manuscript, it is described as a targeted narrative synthesis—not a PRISMA-compliant systematic review. A journal requiring a systematic review would need a fresh, reproducible search of Scopus, Web of Science, PsycINFO, PubMed, and relevant Indian legal databases, with search dates, full search strings, inclusion criteria, screening counts, and risk-of-bias appraisal.

The Bharatiya Nyaya Sanhita, 2023 and Bharatiya Sakshya Adhiniyam, 2023 came into force on 1 July 2024. This paper uses them as the primary current statutory framework and refers to earlier Supreme Court decisions interpreting corresponding provisions of the former Indian Penal Code as interpretive authorities where relevant. The legal analysis should be checked against the statutory text and binding decisions applicable at the time of submission.

6. Conceptualising Criminal Psychology

Criminal psychology applies psychological concepts and research methods to questions arising in relation to offending and the justice system. Forensic psychology is a broader applied field that includes assessment and consultation in legal contexts, treatment in correctional settings, research on legal decision-making, and evaluation of evidence. The field is not a technique for identifying a criminal personality with certainty. Rather, it develops testable explanations and bounded opinions about behaviour, functioning, memory, mental condition, and intervention needs (American Psychological Association, 2013; Bartol & Bartol, 2019).

6.1 Explanation, prediction, and legal attribution

Three tasks should be kept distinct. Explanation concerns possible mechanisms associated with behaviour. Prediction estimates the probability of an outcome under defined conditions and is subject to uncertainty. Legal attribution asks whether the elements of an offence have been established and whether a recognised defence applies. Evidence that a person has characteristics associated with elevated group-level risk does not establish that the person committed a past offence. Similarly, an explanatory account of anger, peer influence, or substance use does not itself answer whether a statutory defence is available.

6.2 Individual and contextual assessment

A sound assessment considers the referral question, the individual's history, relevant records, the circumstances and timing of the alleged conduct, collateral information where lawfully available, and the limitations of the methods used. Psychological tests are not self-interpreting and should not be used beyond their validated purpose. Conclusions should identify the evidence supporting them, alternative explanations, uncertainty, and the boundary between psychological opinion and legal determination (American Psychological Association, 2013).

7. Major Psychological Theories of Criminal Behaviour

7.1 Psychoanalytic and psychodynamic perspectives

Psychoanalytic theory, associated with Freud, emphasised unconscious processes, internal conflict, and early development. In contemporary criminology, psychodynamic ideas may inform clinical understanding of emotional conflict or interpersonal patterns, but they should not be treated as a universal or independently verified explanation of criminality. The evidentiary value of a psychodynamic formulation depends on the quality of the assessment and the specific question being addressed. A speculative account of unconscious motivation cannot establish an offence or determine legal responsibility.

7.2 Behavioural learning and reinforcement

Behavioural approaches examine how actions are shaped by their consequences. Conduct that is intermittently rewarded or goes unchallenged may be repeated, while consistent consequences and reinforcement of alternative behaviour may help establish new patterns. This framework has practical implications for prevention and rehabilitation: programmes can reinforce non-violent problem-solving, delayed gratification, and prosocial conduct. However, learning histories differ, and the same consequence may affect individuals differently. A behavioural explanation is most useful when linked to observable patterns rather than broad assumptions.

7.3 Social learning and differential association

Bandura's (1977) social-learning account proposes that people can acquire behaviour through observation, modelling, and perceived consequences. Akers (1998) extended social-learning principles to criminological explanation, emphasising differential association, definitions favourable to offending, imitation, and reinforcement. These approaches help explain how peer groups or family environments may normalise particular conduct. They do not imply that exposure to violence or delinquent peers inevitably produces offending; individual agency, protective relationships, social supports, and opportunities for lawful participation can alter outcomes.

7.4 Cognitive perspectives

Cognitive approaches examine how people interpret events, make decisions, and justify their actions. Some offending may be accompanied by hostile attribution, minimisation of harm, entitlement beliefs, or rationalisations that frame unlawful conduct as acceptable. Beck's (1976) work on cognitive therapy provides a broader foundation for examining how interpretations relate to emotion and behaviour, while cognitive-behavioural interventions have been used to target thinking patterns and behavioural skills in correctional contexts. Such formulations must remain individualised: not every offence is caused by a cognitive distortion, and a belief or poor decision is not itself a legal defence.

7.5 Personality, self-control, and individual differences

Personality research studies relatively enduring patterns of emotion, cognition, and behaviour. Gottfredson and Hirschi (1990) placed low self-control at the centre of a general theory of crime, proposing that impulsivity and preference for immediate gratification may be relevant to a range of conduct. This theory remains influential but is not a complete explanation of every offence. Personality traits are probabilistic and interact with situational opportunities, social context, and developmental change. A trait score must never be treated as a diagnosis of criminality or proof of guilt.

7.6 Developmental and life-course perspectives

Developmental research examines how offending trajectories emerge, persist, or change across the life course. Moffitt (1993) proposed a distinction between life-course-persistent and adolescence-limited patterns, highlighting the importance of developmental timing and interaction between individual vulnerabilities and environments. This influential taxonomy should be understood as a theoretical framework rather than a rigid classification for every individual. Its practical implication is that early intervention may be beneficial, but early behavioural difficulties should not be used to label a child as destined for criminal conduct.

7.7 Integrated and multifactorial explanations

No single theory adequately accounts for all offending. Contemporary assessment should consider interactions among individual dispositions, developmental history, social learning, access to opportunities, situational triggers, and protective factors. Farrington (2005) reviews developmental criminology evidence showing that risk factors operate across multiple domains. The appropriate conclusion is not that every risk factor is causal in every case, but that prevention and assessment should avoid single-cause explanations and attend to the context in which behaviour occurs.

8. Factors Associated with Criminal Behaviour

8.1 Family environment and early adversity

Family relationships may shape attachment, emotion regulation, behavioural expectations, and methods of conflict resolution. Exposure to abuse, neglect, inconsistent supervision, or persistent violence may be associated with elevated risk for some adverse outcomes. Such associations do not establish inevitability or justify blaming families without considering broader circumstances. Protective adults, stable relationships, educational engagement, and access to support can reduce risk and improve outcomes.

8.2 Peer influence and group processes

Peer approval can reinforce risk-taking and unlawful conduct, especially where a group treats aggression or rule-breaking as a route to status. Group processes may also diffuse responsibility or intensify behaviour in particular settings. Yet peer influence is neither universal nor sufficient to establish legal compulsion. In legal proceedings, the fact that an accused acted with others may be relevant to the evidence and applicable doctrines, but psychological conformity should not be confused with a statutory defence.

8.3 Socioeconomic and structural conditions

Poverty, unemployment, exclusion, educational barriers, and neighbourhood disadvantage may shape exposure to risk and access to legitimate opportunities. These are contextual influences, not markers of inherent criminality. Most people experiencing economic hardship do not engage in crime, and structural conditions alone do not explain why individuals in similar circumstances behave differently. Effective prevention should combine fair enforcement with accessible education, employment pathways, community support, and proportionate social interventions.

8.4 Emotion regulation, impulsivity, and situational pressure

Anger, humiliation, fear, frustration, or poor impulse control may contribute to some incidents, especially where a person interprets a situation as threatening and has limited coping strategies. The relationship between emotion and conduct is mediated by appraisal, learned responses, opportunity, and inhibition. Ordinary anger or jealousy does not automatically excuse violence. A psychological assessment may inform treatment or explain a pattern, but legal consequences depend on the offence and applicable law.

8.5 Substance use and intoxication

Alcohol and other psychoactive substances can affect attention, memory, judgment, and behavioural inhibition, although effects vary by substance, dose, tolerance, co-occurring conditions, and context. Substance use may be relevant to understanding an incident and to treatment planning. Its legal effect is a separate question governed by statutory provisions and the evidence. A general claim that intoxication reduces control cannot replace the specific requirements of the BNS.

8.6 Mental disorder and violence: avoiding stigma

Mental disorder should not be equated with criminality. The relationship between mental illness and violence is complex and affected by multiple variables, including substance misuse, social adversity, prior violence, access to support, and the specific condition under consideration. Most people with mental health conditions are not violent, and many experience stigma or victimisation. In a legal context, diagnosis is only one piece of information and does not automatically determine capacity, intention, or liability. Assessment must be tied to the relevant legal question and the person's functioning at the relevant time.

9. Criminal Liability Under Indian Law

9.1 Actus reus, mens rea, and offence-specific analysis

Actus reus is commonly used to describe the external conduct or other external element of an offence; mens rea refers to the mental element required by the relevant offence, such as intention, knowledge,

recklessness, or another specified state. These are analytical terms and must be applied in accordance with the wording and interpretation of the particular statutory provision. Not every offence requires the same mental element, and the prosecution must prove the elements required by law beyond reasonable doubt. Psychological evidence may assist with a relevant issue, but the court—not the expert—determines whether the legal elements are established.

9.2 Section 22 of the Bharatiya Nyaya Sanhita, 2023: act of a person of unsound mind

Section 22 of the BNS addresses acts of a person of unsound mind. In substance, the provision concerns a person who, at the time of the act, because of unsoundness of mind, is incapable of knowing the nature of the act or that the act is wrong or contrary to law (Bharatiya Nyaya Sanhita, 2023, s. 22). The focus is therefore on the person's legally relevant capacity at the time of the conduct, not simply on whether the person has ever received a psychiatric diagnosis.

The Supreme Court's decision in *Dahyabhai Chhaganbhai Thakker v. State of Gujarat* (1964) explains principles concerning the burden associated with the former Penal Code's insanity exception and the prosecution's continuing obligation to prove guilt. In *Surendra Mishra v. State of Jharkhand* (2011), the Court reiterated the distinction between medical insanity and legal insanity under the former Section 84 IPC. These decisions remain important for understanding the legal reasoning historically associated with the provision, but their application to current proceedings must be read with Section 22 BNS and the current evidentiary framework.

The Supreme Court has reiterated the distinction between medical and legal insanity in *Prakash Nayi alias Sen v. State of Goa* (2023). The decision also discusses the procedural responsibilities of courts when unsoundness of mind is raised. Its precise procedural context should be checked before applying it to a particular case; it does not make diagnosis alone determinative of criminal responsibility.

A clinical diagnosis may support an assessment, but it does not automatically establish the statutory test. Relevant material may include contemporaneous behaviour, medical records, witness accounts, expert opinion, and conduct before, during, and after the event. Such evidence must be assessed as a whole. Equally, unusual behaviour or a history of treatment should not be used in isolation to infer either legal incapacity or guilt.

9.3 Sections 23 and 24 BNS: intoxication

Sections 23 and 24 of the BNS address specified circumstances involving intoxication. Section 23 concerns an act done by a person who, at the time of the act, by reason of intoxication, is incapable of knowing the nature of the act or that it is wrong or contrary to law, where the intoxicating substance was administered against the person's will or without the person's knowledge. Section 24 addresses offences

requiring a particular intent or knowledge by a person who does the act in a state of intoxication. The statutory language and case-specific facts must be consulted before drawing conclusions.

These provisions show why intoxication should not be treated as a blanket exemption. The legal analysis depends on the source and circumstances of intoxication, the statutory test, and the mental element required by the offence. Psychological or toxicological evidence may help establish effects or capacity, but the court must apply the statute.

9.4 Motive, intention, and explanation

Motive refers to the reason a person may have for acting; intention concerns a mental element required by law. A financial motive, revenge, jealousy, or peer approval may help explain why a person acted, but motive is not interchangeable with proof of intention. Nor is a lack of an obvious motive necessarily proof that an offence did not occur. The relevance of motive depends on the legal issue and the totality of evidence.

9.5 Expert opinion under the Bharatiya Sakshya Adhiniyam, 2023

Section 39 of the BSA provides for the relevance of opinions of persons specially skilled in a field when the court must form an opinion on a point of science, art, or another specified field. The provision expressly includes an illustration involving expert opinion on whether unsoundness of mind may have affected a person's capacity at the time of an act (Bharatiya Sakshya Adhiniyam, 2023, s. 39). Expert opinion is relevant evidence, not a transfer of the judicial function to the expert.

A useful forensic report should identify the referral question, methods used, sources of information, findings, limitations, and the reasoning connecting evidence to opinion. The expert should distinguish observed facts from self-report and inference, consider alternative explanations, and avoid opinions outside their competence. The court should evaluate relevance, methodological quality, consistency with other evidence, and the extent to which conclusions are appropriately qualified (American Psychological Association, 2013).

Table 2 summarises the principal statutory provisions discussed in this article. The table is an orientation aid and does not replace the full statutory text or offence-specific case law.

Table 2

Selected statutory provisions relevant to psychological evidence and criminal responsibility

Provision	Subject	Potential psychological relevance	Important limit
BNS s. 22	Act of a person of unsound mind	Expert evidence may address symptoms, functioning, and capacity at the time of the act.	Clinical diagnosis alone does not establish the statutory test.
BNS s. 23	Intoxication caused against the person's will or without	Toxicological and clinical evidence may help establish the circumstances and effects of	Statutory conditions must be satisfied; intoxication is not a

	knowledge	intoxication.	blanket defence.
BNS s. 24	Offence requiring particular intent or knowledge committed by an intoxicated person	Evidence may be relevant to the mental element, subject to statutory rules.	Apply exact statutory wording and offence-specific requirements.
BSA s. 39	Opinions of experts	Qualified expert opinion may be relevant on scientific or specialist questions, including unsoundness of mind.	The court determines admissibility/weight and retains responsibility for legal conclusions.

Note. Statutory references should be checked against the official text in force at the time of submission. BNS = Bharatiya Nyaya Sanhita, 2023; BSA = Bharatiya Sakshya Adhiniyam, 2023.

10. Psychology in Investigations and Trials

10.1 Investigative interviewing and false confessions

Interviewing practices can affect the reliability of information from suspects and witnesses. Leading questions, coercive pressure, repeated suggestion, and the presentation of unverified information may contaminate recall or encourage compliance. A psychologically informed approach uses open-ended prompts, neutral wording, careful documentation, and safeguards against coercion. The goal is not to secure a confession at any cost but to obtain accurate, testable information while respecting legal rights.

10.2 Eyewitness memory and identification

Human memory is reconstructive rather than a literal recording of events. Stress, viewing conditions, distance, duration, weapon focus, delay, post-event information, and identification procedures may affect the accuracy of eyewitness reports. The National Research Council (2014) emphasised the need for scientifically informed procedures and careful evaluation of eyewitness evidence. Loftus (2005) also reviewed how post-event information can influence memory reports. These findings do not mean that eyewitnesses are generally unreliable; they mean that confidence, honesty, and accuracy are distinct concepts and should be assessed carefully.

10.3 Psychological assessment and expert testimony

Psychological assessment may be relevant to mental condition, cognitive functioning, fitness-related questions where legally applicable, treatment needs, or other defined forensic questions. The assessment must be matched to the referral issue and conducted by a suitably qualified professional. The expert should not claim to determine guilt, infer a person's actions solely from a test score, or present uncertain conclusions as established fact. The BSA's framework for expert opinions supports consideration of specialist knowledge while leaving evidentiary weight and legal conclusions to the court.

10.4 Risk assessment and sentencing

Structured risk assessment can organise relevant information about past behaviour, dynamic needs, and protective factors. However, risk instruments estimate probabilities and are vulnerable to base-rate

limitations, measurement error, and contextual change. They should not be treated as precise predictions of an individual's future conduct or used as substitutes for legal standards. Where permitted and relevant, properly qualified assessment may inform supervision or rehabilitation planning, but decisions should remain proportionate, transparent, and reviewable.

10.5 Rehabilitation and evidence-informed interventions

Rehabilitation may target relevant needs such as substance misuse, emotion regulation, problem-solving, pro-criminal attitudes, interpersonal conflict, or educational and vocational barriers. The risk-need-responsivity tradition argues for matching intervention intensity to assessed risk, targeting changeable factors related to offending, and adapting treatment to an individual's learning style, abilities, and circumstances (Andrews & Bonta, 2010). This framework is influential, but its application should be evidence-informed and sensitive to local resources, culture, rights, and programme quality. Rehabilitation is not a denial of accountability; it is a strategy for reducing future harm.

10A. Evidence Synthesis: What Empirical Research Supports

The empirical literature does not support a single-cause model of criminal behaviour. The strongest synthesis available for this draft is a targeted narrative review of selected, identifiable evidence syntheses rather than a new systematic review. Ayano et al.'s (2024) umbrella review of youth-crime risk and protective factors searched Web of Science, PubMed, PsycINFO, and Scopus through June 2024 and included 29 systematic reviews (22 meta-analyses) drawing on 807 unique primary studies. It reported associations across individual, family, peer, and school domains, while also showing that evidence strength differs by factor (Ayano et al., 2024).

The estimates should be interpreted as associations in the reviewed populations, not as causal effects or individual predictions. Odds ratios are affected by study design, definitions of exposure and outcome, residual confounding, and the base rate of offending. Even when an estimate is statistically precise, it does not establish that the factor caused offending in a particular person. The same caution applies to executive-functioning research: a 2024 meta-analysis of 37 studies reported $d = 0.55$ overall, but 84.8% of the variance in effect sizes was attributable to between-study heterogeneity. The adult subgroup estimate was $d = 0.72$, whereas the adolescent subgroup estimate was $d = 0.18$ and was not statistically significant (Griffith et al., 2024).

These findings are useful for formulating prevention and assessment questions, but they do not justify biological or psychological determinism. Group-level associations cannot be used to infer that an individual is criminal, that a particular mental disorder caused an offence, or that a risk factor satisfies or defeats a legal defence. The proper forensic task is narrower: to evaluate a specified question using valid methods and case-relevant information, explain uncertainty, and leave the legal conclusion to the court.

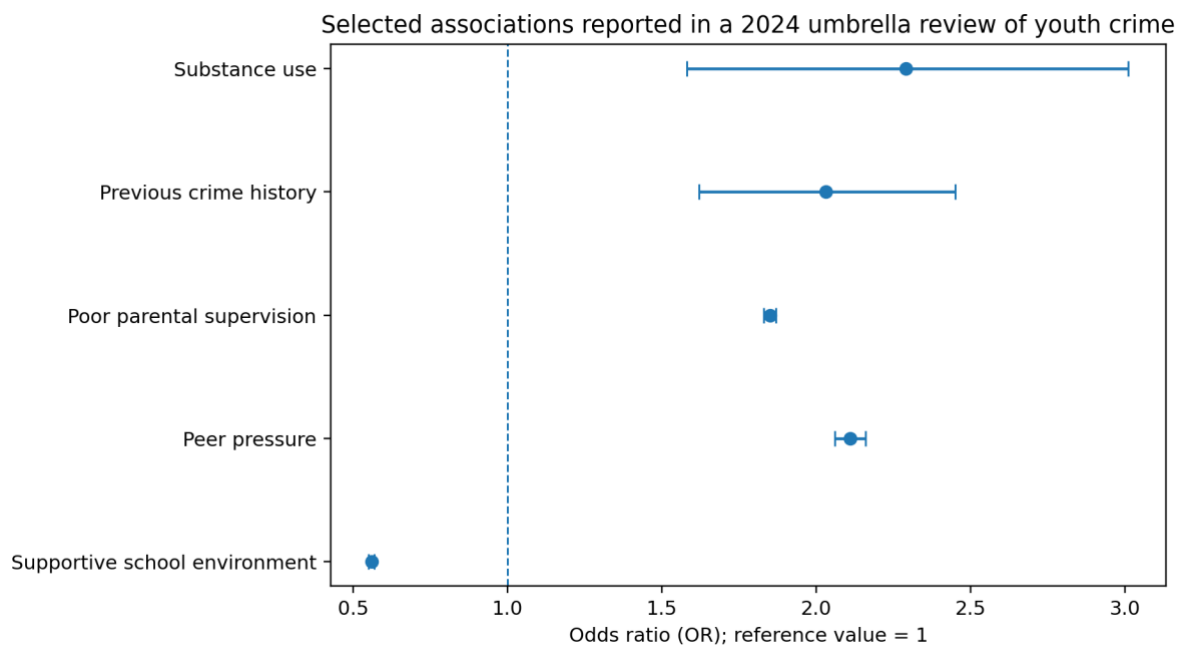
Table 1

Evidence synthesis	Evidence base	Reported result	Interpretation for this paper
Youth crime umbrella review (2024)	29 systematic reviews; 22 meta-analyses; 807 unique primary studies	Selected ORs: substance use 2.29 (95% CI [1.58, 3.01]); previous crime 2.03 [1.62, 2.45]; poor parental supervision 1.85 [1.83, 1.87]; supportive school environment 0.56 [0.55, 0.57]	Factors are associated with outcomes in studied populations; not proof of causation or individual guilt.
Executive functioning meta-analysis (Griffith et al., 2024)	37 studies	Overall $d = 0.55$; adults $d = 0.72$; adolescents $d = 0.18$; 84.8% heterogeneity	Average group differences coexist with substantial variability; no deterministic individual inference.
RNR umbrella review (2024)	26 meta-analyses across risk, need, and responsivity principles	Risk assessment tools reflecting criminogenic needs reported AUCs around 0.62–0.64 in reviewed analyses	Predictive accuracy is imperfect; risk scores require calibration, transparency, and cautious use.
National Research Council eyewitness report (2014)	Multidisciplinary review of basic and applied eyewitness-identification research	Identifies memory malleability and procedure-related influences; recommends evidence-informed identification practices	Use neutral instructions, blind administration where feasible, contemporaneous confidence recording, and careful judicial evaluation.

Note. OR = odds ratio; CI = confidence interval; d = Cohen's standardized mean difference; AUC = area under the receiver operating characteristic curve. Estimates are reproduced as reported in the cited evidence syntheses; they should not be directly compared as if they came from a single common model.

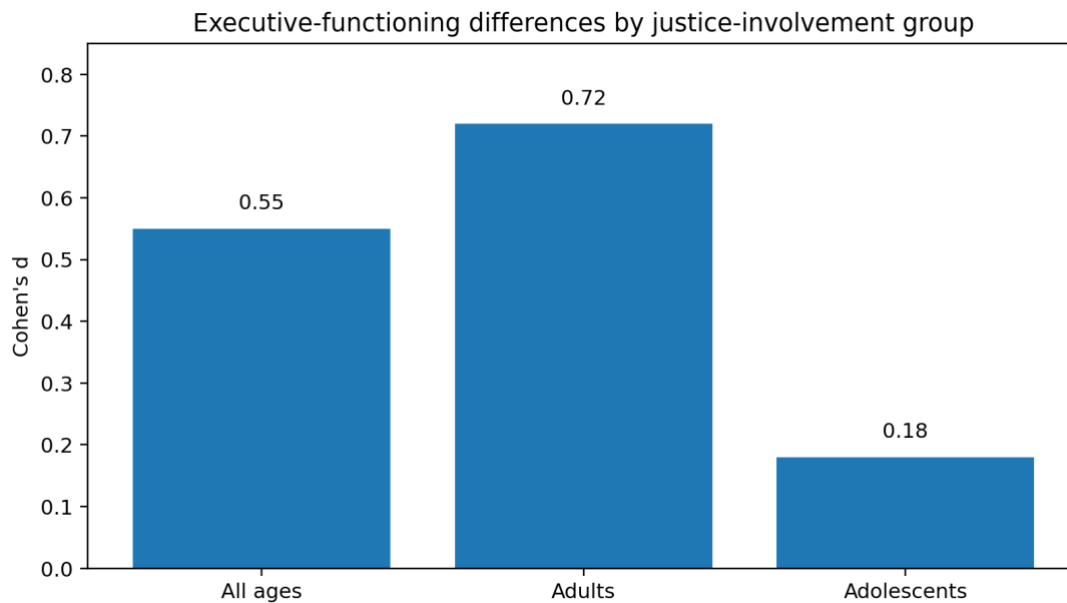
Figure 1

Selected odds ratios reported in an umbrella review of youth-crime risk and protective factors



Note. Points represent published odds-ratio estimates and horizontal bars show the reported 95% confidence intervals. The vertical dashed line marks $OR = 1$. Estimates are selected from a 2024 umbrella review and are not causal effects.

Figure 2



Note. Overall $d = 0.55$; adult subgroup $d = 0.72$; adolescent subgroup $d = 0.18$. The article reported high between-study heterogeneity (84.8%); the adolescent subgroup effect was not statistically significant. These are group-level differences, not individual diagnostic or legal tests.

11. Illustrative Hypothetical Case

Suppose two adults become involved in an argument. One strikes the other and later states that uncontrollable anger caused the assault. A psychological assessment identifies difficulties with emotional regulation. This finding may assist in understanding the person's coping patterns and identifying a treatment need. It does not, by itself, establish that the person lacked the mental element required by the offence or that a legal defence applies.

The court would need to consider the evidence of the act, injury, surrounding circumstances, the relevant offence provisions, and any legally recognised defence raised. If the accused relies on unsoundness of mind, the question is not simply whether a diagnosis exists; it is whether the statutory requirements concerning capacity at the time of the act are met. The example demonstrates the difference between a clinical formulation, an explanation of conduct, and a legal conclusion.

12. Ethical and Evidentiary Challenges

12.1 Diagnostic labels and stigma

A diagnosis should not be treated as a shorthand for dangerousness, dishonesty, or criminality. Broad labels may obscure individual variation and encourage decision-makers to rely on stereotypes. Reports

should use clinically appropriate language, explain relevance to the referral question, and avoid unsupported generalisations.

12.2 Limits of psychological methods

All assessment methods have limits. Reliability, validity, cultural and linguistic suitability, response style, available collateral information, and the conditions under which testing occurred should be considered. A test may be appropriate for clinical screening but not for the specific forensic inference being proposed. Conclusions should reflect the strength of the evidence and the uncertainty that remains.

12.3 Cultural and contextual fairness

Psychological constructs and assessment tools may not operate identically across language, culture, education, and socioeconomic context. In India's diverse population, practitioners should consider language competence, cultural meaning, access to records, and the risk of interpreting unfamiliar behaviour as pathology. Cultural context does not eliminate legal standards, but it can be necessary to interpret behaviour and assessment results responsibly.

12.4 Privacy, consent, and procedural fairness

Forensic assessments often occur under conditions where participation may not be entirely voluntary. Professionals should clarify the purpose of the evaluation, intended recipients, confidentiality limits, and the distinction between treatment and forensic roles. Information should be collected and disclosed only as authorised and relevant. Courts and practitioners should also ensure that the accused has a meaningful opportunity to challenge expert methods and conclusions.

12.5 Balancing accountability and rehabilitation

A fair criminal justice system can recognise individual circumstances without abandoning accountability. Psychological information should neither automatically excuse conduct nor be ignored when it is legally relevant. The appropriate balance requires clear statutory analysis, reliable evidence, proportionality, and interventions aimed at reducing future harm.

13. Discussion

The reviewed literature and legal principles support three central propositions. First, criminal behaviour is multifactorial. Learning, cognition, personality, development, social context, and immediate circumstances may interact, but no single factor explains all offending. This supports prevention strategies that are tailored to identified needs and protective factors rather than based on deterministic labels (Akers, 1998; Farrington, 2005; Moffitt, 1993).

Second, psychological evidence must be linked to a defined legal question. The distinction between medical diagnosis and legal incapacity is particularly important in the context of Section 22 BNS. The cases of Dahyabhai Chhaganbhai Thakker and Surendra Mishra demonstrate the longstanding judicial emphasis on the legal test and the evidence concerning the accused's condition at the relevant time. Expert evidence can assist, but the statutory criteria and ultimate legal determination remain matters for the court.

Third, psychological science can improve the quality of criminal proceedings beyond the insanity defence. Research on memory can inform the assessment of eyewitness evidence; evidence-informed interviewing can reduce contamination; and structured rehabilitation can address changeable factors associated with reoffending. These contributions require restraint. Group-level research cannot establish an individual's guilt, risk estimates are not certainties, and clinical tools must not be used outside their validated scope.

A further implication is the need for interdisciplinary competence. Legal professionals do not need to become clinicians, and psychologists should not assume the role of judges. Instead, each discipline should clarify its methods, terminology, and limits. Courts should ask what the expert actually assessed, what evidence supports the conclusion, how uncertainty was handled, and whether the opinion answers the legal question posed. This approach is consistent with professional guidance on forensic practice and supports transparent, contestable expert evidence (American Psychological Association, 2013).

14. Recommendations

12. Strengthen interdisciplinary training for law students, investigators, prosecutors, defence counsel, judges, and forensic practitioners on the uses and limits of psychological evidence.
13. Use a clearly defined referral question before commissioning a psychological assessment; require reports to state methods, sources, limitations, and alternative explanations.
14. Apply Sections 22–24 of the BNS according to their precise statutory wording and relevant case law; do not equate diagnosis, anger, or ordinary intoxication with an automatic defence.
15. Evaluate expert evidence under the BSA with attention to professional competence, scientific validity, relevance, transparency, and the opportunity for meaningful challenge.
16. Improve investigative interviewing and eyewitness identification procedures through neutral questioning, careful recording, and safeguards against suggestion and coercion.
17. Develop accessible, evidence-informed rehabilitation programmes that address relevant behavioural needs while respecting dignity, proportionality, and individual rights.
18. Invest in early prevention through family support, school-based social-emotional learning, substance-use services, conflict-resolution skills, and community-based interventions.

19. Use risk assessment cautiously and transparently; do not treat risk scores as proof of guilt or as infallible predictions of future behaviour.
20. Promote culturally and linguistically appropriate assessment practices, particularly where standardised tools have not been validated for the individual's context.
21. Encourage Indian empirical research on forensic assessment, eyewitness evidence, rehabilitation outcomes, and the practical operation of the new criminal statutes.

15. Major Findings

22. Criminal behaviour is best understood through interacting psychological, social, developmental, and situational factors rather than a single-cause theory.
23. Psychological theories provide frameworks for explanation and intervention, but they do not establish guilt or predict an individual's behaviour with certainty.
24. Under Section 22 BNS, the relevant inquiry concerns the statutory capacity test at the time of the act; diagnosis alone is insufficient.
25. Sections 23 and 24 BNS create specific rules relating to intoxication, so the legal effect depends on the statutory conditions and case facts.
26. Section 39 BSA recognises the relevance of expert opinion in appropriate cases, but expert evidence does not displace the court's decision-making role.
27. Research on eyewitness memory and interviewing can improve evidence collection and evaluation when applied carefully and without assuming that all witnesses are inaccurate.
28. Rehabilitation and prevention can be strengthened by interventions that address relevant needs while avoiding stigma and deterministic labels.
29. Fair application of psychological evidence requires methodological transparency, cultural sensitivity, procedural safeguards, and clear boundaries between clinical opinion and legal judgment.

16. Limitations and Future Research

This paper is a narrative literature review combined with doctrinal analysis; it does not provide a systematic search protocol, formal quality appraisal, or original empirical data. It also focuses on selected provisions and judgments rather than a comprehensive review of every offence-specific mental element or all relevant Indian case law. Future research could systematically review Indian judgments involving unsoundness of mind under Section 22 BNS, examine how courts evaluate expert evidence under Section 39 BSA, and assess the availability and outcomes of rehabilitation programmes in correctional settings. Empirical work should report sampling, measures, ethics, and limitations transparently and should avoid generalising beyond the population studied.

For publication quality, the manuscript should not describe the reported literature as an original dataset or claim a database-wide systematic search that was not actually conducted. The figures in this paper visualise published estimates from cited reviews; they do not represent new observations collected by the authors. The target journal may require a separate data-availability statement stating that no new dataset was generated, as well as a declaration of funding and conflicts of interest.

17. Conclusion

The relationship between criminal psychology and criminal liability is best understood as complementary but bounded. Psychology helps explain how learning, cognition, emotion, personality, development, and social conditions may influence behaviour. Criminal law determines responsibility through offence-specific legal elements, evidence, and recognised defences. Neither discipline can replace the other: legal reasoning should be informed by reliable psychological knowledge where relevant, while psychological opinion must remain within its evidentiary and professional limits.

The BNS provisions on unsoundness of mind and intoxication illustrate the importance of applying precise statutory tests rather than treating psychological or physiological states as general exemptions. The BSA provides a framework for considering expert opinions, but the court remains responsible for evaluating the evidence and deciding the legal issue. The Supreme Court's earlier decisions on legal insanity remain important interpretive references, subject to careful consideration of the current statutes and subsequent case law.

A psychologically informed criminal justice system should therefore combine scientific caution with humane treatment, procedural fairness, and accountability. When psychological evidence is relevant, reliable, transparent, and properly interpreted, it can improve investigations, reduce avoidable errors, guide rehabilitation, and support more proportionate decisions. Its value lies not in labelling people as criminal, but in helping the justice system understand evidence and respond more effectively while protecting individual rights.

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