

Artificial Intelligence and Juvenile Justice in India: A Socio-Legal Analysis of Law as A Protective Instrument For Children in Conflict with Law

Desh Bandhu^{1*}, Dr. Arvind Rathore²

¹ Research Scholar, Faculty of Law, Maharishi Arvind University, Jaipur, Rajasthan, India

deshbandhu005@gmail.com

² Supervisor, Faculty of Law, Maharishi Arvind University, Jaipur, Rajasthan, India

Abstract: Artificial intelligence has emerged as a transformative force in governance, law enforcement, judicial administration, forensic investigation and social welfare. Its increasing capacity to analyse large datasets, recognise patterns, predict behaviour, process digital evidence and automate administrative decision-making offers significant possibilities for improving the functioning of criminal justice institutions. The use of artificial intelligence in matters involving children in conflict with law, however, raises distinctive socio-legal concerns. Juvenile justice is fundamentally different from the ordinary criminal justice system because it is based upon protection, rehabilitation, reintegration, developmental vulnerability, reduced culpability and the belief that childhood misconduct should not permanently determine the future of a young person. The Juvenile Justice (Care and Protection of Children) Act, 2015 adopts a child-friendly framework founded upon the principles of presumption of innocence, dignity and worth, participation, best interest, family responsibility, equality and non-discrimination, privacy and confidentiality, institutionalisation as a measure of last resort, diversion, fresh start and natural justice. These principles provide an important normative framework against which the use of AI in juvenile justice must be assessed.

This article undertakes a socio-legal examination of the opportunities and risks associated with AI in cases involving children in conflict with law in India. It analyses the potential use of AI in policing, digital evidence, facial recognition, case management, preliminary assessment, bail-related decisions, rehabilitation, probation and post-release monitoring. Particular attention is given to Section 15 of the Juvenile Justice Act concerning preliminary assessment of children aged sixteen to eighteen alleged to have committed heinous offences. The Supreme Court's decision in *Barun Chandra Thakur v. Master Bholu* emphasised the complexity of assessing mental and physical capacity, understanding of consequences and circumstances surrounding an alleged offence, reinforcing the need for specialised and individualised assessment. The article argues that algorithmic risk scores cannot lawfully substitute for the independent judgment of the Juvenile Justice Board or qualified psychological and psycho-social experts.

The article further considers children's privacy, algorithmic discrimination, predictive policing, biometric surveillance and the statutory principle of fresh start. The Digital Personal Data Protection Act, 2023 provides special protections for children's personal data, including restrictions on detrimental processing and behavioural monitoring, although the substantive provisions of Sections 3-17, including Section 9, are scheduled to come into force eighteen months after the 13 November 2025 commencement notification and therefore are not yet operational as of August 2026. International developments, including the UN Convention on the Rights of the Child, UNICEF's child-centred AI guidance and the European Union Artificial Intelligence Act, demonstrate an increasing global consensus that predictive and biometric technologies affecting children require heightened safeguards. The article concludes that law must operate as a protective instrument ensuring that AI assists rather than replaces human judgment, that children are not reduced to algorithmic risk profiles, and that rehabilitation and the possibility of a fresh start remain at the centre of Indian juvenile justice.

Keywords: Artificial Intelligence; Juvenile Justice; Children in Conflict with Law; Child Protection; Juvenile Justice Board; Algorithmic Bias; Predictive Policing; Rehabilitation; Privacy; Digital Evidence; Facial Recognition; Section 15 Preliminary Assessment; Best Interests of the Child; Fresh Start; AI Governance; Socio-Legal Analysis.

INTRODUCTION

Artificial intelligence has entered almost every major sphere of contemporary human activity. Machine-learning systems can process information at speeds and scales beyond conventional human capacity, identify statistical relationships, analyse photographs and video, translate language, recognise biometric features, generate documents and predict certain future outcomes from historical datasets. Governments increasingly explore AI for public administration, law enforcement, fraud detection, social welfare and court management. Criminal justice institutions are particularly attracted to technology because of persistent concerns regarding investigation delays, large caseloads, evidentiary complexity and limited human resources.

The application of AI to criminal justice, however, creates an immediate tension between efficiency and individual rights. A technological system used merely to schedule hearings raises relatively limited constitutional concerns. A system used to predict whether a person is likely to commit another offence, determine whether bail should be granted or influence detention decisions raises much more serious questions concerning liberty, equality, fairness and the presumption of innocence.

These concerns become considerably stronger when the person affected is a child. Juvenile justice law is founded upon the proposition that childhood and adolescence involve continuing physical, psychological, emotional and social development. Conduct occurring during this period cannot always be evaluated through the same assumptions applied to mature adults. A child may be influenced by peer pressure, family circumstances, deprivation, abuse, exploitation, impulsivity or limited capacity to appreciate long-term consequences. Juvenile justice therefore emphasises rehabilitation rather than retribution and reintegration rather than permanent exclusion.

India's Juvenile Justice (Care and Protection of Children) Act, 2015 reflects this philosophy. The statute defines a child as a person who has not completed eighteen years of age and creates specialised institutions and procedures for children alleged or found to be in conflict with law.

Its long title expressly states that its purpose is to provide care, protection, development, treatment and social reintegration through a child-friendly approach in the best interests of children.

Section 3 of the Act is particularly important because it establishes general principles binding upon authorities implementing juvenile justice. Among them are the presumption that a child is innocent of mala fide or criminal intent up to eighteen years of age, the principle of dignity and worth, participation, best interests, equality and non-discrimination, privacy and confidentiality, positive measures, institutionalisation as a last resort, repatriation and restoration, fresh start, diversion and natural justice.

The introduction of AI into juvenile justice must therefore be assessed against a legal framework that deliberately resists permanent criminal labelling. This creates a fundamental conceptual tension. Artificial intelligence frequently works by studying past behaviour and generating predictions concerning future behaviour. Juvenile justice, in contrast, is based upon the belief that a child's past should not permanently determine his or her future.

A child who has once come into contact with the police may appear statistically more likely to return to the justice system. Yet that correlation may reflect factors other than criminal propensity. Police may patrol some communities more heavily than others. Children from disadvantaged backgrounds may have less access to legal representation. School exclusion, poverty, homelessness or family instability may increase contact with authorities without proving an underlying disposition toward criminality. An algorithm trained upon historical justice data may convert these inequalities into apparently neutral mathematical predictions.

The socio-legal implications are therefore considerable. AI does not operate independently of society. Its datasets are produced by institutions, its variables reflect human choices and its outputs acquire significance because police officers, social workers, probation authorities or judges decide to rely upon them. An algorithmic system may therefore reproduce social prejudices even without any explicit discriminatory programming.

At the same time, an excessively negative approach to technology would overlook genuine possibilities for child protection. AI can potentially identify delays in juvenile inquiries, help lawyers analyse large digital records, assist translation for children unfamiliar with the

language of proceedings, detect manipulated videos and deepfakes, facilitate access to welfare programmes and identify institutional rather than individual patterns of failure. Technology can therefore strengthen juvenile justice when used to improve services rather than to predict criminality.

The central socio-legal question is consequently not whether AI should be used at all, but **what kinds of AI should be permitted, for what purposes, under what safeguards, and with what consequences for the rights and future of the child.**

This inquiry has become particularly relevant because India's broader AI governance framework is rapidly developing. The India AI Governance Guidelines released in 2025 emphasise people-first AI, fairness, equity, accountability, transparency and human oversight and specifically recognise the need for greater protection of vulnerable groups, including children. Simultaneously, India's data-protection framework recognises children as requiring special protection, although the principal substantive obligations under the Digital Personal Data Protection Act are being phased into force.

Internationally, comparable concerns have produced stricter approaches. The European Union Artificial Intelligence Act prohibits AI systems used to assess or predict an individual's risk of committing a criminal offence solely on the basis of profiling or personality characteristics, although it permits AI support for human assessments already based upon objective and verifiable facts linked to criminal activity. UNICEF's updated guidance similarly places safety, privacy, non-discrimination, explainability, accountability and children's best interests at the centre of child-focused AI governance.

This article adopts a socio-legal method by examining statutory law, constitutional principles, judicial decisions and international standards together with the social consequences of algorithmic decision-making. It seeks to determine how Indian law can harness technological innovation without allowing AI to weaken the distinctive protective philosophy underlying juvenile justice.

Historical Background

The idea that children who violate the law require a justice system different from that applicable to adults developed gradually. Historically, criminal justice systems frequently

treated children according to rules designed primarily for adult offenders. Although very young children were sometimes protected through doctrines concerning incapacity, older children could face harsh punishments without systematic consideration of developmental maturity, family circumstances or prospects for reform. With the emergence of modern psychology, sociology and child welfare movements during the nineteenth and twentieth centuries, this approach increasingly came under criticism. Scholars and reformers began to recognise childhood as a distinct developmental stage and argued that delinquent conduct frequently reflected environmental circumstances rather than settled criminal character.

The early juvenile court movement developed from this rehabilitative philosophy. Instead of asking only what punishment an offence deserved, juvenile justice institutions were encouraged to ask why the child had behaved in a particular manner and what intervention could facilitate reintegration. Probation, counselling, education, vocational training and community supervision increasingly became alternatives to imprisonment. This model was not without criticism because welfare-based systems sometimes exercised extensive discretionary control over children without adequate procedural safeguards. Nevertheless, it established the essential principle that children should not be treated as miniature adults.

International human-rights law subsequently gave stronger normative foundations to this approach. The United Nations Standard Minimum Rules for the Administration of Juvenile Justice, 1985, commonly known as the Beijing Rules, emphasised the well-being of juveniles, proportionality, privacy, diversion and specialisation of institutions dealing with children. The Convention on the Rights of the Child, 1989 transformed many of these principles into international legal commitments. Article 3 established the best interests of the child as a primary consideration in actions concerning children, while Articles 37 and 40 required child justice systems to respect dignity, avoid arbitrary deprivation of liberty, use detention only as a measure of last resort and promote reintegration.

India's legal evolution reflected these broader developments. Prior to uniform national legislation, children's laws differed significantly among States. The Juvenile Justice Act, 1986 attempted to create a more consistent framework. It was followed by the Juvenile Justice (Care and Protection of Children) Act, 2000, enacted after India became a party to the Convention on the Rights of the Child. The 2000 legislation strengthened the distinction between children

in conflict with law and children needing care and protection and adopted rehabilitation-oriented procedures.

The Juvenile Justice (Care and Protection of Children) Act, 2015 marked another major transformation. It retained eighteen years as the general age threshold but introduced a special mechanism relating to children who had completed sixteen years and were alleged to have committed heinous offences. Under Section 15, the Juvenile Justice Board is required to conduct a preliminary assessment regarding the child's mental and physical capacity to commit the alleged offence, ability to understand its consequences and the circumstances in which the offence was allegedly committed. The Board may obtain assistance from experienced psychologists, psycho-social workers or other experts.

This provision was controversial because it created the possibility that certain older children could ultimately be tried within a more adult-oriented framework. Yet the statute did not establish automatic transfer based merely upon the allegation. It required individualised assessment. The distinction becomes critical in the age of AI because an algorithmic score based on general statistical characteristics is conceptually different from the case-specific and child-specific assessment contemplated by the Act.

The Supreme Court considered this question in considerable depth in *Barun Chandra Thakur v. Master Bholu* in 2022. The Court emphasised that preliminary assessment under Section 15 is a delicate process involving evaluation of multiple interrelated dimensions of a child's development and circumstances. The decision recognised the importance of appropriate expertise and rejected simplistic treatment of preliminary assessment as a routine procedural exercise. The case therefore provides an important doctrinal foundation for resisting the substitution of algorithmic risk assessment for professional and judicial judgment.

Parallel technological developments were transforming ordinary criminal justice. The Information Technology Act, 2000 recognised electronic records and facilitated the growing use of digital evidence. During the following decades, mobile phones, social media, CCTV, location data, digital payment records and forensic computing became increasingly significant in investigation and trial. Children in conflict with law could consequently become subjects not only of conventional investigation but also of digital surveillance and data analysis.

The rise of artificial intelligence introduced a further qualitative change. Digital technology had initially been used primarily to store or reproduce evidence. AI could now classify, rank and predict. Law-enforcement agencies internationally began experimenting with facial recognition, predictive policing and risk-assessment tools. Courts and correctional agencies in some jurisdictions also used structured or algorithmic instruments to estimate recidivism.

Research exposed important problems. Berk's analysis of juvenile justice risk assessment demonstrated that accuracy and fairness can involve difficult trade-offs; improving one technical measure of predictive performance does not necessarily eliminate unequal outcomes. Subsequent research on machine-learning approaches to juvenile recidivism similarly demonstrated that models may achieve considerable predictive ability while producing disparities among protected groups. The lesson is particularly significant for India, where caste, class, geography, disability and unequal access to institutions can influence justice-system contact.

International child-rights bodies began responding directly to the digital transformation. The UN Committee on the Rights of the Child's General Comment No. 24 reaffirmed that persons below eighteen years should ordinarily benefit from specialised child justice systems and emphasised rehabilitation and diversion. General Comment No. 25 in 2021 recognised that the digital environment includes artificial intelligence, automated systems, algorithms, data analytics and biometrics. It thereby brought conventional child-rights principles directly into technological governance.

UNICEF developed specific guidance concerning AI and children, initially identifying requirements relating to children's development, privacy, fairness, transparency, safety and inclusion. Its updated 2025 guidance now contains ten requirements for child-centred AI, including regulatory oversight, safety, data protection, non-discrimination, explainability, accountability and respect for children's development and well-being.

India's legal environment was also developing. The Digital Personal Data Protection Act, 2023 established special rules concerning processing of children's personal data. Section 9 prohibits data processing likely to cause detrimental effects on children's well-being and restricts tracking and behavioural monitoring subject to prescribed exceptions. However, the November 2025 commencement notification provides that Sections 3–17, including Section

9, come into force eighteen months after publication, meaning that these substantive obligations are scheduled for May 2027 rather than being fully operative in August 2026.

The India AI Governance Guidelines released in November 2025 represent another stage in this development. They recognise that children may face distinctive harms from AI systems and recommend a risk-classification framework, human oversight, fairness and proportionate safeguards for sensitive applications.

The historical development of juvenile justice and AI governance thus follows two intersecting trajectories. Juvenile justice has gradually moved from punishment and stigma towards rehabilitation, rights and fresh start. Artificial intelligence, meanwhile, has moved from simple data processing toward increasingly sophisticated prediction and profiling. The challenge for contemporary law is to ensure that the second trajectory does not reverse the achievements of the first.

Socio-Legal Foundations of Juvenile Justice in India

Juvenile justice cannot be adequately understood through statutory provisions alone. Children entering the justice system often come from complex socio-economic circumstances involving poverty, unstable housing, family conflict, educational exclusion, substance exposure, neighbourhood violence or exploitation by adults. None of these factors automatically causes criminal behaviour, but they can shape vulnerability and contact with institutions.

A socio-legal approach therefore rejects the assumption that an offence is merely an isolated exercise of individual choice. It examines the interaction between law, family, schools, community, policing practices and social inequality.

This perspective becomes crucial when AI systems use socio-economic data. A model may interpret poor school attendance as a risk factor. Yet absenteeism may be caused by poverty, caregiving responsibilities, disability or inadequate educational access. An algorithm might treat police contact as evidence of higher criminal risk even though the contact itself may reflect concentrated policing in particular neighbourhoods.

The principle of equality under Section 3 of the Juvenile Justice Act should therefore be interpreted not merely as a prohibition against explicit discrimination but as requiring

authorities to examine whether supposedly neutral technological processes reproduce structural disadvantage.

Article 14 of the Constitution strengthens this requirement through the principle of non-arbitrariness. Article 15(3) permits special legal provisions for children, while Article 21 protects dignity, liberty and privacy. The Directive Principles, particularly Article 39(f), further contemplate opportunities for children to develop in conditions of freedom and dignity.

Law therefore functions in juvenile justice as more than a mechanism for determining responsibility. It is a **protective instrument** intended to prevent temporary childhood misconduct from becoming permanent social exclusion.

Artificial Intelligence in Policing and Investigation Involving Children

AI can enter the juvenile justice process before a child ever appears before a Juvenile Justice Board. Police may use data analytics, facial recognition or digital forensic tools during investigation.

Certain applications may be legitimate and beneficial. AI-assisted forensic software can search large volumes of digital information and identify relevant material. Deepfake-detection systems may help determine whether incriminating audiovisual material has been manipulated. Image-analysis tools may help locate missing or trafficked children.

However, predictive policing presents significantly greater dangers. Predictive systems may identify localities, peer groups or individuals considered more likely to become associated with offending. Such systems depend upon historical policing data and can therefore reproduce historical enforcement patterns.

If a neighbourhood has been heavily policed in the past, more offences will have been recorded there. A predictive system may then recommend even greater police deployment to that location. Increased surveillance generates further recorded incidents, reinforcing the model's prediction. Children growing up within that locality may consequently face repeated police attention independently of their actual conduct. Person-based prediction is even more problematic. Variables such as previous police contact, family history, school disciplinary records, social-media associations or neighbourhood can create a digital risk profile. Such a

profile can undermine the statutory presumption of innocence by shifting attention from what the child has actually done to what an algorithm believes the child may do in the future.

Juvenile justice should therefore draw a clear legal boundary between **evidence-based investigation of an alleged act** and **prediction of criminal propensity**.

AI and Preliminary Assessment under Section 15 of the Juvenile Justice Act

Section 15 is arguably the most sensitive point at which AI could affect juvenile justice.

For a child who has completed sixteen years and is alleged to have committed a heinous offence, the Juvenile Justice Board must undertake a preliminary assessment of mental and physical capacity, understanding of consequences and circumstances surrounding the alleged offence.

These questions require individualised judgment. Mental capacity cannot safely be inferred from academic performance. Understanding consequences cannot be reduced to chronological age. Circumstances surrounding the offence may include coercion, exploitation, abuse, peer pressure, psychological condition, family circumstances and developmental vulnerability.

An AI system trained on earlier juvenile cases may purport to assign a probability that a particular child should be transferred for adult trial. Such a system would be fundamentally problematic.

First, historical cases may reflect inconsistent or biased decision-making.

Second, the variables available to the computer may be incomplete.

Third, predictive correlation does not establish individual developmental capacity.

Fourth, an algorithm cannot meaningfully observe the child's interaction with professionals, family relationships or emotional responses in the manner contemplated by an individualised inquiry.

Fifth, reliance upon an opaque proprietary algorithm could prevent the child from understanding or challenging the basis of the assessment.

The Supreme Court's reasoning in *Barun Chandra Thakur* reinforces the conclusion that Section 15 is not a mechanical evaluation.

AI may legitimately assist by organising records, retrieving recognised assessment criteria or helping experts review relevant documentation. It should not generate a dispositive score on mental capacity or suitability for transfer.

The final assessment must remain with the Juvenile Justice Board, supported where necessary by appropriately qualified psychologists or psycho-social professionals.

Algorithmic Bias and the Principle of Equality

Artificial intelligence is frequently described as objective because mathematical processes appear detached from emotion and prejudice. This description is misleading. Algorithms are created by human designers, trained on historically produced data and configured according to selected objectives. Bias can therefore enter at multiple stages.

Data bias occurs where the training information does not accurately represent all groups.

Measurement bias arises when proxies are used for complex social characteristics.

Selection bias occurs where certain children are more likely to appear in official datasets because they are more frequently subjected to police intervention.

Outcome bias can arise when the variable being predicted itself reflects institutional inequality.

An AI system predicting “risk of reoffending” from prior arrest records may therefore measure likelihood of re-arrest rather than actual future offending. The problem is intensified in India's socially diverse environment. Location, language, educational institution and income can indirectly correlate with social identity. Removing explicit sensitive categories from a dataset does not automatically eliminate discrimination.

A legally acceptable system must therefore be evaluated separately across relevant demographic and socio-economic groups rather than merely on overall accuracy. India's AI

Governance Guidelines recognise fairness and equity as central principles and specifically call for appropriate safeguards and risk assessment for vulnerable groups.

In juvenile justice, fairness should be evaluated against an even stricter standard because an erroneous classification can affect liberty, institutional placement and the child's future identity.

Privacy, Data Protection and the Digital Identity of the Child

Juvenile justice law provides stronger confidentiality than ordinary criminal law for an important reason: public identification can permanently stigmatise a child.

Section 74 of the Juvenile Justice Act prohibits disclosure of identifying particulars of children involved in proceedings, subject to limited statutory exceptions. Section 24 provides for removal of certain disqualifications arising from findings of offences and reflects the broader principle of fresh start. AI creates new challenges because data can survive even when visible records are formally deleted.

A juvenile record may exist simultaneously in police databases, court-management systems, institutional records, backups and algorithmic training datasets. Even after a person's original file is erased, a predictive model may continue to contain statistical influence derived from that data. The traditional legal idea of record destruction must therefore evolve into a concept of **digital fresh start**.

Children's information should not automatically become training material for general-purpose policing or predictive systems. Data collected for counselling, rehabilitation or welfare should not be repurposed as intelligence concerning future criminality.

The DPDP Act reinforces the broader direction of child-data protection by providing specific rules against harmful processing and behavioural monitoring. However, because Section 9 is not yet operative as of August 2026 under the notified commencement schedule, the immediate protection of juvenile data continues to depend heavily upon the Juvenile Justice Act, constitutional privacy principles and sector-specific safeguards.

The privacy principles developed by the Supreme Court in *Justice K.S. Puttaswamy (Retd.) v. Union of India* remain highly relevant. Government processing of sensitive juvenile information should have a lawful purpose, be necessary and proportionate and contain adequate safeguards against misuse.

Facial Recognition, Biometrics and Surveillance of Children

Biometric technologies create special risks in juvenile justice. Facial recognition may compare CCTV images with databases containing known or suspected individuals. While such technology can help locate missing children, its use for identifying children suspected of crime should be tightly controlled.

Children's faces change during development. Poor-quality surveillance images can increase error. Even a technically accurate match establishes identity or similarity, not guilt.

A false match can expose an innocent child to apprehension, police questioning and community stigma.

Consequently, facial-recognition results should never constitute sufficient grounds by themselves for determining responsibility. Independent corroborative evidence should be required.

Untargeted mass collection of children's facial images raises even greater concerns. The EU AI Act prohibits AI systems that create or expand facial-recognition databases through untargeted scraping of images from the internet or CCTV footage. India should consider a comparable child-specific restriction. Juvenile justice should not become a gateway for permanent biometric surveillance of children.

AI in Bail, Institutional Placement and Recidivism Assessment

Section 12 of the Juvenile Justice Act adopts a strongly liberty-oriented approach to bail for children. The starting position is release unless statutory circumstances justify denial. An AI-generated risk score should therefore not reverse this presumption.

Suppose a predictive system classifies a child as having a 70 per cent probability of reoffending. Such a number creates an appearance of scientific certainty but hides difficult

questions: What data were used? Was the model trained on Indian children? Were demographic groups represented equally? Does the percentage predict offending, rearrest or institutional return? What is the error rate?

A decision concerning liberty cannot be reduced to unexplained statistical classification. Risk assessment may have some legitimate role as one source of professional information, particularly in designing supportive interventions. But a risk classification should not operate as an independent basis for detention.

There is an important distinction between using information to ask **“What support does this child need?”** and asking **“How dangerous is this child?”** The first question aligns with rehabilitation. The second risks transforming juvenile justice into preventive punishment.

AI as a Tool for Rehabilitation and Social Reintegration

Not all applications of AI involve prediction or surveillance. Used carefully, technology can support the protective objectives of juvenile justice.

AI-assisted case-management systems could identify children whose inquiries have exceeded statutory timelines. They could alert authorities when individual-care plans are overdue, counselling sessions have not occurred or educational programmes remain unavailable.

Language tools may enable children from different linguistic backgrounds to understand proceedings and communicate more effectively. Accessibility technologies can support children with hearing, speech or visual disabilities. Rehabilitation planning may benefit from systems that match educational or vocational interests with available programmes, provided such systems recommend opportunities rather than restrict choices.

AI could also analyse anonymised institutional data to identify structural problems. For example, it may reveal that a particular district has unusually long case delays, that particular institutions show high dropout rates or that certain regions lack adequate psychologists and probation services.

This approach represents an important conceptual shift: **AI should be used to predict institutional failure rather than child failure.** Such applications use technology to make the justice system more accountable without permanently categorising the child.

Generative AI, Deepfakes and Digital Evidence in Juvenile Cases

Generative artificial intelligence introduces a new dimension to juvenile justice. Synthetic images, audio and video can be created at increasingly high levels of realism.

A child may be falsely depicted in incriminating material. Conversely, authentic evidence may be dismissed as artificial. Courts and Juvenile Justice Boards will therefore require increased digital-forensic competence.

AI-assisted deepfake detection may help, but detection software itself can produce false conclusions. The evidentiary process must remain based on forensic verification, metadata, source examination and chain of custody rather than dependence upon a single AI detector.

Generative AI also creates risks within legal administration. AI-generated summaries of case files may omit important details or generate inaccurate information. In a Section 15 assessment or social-investigation report, even a small error may materially influence the understanding of a child's circumstances. Accordingly, all AI-generated judicial or administrative summaries affecting children should require human verification against original records.

Transparency, Explainability and the Right to Contest an Algorithmic Decision

Natural justice is explicitly recognised among the foundational principles of the Juvenile Justice Act. If AI materially influences a decision affecting a child's rights, natural justice requires meaningful disclosure. At minimum, the child and legal representative should know:

- That an AI system was used;
- The purpose for which it was used;
- The principal categories of data considered;
- Whether the output materially affected the decision;
- The limitations and known error rates of the system; and
- What an inaccurate information or unfair conclusions may be challenged.

Explainability must be appropriate to the child's age and comprehension. A technical explanation filled with statistical terminology does not satisfy child-friendly justice. The underlying reasons should be communicated in accessible language.

There must also be a right to meaningful human reconsideration. An official who simply accepts a computer recommendation does not provide genuine human oversight. The India AI Governance Guidelines emphasise human control, accountability and understandable systems. Juvenile justice should convert these principles into enforceable procedures.

Law as a Protective Instrument in the Age of AI

The title of this study emphasises law as a protective instrument because regulation of juvenile conduct is only one function of juvenile justice. Its deeper purpose is to protect children from the long-term consequences of both offending and excessive institutional intervention. This protective role operates at several levels.

First, law protects against **premature criminalisation** through child-specific procedures.

Second, it protects against **unnecessary detention** by prioritising bail and diversion.

Third, it protects identity through confidentiality.

Fourth, it protects future opportunities through the fresh-start principle.

Fifth, it protects developmental interests through rehabilitation and reintegration.

Artificial intelligence should be evaluated according to whether it strengthens or weakens these protections. An algorithm that helps identify a missing counselling report strengthens protection. An algorithm that permanently labels a twelve- or seventeen-year-old as likely to become a future offender weakens protection. The central legal principle should therefore be **protective proportionality**: the greater the potential effect of an AI system upon liberty, reputation, privacy or future opportunities, the stronger the justification and safeguards required.

International Perspectives

United Nations Convention on the Rights of the Child

The CRC remains the principal international normative framework. Article 3 requires the best interests of the child to be a primary consideration. Article 12 protects participation. Article 16 protects privacy, and Articles 37 and 40 establish specific standards for children in conflict with law.

The Committee on the Rights of the Child's General Comment No. 24 emphasises a specialised child justice system and recommends that all persons under eighteen at the time of an alleged offence receive juvenile justice protections. This approach creates tension with automated systems designed primarily around general criminal justice risk models.

Children's Rights in the Digital Environment

General Comment No. 25 specifically recognises artificial intelligence, automated systems, algorithms, data analytics and biometrics as components of the digital environment affecting children's rights. This means that child-rights obligations apply not merely to online content but also to automated administrative and governmental systems.

UNICEF's Child-Centred AI Framework

UNICEF's updated guidance identifies ten central requirements for AI affecting children, including regulatory oversight, safety, privacy, non-discrimination, explainability, accountability, inclusion and protection of children's best interests and development. These requirements are particularly relevant to juvenile justice because the consequences of error are more severe than in ordinary consumer applications.

European Union Artificial Intelligence Act

The EU AI Act offers perhaps the most directly relevant comparative example. Article 5 prohibits AI systems that make criminal-offence risk assessments of individuals based solely upon profiling or personality characteristics. It allows AI to support human assessment where objective and verifiable facts directly linked to criminal activity already exist. This distinction provides a valuable model for India. AI should assist evidence-based investigation, not

independently predict criminality. The EU legislation also prohibits untargeted scraping to create facial-recognition databases and imposes stringent requirements upon high-risk AI.

International Comparative Lesson

International standards increasingly converge around several principles: human oversight, necessity, proportionality, privacy, non-discrimination, transparency and remedies. For children, these protections must be stronger rather than weaker. India need not reproduce foreign regulatory structures exactly. Its juvenile justice framework already contains powerful protective principles. The essential task is to apply those principles explicitly to AI.

Contemporary Indian Regulatory Position

India does not presently regulate all AI through a single comprehensive horizontal AI statute. Instead, the emerging governance approach relies upon existing legal frameworks, sector-specific regulation and risk-based governance.

The India AI Governance Guidelines recognise risks relating to bias, lack of transparency and vulnerable groups and recommend safeguards corresponding to the seriousness of AI applications. They specifically highlight risks to children and recommend a context-sensitive risk-assessment framework. This flexible approach allows innovation, but juvenile justice should be treated as a special high-risk sector.

A recommendation engine suggesting entertainment content and an algorithm influencing whether a child remains in institutional custody cannot be regulated according to identical expectations. Consequently, the Ministry of Women and Child Development, National Commission for Protection of Child Rights, State Commissions, Juvenile Justice Boards and judicial institutions should participate actively in the development of child-specific AI standards.

Suggested Legal and Policy Framework for India

India should adopt a dedicated framework governing AI use in matters involving children in conflict with law.

- 1. Prohibition of Fully Automated Adverse Decisions:** No AI system should independently determine apprehension, denial of bail, institutional placement, preliminary assessment under Section 15, transfer to Children's Court or the success or failure of rehabilitation.
- 2. Child Rights Impact Assessment:** Before deploying AI within juvenile justice, authorities should conduct a mandatory Child Rights and Algorithmic Impact Assessment examining purpose, necessity, proportionality, accuracy, privacy, bias, security and alternatives.
- 3. Strict Prohibition on Predictive Criminal Profiling:** AI should not classify a child as likely to offend solely from personality, family background, neighbourhood, school records, peer group or socioeconomic characteristics.
- 4. Independent Validation:** Any system used for consequential decisions should be independently tested on relevant Indian populations and periodically audited.
- 5. Meaningful Human Oversight:** The legally authorised human authority must remain capable of rejecting the system's output.
- 6. Right to Explanation:** Children and their lawyers should receive understandable information whenever AI materially influences a decision.
- 7. Data Minimisation:** Only information genuinely necessary for the specific lawful purpose should be collected.
- 8. Separation of Welfare and Policing Data:** Psychological, educational and rehabilitation records collected to help a child should not become routine police-intelligence data.
- 9. Digital Fresh Start:** Deletion obligations should extend, to the greatest technically achievable extent, to derived profiles, replicated databases and AI training pipelines.
- 10. Child Participation:** Children should participate in the design and evaluation of technological systems that affect them. UNICEF's contemporary child-centred AI framework likewise stresses inclusion and child participation.

FUTURE SCOPE

The relationship between AI and juvenile justice in India remains at an early stage, leaving substantial scope for interdisciplinary research.

Future studies should first identify where automated technologies are actually being deployed across police departments, Juvenile Justice Boards, probation systems, child-care institutions and courts. Public debate often focuses on hypothetical risks without adequate mapping of existing technology.

A second area concerns empirical analysis of algorithmic discrimination. Systems should be tested for differential outcomes across gender, socioeconomic status, disability, geographical region, language and other legally relevant categories.

Section 15 deserves particularly careful research. Technology may assist experts in organising developmental information, but future studies should identify clear boundaries preventing AI-generated psychological or recidivism scores from becoming substitutes for professional assessment.

The principle of fresh start requires significant technological innovation. Research on machine unlearning, verifiable deletion and privacy-preserving computation may become central to ensuring that juvenile information can genuinely cease to influence algorithmic systems.

AI may also be used positively to monitor compliance with statutory timelines. Future platforms could automatically identify overdue inquiries, prolonged institutional stays and failures to prepare individual-care plans.

Legal-aid technologies provide another promising field. Carefully designed systems can explain procedures, identify nearby legal services and help children understand their rights. Such systems should remain supplementary to qualified human lawyers.

Research should also focus on deepfakes and synthetic evidence. Children may increasingly become victims of fabricated audiovisual material, including false depictions of illegal conduct. Digital forensic standards must therefore evolve rapidly.

The future implementation of the DPDP Act will also require close study. Section 9 and related substantive provisions are scheduled to become operative only after the transitional period created by the 13th November 2025 notification. Once operational, their interaction with statutory juvenile records, police investigation, welfare processing and government exemptions will require careful judicial interpretation.

Artificial intelligence literacy should become part of training for JJB members, Children's Court judges, prosecutors, defence lawyers, probation officers, psychologists and Special Juvenile Police Units.

Independent national guidelines on AI in juvenile justice should ultimately be developed through participation of technologists, child psychologists, lawyers, social workers and children themselves.

The most productive future direction is to shift emphasis from **predictive justice** toward **supportive technology**. Instead of asking machines to predict which child may offend again, institutions should use technology to identify which services, schools, families and communities require additional support.

CONCLUSION

Artificial intelligence presents one of the most significant emerging challenges for juvenile justice in India because it introduces technologically sophisticated forms of classification, prediction and surveillance into a legal system designed around rehabilitation and fresh start.

The Juvenile Justice (Care and Protection of Children) Act, 2015 provides a strong normative foundation for responding to this challenge. Its principles of innocence, dignity, best interest, equality, confidentiality, diversion, natural justice and fresh start collectively establish a child-protective framework.

The relationship between AI and juvenile justice should therefore not be determined by technological capability alone. The fact that a machine can generate a recidivism score does not mean that law should permit it to determine detention. The fact that facial-recognition technology can identify similarities does not mean that it should become proof of guilt. The

fact that large-scale data can be collected does not mean that a child's history should remain digitally permanent.

Section 15 illustrates the central principle particularly clearly. Preliminary assessment in heinous-offence cases requires individualised examination of developmental capacity and circumstances. The Supreme Court's decision in *Barun Chandra Thakur* reinforces the complexity and seriousness of this inquiry. Artificial intelligence may assist the professionals involved, but it cannot legitimately replace their judgment.

The socio-legal problem of algorithmic bias is equally important. Historical justice datasets may contain the effects of unequal policing, socioeconomic deprivation and institutional discrimination. An algorithm can reproduce these inequalities while presenting its result as mathematically neutral.

Privacy and fresh start raise perhaps the most distinctive juvenile concern. A child justice system cannot genuinely promise reintegration if digital profiles created during adolescence remain available indefinitely. India's legal framework must therefore develop the concept of a **digital fresh start**, ensuring that rehabilitation is not undermined by permanent algorithmic memory.

International developments support this approach. The UN child-rights framework extends children's rights into digital environments. UNICEF emphasises privacy, safety, fairness and explainability in child-centred AI. The European Union has gone further by prohibiting AI-based criminal-risk prediction based solely upon profiling and personality characteristics.

India's emerging AI Governance Guidelines provide an appropriate general foundation through their emphasis on people-first technology, fairness, accountability, human control and special protection for vulnerable groups. These principles should now be translated into specific safeguards for juvenile justice.

The appropriate relationship between AI and juvenile justice can ultimately be expressed through a simple distinction: **technology may assist in understanding a child's circumstances, but it should not define the child's identity or future.**

Law must remain the primary protective instrument. AI should assist law in identifying evidence, improving administration, strengthening rehabilitation and making institutions accountable. It should never become an autonomous mechanism of suspicion, punishment or exclusion. The success of AI in juvenile justice should therefore not be measured by how accurately a machine claims to predict future offending. It should be measured by whether technology helps the legal system protect dignity, reduce unnecessary detention, eliminate discrimination, improve rehabilitation and give every child a meaningful opportunity to start again.

References

1. Constitution of India. (1950). *The Constitution of India*. Government of India.
2. United Nations. (1985). *United Nations Standard Minimum Rules for the Administration of Juvenile Justice (The Beijing Rules)*. United Nations General Assembly Resolution 40/33.
3. United Nations. (1989). *Convention on the Rights of the Child*. United Nations Treaty Series, 1577, 3.
4. United Nations. (1990). *United Nations Guidelines for the Prevention of Juvenile Delinquency (The Riyadh Guidelines)*. United Nations General Assembly Resolution 45/112.
5. United Nations. (1990). *United Nations Rules for the Protection of Juveniles Deprived of Their Liberty*. United Nations General Assembly Resolution 45/113.
6. Government of India. (2000). *The Juvenile Justice (Care and Protection of Children) Act, 2000*. Ministry of Law and Justice.
7. Government of India. (2000). *The Information Technology Act, 2000*. Ministry of Law and Justice.
8. Government of India. (2015). *The Juvenile Justice (Care and Protection of Children) Act, 2015*. Ministry of Law and Justice.
9. Government of India, Ministry of Women and Child Development. (2016). *Juvenile Justice (Care and Protection of Children) Model Rules, 2016*. Government of India.
10. *Justice K.S. Puttaswamy (Retd.) v. Union of India*, (2017) 10 SCC 1.
11. Berk, R. (2019). Accuracy and fairness for juvenile justice risk assessments. *Journal of Empirical Legal Studies*, 16(1), 175–194. <https://doi.org/10.1111/jels.12206>

12. United Nations Committee on the Rights of the Child. (2019). *General comment No. 24 on children's rights in the child justice system* (CRC/C/GC/24). United Nations.
13. Miron, M., Tolan, S., Gómez, E., & Castillo, C. (2021). Evaluating causes of algorithmic bias in juvenile criminal recidivism. *Artificial Intelligence and Law*, 29, 111–147. <https://doi.org/10.1007/s10506-020-09268-y>
14. United Nations Committee on the Rights of the Child. (2021). *General comment No. 25 on children's rights in relation to the digital environment* (CRC/C/GC/25). United Nations.
15. United Nations Children's Fund. (2021). *Policy guidance on AI for children* (Version 2.0). UNICEF Office of Global Insight and Policy.
16. United Nations Educational, Scientific and Cultural Organization. (2021). *Recommendation on the ethics of artificial intelligence*. UNESCO.
17. *Barun Chandra Thakur v. Master Bholu*, Criminal Appeal Nos. 950–951 of 2022, Supreme Court of India, decided July 13, 2022.
18. Government of India. (2023). *The Digital Personal Data Protection Act, 2023*. Ministry of Law and Justice.
19. European Parliament & Council of the European Union. (2024). Regulation (EU) 2024/1689 laying down harmonised rules on artificial intelligence (Artificial Intelligence Act). *Official Journal of the European Union*.
20. Council of Europe. (2024). *Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law*. Council of Europe.
21. Ministry of Electronics and Information Technology. (2025). *India AI Governance Guidelines: Enabling safe and trusted AI innovation*. Government of India.
22. Ministry of Electronics and Information Technology. (2025). *Digital Personal Data Protection Rules, 2025*. Government of India.
23. United Nations Children's Fund. (2025). *Guidance on AI and children: Recommendations for AI policies and systems that uphold child rights* (Version 3.0). UNICEF Innocenti Global Office of Research and Foresight.