ISSN: 2710-0723

Research on the Evidence Access and Judicial Review Mechanism of Personal Risk Assessment Reports

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Abstract

As big data, machine learning, and automated analytics increasingly enter the field of criminal justice,Personal risk assessment reports are widely used in criminal justice processes such as pre-trial detention, sentencing, and community corrections, significantly impacting the rights of the parties involved. However, their evidentiary status has long been ambiguous, often regarded only as a case reference, leading to practical problems such as inadequate cross-examination, arbitrary acceptance of evidence, and algorithmic risks. This study, based on the fundamental tenets of the law of evidence, systematically demonstrates the legal basis for classifying them as expert opinions within the current legal framework from the dimensions of basic attributes and constituent elements, clarifying their evidentiary qualifications and access path; and constructs a four-dimensional review rule of "subject-content-procedure-scientificity." Simultaneously, addressing the theoretical tension between predictability and retrospection, it proposes a two-step institutional path: "currently classified as expert opinions + long-term independent classification."

Keywords

Personal Risk Assessment Report; Predictive Evidence; Expert Opinion; Rules of Evidence Review; Criminal Procedure.

1. Introduction

With the deepening of the criminal policy of combining leniency with severity and the full application of the system of leniency for those who plead guilty and accept punishment, the assessment of personal dangerousness has permeated the entire criminal justice process in China, substantially impacting citizens' basic rights such as detention, probation, and parole. Artificial intelligence technology is widely used in scenarios such as quantitative assessment of social dangerousness and pre-trial non-custodial codes, significantly improving judicial efficiency; however, its legal status remains ambiguous[3]. In practice, assessment reports are only used as "reference materials," not legal evidence, and are not subject to the rules of evidence, lacking standardized cross-examination mechanisms and unified review standards. Relevant empirical studies show that algorithmic assessments have substantially influenced judges' convictions and are prone to exacerbating the imbalance between prosecution and defense[5]. Against the backdrop of the widespread promotion of intelligent and quantitative assessments, clarifying their evidentiary attribution and constructing sound review rules have become important theoretical and practical issues that urgently need to be addressed in the field of criminal proceedings.

Against this backdrop, this article, based on the framework of China's criminal procedure evidence system and combined with the needs of judicial practice, systematically studies the evidentiary attributes, classification paths, review rules, and institutional connections of personal risk assessment reports. The aim is to promote the transformation of such reports

ISSN: 2710-0723

from internal reference materials to standardized litigation evidence, protect the rights of the defense, and help implement the policy of reducing arrests, prosecutions, and detentions .

2. Nature Definition: Restating the Evidentiary Attributes of Personal Risk Assessment Reports

2.1. Normative Definition of Core Concepts

“evidence that predicts future conduct risks rather than proving past criminal facts”.A personal risk assessment report is a written opinion issued by public security and judicial organs, community correction institutions, or entrusted specialized institutions, which uses quantitative indicators, statistical models, or algorithms to comprehensively assess the recidivism risk and social danger of criminal suspects or defendants, providing professional reference for the application of coercive measures, sentencing discretion, and community correction.

The controversy surrounding the admissibility of personal risk assessment reports in the criminal procedure evidence system stems from their fundamental difference from the core function of traditional evidence, which is to “evidence that predicts future conduct risks rather than proving past criminal facts”. Traditional evidence proves past criminal acts, while personal risk assessment reports prove the future behavioral risks of the accused. These differences in evidentiary logic and functional positioning lead to a predicament regarding the admissibility of personal risk assessment reports within the existing framework of evidence types[1].

2.2. Review and Analysis of Mainstream Theories

In academic circles , there are three main viewpoints regarding the evidentiary nature of personal risk assessment reports: the "sentencing reference theory" holds that personal risk assessment reports are not a legally recognized type of evidence, but merely internal reference materials for judicial organs when making judgments, and therefore do not have evidentiary qualifications and do not need to follow strict rules of evidence; the "expert opinion theory" argues that the report is issued by a person with specialized knowledge, making a professional judgment on specialized issues , which meets the core characteristics of an expert opinion and should be classified as such; the "character evidence theory" holds that the report mainly reflects the personality traits and consistent behavior of the accused, falling under the category of character evidence, but character evidence has not been established as an independent type of evidence in Chinese criminal proceedings and its application is strictly limited.

of the aforementioned theories reveals that the "sentencing reference theory" neglects the substantial impact of personal risk assessment reports on the judgment outcome, thus detaching them from the constraints of evidence rules and preventing the defense from effectively cross-examining the evidence, thereby deviating from the basic requirements of procedural fairness . The " character evidence theory" equates professional assessment with character evidence, failing to accurately grasp its essence as a scientific assessment based on multi-dimensional factors . Character evidence focuses on the past behavior of the accused, and the two differ significantly in assessment methods and evidentiary purposes . While the "expert opinion theory" faces the theoretical tension between the retrospective fact-finding of traditional expert opinions and the forward-looking risk assessment of reports, it better aligns with the core characteristics of these reports being issued by specialized personnel and addressing specialized issues based on professional methods, making it the optimal interpretive path within the current institutional framework[7].

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2.3. Functional Positioning of Predictive Evidence

personal risk assessment reports are functionally predictive evidence, with their core value lying in providing professional basis for risk assessment in criminal proceedings and substantive judgments. While China's current evidence system does not explicitly define predictive evidence, the demand for its judicial application continues to grow. This report differs from traditional evidence focused on proving past facts, and also from general character evidence. Within the existing framework of evidence types, it is appropriate to categorize it as expert opinion, while acknowledging its differences from traditional expert opinions, assigning it an intermediate position as a "quasi-expert opinion," establishing differentiated review rules , clarifying its evidentiary status, and promoting the construction of a judicial review mechanism[2].

3. Inclusion Argument: The Optimal Classification Path Under Current Evidence Types

3.1. Individual Verification of Different Classification Paths

3.1.1. Analysis of the Limitations of the Documentary Evidence Approach

Some argue that personal risk assessment reports should be classified as documentary evidence, arguing that as specialized opinions recorded in writing, they conform to the format of documentary evidence. However, documentary evidence "proves the facts of a case through its recorded content and the ideas it reflects," and its content is usually an objective record of past events. In contrast, personal risk assessment reports are professional judgments made by assessors based on statistical models or algorithms regarding future risks , and are not a record of objective facts. Furthermore, the formation of documentary evidence generally does not require specialized knowledge and professional methods, while the issuance of personal risk assessment reports relies on specialized knowledge and scientific assessment methods from criminology, psychology, and other fields. The two differ fundamentally in their formation mechanisms and evidentiary logic; therefore, classifying them as documentary evidence would present a problem of insufficient normative fit. risk assessment reports should be positioned as quasi-expert opinions under the current evidence system.

3.1.2. The Dilemma of the Expert Witness Opinion Path

In common law countries like the US and UK, personal risk assessment reports are considered expert witness opinions, requiring expert witnesses to testify in court and be subject to cross-examination. my country's Criminal Procedure Law does not establish an expert witness system; it only stipulates a system of expert assistants-persons with specialized knowledge who appear in court to offer opinions on expert reports. Expert assistant opinions are not an independent type of evidence and can only be used as a reference for cross-examination. Classifying personal risk assessment reports as expert witness opinions lacks a basis under current Chinese law and cannot grant them independent evidentiary status, making it difficult to guarantee their effective application in litigation.

3.1.3. Analysis of the Fit between Different Approaches to Expert Opinions

An expert opinion is a written opinion issued by public security and judicial organs after appointing or hiring individuals with specialized knowledge to conduct an assessment in order to resolve certain specialized issues in a case. A personal dangerousness assessment report meets the core characteristics of an expert opinion: 1. It addresses specialized issues; personal dangerousness assessments involve specialized knowledge from multiple disciplines such as criminology, psychology, and sociology, and are specialized issues that judicial personnel cannot judge based on general experience; 2. It is issued by individuals with specialized knowledge, and the assessors must possess relevant professional qualifications and assessment

ISSN: 2710-0723

experience; 3. The judgment is based on professional methods, and the assessment process must follow scientific assessment models and methods.

Meanwhile, my country's "Regulations on the Classification of Forensic Medical Appraisal Practice" has explicitly included "risk assessment" within the scope of forensic psychiatric appraisal, applicable to the assessment of the violent risk of mentally ill patients during compulsory medical treatment procedures, thus providing a normative basis for classifying personal risk assessment reports as appraisal opinions. Article 100 of the "Interpretation of the Supreme People's Court on the Application of the Criminal Procedure Law of the People's Republic of China" stipulates that reports issued by individuals with specialized knowledge on specialized issues in a case, when no appraisal institution is available, can be used as evidence. This provision provides a legal basis for classifying personal risk assessment reports as "quasi-appraisal opinions".[4][6]

3.2. Justification for Including in the Expert Opinion

In terms of their compatibility, personal risk assessment reports and expert opinions are highly compatible in terms of subject, object, and method . Regarding the subject, both must be issued by personnel with specialized knowledge, and the qualifications of the assessors are a crucial guarantee of the report's legality. Regarding the object, both address specialized issues in the case, where judicial personnel cannot make accurate judgments based on general experience. Regarding the method, both must adhere to scientific and professional methods and procedures to ensure the objectivity and scientific rigor of the opinions.

From the perspective of meeting the requirements, including expert opinions satisfies the requirements of legality, objectivity, and relevance of evidence in China's criminal proceedings. Regarding legality, the assessment report is issued by qualified personnel, meeting the requirements for an expert opinion. Regarding objectivity, the assessment report makes judgments based on objective facts and scientific methods; although it contains subjective judgment elements, it is not arbitrary conjecture. Regarding relevance, the assessment report is directly related to the social dangerousness of the accused and the outcome of the criminal trial, and can influence the case outcome .

From a practical perspective, there are numerous cases in judicial practice where personal risk assessment reports have been used as expert opinions or specialized evidence, especially in cases involving compulsory medical treatment and juvenile delinquency. These assessment reports are often adopted as key evidence, and including them in expert opinions can respond to the real needs of judicial practice and provide a clear legal basis for the application of such reports.

3.3. Acknowledge the Differences from Traditional Identification Methods and Establish a Middle Ground

Personal danger assessment reports fall under the category of expert opinions but are not entirely equivalent to traditional expert opinions. There are several differences: First , the objects of proof differ. Traditional expert opinions retrospectively determine past facts, while personal danger assessment reports make forward -looking judgments about future behavioral risks. Second , the certainty of the conclusions differs. Traditional expert opinions typically yield relatively definitive conclusions, while personal danger assessment reports present probabilistic conclusions. Third , the assessment methods differ. Traditional expert opinions rely heavily on objective methods such as laboratory testing and physical evidence analysis, while personal danger assessments are based on algorithmic models and combine multiple dimensions for comprehensive analysis, which may introduce biases[5].

Therefore, personal risk assessment reports should be given an intermediate status as "quasi-expert opinions," acknowledging their evidentiary status as expert opinions while also

ISSN: 2710-0723

recognizing their differences from traditional expert opinions. Differentiated review rules should be set for them to ensure their scientific validity and reliability while avoiding the application of overly stringent traditional expert review standards, thus achieving a balance between institutional norms and practical needs.

4. Rule Construction: A Four-Dimensional Evidence Examination Rule System

To promote the transformation of personal risk assessment reports from internal reference materials to standardized litigation evidence, it is necessary to construct a four-dimensional evidence review rule system integrating subject, content, procedure, and scientific rigor, providing clear guidance for the admissibility and judicial acceptance of such reports as evidence.

4.1. Subject Dimension: Clarify the Qualifications of the Assessment Subject and Procedural Requirements

The qualifications of the assessment body are fundamental to ensuring the legality and scientific validity of personal risk assessment reports. Clearly define the qualification requirements for assessment bodies, requiring assessment institutions or personnel to possess relevant professional backgrounds and qualifications, such as those in criminology, psychology, or psychiatry, and to have corresponding assessment experience. Establish the neutrality obligation of the assessment body; assessment personnel must not have any conflict of interest with the parties involved in the case, otherwise they should recuse themselves. Standardize the selection procedure for assessment bodies, which can refer to the selection method for expert witnesses, with appointment or hiring by public security and judicial organs to ensure the impartiality and authority of the assessment body.

4.2. Content Dimension: Standardize the Matters Recorded in the Report and Separate Facts from Judgments

The review of the assessment report's content is crucial to ensuring its objectivity and relevance. The report should be standardized in its content, clearly requiring it to include basic information, the basis for the assessment, the methods used, the process, and the conclusions, ensuring its completeness and transparency. Objective facts and subjective judgments should be separated; the report should distinguish between objective facts such as the defendant's basic information, upbringing, and criminal acts, and the subjective judgments made by the assessors based on professional methods, avoiding confusion between subjective judgments and objective facts and facilitating review and cross-examination by judicial personnel and parties involved. The expression of assessment conclusions should be clearly defined, requiring conclusions to explicitly state the basis, methods, and limitations of the assessment, avoiding absolute statements and reflecting the probabilistic nature of the assessment conclusions.

4.3. Procedural Dimension: Strengthening the Guarantee of Evidence and the Remedies for Procedural Defects

Procedural justice is a crucial guarantee of the impartiality of personal risk assessment reports. A pre-trial disclosure system should be established to ensure both parties' right to know and sufficient time for cross-examination . The mechanism for assessors to testify in court should be improved ; similar to the regulations for expert witnesses, assessors should appear in court to answer questions if a party objects to the assessment report and the report has a significant impact on the case's judgment. The role of expert witnesses should be strengthened, allowing parties to hire individuals with specialized knowledge to appear in court and offer opinions on the scientific validity and reliability of the assessment report. Simultaneously, rules for

ISSN: 2710-0723

handling procedural defects should be established: minor defects should allow assessment institutions or personnel to provide corrections and explanations, while serious procedural violations should result in direct exclusion of the evidence.

4.4. Scientific Dimension: Establishing Review Standards for Data, Tools, and Algorithms

Scientific rigor is the core value of a personal risk assessment report, and its focus should be on data, tools, algorithms, and individualized testing. The reliability of the assessment data must be examined, ensuring that the underlying data is legally sourced, objective, comprehensive, and reflects the true situation of the person being investigated. The scales and models used must be scientifically validated and possess good reliability and validity. Furthermore , the principles, parameters, and logic of the artificial intelligence and big data technologies employed should be publicly disclosed to eliminate any algorithmic "black boxes"[8]. Adhering to the principle of maximum individualization, the report should analyze individual characteristics in a targeted manner, avoiding the mechanical application of models to ensure the personalization and reasonableness of the assessment conclusions.

5. Future Outlook: The Two-Step Evolution of Independent Evidence Types

Incorporating personal risk assessment reports into expert opinions is the optimal transitional solution at the current stage, but it still faces theoretical tensions and practical limitations. In the long run, it should be promoted to become an independent legally recognized type of evidence, establishing a dedicated rule system to standardize the application of predictive evidence in criminal proceedings[1,5]. Therefore, a two-step evolutionary path is proposed:

5.1. First step: Refining the Rules based on the Current Classification Theory

At the current stage, the focus is on incorporating expert opinions into the application of personal risk assessment reports, while refining the rules for their application through judicial interpretation. On the one hand, this clarifies the qualifications of the assessment body, the content requirements of the assessment report, the review standards, and the rules for acceptance, providing clear guidance for judicial practice. On the other hand, it improves supporting mechanisms such as the expert assistant system and the system for assessors to testify in court, ensuring the parties' right to cross-examination and enhancing the scientific rigor and impartiality of assessment reports. Simultaneously, issuing guiding cases can unify the standards for reviewing and accepting personal risk assessment reports in judicial practice, preventing inconsistent judgments in similar cases.

5.2. Second Step: Long-term Promotion of Adding Independent Types of Evidence

As the role of personal dangerousness assessment in criminal proceedings becomes increasingly prominent, the Criminal Procedure Law should be amended to establish "predictive evidence" or "expert opinions" as independent legal evidence categories, incorporating personal risk assessment reports . At the legislative level, the definition, scope, qualifications of assessors, review rules, and acceptance standards of predictive evidence should be clearly defined, and a dedicated rule system should be constructed to adapt to the future-oriented and probability-based nature of predictive evidence. Simultaneously, supporting systems should be established and improved, such as regulations governing the professional qualifications of assessors, the entry and supervision of assessment institutions, and the cross-examination and remedies system for assessment reports. These measures will

ISSN: 2710-0723

provide institutional guarantees for the standardized application of predictive evidence, achieving an organic unity between interpretation and legislation[2,5].

6. Conclusion

The transformation of personal risk assessment reports from internal reference to litigation evidence reflects the profound interaction between scientific rigor and the rule of law in contemporary Chinese criminal justice. On the one hand, the introduction of risk assessment technology helps improve the rationality of sentencing decisions and reduce the arbitrariness of purely intuitive judgments; on the other hand, the embedding of technological means into the adjudication process must be subject to due process testing to prevent bias disguised as science from quietly eroding judicial fairness.

This article advocates taking the standardization of evidentiary admissibility as a breakthrough, systematic review rules as institutional support, interpretative coordination as a transitional solution, and independent evidence categories as a long-term goal, to pave a normative path from what is to what ought to be for the judicial application of personal risk assessment reports. Technological progress should not be an excuse to undermine procedural safeguards, nor should scientific authority be a reason to exempt judicial review-this is both the fundamental stance throughout this article and the bottom-line principle that must be upheld when any new type of evidence is integrated into the criminal evidence system.

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