

ISSUES OF IMPROVING THE QUALITY OF NATIONAL CRIMINOLOGICAL RESEARCH ON THE BASIS OF MODERN SCIENTIFIC STANDARDS



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Abstract. The article examines the theoretical, methodological, and practical issues of improving the quality of national criminological research in accordance with modern scientific standards. It substantiates the importance of clearly defining the research problem, developing a sound methodology, building a reliable empirical database, applying statistical and comparative analysis, using digital technologies, verifying research findings, and ensuring their practical implementation. The study proposes a comprehensive approach based on the sequence: “problem – methodology – empirical basis – analysis – forecasting – scientific conclusion – practical recommendation – implementation – effectiveness assessment.” It concludes that this approach will contribute to the development of criminological science, the improvement of crime prevention activities, and the promotion of evidence-based decision-making in law enforcement practice.

Keywords: national criminological research, research quality, criminological methodology, empirical analysis, crime research, criminological forecasting, evidence-based approach, digital criminology, crime prevention.

Annotatsiya. Ushbu maqolada zamonaviy ilmiy standartlarga muvofiq milliy kriminologik tadqiqotlar sifatini oshirish bilan bog'liq nazariy, metodologik va amaliy masalalar ko'rib chiqiladi. Tadqiqotda “muammo – metodologiya – empirik asos – tahlil – bashorat qilish – ilmiy xulosa – amaliy tavsiya – amalga oshirish – samaradorlikni baholash” ketma-ketligiga asoslangan kompleks yondashuv taklif etiladi.

Kalit so'zlar: milliy kriminologik tadqiqotlar, tadqiqot sifati, kriminologik metodologiya, empirik tahlil, jinoyatchilik tadqiqotlari, kriminologik prognozlash, dalillarga asoslangan yondashuv, raqamli kriminologiya, jinoyatchilikning oldini olish.

Аннотация. В статье рассматриваются теоретико-методологические и практические вопросы повышения качества национальных криминологических исследований в соответствии с современными научными стандартами. Предлагается комплексный подход, основанный на последовательности: «проблема – методология – эмпирическая основа – анализ – прогноз – научный вывод – практическая рекомендация – внедрение – оценка эффективности».

Ключевые слова: криминологические исследования, криминологическая методология, качество исследования, исследование преступности, криминологическое прогнозирование, доказательный подход, предупреждение преступности, правоохранительная деятельность, научные стандарты, эффективность профилактики.

Contemporary criminology is no longer limited to explaining crime solely through the statistics of committed offences, general indicators, or the dynamics of increase and decrease across regions. On the contrary, it requires crime to be studied as a **complex socio-legal phenomenon** shaped by causes, conditions, the social environment, individual behaviour, territorial criminogenic situations, economic pressure, digital risks, urbanization, migration, family and domestic conflicts, youth employment, information technologies, and the effectiveness of the prevention system.

In the context of Uzbekistan, criminology has been institutionally developing in recent years as an independent scientific and practical field. The need for scientifically grounded crime research, in-depth study of the causes and conditions of crime, assessment of territorial criminogenic situations, development of criminological forecasts and preparation of specific proposals for preventive practice has significantly increased [1; 2; 3]. However, within this process, issues such as evaluating the quality of research, organizing it on the basis of modern scientific standards, linking research outcomes with practice, and substantiating scientific conclusions with evidence still require special methodological attention.

Practical observations show that in some criminological studies, priority is given mainly to the general statistical description of crime, territorial comparison, or simple numerical analysis by crime type. Although such an approach has a certain informational value, it is not sufficient to reveal the **internal causal mechanisms of crime**, the interrelation of risk factors, the effectiveness of preventive measures, or future criminogenic trends. As a result, the proposals formulated at the end of some studies remain at the level of general recommendations, while it is not always clear on which data, which method, which empirical finding, or which forecast they are based.

From this point of view, in order to improve the quality of national criminological research, it is first necessary to define the concept of “**research quality**” on the basis of clear scientific criteria. The quality of criminological research should not be

determined only by the relevance of the topic or the theoretical richness of the text. Rather, it should be assessed by the clarity of the scientific problem, the soundness of the methodological design, the reliability of the empirical base, the validity of statistical analysis, the disclosure of causal relationships, the verification of results, the targeted nature of practical recommendations, and the possibility of their implementation in preventive practice [13; 14].

One of the most important issues in improving the quality of national criminological research is the transition from a descriptive approach to an **analytical and prognostic approach**. A descriptive approach shows the current state of crime, but it is not sufficient to identify its possible future trajectories. An analytical and prognostic approach, however, makes it possible to determine the probable trajectory of crime development by jointly assessing crime dynamics, criminogenic factors, territorial risk levels, the characteristics of social groups, and the impact of prevention measures.

The main scientific thesis advanced in this article is that, in order to improve the quality of national criminological research in Uzbekistan, it is necessary to form a **unified system of scientific and methodological standards**. These standards should ensure the following sequence in every criminological study: **scientific problem – methodology – empirical basis – analysis – causal explanation – forecast – scientific conclusion – practical recommendation – implementation – effectiveness assessment**. It is precisely this chain that elevates research from a simple informational or descriptive report to a criminological product with real scientific and practical value.

Thus, improving the quality of national criminological research is directly related not only to the internal development needs of criminological science, but also to the prevention of crime, the maintenance of public safety, the scientific substantiation of state bodies' activities, and the formation of a safe social environment [5]. Therefore, the establishment of a system of criminological research that is based on modern scientific standards, empirically robust, enriched

with digital analysis, and oriented toward practical effectiveness is a **pressing scientific and practical task**.

This article applies a **comprehensive methodological approach** to the analysis of issues related to improving the quality of national criminological research on the basis of modern scientific standards. The methodological premise of the study is that the quality of criminological research should not be assessed merely by the relevance of the topic or the abundance of statistical data, but rather by the proper formulation of the scientific problem, the justification of selected methods, the reliability of empirical data, the verifiability of results, and the possibility of their practical implementation.

First of all, the article employs the **method of systemic analysis**. This method made it possible to examine national criminological research not as an isolated academic text or report, but as a scientific and practical process consisting of interrelated stages. In addition, the method of scientific and methodological analysis was used. Through this method, the methodological structure of criminological research was examined, including the object and subject of the study, its aim, objectives, hypothesis, data sources, selected methods, and criteria for evaluating results. This approach demonstrates that high-quality criminological research must provide clear answers to the following questions: **what criminological phenomenon is being studied, which factors are being analysed, by which method conclusions are drawn, and which practical problem the results are intended to solve** [13; 14].

The article also applies the **method of criminological analysis** as one of its core research methods. This method serves to study crime not only through legal qualification or statistical indicators, but also in connection with its causes and conditions, as well as personal, social, economic, territorial, demographic, and psychological factors. Through criminological analysis, it is argued that the quality of research should be assessed not by merely recording an increase or decrease in crime, but by the extent to which the factors influencing these changes are identified,

their interrelations are revealed, and preventive measures are scientifically substantiated.

The **comparative analysis method** also plays an important role in the study. This method allows existing approaches in national criminological research to be compared with modern scientific standards, international criminological practice, and the requirements of evidence-based research. The comparative approach shows that contemporary criminological research should not be limited to theoretical narration or statistical description; it must also include empirical verification, causal analysis, forecasting, a system of indicators, and mechanisms for implementing results in practice.

The article further uses the **normative-legal analysis method**. This is because the quality of national criminological research is closely linked to the existing legal foundations governing crime control, offence prevention, public safety, criminological activity, and the organization of scientific research in the country. Through this method, the article analyses the need for the results of criminological research to serve not only as theoretical conclusions, but also as a basis for developing legal proposals, organizational measures, methodological recommendations, and practical mechanisms [1; 2; 3].

An **empirical approach** is identified as a separate methodological criterion in the study. The quality of criminological research is directly related to the extent to which it relies on real data. Therefore, criminological studies should make use of official statistics, criminal case materials, investigative and court documents, prevention reports, sociological surveys, expert interviews, data on territorial criminogenic situations, observations at the mahalla level, and digital databases. Research without an empirical foundation often remains at the level of general theoretical reasoning and has limited impact on practical decision-making [16; 17].

At the same time, the article considers **statistical analysis** as an essential tool for improving the quality of national criminological research. Statistical methods are important for analysing the state, dynamics, structure, territorial distribution, seasonality, recurrence of crime, and

the composition of offenders. However, the article also argues that statistical analysis alone is not sufficient. If statistical data are not enriched with criminological interpretation, they remain merely a numerical description. Therefore, according to modern standards, statistical analysis should be integrated with causal, territorial, sociological, and prognostic analysis.

The article also examines the **digital analysis approach** as a theoretical and methodological basis. In contemporary conditions, technologies such as **Big Data, Geographic Information Systems (GIS), Artificial Intelligence (AI), Natural Language Processing (NLP), data mining, and predictive analytics** are among the important tools for improving the quality of criminological research. They make it possible to process large volumes of crime-related data, identify hidden correlations, create territorial risk maps, automatically extract the causes of crime, and assess the effectiveness of preventive measures.

The need to use the **expert evaluation method** is also substantiated. In criminological research, it is not appropriate to rely solely on statistical or algorithmic conclusions. Since crime is a complex socio-legal phenomenon, research results should be evaluated by criminologists, law enforcement officers, prevention inspectors, investigative and judicial practitioners, psychologists, sociologists, and representatives of the mahalla system. This makes it possible to assess the practical relevance, real-life applicability, and contextual validity of the research findings.

The article also considers the **verification method**, that is, the approach of checking and reassessing scientific results, as an important methodological tool. According to modern scientific standards, the results of criminological research should not remain merely at the level of the author's conclusions. They should be compared with other data sources, expert opinions, territorial practice, statistical verification, or experimental and pilot results. Verification increases the reliability of research, reduces the subjectivity of conclusions, and provides a stronger basis for practical decision-making.

The assessment of **practical effectiveness** occupies a special place in the methodology of the

study. In order for criminological research to be considered high quality, it must have a tangible impact on practice. In other words, it is not enough to state at the end of a study that "conclusions were drawn" or "proposals were made". It should be clearly indicated what methodology, indicator, preventive algorithm, risk map, legal proposal, educational-methodological material, or management decision has been developed as a result of the research. On this basis, the article advances the need to develop criteria for assessing the practical effectiveness of criminological research [20; 21].

In general, the methods applied in this article serve to analyse the issue of improving the quality of national criminological research not as a matter of general theoretical reasoning, but on the basis of **specific scientific standards, methodological requirements, and criteria of practical effectiveness**. The integration of systemic, criminological, comparative, normative-legal, empirical, statistical, prognostic, digital, expert, and verification-based approaches makes it possible to develop a comprehensive scientific and practical model for improving the quality of criminological research in the context of Uzbekistan.

The findings show that improving the quality of national criminological research is not limited to raising the academic level of articles, reports, or dissertations. It is directly connected with the effectiveness of crime control policy, offence prevention, public safety, evidence-based decision-making by state bodies, and the practical impact of criminological science. Therefore, the quality of national criminological research should be assessed and developed in accordance with **modern scientific, methodological, and practical standards**.

1. The Need to Improve the Quality of National Criminological Research

The need to improve the quality of national criminological research is primarily determined by the changing nature of contemporary crime. Today, crime can no longer be fully explained through simple statistical indicators. It is increasingly shaped by territorial criminogenic conditions, socio-demographic characteristics of individuals, the digital environment, economic pressure, family

and domestic conflicts, youth employment, migration, urbanization, information technologies, and mechanisms of social control.

For this reason, criminological research should not merely record the number of offences. It must reveal the **causal mechanisms of crime**, identify the factors that most strongly contribute to criminal behaviour, determine risk groups and high-risk areas, forecast possible future trends, and substantiate practical preventive measures.

In the current context, national criminological research should meet the following quality requirements. First, studies must move from a superficial description of crime to a deeper causal analysis. Second, every study should rely on empirical data, clearly indicating the source, reliability, and method of analysis of such data. Third, the results of criminological research should produce a specific practical outcome, such as a preventive measure, a legal proposal, a methodological recommendation, risk indicators, or a management decision. Fourth, the quality of research should be evaluated not only by the academic level of the text, but also by its **capacity to influence practice**.

2. Methodological Problems Observed in National Criminological Research

The analysis reveals several methodological problems that may negatively affect the quality of national criminological research.

The first problem is the excessive reliance on descriptive statistics. In some studies, the state of crime is presented mainly through numbers, percentages, and the dynamics of increase or decrease. This approach is necessary, but it is not sufficient. Statistical indicators show what has happened in crime, but they do not fully explain why it happened, which factors influenced it, or what risks may emerge in the future.

The second problem is the insufficient formulation of scientific hypotheses and research questions. In high-quality criminological research, the author should clearly determine in advance what is to be proven, which scientific assumption is to be tested, and which practical or theoretical problem is to be solved. Otherwise, the study risks becoming a collection of general information rather than a structured scientific inquiry [13; 14].

The third problem is the weak disclosure of the empirical base. If a study does not clearly indicate where the data were obtained, what period they cover, how they were selected, how they were analysed, and what limitations they have, the scientific reliability of the findings decreases.

The fourth problem is conceptual ambiguity in distinguishing between causes and conditions of crime. In criminological studies, terms such as “cause”, “factor”, “condition”, “determinant”, and “risk indicator” are sometimes used interchangeably. This reduces the precision of scientific analysis. According to a more rigorous criminological approach, a cause should be understood as an internal or external impulse that directly contributes to crime, while a condition should be interpreted as the environment that enables or facilitates the commission of an offence.

The fifth problem is the weak mechanism for implementing research results in practice. Some studies provide recommendations at the end, but they do not specify which body should implement them, within what timeframe, through what mechanism, with what resources, and according to which evaluation criteria. As a result, a scientific recommendation may fail to become a practical decision.

3. Quality Criteria for Criminological Research Based on Modern Scientific Standards

Based on the findings of the study, the following key criteria may be proposed for assessing the quality of national criminological research.

The first criterion is the **clarity of the scientific problem**. The problem addressed in the study must be clear, relevant, and criminologically significant. For example, instead of a general statement such as “crime is increasing”, the research problem should be formulated more precisely: “Why is a specific type of crime increasing in a particular territory, and which preventive mechanism may be effective in reducing it?”

The second criterion is methodological validity. The methods used in the study should correspond to the topic, purpose, and empirical base. If statistical data are available, statistical analysis should be applied; if territorial risks are

studied, GIS mapping may be appropriate; if individual behaviour is analysed, sociological and psychological methods should be used; and if future trends are examined, forecasting methods should be applied.

The third criterion is empirical reliability. Criminological research must rely on real data. The source, scope, relevance, accuracy, comparability, and limitations of the data should be clearly indicated. The stronger the empirical foundation, the more reliable the scientific conclusion [16; 17].

The fourth criterion is the depth of causal analysis. The study should not only describe the external manifestations of crime, but also reveal its internal mechanisms. This means analysing the causes, conditions, factors, risk indicators, and their interrelations.

The fifth criterion is prognostic capacity. Modern criminological research should be able to identify future risks. It is not enough to analyse only the past. A study should identify the probable directions of crime development, high-risk territories, vulnerable groups, and points requiring preventive intervention.

The sixth criterion is practical effectiveness. At the end of the study, there should be a concrete product that can be applied in practice. This may be a methodological recommendation, a preventive algorithm, a legal proposal, risk indicators, a criminogenic map, a questionnaire, an assessment scale, or an organizational mechanism.

The seventh criterion is ethical and legal acceptability. When criminological research involves personal data, criminal case materials, and information about victims or offenders, strict compliance with confidentiality, legality, human rights, and research ethics is required [4].

4. Proposed Model for Improving the Quality of Criminological Research

Based on the research findings, the following comprehensive model can be proposed for improving the quality of national criminological research: **scientific problem** → **methodological design** → **empirical data** → **statistical and causal analysis** → **criminological forecast** → **scientific conclusion** → **practical recommendation** → **implementation** → **effectiveness assessment**.

This model consistently links all stages of criminological research.

At the first stage, the research problem is clearly defined. The problem should not be general; it should be measurable, verifiable, and analytically meaningful.

At the second stage, the methodological design is developed. This includes the object and subject of the study, its aim, objectives, hypothesis, data sources, and methods of analysis.

At the third stage, empirical data are collected. These may include official statistics, court and investigative materials, prevention reports, sociological surveys, expert interviews, territorial observations, and digital databases.

At the fourth stage, statistical and causal analysis is carried out. At this stage, the state, dynamics, territorial features, key factors, and interrelations of crime are identified.

At the fifth stage, a criminological forecast is developed. This stage determines the possible direction of crime development, the territories where risks may increase, and the factors requiring preventive intervention.

At the sixth stage, a scientific conclusion is formulated. The conclusion should not be a general opinion; it must be based on empirical data, methodological analysis, and causal explanation.

At the seventh stage, practical recommendations are prepared. Such recommendations should have a specific addressee, a responsible implementing body, a clear execution mechanism, and measurable result indicators.

At the eighth stage, the research results are implemented in practice. This may take the form of a draft legal act, methodological manual, prevention plan, training module, or management decision.

At the ninth stage, effectiveness is assessed. This means evaluating what practical change the research result produced, how it affected crime indicators, prevention effectiveness, or management decisions.

5. Introducing a “Quality Indicator Matrix” for National Criminological Research

From a practical perspective, it is advisable to introduce a “**quality indicator matrix**” for improving the quality of national criminological

research. This matrix would make it possible to assess each study both at the planning stage and after completion.

The matrix may include the following main blocks:

1. **Scientific problem block** – assesses the clarity, relevance, novelty, and practical significance of the research problem.

2. **Methodology block** – examines the research design, suitability of methods, and the presence of hypotheses and research questions.

3. **Empirical base block**, evaluates the source, scope, reliability, periodicity, and analytical usability of the data.

4. **Analysis block** – assesses the level of statistical, causal, comparative, territorial, and prognostic analysis.

5. **Results block** – evaluates the presence of scientific conclusions, proposals, methodological products, risk indicators, or practical mechanisms.

6. **Implementation block** – identifies which area of practice the research results will be applied to, through which subject, and in what manner.

7. **Effectiveness block** – defines the real impact of the research results, evaluation indicators, and mechanisms for repeated monitoring.

Such a matrix makes it possible to evaluate criminological research not merely as a written academic work, but as a **scientific product capable of generating practical results**.

6. Expected Scientific and Practical Outcomes

The proposed approach can improve the quality of national criminological research in several directions.

First, research will move from a general descriptive level to a more precise methodological and empirically grounded analytical level.

Second, in identifying the causes and conditions of crime, an evidence-based approach will be strengthened instead of relying on subjective assumptions.

Third, the possibility of implementing criminological research results in practice will increase.

Fourth, a culture of scientifically grounded decision-making will develop in crime control and offence prevention.

Fifth, the digital transformation of criminological science in Uzbekistan will accelerate.

Sixth, national criminological research will move closer to international scientific standards, thereby increasing its academic credibility.

Overall, the results show that improving the quality of national criminological research on the basis of modern scientific standards requires the formation of an integrated system consisting of a clear methodological model, quality criteria, an empirical base, digital analytical tools, and mechanisms for practical implementation. Such an approach will not only enhance the scientific potential of criminology in Uzbekistan, but also move crime control practice toward a more **evidence-based, predictive, and results-oriented management model** [20; 21].

Improving the quality of national criminological research on the basis of modern scientific standards is one of the most important methodological issues in contemporary criminology. This issue cannot be resolved merely by increasing the number of academic papers or expanding statistical databases. The central task is to enhance the **real scientific value, practical relevance, and institutional impact** of criminological research on the system of crime control and offence prevention.

In modern academic literature, two broad approaches can be observed regarding the quality of criminological research. According to the first approach, research quality is determined by its scientific novelty, theoretical validity, and methodological rigour. The second approach gives priority to practical effectiveness, arguing that the value of research should be assessed by its real impact on reducing crime, improving prevention practice, or supporting managerial decision-making. In our view, these two approaches should not be treated as mutually exclusive. **A modern criminological study can be considered high quality only when it is both scientifically grounded and practically useful** [13; 14].

Although many criminological studies currently conducted in Uzbekistan address relevant topics, in some cases their methodological structure and criteria for evaluating results remain insufficiently developed. For example, studies may

contain a large amount of statistical data on crime, yet the causal interpretation of these data, their connection with risk factors, or their implications for future trends are not always fully disclosed. As a result, research may have informational value, but it does not always become an analytical product capable of supporting practical decision-making.

This situation requires a reconsideration of how research quality is understood. In contemporary criminology, the main purpose of research is not simply to collect information about crime, but to **explain, forecast, and prevent crime**. In other words, criminological research should not stop at the question “What happened?” It should also answer the following questions: “Why did it happen?”, “Which risk factors contributed to it?”, “What may happen in the future?”, and “What should be done to prevent it?”

One of the key issues in this discussion is the role of empirical data in criminological research. Some scholars argue that criminology, as a theoretical discipline, should rely primarily on conceptual and theoretical analysis. Other researchers emphasize that modern criminology cannot develop without empirical evidence. In our view, the second approach is particularly important in the current context. The complex nature of contemporary crime can no longer be adequately studied only through theoretical reasoning. It requires real statistical data, sociological surveys, territorial observations, expert assessments, and digital information [16; 17].

At the same time, the mere availability of empirical data is not the only indicator of research quality. In some cases, large volumes of data are collected, but their analysis remains superficial. Modern scientific standards focus not only on the quantity of data, but also on the quality of their scientific processing and the validity of the conclusions drawn from them. Therefore, an important feature of high-quality criminological research is not the simple description of data, but their **analysis, systematization, interpretation, and transformation into scientifically grounded conclusions**.

Another important issue is the insufficient development of the forecasting component in criminological research. In Uzbekistan, many

studies focus on analysing the current state of crime. However, relatively fewer studies examine the possible future directions of crime, emerging risk factors, and the prospective effectiveness of preventive interventions. Yet one of the core functions of modern criminology is to provide a scientific basis for prevention through criminological forecasting.

The development of digital technologies and artificial intelligence is creating new requirements for the quality of criminological research. In the past, researchers had to process large amounts of statistical information manually. Today, **Big Data, GIS, AI and other digital tools** make it possible to analyse large datasets within a much shorter period of time. At the same time, these technologies raise new methodological questions. How should the reliability of conclusions generated by artificial intelligence be assessed? How may algorithmic errors affect criminological findings? How should the balance between personal data protection and the needs of scientific research be maintained? These questions are shaping new directions in contemporary criminological methodology [4; 6].

The model proposed in this article – **scientific problem – methodology – empirical basis – analysis – forecast – scientific conclusion – practical recommendation – implementation – effectiveness assessment** – is aimed precisely at addressing these methodological challenges. Its advantage lies in the fact that it allows criminological research to be viewed not only as an academic text, but also as a system capable of producing managerial decisions, preventive mechanisms, or legal and policy proposals.

In our view, it would be appropriate in the near future to develop a unified national standard for assessing the quality of criminological research in Uzbekistan. Such a standard should establish clear criteria for evaluating methodological quality, empirical reliability, scientific novelty, practical effectiveness, forecasting capacity, and the level of implementation. This would not only improve the quality of academic work, but also strengthen the integration of criminological research with public administration and the system of offence prevention [1; 3].

The issue of evaluating the effectiveness of criminological research also deserves special attention. In current practice, scientific work is often assessed by the number of published articles, monographs, or reports. In reality, however, the true value of criminological research should be measured by its impact on crime control practice. For example, whether a new preventive mechanism has been introduced, whether a legal act has been improved, whether risk indicators have been developed, or whether a new model for reducing crime has been proposed – these are the factors that demonstrate the real effectiveness of criminological research [20; 21].

Thus, the analysis and discussion presented in this article show that improving the quality of national criminological research is one of the central methodological challenges of modern criminology. Addressing this challenge requires the scientific standardization of research, the strengthening of the empirical base, the development of forecasting approaches, the introduction of digital technologies, the assessment of practical effectiveness, and the formation of unified quality criteria. Only under these conditions can national criminological research move beyond being a theoretical tool for studying crime and become an **effective scientific instrument for crime prevention, management, and evidence-based policy-making**.

The analysis conducted in this article shows that improving the quality of national criminological research on the basis of modern scientific standards is a key methodological task for the next stage of criminological science in Uzbekistan. The complex, rapidly changing and multi-factor nature of contemporary crime requires a much deeper scientific approach than a simple statistical description or general theoretical reasoning. Therefore, modern criminological research should be formed as a **comprehensive scientific and practical product** that integrates a clearly formulated research problem, a sound methodology, a reliable empirical base, causal analysis, forecasting, practical recommendations and implementation mechanisms.

As argued in the article, the quality of criminological research cannot be measured only

by the volume of the text, the number of references or the availability of statistical data. Its real value should be assessed by the clarity of the research problem, the appropriateness of selected methods, the reliability of empirical evidence, the depth of causal analysis, the ability to forecast future criminogenic trends, and the development of concrete recommendations that can be implemented in practice. Thus, national criminological research must move from a predominantly descriptive stage to an **analytical, predictive and practice-oriented stage**.

Based on the findings of the study, the following scientific and practical recommendations are proposed.

First, a National Standard for the Quality of Criminological Research should be developed in Uzbekistan. This standard should define mandatory requirements for formulating the scientific problem, research questions, hypothesis, methodological design, empirical base, analytical methods, verification of results and implementation mechanisms. Such a standard would improve the comparability, reliability and practical relevance of criminological studies [1; 3].

Second, a “Criminological Research Passport” should be introduced for every major criminological study. Before launching a study, the passport should clearly indicate the research problem, aim, objectives, hypothesis, data sources, selected methods, expected scientific result, practical output and implementation mechanism. This would prevent research from becoming a general descriptive report and would ensure methodological discipline from the very beginning.

Third, an “Empirical Data Quality Protocol” should be made a mandatory element of criminological research. Each study should disclose where the data were obtained, what period they cover, how they were selected, what limitations they have, and how they were analysed. Official statistics, criminal case materials, prevention reports, sociological surveys, expert interviews, territorial observations and digital databases should be used in an integrated manner. **Research that is not based on reliable empirical evidence cannot produce strong criminological conclusions** [16; 17].

Fourth, the culture of causal analysis should be strengthened in national criminological research. It is not sufficient to state that crime has increased or decreased. Research should identify the social, economic, psychological, territorial, family-related, demographic and institutional factors behind these changes. This requires a clear distinction between causes, conditions, factors, determinants and risk indicators. Only such an approach can produce targeted and evidence-based preventive recommendations.

Fifth, criminological forecasting should be developed as a mandatory methodological component of research. Modern criminological studies should not be limited to analysing past or current crime trends. They should identify likely future developments, high-risk territories, vulnerable groups and points requiring preventive intervention. This would allow crime prevention practice to move from a reactive model to a **proactive and risk-oriented model**.

Sixth, every criminological study should end with a concrete practical product. The final result of a study should not be limited to general conclusions. It should produce at least one clearly applicable product, such as a methodological recommendation, a prevention algorithm, risk indicators, a legal proposal, a criminogenic map, a questionnaire, an assessment scale, a training module or a management decision. The practical impact of research should become one of the main indicators of its quality [20; 21].

Seventh, a “Quality Indicator Matrix” should be developed for assessing criminological research. This matrix should evaluate each study according to several criteria: clarity of the scientific problem, methodological rigour, reliability of the empirical base, depth of statistical and causal analysis, forecasting capacity, practical effectiveness, ethical and legal acceptability, and implementation mechanism. Such a matrix would help identify the strengths and weaknesses of each study before, during and after its completion.

Eighth, a national “What Works in Crime Prevention” platform should be created. This platform could collect, evaluate and systematize the results of criminological studies and preventive practices. It should answer the following practical

questions: which preventive measure works, in which territory it works, under what conditions it works, which institution should implement it, and how its effectiveness should be measured. This would strengthen **evidence-based crime prevention** in Uzbekistan.

Ninth, digital technologies should be systematically integrated into criminological research. Big Data, GIS, artificial intelligence, natural language processing, data mining and predictive analytics can significantly improve the processing of large crime-related datasets, the creation of risk maps, the identification of hidden correlations and the justification of preventive decisions. However, these technologies should not replace the researcher's scientific reasoning; they should serve as tools that strengthen analytical capacity [6].

Tenth, verification and post-implementation monitoring should become compulsory. The results of criminological research should be re-evaluated through other data sources, expert assessment, territorial practice, pilot testing or statistical verification. In addition, after recommendations are implemented, their real effect should be measured. This would reduce subjectivity, increase reliability and create a stronger evidence base for practical decision-making.

Eleventh, ethical and legal safeguards must be strengthened in criminological research. When research involves personal data, criminal case materials, information about victims, offenders or vulnerable groups, strict compliance with confidentiality, legality, human rights and research ethics is required. Digital criminological research, in particular, should include mechanisms for anonymization, data protection, prevention of discrimination and responsible use of algorithmic tools [4].

Twelfth, interdisciplinary research teams should be formed. Modern crime cannot be fully explained only through criminal law or classical criminology. Therefore, criminological research should involve criminologists, lawyers, sociologists, psychologists, data analysts, GIS specialists, cyber security experts, economists and practitioners. Such cooperation would improve both the scientific depth and practical applicability of research findings.

In general, improving the quality of national criminological research on the basis of modern scientific standards is an essential condition for strengthening the academic authority of criminological science in Uzbekistan, substantiating crime control practice with evidence, and organizing offence prevention more effectively. For this purpose, criminological research should have a clear problem, a robust methodology, a reliable empirical base, deep analysis, forecasting capacity, practical recommendations and a system for evaluating effectiveness.

Thus, the model proposed in this article – **scientific problem – methodology – empirical basis – analysis – forecast – scientific conclusion – practical recommendation – implementation – effectiveness assessment** – may serve as a conceptual framework for improving the quality of national criminological research. The implementation of this model in scientific and practical activity would transform criminological research from a descriptive academic product into a **real scientific instrument for understanding crime, assessing future risks and supporting preventive decision-making**.

References

1. O'zbekiston Respublikasi Prezidentining "Jamoat xavfsizligini ta'minlash va jinoyatchilikka qarshi kurashish sohasini ilmiy tadqiq qilish faoliyatini sifat jihatidan yangi bosqichga ko'tarish chora-tadbirlari to'g'risida"gi farmoni. 2024-yil 15-yanvar, PF-10-son // Qonunchilik ma'lumotlari milliy bazasi. – URL: <https://lex.uz/docs/-6755597> (murojaat sanasi: 08.06.2026).
2. O'zbekiston Respublikasi Prezidentining "Kriminologiya sohasida ilmiy-amaliy tadqiqot ishlarini tashkil etish chora-tadbirlari to'g'risida"gi qarori. 2024-yil 15-yanvar, PQ-22-son // Qonunchilik ma'lumotlari milliy bazasi. – URL: <https://lex.uz/docs/-6755253> (murojaat sanasi: 08.06.2026).
3. O'zbekiston Respublikasi Vazirlar Mahkamasining "Kriminologik faoliyatni ilmiy ta'minlash chora-tadbirlari to'g'risida"gi qarori. 2024-yil 24-iyul, 445-son // Qonunchilik ma'lumotlari milliy bazasi. – URL: <https://lex.uz/docs/-7034904> (murojaat sanasi: 08.06.2026).
4. O'zbekiston Respublikasining "Shaxsga doir ma'lumotlar to'g'risida"gi qonuni. 2019-yil 2-iyul, O'RQ-547-son // Qonunchilik ma'lumotlari milliy bazasi. – URL: <https://lex.uz/docs/-4396419> (murojaat sanasi: 08.06.2026).
5. O'zbekiston Respublikasining "Huquqbuzarliklar profilaktikasi to'g'risida"gi qonuni. 2014-yil 14-may, O'RQ-371-son // Qonunchilik ma'lumotlari milliy bazasi. – URL: <https://lex.uz/docs/-2387357> (murojaat sanasi: 08.06.2026).
6. O'zbekiston Respublikasi Prezidentining "Sun'iy intellekt texnologiyalarini 2030-yilga qadar rivojlantirish strategiyasini tasdiqlash to'g'risida"gi qarori. 2024-yil 14-oktabr, PQ-358-son // Qonunchilik ma'lumotlari milliy bazasi. – URL: <https://lex.uz/docs/-7158604> (murojaat sanasi: 08.06.2026).
7. Kriminologiya: darslik / mas'ul muharrir: Q.R. Abdurasulova. – Toshkent: TDYU, 2021. – 400 b.
8. Abdurasulova Q.R. Kriminologiya. Umumiy qism: o'quv qo'llanma. – Toshkent: TDYU, 2020. – 252 b.
9. Криминология: учебник / под ред. В.Н. Кудрявцева, В.Е. Эминова. – 5-е изд., перераб. и доп. – Москва: Норма; ИНФРА-М, 2015. – 800 с.
10. Криминология: учебник / под ред. А.И. Долговой. – 4-е изд., перераб. и доп. – Москва: Норма, 2010.
11. Клейменов М.П. Криминология: учебник. – Москва: Норма; ИНФРА-М, 2018. – 448 с.
12. Лунеев В.В. Курс мировой и российской криминологии: в 2 т. Т. 1. Общая часть. – Москва: Юрайт, 2011.
13. Babbie E. The Practice of Social Research. – 15th ed. – Boston: Cengage Learning, 2021. – 592 p.
14. Creswell J.W., Creswell J.D. Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. – 5th ed. – Thousand Oaks: SAGE Publications, 2018. – 304 p.
15. Bryman A. Social Research Methods. – 5th ed. – Oxford: Oxford University Press, 2016. – 824 p.
16. Maxfield M.G., Babbie E.R. Research Methods for Criminal Justice and Criminology. – 8th ed. – Boston: Cengage Learning, 2018. – 496 p.
17. Bachman R., Schutt R.K. The Practice of Research in Criminology and Criminal Justice. – 7th ed. – Thousand Oaks: SAGE Publications, 2020. – 616 p.
18. Sampson R.J. Great American City: Chicago and the Enduring Neighborhood Effect. – Chicago: University of Chicago Press, 2012. – 552 p.
19. Weisburd D., Bruinsma G. Encyclopedia of Criminology and Criminal Justice. – New York: Springer, 2014.

20. Sherman L.W. Evidence-Based Policing. – Washington, D.C.: Police Foundation, 1998. – 15 p.
21. Sherman L.W., Farrington D.P., Welsh B.C., MacKenzie D.L. Evidence-Based Crime Prevention. – London; New York: Routledge, 2002. – 440 p.
22. Welsh B.C., Farrington D.P. The Oxford Handbook of Crime Prevention. – Oxford: Oxford University Press, 2012. – 560 p.
23. Farrington D.P. Integrated Developmental and Life-Course Theories of Offending. – New Brunswick: Transaction Publishers, 2005. – 279 p.
24. Clarke R.V. Situational Crime Prevention: Successful Case Studies. – 2nd ed. – New York: Harrow and Heston, 1997. – 357 p.
25. Ratcliffe J.H. Intelligence-Led Policing. – 2nd ed. – London; New York: Routledge, 2016. – 234 p.

