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# THE SPECIFICS OF THE SCIENTIFIC RESEARCH PROCESS OF CRIME PREVENTION: METHODOLOGICAL AND INTERDISCIPLINARY CHALLENGES

**Saša Milojević[1*], Boban Milojković[1], Dejan Savićević[2]**

[1]University of Criminal Investigation and Police Studies, Belgrade, Serbia
[2]Sirmium College of Applied Studies, Sremska Mitrovica, Serbia

ORCID iDs: Saša Milojević https://orcid.org/0000-0002-3707-5714
Boban Milojković https://orcid.org/0000-0002-8450-2141
Dejan Savićević https://orcid.org/0000-0003-4305-6795

**Abstract**

Crime prevention is a central issue in modern criminological and security sciences, but it is also one of the most methodologically demanding areas of scientific research. The complexity of contemporary forms of crime, their social and technological conditioning, and the diversity of theoretical frameworks and practical prevention strategies make it impossible to reduce this phenomenon to a single paradigm or standardised research approach. From this perspective, the paper focuses on the theoretical and methodological analysis of the specific features of the scientific research process in crime prevention, with special emphasis on the phased challenges that affect the validity, reliability, and interpretative reach of research findings. The paper discusses key methodological problems, including the paradox of 'unrealised crime,' the dark crime figure, the contextual conditionality of preventive measures, and the limitations of experimental control in real social conditions. Special attention is paid to the delimitation of normative goals of prevention from analytical-empirical hypotheses, as well as to the theoretical conditionality of the choice of research design, indicators and data sources. The specifics of individual phases of research are also analysed – from the formulation of problems and operationalisation of concepts, through hypothesis, design and sampling, to data collection, analysis, interpretation and generalisation of findings. The paper further examines the role of the interdisciplinary approach in the study of crime prevention, noting that interdisciplinarity is a methodological necessity, but only under the condition of theoretical reflection and analytical control. Contemporary technological challenges, such as cybercrime, big data analytics, and predictive models, are particularly problematic and open new research questions as well as ethical and methodological dilemmas. In conclusion, the paper does not offer a universal model of crime prevention research, but a methodological framework for its critical, scientifically based and contextually responsible study.

**Key words**: crime prevention, research methodology, interdisciplinarity, criminal sciences, Police Science.

[*] Corresponding author: Saša Milojević, University of Criminal Investigation and Police Studies, Cara Dušana 196, 11080 Belgrade, Serbia, sasa.milojevic@kpu.edu.rs

# СПЕЦИФИЧНОСТИ НАУЧНОИСТРАЖИВАЧКОГ ПРОЦЕСА ПРЕВЕНЦИЈЕ КРИМИНАЛИТЕТА: МЕТОДОЛОШКИ И ИНТЕРДИСЦИПЛИНАРНИ ИЗАЗОВИ

**Апстракт**

Превенција криминалитета представља једно од централних питања савремених криминолошких и безбедносних наука, али истовремено и једно од методолошки најзахтевнијих подручја научног истраживања. Сложеност савремених облика криминалитета, њихова друштвена и технолошка условљеност, као и разуђеност теоријских оквира и практичних стратегија превенције, онемогућавају редукцију овог феномена на јединствену парадигму или стандардизовани истраживачки образац. Полазећи од тог становишта, рад је усмерен на теоријско-методолошку анализу специфичности научноистраживачког процеса у области превенције криминалитета, са посебним нагласком на фазне изазове који утичу на валидност, поузданост и интерпретативни домет истраживачких налаза. У раду се разматрају кључни методолошки проблеми, укључујући парадокс 'неоствареног криминала', тамну бројку криминалитета, контекстуалну условљеност превентивних мера и ограничења експерименталне контроле у реалним друштвеним условима. Посебна пажња посвећена је разграничењу нормативних циљева превенције од аналитичко-емпиријских хипотеза, као и теоријској условљености избора истраживачког дизајна, индикатора и извора података. Анализирају се и специфичности појединих фаза истраживања – од формулације проблема и операционализације појмова, преко постављања хипотеза, дизајна и узорковања, до прикупљања података, анализе, интерпретације и генерализације налаза. Рад додатно разматра улогу интердисциплинарног приступа у проучавању превенције криминалитета, указујући да интердисциплинарност представља методолошку нужност, али само под условом теоријске рефлектованости и аналитичке контроле. Посебно се проблематизују савремени технолошки изазови, попут сајбер-криминалитета, биг дата аналитике и предиктивних модела, који отварају нова истраживачка питања, али и нове етичке и методолошке дилеме. Закључно, рад не нуди универзални модел истраживања превенције криминалитета, већ методолошки оквир за њено критичко, научно утемељено и контекстуално одговорно проучавање.

**Кључне речи**: превенција криминалитета, методологија истраживања, интердисциплинарност, криминалистичке науке, полицијске науке.

## *INTRODUCTION*

Crime prevention is one of the oldest yet most complex issues in criminological and security thought. Ever since Beccaria’s classic demand that the penal system be rational, proportionate, and preventively effective, the idea of preventing criminal behaviour has been central to the theory and practice of social control (Beccaria, 1986). However, modern forms of crime, their social conditioning, and technological transformation have made prevention an incomparably more complex subject of study than it was in the classical criminological framework. Criminality today appears not only as an individual deviant act but also as the product of complex interactions among individuals, social structures, institutional practices, and the broader cultural and technological environment (Sutherland, 1947; Cohen & Felson, 1979; Cullen, Agnew & Wilcox, 2014).

In this sense, modern crime prevention cannot be reduced to a single theoretical paradigm or to a single type of intervention. Situational prevention, rational-choice models, social learning theories, theories of social disorganisation, developmental criminological approaches, and early intervention programs offer different interpretative frameworks and different mechanisms of action of preventive measures (Clarke, 1997; Cornish & Clarke, 2014; Akers, 2009; Farrington & Welsh, 2007; Cullen, Agnew & Wilcox, 2014). Social learning theories, for example, suggest that criminal behaviour is acquired through interactions, modelling, and reinforcement in the social environment, which directly justifies preventive interventions aimed at families, schools, and peer groups (Bandura, 1977; Akers & Jensen, 2003). Developmental and educational approaches further show that risky behavioural patterns arise early in life and that prevention programs are most effective when implemented in early childhood and adolescence (Heckman, 2006; Farrington, 2003; Botvin & Griffin, 2004).

At the same time, empirical research on situational prevention and policing strategies targeting troubled areas and target groups suggests that changes in the environment, increased risk perception, and targeted deterrence can lead to measurable reductions in crime (Clarke, 1997; Braga & Weisburd, 2010; Braga, 2017; Nagin, 2013). Programs such as "Operation Ceasefire" or focused deterrence strategies demonstrate that precisely targeted, theoretically grounded, and cross-sectorally coordinated interventions can have a strong preventive effect, especially in violent youth crime (Braga et al., 2001; Braga & Weisburd, 2012). However, it is precisely this diversity of theoretical frameworks and practical strategies that indicates that crime prevention is not a homogeneous policy, but a set of diverse interventions whose effects vary depending on the context, the target population and the mode of implementation.

This theoretical and practical disambiguation of crime prevention is directly reflected in the methodological challenges of its scientific study. Unlike reactive action, where the outcome manifests as a recorded event, prevention, by definition, prevents an occurrence that has not yet occurred. In this way, the researcher confronts the paradox of 'unrealised crime': how to empirically demonstrate that a particular intervention prevented an act that might not have occurred in its absence (Clarke & Weisburd, 1994; Sherman et al., 1998). This problem is further complicated by underreporting of crime, differences in crime reporting, and variations in crime definitions across countries and time periods (UNODC & UNECE, 2010; Eurostat, 2024).

The methodological complexity of crime prevention research also stems from the multidimensionality of the cause-and-effect relationship in criminal behaviour. Crime does not arise from a single factor, but rather from intertwined individual, family, educational, economic, and institutional influences (Hirschi, 1969; Sampson, Raudenbush & Earls, 1997; Sampson, 2012). Under such conditions, simple correlation analyses often produce the appearance of explanation, but not an understanding of the mechanisms of action of preventive measures. Methodologically rigorous designs – experimental, quasi-experimental, and longitudinal – can mitigate these problems, but in real social conditions, they face ethical, institutional, and practical limitations (Cook & Campbell, 1979; Shadish, Cook & Campbell, 2002).

Modern technological developments further complicate this methodological picture. Cybercrime, digital forms of violence and transnational criminal networks have expanded the subject of prevention beyond traditional territorial and institutional frameworks (Europol, 2023; ENISA, 2022). At the same time, big data analytics, predictive models, and algorithmic tools offer new research opportunities, but also new issues of bias, data reliability, and ethical acceptability (Kitchin, 2014; Lum & Isaac, 2016; European Union Agency for Fundamental Rights, 2018). Technological sophistication cannot replace theoretical reflection and methodological discipline; On the contrary, the more powerful the tools, the greater the need for a clear theoretical framework and transparent research decisions.

In this context, interdisciplinarity imposes itself as a methodological necessity, but not as a normative ideal in itself. Crime prevention cannot be adequately understood within a single disciplinary paradigm, but it also cannot be investigated through the uncritical mixing of concepts, methods, and data from different disciplines (Creswell & Plano Clark, 2011; Milojević, Milašinović & Milojković, 2025a). Methodologically productive interdisciplinarity implies a clear demarcation of the roles of individual disciplines, the harmonisation of their epistemological assumptions, and the analytical synthesis of findings. Otherwise, interdisciplinarity is reduced to a terminological decorative framework that masks theoretical confusion and methodological imprecision (Milojević, Milašinović & Milojković, 2026).

Starting from these problems, this paper argues that crime prevention cannot be scientifically studied as a set of isolated measures, programs, or policies, but rather as a methodologically complex and phased object of research. Instead of normative evaluation of specific preventive policies or descriptive presentation of crime-related statistical trends, the paper focuses on the theoretical and methodological analysis of the scientific research process in this area. Its goal is not to offer a universal model of crime prevention, nor to identify 'best practices,' but to uncover specific methodological challenges that arise at different stages of research – from problem formulation and operationalisation of concepts, through the choice of design, sample and data source, to the analysis, interpretation and generalisation of findings (Kothari, 2004; Sherman et al., 1998; Milošević & Milojević, 2001).

## *RESEARCH APPROACHES AND METHODOLOGICAL CHALLENGES*

The study of crime prevention encompasses different research approaches – quantitative analyses of statistical trends, qualitative case studies, program evaluations, comparative research across countries – which reflects the complexity of the phenomenon (Braga, 2017; UNODC, 2023). However, this multidisciplinarity also brings significant methodological challenges (Kothari, 2004). First of all, measures of the success of preventive measures are complex: it is difficult to empirically prove that an intervention prevented a crime that did not occur (Clarke, 1997; Sherman et al., 1998). The evaluation of proactive police policies cannot rely on the same indicators as in reactive policing – it is necessary to demonstrate that the observed changes (e.g., a decrease in crime) are a consequence of the introduced preventive measure, which requires carefully designed methods (Milašinović & Milojević, 2016). It is often a challenge to isolate the impact of a single factor; for example, in community safety programs, policing activities are intertwined with initiatives by schools, social work centres, and other actors, making it difficult to quantify each factor's contribution separately (Braga & Weisburd, 2010).

The methodological approach, therefore, often involves experimental and quasi-experimental designs (such as randomised controlled trials or pre-post analyses) to measure the effects of prevention (Sherman et al., 1998; Braga, 2017). In social and educational contexts, scholars encounter ethical and practical limitations – it is not always possible to randomly deny a preventive program to a group for comparison, nor to control for all social variables (Kothari, 2004; Cook & Campbell, 1979). Longitudinal studies are useful for monitoring the effects of educational interventions on future delinquency rates, but they take a long time and are subject to sample dropout (Farrington, 2003). In addition, research into technological aspects (e.g., the effectiveness of video surveillance, predictive policing algorithms, or cyber patrol programs) requires interdisciplinary skills – combining criminological knowledge with IT systems knowledge – and confronts the ever-changing nature of digital threats (Perry et al., 2013; Europol, 2023). Data collection can be particularly difficult: classical statistics rely on police records that suffer from dark numbers (unreported cases), while in cyberspace, a large proportion of incidents remain undetected or registered by private companies, beyond the reach of traditional government statistics (UNODC, 2023). Therefore, researchers are increasingly resorting to victimisation surveys, specialised databases (e.g., social work centre records for domestic violence), and open data sources (UNODC, 2023; Eurostat, 2024). However, such data also raises questions of reliability and consistency of definitions – not all countries define criminal offences in the same way, which complicates comparative analyses.

In analyses of social factors, multicollinearity and factor interdependence are common: social exclusion, unemployment, quality of education, and peer-group influence can be related, making it difficult to isolate the influence of individual variables on delinquent behaviour (Farrington, 2003). Qualitative approaches (such as ethnographic studies in high-risk communities or interviews with young people involved in gangs) provide deeper insights. However, questions arise about the representativeness and generalisability of the findings (Hammersley & Atkinson, 2007). Mixed methodological approaches (combining quantitative statistical reviews with qualitative case studies) are often recommended to capture the complexity of crime prevention (Creswell & Plano Clark, 2011). Finally, researchers must take ethics into account: when collecting data on minors in school prevention programs, parental consent is required; in studies of surveillance technologies, the privacy of citizens must be considered (Sieber, 1992; European Union Agency for Fundamental Rights, 2014). All of these specific methodological challenges require careful research planning and often innovative solutions (e.g., the use of big data analytics to track criminal patterns on the Internet while preserving anonymity) (Kitchin, 2014; UNODC, 2023).

Interdisciplinarity in crime prevention research is not reduced to the mere parallel use of terms and findings from different disciplines, but rather implies a methodologically grounded integration of diverse research perspectives within a single analytical framework (Milojević, Milašinović & Milojković, 2025a). In this sense, criminology, sociology, pedagogy, security sciences and information technology do not contribute to research in the same way, nor do they answer the same research questions. However, each of them offers specific theoretical assumptions, data types and methodological tools. From a methodological point of view, the interdisciplinary approach is operationalised through the functional division of research roles of disciplines. The criminological framework is used to conceptualise the forms of crime and the mechanisms of action of preventive measures; sociological approaches contribute to the understanding of structural and contextual factors (community, social cohesion, institutional trust); pedagogical perspectives enable the analysis of preventive interventions in the educational environment; while information technology is considered as a source of new forms of crime, but also new research tools and data sources. Such a division allows interdisciplinarity to be analytically productive rather than terminologically decorative. Particular attention should be paid to harmonising the epistemological and methodological assumptions across disciplines to avoid an uncritical combination of data and findings grounded in different explanatory logics. For example, quantitative patterns observed in statistical analyses of crime are not treated as self-sufficient evidence. However, they are interpreted in the light of qualitative insights into institutional practices and social context. In this way, the interdisciplinary approach is not achieved additively, but through an analytical synthesis, in which the results of one discipline are verified and supplemented by the insights of another. In this sense, interdisciplinarity in crime prevention research is a methodological necessity, not a normative ideal. The complexity of modern forms of crime, especially in the digital and transnational environment, makes it impossible to understand them adequately within a disciplinary paradigm. However, this complexity also requires clear methodological constraints and transparency about what each discipline can and cannot explain. It is precisely this disciplined, interdisciplinary approach that enables crime prevention research to develop into a scientifically based, analytically coherent, and practically relevant field.

The discussed research approaches and methodological challenges clearly show that crime prevention cannot be investigated using a single, standardised methodological pattern. On the contrary, the complexity of the phenomenon, the intertwining of social, institutional, and technological factors, and the limitations in experimental control and the availability of reliable data necessitate a flexible, contextually adapted research design. Methodological dilemmas – from measuring ‘unrealised’ crime and the problem of the dark number, to ethical constraints and interdisciplinary data integration – are not secondary technical problems, but essentially determine the scope of validity and applicability of research findings. That is why the choice of methods and data sources in crime prevention research must be theoretically grounded and explicitly explained, because it depends on these choices whether the research will contribute to understanding the causes and mechanisms of prevention or remain at the level of a descriptive presentation of phenomena.

## *SPECIFIC CHALLENGES IN THE PHASES OF SCIENTIFIC RESEARCH*

Each phase of the scientific research process in crime prevention has specific characteristics and challenges (Kothari, 2004). Formulating a problem requires a precise definition of the focus – e.g., whether we are researching the prevention of violence in schools or the prevention of cybercrime – because the range of phenomena is broad (Braga, 2017; UNODC, 2023). This stage often involves reviewing policies and practices to identify knowledge gaps: the researcher must know how the existing prevention system works (laws, policing strategies, school programs, technological measures) to ask a relevant research question (Sherman et al., 1998; European Crime Prevention Network [EUCPN], 2020). Reviewing the literature in this domain can be complex because it includes interdisciplinary sources in multiple languages (Cullen, Agnew & Wilcox, 2014). It is necessary to integrate findings from criminological journals, reports of international organisations (UNODC, EUCPN, Europol, etc.), domestic statistical bulletins (e.g. Ministry of the Interior of Serbia) and even unpublished project evaluations (UNODC, 2023; Europol, 2023; Ministry of Internal Affairs of the Republic of Serbia, 2024a). Often, the literature is scattered and of uneven quality – the researcher must critically evaluate the methodology of earlier studies (whether the findings are based on well-designed experiments or merely on correlations) to build a solid foundation for his own work (Cook & Campbell, 1979; Kothari, 2004). The language barrier can also be a challenge, as relevant studies are available in English and regional languages (Serbian, Croatian, Russian, German, etc.), so a thorough review often requires a multi-country, multicultural approach (Milojević, Milašinović & Milojković, 2025b).

Hypothesis setting in crime prevention sometimes deviates from classical simple hypotheses due to the complexity of social phenomena (Kothari, 2004; Cullen, Agnew & Wilcox, 2014). Hypotheses can be multi-part (e.g., "Introducing a school curriculum X will reduce bullying by Y%, but the effect will be mediated by the degree of parent and teacher involvement"), reflecting the understanding that outcomes depend on multiple factors (Braga, 2017). The challenge is to operationalise the concepts: what exactly does 'prevention success' mean – is it the complete absence of an incident, a reduction in the rate by a certain percentage, an improvement in the subjective sense of security? Clear operationalisation is key before moving to the design stage (Cook & Campbell, 1979; Kothari, 2004). In crime prevention research, it is necessary to clearly demarcate the analytical-empirical level of hypotheses from the normative and political-programmatic goals of prevention. While in practice prevention is often formulated in terms of value-desirable goals (e.g., reducing crime, increasing security, strengthening citizens' trust), the scientific research process requires that such goals be translated into precisely operationalised, empirically verifiable claims. Otherwise, there is a risk that the research turns into an evaluation of normative expectations rather than an analysis of actual cause-and-effect relationships (Milojević, Milašinović & Milojković, 2026). From a methodological point of view, hypotheses in the field of crime prevention often have a complex, multi-layered structure, as the outcomes of preventive measures depend on indirect variables, institutional context and the mode of implementation. Therefore, it is important to distinguish between hypotheses with an explanatory character (aimed at elucidating the mechanisms of action) and those with an evaluative character (aimed at assessing the effects of specific interventions). Both types of hypotheses are legitimate, but require different research designs, indicators, and analytical procedures. A particular methodological challenge is the tendency to presume positive outcomes of prevention, which blurs the boundary between the research question and the desired outcome. To preserve scientific validity, the research design must also allow for the possibility that hypotheses cannot be confirmed, i.e., that the effect of preventive measures is limited or absent. In this sense, a clear demarcation between the normative goals of prevention and analytical-empirical hypotheses is a prerequisite for objective evaluation and responsible interpretation of results.

The design of the research must be adapted to the specifics of the phenomenon (Kothari, 2004). If possible, an experimental approach is used (e.g., a pilot project of preventive measures in one community vs. a control community without preventive measures), but a quasi-experiment or a pre-post design with a control group with similar characteristics is often necessary (Cook & Campbell, 1979; Sherman et al., 1998). The challenge is to find adequate control groups in a real-world setting – rarely are two schools or two municipalities identical, so differences must be accounted for and controlled statistically (Shadish, Cook, & Campbell, 2002). Also, in transnational prevention studies (e.g., comparisons across multiple countries), the design must account for cultural and legal differences that affect the applicability of the results (UNODC, 2023). The sample in such surveys can include different units of analysis: individuals (in evaluations of youth work programs), schools or neighbourhoods (in research on community programs), or countries (in comparative analyses of prevention strategies) (Braga, 2017). The sample size is often limited by practical constraints – e.g., the number of cities involved in the project – which reduces statistical power and the possibility of generalisation (Cohen, 1988). Therefore, multi-site studies are resorted to to ensure greater reliability of the findings (Farrington & Welsh, 2007).

Data collection in the field of crime prevention presents its own challenges that must be anticipated in the design phase (Kothari, 2004; Shadish, Cook, & Campbell, 2002). As mentioned earlier, reliance on official statistics can obscure part of the picture due to underreporting (e.g., domestic violence has traditionally been underestimated in police records) (UNODC, 2023). Therefore, researchers combine sources such as administrative data (police, courts, social work centres, schools), surveys on victimisation or self-reported offences, and focus groups with residents (UNODC, 2010; Eurostat, 2024). The integration of these sources requires attention – how to unify definitions and coverage periods, resolve conflicting information and ensure validity? (Cook & Campbell, 1979; Kothari, 2004). In technology research, data collection can also mean web scraping incident data or using social media APIs to detect criminal patterns, which introduces technical challenges and ethical dilemmas (e.g., collecting publicly available user data to investigate online hate speech) (Kitchin, 2014; European Union Agency for Fundamental Rights, 2018).

Analysis and testing of hypotheses in this area often requires a combination of statistical methods (Kothari, 2004; Shadish, Cook, & Campbell, 2002). Since the data can be hierarchical (e.g., students within schools, or incidents grouped by city), multilevel models are used (Raudenbush & Bryk, 2002). Often, the goal is to test whether an intervention has an effect, which requires appropriate statistical tests (t-tests, ANOVAs, regressions, sensitivity tests) in addition to controlling for confounding variables (confounders) (Cohen, 1988; Cook & Campbell, 1979). A specific challenge is that the 'null hypothesis' of prevention often means that there is no difference in the number of crimes – that is, the success of prevention is statistically demonstrated by the fact that the experimental group has no increase or decrease in crime compared to the control (Sherman et al., 1998). This makes it difficult to detect the effect, as the absence of something is taken as evidence; researchers therefore resort to proxy measures or one-tailed tests when they have clear expectations about the direction of the effect (Cohen, 1988). In interpreting the results, care must be taken not to confuse correlation with causality – e.g., if schools with program X are found to have lower levels of violence than schools without the program, is it because of the program or because these schools had more motivated staff and greater community support independently of the program? A rigorous approach seeks to control such factors, or at least discuss their possible effect (Shadish et al., 2002; Braga, 2017).

The generalisation of the findings is the final, but important, stage – here the researcher considers to what extent the study's conclusions can be applied elsewhere (Kothari, 2004). Crime prevention is very contextual; a successful strategy in one country may not work in another due to different cultures, laws or economic circumstances (UNODC, 2023). Therefore, the reporting of results emphasises the study's context and the limits of generalisation (Shadish, Cook, & Campbell, 2002). International reviews and meta-analyses are particularly important in determining what can be considered the general principle of effectiveness (Sherman et al., 1998; Braga, 2017). For example, meta-analyses of community-based crime prevention programs show that youth-focused initiatives (mentoring schemes, social skills training) consistently produce positive effects across countries, whereas mere repressive measures without support components show short-term or no effects (Farrington & Welsh, 2007; Catalano et al., 2012). This builds a scientific consensus and a theoretical basis for further action (Cullen, Agnew & Wilcox, 2014).

Reporting requires a clear, objective presentation of all phases and findings. In the field of crime prevention, it is particularly important to highlight the practical implications in the discussion – scientists emphasise what their findings mean for policymakers, police, educators, or the IT sector (Sherman et al., 1998; Braga, 2017). An 'implementation science' approach is often recommended: not only to state that a measure is effective, but also how to implement and maintain it in practice (Fixsen et al., 2005). The challenges discussed (e.g., measurement difficulties and multiple causes) must be clearly presented in the paper so that readers (and reviewers) understand the reliability and limitations of the conclusions (Shadish, Cook, & Campbell, 2002). Transparent reporting of methods and results, with precise citation of sources (which includes statistical data such as those of UNODC, EUROPOL, MUP, etc.), enables crime prevention research to fulfil both a scientific and social purpose – to be verifiable and to formulate better practice in the field (UNODC, 2023; Europol, 2023; Ministry of Internal Affairs of the Republic of Serbia, 2024b).

Consideration of specific challenges in certain phases of the scientific research process shows that crime prevention research requires continuous methodological reflection rather than the mechanical application of predetermined research procedures. From the initial conceptualisation of the problem and operationalisation of key concepts, through the choice of design, sample, and data source, to the analysis, interpretation, and generalisation of the findings, each phase carries potential methodological limitations that can significantly affect the validity and reliability of the research. These challenges are particularly acute in conditions of complex cause-and-effect relationships, limited experimental control, and strong contextual conditionality of preventive measures. This confirms that the success of crime prevention research does not depend solely on the choice of the 'right' methods, but also on a consistent theoretical foundation, phased alignment, and transparent reasoning in research decisions. Such a phased consideration of methodological challenges enables the research process to be understood as an integrated whole, which creates the basis for more valid conclusions and a more responsible application of scientific knowledge in the field of crime prevention.

## *CONCLUSION*

The analysis of the specifics of the scientific research process of crime prevention, presented in this paper, confirms the initial thesis that crime prevention cannot be researched as a set of isolated measures, programs, or policies, but exclusively as a methodologically complex, phased, and structured subject of research. Consideration of the different phases of the scientific research process – from the formulation of problems and operationalisation of concepts, through hypothesis, research design and data collection, to the analysis, interpretation and generalisation of findings – shows that each of these phases carries specific methodological challenges that directly affect the validity, reliability and scope of the knowledge obtained (Kothari, 2004; Shadish, Cook & Campbell, 2002).

One of the key findings of this paper is that methodological dilemmas in crime prevention research are not secondary technical issues, but a structural feature of the research process itself. The paradox of 'unrealised crime,' the problems of the dark number, the differences in the definition and recording of crimes, as well as the contextual conditionality of preventive measures, limit the possibility of simply attributing cause-and-effect relationships between interventions and outcomes (Clarke & Weisburd, 1994; UNODC & UNECE, 2010; Eurostat, 2024). These problems clearly show that the analysis of statistical trends in crime cannot have an evidentiary function without careful theoretical and methodological interpretation.

Consideration of the theoretical frameworks further confirms that there is no theoretically neutral methodology for crime prevention. Different criminological paradigms – from theories of social learning and social control, through developmental criminology, to rational-elective and situational approaches – not only offer different explanations for criminal behaviour, but also directly shape the formulation of research questions, the choice of indicators, and the type of research design (Akers, 2009; Hirschi, 1969; Farrington, 2003; Cornish & Clarke, 2014; Cullen, Agnew & Wilcox, 2014). This confirms that every research project in the field of crime prevention is necessarily theoretically conditioned, and insufficiently reflected theoretical choice leads to methodological simplifications and misinterpretations of empirical findings.

A special methodological problem is the tendency to uncritically equate the normative goals of prevention – reducing crime, increasing safety, strengthening citizens' trust – with analytical-empirical hypotheses. Such an approach blurs the distinction between the research question and the desired result, turning research into confirmation of preconceived outcomes (Sherman et al., 1998; Milojević, Milašinović & Milojković, 2026). A clear distinction between normative goals and empirically verifiable claims is a prerequisite for scientific validity and responsible interpretation of results.

Analysis of the research design confirms that experimental and quasi-experimental approaches remain methodologically the gold standard for evaluating preventive measures, but that, in real social conditions, they are often limited by ethical, institutional, and practical factors (Cook & Campbell, 1979; Shadish, Cook & Campbell, 2002). Limited sample sizes, control-group problems, and sample dropout in longitudinal studies further reduce statistical power and the ability to generalise the findings (Cohen, 1988; Farrington & Welsh, 2007). This confirms that the success of crime prevention research does not depend solely on the choice of the 'right' methods, but also on a consistent theoretical foundation, phased alignment, and transparent reasoning in research decisions.

Modern technological developments further complicate the methodological picture. Cybercrime and digital forms of violence have expanded the subject of prevention beyond traditional territorial frameworks, while big data analytics and predictive models offer new research tools, but also new issues of bias, trustworthiness, and ethical acceptability (Kitchin, 2014; Lum & Isaac, 2016; European Union Agency for Fundamental Rights, 2018; Europol, 2023). These findings confirm that technological innovation cannot replace methodological discipline and theoretical reflection, but rather makes them even more necessary.

A special contribution of the work is the consistent application of a disciplined, interdisciplinary approach. Interdisciplinarity is understood here not as a normative ideal, but as a methodological necessity, but only under the condition that it is theoretically reflected and analytically controlled (Creswell & Plano Clark, 2011; Milojević, Milašinović & Milojković, 2025a). Such an approach makes it possible to examine the complexity of crime prevention without methodological eclecticism or theoretical confusion, and creates a basis for analytically coherent and practically relevant research.

Based on the analysis, it can be concluded that the improvement of crime prevention research does not depend primarily on expanding the empirical base or introducing new technical tools, but on systematic methodological reflection of the research process as a whole. The key challenge of modern research is not the lack of data, but the ability of researchers to integrate theory, design, data sources, and the interpretation of findings (Kothari, 2004; Milošević & Milojević, 2001). In this sense, this paper does not offer a universal model of crime prevention research, but rather a methodological framework that enables a critical, scientifically based, and contextually responsible study of this complex social phenomenon.

Finally, it can be concluded that the scientific study of crime prevention represents an ongoing methodological challenge that requires a return to classical epistemological questions – what exactly do we measure, how do we measure it, under what theoretical assumptions and with what limitations. At a time when crime prevention is increasingly promoted as a political slogan or technological project, and less often as an object of serious scientific reflection, insisting on methodological discipline, theoretical reflection and phased alignment of research decisions is a necessary step towards a more responsible and scientifically based understanding of this field (Sherman et al., 1998; Cullen, Agnew & Wilcox, 2014; United Nations, 2015).

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# СПЕЦИФИЧНОСТИ НАУЧНОИСТРАЖИВАЧКОГ ПРОЦЕСА ПРЕВЕНЦИЈЕ КРИМИНАЛИТЕТА: МЕТОДОЛОШКИ И ИНТЕРДИСЦИПЛИНАРНИ ИЗАЗОВИ

**Саша Милојевић[1], Бобан Милојковић[2], Дејан Савићевић[1]**

[1]Криминалистичко-полицијски универзитет, Београд, Србија
[2]Висока школа Сирмијум, Сремска Митровица, Србија

**Резиме**

Рад разматра специфичности научноистраживачког процеса у области превенције криминалитета, полазећи од становишта да се овај феномен не може проучавати као скуп изолованих мера, програма или политика, већ искључиво као методолошки сложен и фазно структурисан предмет истраживања. Савремени облици криминалитета, њихова друштвена условљеност и технолошка трансформација учинили су превенцију криминалитета неупоредиво сложенијим подручјем проучавања него што је то био случај у класичном криминолошком оквиру. Због тога се у раду одбацује идеја јединственог теоријског и методолошког модела превенције и инсистира на контекстуално прилагођеном, теоријски утемељеном и интердисциплинарно промишљеном истраживачком приступу.

У првом делу рада разматра се теоријска разуђеност превенције криминалитета и њене импликације на методологију истраживања. Указује се да различите криминолошке парадигме – од теорија социјалног учења и социјалне контроле, преко развојне криминологије, до рационално-изборних и ситуационих приступа – не само да нуде различита објашњења криминалног понашања, већ непосредно обликују формулацију истраживачких питања, избор индикатора и тип истраживачког дизајна. Тиме се потврђује да не постоји теоријски неутрална методологија превенције криминалитета и да је сваки истраживачки пројекат нужно теоријски условљен.

Централни део рада посвећен је анализи кључних методолошких изазова у истраживању превенције криминалитета. Посебно се разматра парадокс 'неоствареног криминала', проблеми тамне бројке, разлике у евидентирању кривичних дела и контекстуална условљеност превентивних мера, који ограничавају могућност једноставног приписивања узрочно-последичних веза између интервенција и исхода. Указује се да анализа статистичких трендова криминалитета не може имати доказну функцију без пажљиве теоријске и методолошке интерпретације, као и да експериментални и квази-експериментални дизајни, иако представљају методолошки златни стандард, у реалним друштвеним условима наилазе на озбиљна етичка, институционална и практична ограничења.

Посебна пажња посвећена је фазама научноистраживачког процеса – од формулације проблема и операционализације појмова, преко постављања хипотеза, дизајна и узорковања, до прикупљања података, анализе, интерпретације и генерализације налаза. У раду се наглашава да свака од ових фаза носи специфичне

методолошке ризике који могу битно утицати на валидност и поузданост истраживања. Посебно се проблематизује тенденција да се нормативни циљеви превенције некритички поистовете са аналитичко-емпиријским хипотезама, чиме се брише граница између истраживачког питања и жељеног резултата.

Рад такође разматра улогу интердисциплинарности, указујући да она представља методолошку нужност, али само под условом теоријске рефлектованости и аналитичке контроле. Интердисциплинарни приступ се не схвата адитивно, већ као аналитичка синтеза различитих перспектива у оквиру јединственог методолошког оквира. На крају, разматрају се савремени технолошки изазови – сајберкриминалитет, биг дата аналитика и предиктивни модели – који отварају нове истраживачке могућности, али и нове етичке и методолошке дилеме.

Закључно, рад не нуди универзални модел истраживања превенције криминалитета, већ методолошки оквир за њено критичко, научно утемељено и контекстуално одговорно проучавање, инсистирајући на фазној усклађености теорије, дизајна, извора података и интерпретације налаза као кључном предуслову научне валидности.