

Methodological challenges and social risks of privacy violation in the process of forensic identification of persons from video materials

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Abstract. The relevance of this study stems from the critical need to enhance the effectiveness of crime-fighting efforts while simultaneously safeguarding individual privacy. Thus, the purpose of the study was to examine all aspects of conducting the person's forensic identification from video materials, namely theoretical, which covers the characteristic features and principles of this type of activity, and practical, which shows the implementation of the fixed principles in conducting this investigative action. In the study, various methodological theoretical and practical approaches were used, necessary for the most complete and effective consideration of this issue, namely, theoretical-methodological approach, analysis and comparative analysis, functional-methodological approach. In the course of research on an integrated approach to solving the problem of forensic identification of person's appearance from video materials, was to consider the following aspects: the consideration of theoretical component in defining the concept, characteristic features, and principles of conducting forensic identification of the person's appearance from video materials, the experience of researchers regarding this issue, and the alignment of forensic identification methods with privacy norms in the context of existing laws in the Kyrgyz Republic and Azerbaijan. The practical significance of the research lies in its applicability for law enforcement agencies, forensic experts, and legal professionals in both the Kyrgyz Republic and Azerbaijan, where the results can be used to improve forensic identification processes, ensuring compliance with privacy legislation while enhancing the effectiveness of crime investigation through the use of video materials

Keywords: human body; medical and forensic examination; carriers of portrait information; criminal offences; functional features; confidentiality standards

Introduction

The development of digital technologies has led to an expansion of the range of devices suitable for research: video cameras, dashboard cameras, and even mobile devices with video recording functions. However, along with the rapidly developing digital progress, the number of video recording formats and a variety of device connectors have expanded, which separately and collectively leads to difficulties in the study of video materials necessary for forensic identification. One of the urgent and problematic issues is the growing concern over privacy, particularly in relation to the increasing use of video footage by law enforcement agencies, which raises significant questions about the balance between effective crime-solving and the protection of individual privacy rights. This topic has received a lot of attention in the

scientific community. Below are the conclusions obtained by some researchers.

B. Poirier *et al.* (2024) examined the use of police body-worn cameras (BWC) and the associated privacy concerns from the perspectives of both officers and citizens in Quebec, Canada. The authors focused on two primary aspects: police officers' feelings about being monitored by BWCs and citizens' concerns about privacy when interacting with officers equipped with such devices. The findings indicate that police officers are apprehensive about the potential impact of BWCs on their privacy and work performance, while citizens generally express fewer concerns. Certain demographics, however, such as older individuals and those with specific perceptions of law enforcement, show heightened

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privacy apprehensions. The researchers highlighted the tension between transparency and privacy. However, the analysis could benefit from a deeper exploration of the long-term implications of BWC usage on officer performance and a more thorough investigation of how privacy concerns might evolve as the technology becomes more pervasive.

A. Buhera (2021) explores the topic in the field of modern habitology. The author notes such a modern method of identification as biometric identification, namely, the recognition of a person by their unique biometric characteristics. The most common methods in this type of identification are iris and fingerprint scanning. By examining video footage, it is possible to identify a person by the iris of the eyeball. For example, the iris pattern is finally formed in a person by the age of 2 and does not undergo significant changes throughout life, only in cases of sebaceous trauma or pathologies of the body. Another modern method of identification from video footage is geometric (facial geometry). This method does not require direct contact with the person, as in the case of scanning the eye with infrared light, and does not require additional equipment. The integration of facial geometry identification systems into street surveillance cameras is an effective method of crime prevention, as well as in the investigation and search for individuals for various legitimate purposes. The paper also notes that the biometric method based on facial geometry is the most promising, affordable, and practical.

The paper by T.G. Chashnytska (2021) investigates the problems of identification from video recordings. It is emphasised that certain requirements must be met for portrait studies based on video materials. First, the requirements of comparability, i.e., the same display of elements of the same type on the objects being compared. This means the same angle, the same facial expressions, the same age. Tracing the dynamics of growth when it comes to children and materials of different ages. Second, the requirement of good quality. This requirement means that the image must be of satisfactory quality, clarity, contrast, and show facial features. Third, the requirement of authenticity means that the video materials are obtained legally, in compliance with the rules and regulations, which would make it impossible or minimise substitution, confusion, and forgery. There is also the problem of identifying a person from video due to the complexity of the process itself, which uses different media and subjects of information. Therefore, it is important to optimise the identification process by adapting the methods of assessing the reliability of a person's image to modern portrait studies, new media, and to pay attention to the development of new software tools for video identification.

O.A. Kozhevnikov (2020) in his paper determines that the effectiveness of searching for forensic information on the Internet depends on a combination of traditional expertise and modern data retrieval technologies. Namely, the researcher considers Open Source Intelligence (OSINT) as a modern technology – analysis of open sources of information to obtain the required result. Monitoring of open data on the Internet is necessary for several reasons. First of all, the paper draws attention to the need to quickly identify elements of a person's appearance with the person himself or herself using portrait expertise, as well as to detect editing and other manipulations. The paper points to the positive results of identifying offenders and criminals by analysing OSINT information, and also draws attention to the use of specialised

knowledge in portrait and photographic examination by involving the conclusions of specialists.

A.R. Zavotpayev *et al.* (2023) focused on the critical importance of timely forensic examinations in the investigation of crimes against the sexual integrity of minors in Kazakhstan. It emphasised that prompt forensic analysis is not only essential for the swift and thorough investigation of such crimes, but also serves as a key means of proving the guilt of suspects, especially when other evidence is lacking. The authors discussed how the evolving forensic analysis system in Kazakhstan, backed by recent legislative initiatives, plays a pivotal role in guiding investigations and ensuring the collection of vital evidence. N.I. Abbasov and M.N. Abbasova (2023) investigated the reasons behind the non-detection of fingerprints during forensic examinations, focusing on both objective and subjective factors. The researchers utilised a variety of scientific methods, including comparison, analysis, synthesis, and deduction, to examine practical and technical challenges faced by forensic experts in Azerbaijan. They analysed the limitations of current fingerprint detection techniques and propose ways to overcome these deficiencies. However, both studies could benefit from a more in-depth exploration of potential challenges or limitations in the studied forensic system, such as resource constraints or the availability of qualified forensic experts.

The purpose of this study was to explore effective methods for enhancing forensic identification from video materials, with a focus on balancing improved investigative efficiency and the protection of privacy in the digital age. The main tasks of the study were:

- ▶ to review modern methods of forensic identification from video footage to evaluate their effectiveness and applicability;
- ▶ to analyse how specific forensic identification methods align with the current privacy legislation of the Kyrgyz Republic and Azerbaijan;
- ▶ to review whether the existing instructions on handling confidential information comply with the new legislation of the Kyrgyz Republic.

Materials and methods

The study in the field of forensic identification of person's appearance based on video materials requires the use of both practical and theoretical-methodological approaches necessary for the successful conduct of research. Specifically, the study used the theoretical method, analysis, synthesis, deduction, comparative analysis, and analysis of scientific literature. Along with the methods, the research also applied dialectical and functional methodological approaches.

Firstly, the theoretical method should be noted, which forms the basis for further research, by studying the basic concepts and their definitions in the field of forensic science, characteristic features, principles for the implementation of such activities, and the application of theoretical knowledge in practice. Using the analysis, the subject matter of the paper was examined, namely, criminological identification of a person from video materials, and its individual constituent elements, namely: the signs, characteristic features of this type of identification, properties and opportunities which it provides. After that, using the method of synthesis, all the studied constituent elements and features are combined into a single concept of criminological identification from video, which helps characterise the subject matter in full. By means

of synthesis, the topic is considered as an integral separate category, which is assembled from its previously studied individual parts. The study used the method of deduction to investigate criminological identification by video, starting from the general understanding of criminological identification as a phenomenon with its own types to a specific type – identification by video. With the help of deduction, based on the general characteristics of identification, it is possible to identify certain special features of video identification of a person.

The other crucial method was comparative analysis, which allowed investigating scientific achievements of researchers not only of a particular state but also the experience of their foreign colleagues, evaluating their approaches to solving the issue of identifying person's appearance. The comparative analysis contrasted the methods of conducting forensic identification of person's appearance in different countries, which facilitates developing recommendations and ways to improve in this matter. Further, such a methodological approach as a dialectical-methodological method was used, which described all the constituent elements of research consistently and logically. In addition, the functional-methodological approach identified the main purposes and objectives in the study of video materials in the forensic identification of person's appearance and developed recommendations for further improvement and efficiency increase of this area. The analysis of scientific literature allowed considering different concepts of authors for the analysis of the stated problem, including practical and theoretical aspects, which, in turn, will increase the effectiveness of research.

The study was based on the statistics of the State Statistical Committee of the Republic of Azerbaijan (n.d.), the Bureau of National Statistics (2024), and the studies by various researchers on the topic. The legal basis of the study is the Criminal Procedure Code of the Republic of Azerbaijan (2000), Law of the Republic of Kazakhstan No. 94-V "On Personal Data and Their Protection" (2013), Law of the Republic of Azerbaijan No. 998-IIIQ "On Personal Data" (2010), Resolution of the Government of the Republic of Kazakhstan No. 429 "On Approval of the Rules of Classification of Information as Official Information of Limited Dissemination and its Handling" (2022), and Model Instruction on the Confidentiality of Personal Information on Victims of Trafficking in Human Beings (2019).

This study was carried out in several stages, aligned with the outlined tasks. The first stage involved a comprehensive review of modern methods of forensic identification from video footage, covering key concepts such as "forensic identification", "forensic portrait examination", "dynamic and static identification", and the principles guiding these processes. The second stage focused on analysing the alignment of these forensic identification methods with the current privacy legislation of the Kyrgyz Republic and Azerbaijan, ensuring compliance with legal standards. Finally, in the third stage, the study reviewed existing instructions on handling confidential information to assess whether they are in line with the new legislation of the Kyrgyz Republic. Based on this analysis, recommendations were developed to enhance both the efficiency of forensic research and adherence to privacy regulations.

Results

The role of video surveillance in forensic identification. The end of the 20th century and the beginning of the 21st cen-

tury was marked by the increasing pace of technological progress, which also led to an increase in the number of technical means containing information about the appearance of a person. The growing number of street surveillance cameras, video surveillance of business entities, private entities, urban infrastructure, dashboard cameras increases the number of materials that can be used in performing various types of activities. It is also worth noting that such videos are particularly important in investigating committed offences. Video recordings are used by law enforcement agencies in their activities, such as intelligence-gathering actions (surveillance, identification), investigative measures (identification, collection of materials for comparative analysis), conducting forensic portrait examinations. For investigators or persons assigned to investigate the incident, video surveillance recordings are of high value, 9 out of 10 investigators use video and photographic footage in their work, at the same time, every third investigator finds it difficult to evaluate and solve problems related to image quality and the conditions in which video surveillance cameras were used (Iswardani & Sudibyo, 2020). The active growth in the use of video surveillance systems in conducting investigations suggests that video recordings are an informative and reliable source of information. According to the statistics of the State Statistical Committee of the Republic of Azerbaijan (n.d.), 36,494 crimes were registered in the country in 2022 and 36811 in 2023. Moreover, the number of registered crimes per 100 thousand population in 2023 increased by 94 points compared to 2019, namely, the number of crimes amounted to 363 per 100 thousand, with only 15.5% of them being heavy and especially grave crimes (The State Statistical..., n.d.).

According to the Bureau of National Statistics (2024), 140,272 criminal offences were registered in 2023, which is around 11% less compared to the 2022. The crime rate in Kazakhstan decreased from 80 per 10,000 population in 2022 to 70 per 10,000 population in 2023, indicating an overall reduction in criminal activity by 12.5%. There is an active use of video surveillance systems to monitor the observance of law and order in the Republic of Kazakhstan. In Almaty alone, 38,854 video cameras have been brought out, and by the end of 2024 their number is planned to reach 50,000, that is, to increase their number by almost 30% (The number of video..., 2024). In addition, their effectiveness has been proven in practice, the crime rate in the area where video cameras are installed considerably decreases. According to the data of the Central Operational Directorate of the Department of Internal Affairs of the city of Alma-Ata, more than four thousand administrative offences were detected in the first quarter of 2018, and 10 crimes were solved, including four carjackings (Malchenko, 2018). According to the official representative of the Ministry of Internal Affairs of the Republic of Kazakhstan, N. Oraz, 50% of crimes committed are theft, and in the period from 2016 to 2020, their number was reduced by 67%. Representatives of the Ministry of Internal Affairs associate such positive dynamics, in particular, with preventive work, namely, the implementation of departmental anti-theft programmes, within which more than 54 thousand video surveillance cameras have already been installed in the residential yards, and more than 14 thousand are equipped on the initiative of the residents themselves (What type of crime..., 2021). The most common types of crime in 2024 are theft and fraud, accounting for 22,881 and 31,128 cases respectively (Legal Statistics, 2024). In

summary, Kazakhstan has already introduced a number of measures to combat crime that have proven to be effective, but their further successful use and scaling up will depend on the introduction of relevant investigative techniques.

Methods of forensic identification. When conducting portrait identification of a person, various techniques and methods are used, the main of which are the descriptive comparison, mathematical and graphical methods. In addition, some researchers divide the methods of studying video materials into subjective and objective. Subjective methods include those that are conducted with visual perception using visual memory or special scientific knowledge. Objective methods in such a division criterion include methods based on automatic identification: analysis, comparison of features of person's appearance, and evaluation of such results performed by machine systems (Chashnytska, 2021).

The descriptive comparison is a consistent description of all visible parts of the human body – hair, face, its elements, scars, moles, wrinkles. Measuring proportions such as the size, position, shape, and form of each individual part of the appearance (thickness, depth of fit, width, symmetry, level of facial expression) is of great importance (Baker *et al.*, 2023). The descriptive comparison method must align with privacy policies on personal data protection. According to Article 6 of the Law of the Republic of Kazakhstan No. 94-V “On Personal Data and Their Protection” (2013), personal data can only be processed with consent or under specific legal circumstances. Similarly, Article 5 of the Law of the Republic of Azerbaijan No. 998-IIIQ “On Personal Data” (2010) stipulates that personal data should only be collected for legitimate purposes and should not exceed the requirements of the investigation. While this method generally aligns with these legal standards, any misuse or unauthorised dissemination of personal data collected during descriptive comparison could violate Article 7 of the Law of the Republic of Kazakhstan No. 94-V “On Personal Data and Their Protection” (2013), which requires strict confidentiality of such information. Law enforcement must ensure that this data is handled according to the guidelines for limited dissemination outlined in Chapter 3 of Resolution of the Government of the Republic of Kazakhstan No. 429 “On Approval of the Rules of Classification of Information as Official Information of Limited Dissemination and its Handling” (2022), which specifies how sensitive data should be classified and managed.

In addition, mathematical methods are crucial in identification, which capture the linear distances and angular magnitudes between anatomical and topographic points. Article 13 of the Criminal Procedure Code of Azerbaijan (2000) emphasises the need to collect and process such data only when necessary for criminal proceedings. In line with Article 8 of the Law of the Republic of Kazakhstan No. 94-V “On Personal Data and Their Protection” (2013), law enforcement must ensure that biometric data is securely processed and stored to prevent unauthorised access. These methods are consistent with law enforcement guidelines, but only if additional safeguards are in place to ensure the minimization of data retention after the investigation, as required under Article 12 of the Law of the Republic of Kazakhstan No. 94-V “On Personal Data and Their Protection” (2013). Implementing protocols that limit access to biometric data to authorised personnel would help align these methods more closely with privacy protection standards.

The use of graphical methods involves the development of graphical constructions. In this method, a certain number of anatomical points are taken, and then lines are drawn between them, and the same lines should connect the anatomical points on the study materials. In this way, the formed lines are subsequently compared, and if they intersect (coincide) with each other or are close to each other, the appropriate conclusions are drawn regarding identification (whether it is the same person or not). These methods must adhere to confidentiality standards outlined in paragraph 7 of the Model Instruction on the Confidentiality of Personal Information on Victims of Trafficking in Human Beings (2019). This paragraph requires that all personal information, especially sensitive data such as graphical representations of physical features, be handled confidentially and securely. In addition, Article 22 of the Law of the Republic of Kazakhstan No. 94-V “On Personal Data and Their Protection” (2013) mandates that personal data used for forensic purposes should be restricted to authorised personnel and subject to secure storage conditions. To ensure compliance, law enforcement agencies should limit access to these graphical models and implement strict protocols for their handling, as stipulated by Chapter 9 of the Resolution of the Government of the Republic of Kazakhstan No. 429 “On Approval of the Rules of Classification of Information as Official Information of Limited Dissemination and its Handling” (2022), which governs the classification and handling of sensitive information.

Challenges of forensic identification from video materials. According to the forensic practice of Azerbaijan, the examination of video materials for the purpose of identifying a person is relatively new and complex. Article 20 of the Law of the Republic of Azerbaijan “On Forensic Expert Activity” (1999) provides for the concept of complex forensic medical expertise. Comprehensive forensic examination is appointed when the clarification of matters important to the case can be carried out by conducting only several studies using a system of different methods in different fields of expertise or science or within the same field of expertise. In the forensic science of Azerbaijan, a comprehensive video examination combines several examinations – technical, phonographic (audio research), and person identification. Such a comprehensive examination is defined as video phonographic (or video phonoscopic). This type of expertise has been developed over the last decade, and as a result of research, it has been established that the voice of a speaking person has individual characteristics that depend on the structure and functions of the organs involved in the speech process. Pathological changes of this organ affect the individuality of the speech process. Research shows that the human speaking voice, being stable over time, depends primarily on sex-age characteristics. As a result of the influence of social and mental factors, voice and speech are formed during childhood and adulthood, become a habit and remain unchanged throughout a person's life (Abdrasulov *et al.*, 2023). “Phonos” means “sound”, “skopic” means “transmit”. That is, it involves a forensic investigation of the language and images recorded on video.

Article 124.2 of the Criminal Procedure Code of the Republic of Azerbaijan (2000) provides one of the types of evidence – digital evidence. This kind of evidence cannot be physically “held”, and its fixation and preservation require special technical means, conditions and knowledge. Video

recordings, as important digital data for the case, as a rule have probative value, as physical evidence, and therefore, formally, the carrier itself, and not the information on it. This does not prevent the subsequent alteration, falsification, removal, or distribution of this evidence, which leads to doubt about the authenticity of the data. When a final decision is made in a case, it may be decided to destroy not only the digital evidence, but its carrier. Further, the distribution of this type of evidence without restrictions may lead to an incorrect legal assessment of the digital evidence. The use of the concept of digital evidence facilitates the easier obtaining and use of such evidence, as well as prevents violations of property and other rights of individuals and legal entities (Podoprigora *et al.*, 2019).

However, it is impossible to discuss the absolute differentiation of methods of forensic identification of person's appearance from video materials into subjective and objective ones, since the results obtained by using objective methods in some cases require analysis and evaluation by a specialist in this industry, which indicates the complex application of two types of research methods. When transferring video materials to a specialist in this field of knowledge, they are assigned a number of tasks necessary for the effective conduct of this procedure and obtaining competent results. Thus, in criminology, these tasks are divided into two groups – identification and diagnostic. The purpose of performing identification tasks is to establish the fact of a specific or group identity of material objects. Such tasks include the identification of person's appearance by video material, the location of the video recording, a specific fact displayed on the video. Currently, there is no unified scientific approach to the concept of “diagnostic tasks” in forensics. However, the following diagnostic tasks are most often distinguished: establishing the properties of video recording materials, the conditions under which events were recorded, establishing the fact of changing the video recording and interfering with its integral structure, determining the number of subjects taking part in events displayed on video materials (Kaur *et al.*, 2020).

As for the tasks, methods, and techniques of expert research, in accordance with the Decision of the Cabinet of Ministers of the Republic of Azerbaijan “On the Approval of the “Rules for Maintaining the State Register of Forensic Expertise Research Methods and Entering New Methods into that Register” (2020), a special State Register operates in the country, which is constantly updated. The register, according to the law, contains the following information for experts: the name and essence of the method, information about the author of the method, expert tasks solved by the method, objects of research, research methods and tools, step-by-step description of the method. Along with this, the Methodological Fund of Forensic Expertise was created. In accordance with the Decision of the Cabinet of Ministers of the Republic of Azerbaijan “On the Approval of the “Rules for the Creation and Use of the Methodical Fund of Forensic Expertise” (2020b) is a database consisting of scientific and methodological materials of forensic examinations.

Despite the active use of this method of collecting information, the question of the feasibility of using video surveillance systems as a data source for conducting forensic identification of person's appearance from video materials is actively discussed by specialists in this field, employees of internal affairs bodies, the media, and even ordinary citizens. The reason for this widespread concern is the risk of

ineffective use of video materials in the study, conditioned upon a number of causes. This can be attributed to the quality of the material. The quality itself is primarily determined by the means of video recording, and if they are flawed, the video material will be of poor quality. Since surveillance equipment acts as a motion detector and not a specific static image, it may not be possible to identify a moving object with low video quality.

In addition, the quality of the displayed material is affected by a number of external factors in which video was recorded, such as lighting, remoteness of the video recorder from the subject, weather conditions, contamination of the surface of the video camera, the presence of interfering objects, and other factors (Pilyukov *et al.*, 2023). The second, but no less important reason is the obsolescence of research methods, explained by rapid technological progress, the adaptation to which considerably lags behind. Thus, one of the methods of studying video materials is the analysis of static images obtained from video materials, that is, such an analysis involves the study of photographic images from video materials (León-Mendoza, 2019). This method is applicable only to the study of static anatomical features of person's appearance, such as features of individual body parts, head shape, facial proportions, height, width, and position of the forehead. The method of analysing static images from video aligns with government privacy policies and law enforcement guidelines if handled appropriately. According to Article 6 of the Law of the Republic of Kazakhstan No. 94-V “On Personal Data and Their Protection” (2013), personal data, including biometric information derived from video materials, must be processed only with consent or under legal authority. Similarly, Article 5 of the Law of the Republic of Azerbaijan No. 998-IIIQ “On Personal Data” (2010) requires that personal data be collected for specific, legitimate purposes and handled securely. When using this method of analysing video materials, part of the possibilities of obtaining data for identification is lost, namely, the dynamic signs of a person's external appearance – gestures, facial expressions, gait. At the same time, there is a problem of identification conditioned by the lack of a database with information, video recordings or images necessary for identification. Thus, for example, in the comparative analysis of gait, there are no materials that could become objects for comparison, and such dynamic features are directly related to the conditions and the environment in which a person resides. It is proposed to divide the criteria for evaluating video materials into groups.

Analysis and evaluation of each factor and the ratio of the results obtained will allow drawing a conclusion about the possibility of using source materials for forensic identification. The first group of criteria are those that are directly related to the conditions of recording video materials: lighting (daytime or night, frontal or lateral, natural or artificial), the resolution of the video camera, frequency, the position of the person relative to the recording device. The second group of factors is the state of the displayed object, in particular, the appearance of a person. Such components of appearance as body parts, limbs, body regions (back, chest), facial elements (nose, lips), functional features (walking, stuttering), as well as appearance, clothing, belongings, accessories are crucial for identification (Yukhno *et al.*, 2023). The third group includes factors related to the use, transmission, and storage of source data. As is known, the frequent transfer of a file from one medium to another reduces its

quality as well as mechanical impact and interference in the video sequence by third parties.

The need for integrated approaches in forensic research. Despite the fact that some factors may be recognised as suitable for use in identification, others of them are questioned or recognised as such that they cannot be recognised as acceptable, and then the entire video recording cannot be considered. Notably, without an integrated approach, it is difficult to achieve results in forensic identification from video materials. A competent solution to the problem requires complexity and the use of a modern approach based on the application of research from various fields and expertise. It is proposed to distinguish a separate type of expertise, such as a comprehensive examination of video materials, which can be carried out by experts from different types of expertise jointly to address related issues.

Thus, each specialist studies only those properties of the object in which they are competent, which leads to a complete and reliable study of the object. Generally, during the forensic identification of person's appearance, photographic images are used, which are examined by a specialist in this field. The main focus is on the content of the video or image. Researchers primarily focus on content analysis by replaying recordings and identifying evidence by filtering video content in conventional forensic video analysis. In fact, conventional methods are time-consuming and ineffective if there is a huge amount of video material (Singh & Mohan, 2020). The development of digital technologies and the emergence of new sources of obtaining materials for comparison, such as video recordings, necessitate the involvement of specialists from other branches of science. When studying video recordings, it is necessary to evaluate not only the objects displayed on them but also the video itself as an object of research. The setting of additional tasks for forensic research, in turn, requires the involvement of researchers not only in the field of forensic science but also specialists in technical sciences.

This method is largely consistent with government privacy policies and current law enforcement guidelines, but it must be carefully applied to ensure compliance with legal frameworks. According to Article 14 of the Law of the Republic of Kazakhstan No. 94-V "On Personal Data and Their Protection" (2013), video recordings, which are considered personal data, must be processed in a lawful and transparent manner, ensuring the data is used solely for its intended investigative purpose. However, it also carries a risk of overstepping privacy boundaries, especially when large amounts of video material are involved. Therefore, law enforcement agencies must ensure that the analysis is limited to the scope of the investigation.

Since video materials are components of video surveillance systems, mobile devices, video cameras, cameras, the qualitative and quantitative properties of the resulting images directly depend on the quality of the recording device (Kobets, 2023). It is worth noting that there are several approaches to solving this issue. The first approach is based on the fact that video materials suitable for forensic identification must be examined in their original state and their processing, in this case, is impossible. However, this approach complicates the work with the source materials, since the quality of the obtained video materials may be deemed unsuitable for identification, which may subsequently lead to the exclusion of these video materials from the evidence base, and will also help the offender avoid punishment. The second approach

is based on the fact that the original video materials, if their condition is not satisfactory enough for their use in forensic identification of person's appearance, can be processed from the standpoint of correcting the parameters of the video, not its contents. Thus, video recording parameters such as light correction, brightness, contrast, colour balance, noise reduction, sharpening, speed mode can be applied, while interference with the structure of the video recording, extraction of its fragments or vice versa, the inclusion of additional frames are absolutely not allowed. Each of these approaches may exist because has its advantages and disadvantages. In the first case, the study of original, raw video recordings is the key to an objective perception of video materials. Nevertheless, the second approach can make the process of studying video materials more efficient and facilitate the work of specialists, but there is still a risk of unjustified interference and falsifications in the processing of video recordings.

In addition, criminologists cannot competently assess whether there has been a change in the video recording from the standpoint of its structure, such as video editing, joining of individual frames. During the initial study of the video recording, primitive editing can be visible to the naked eye. For example, abrupt transitions or jumps in the video, a violation of continuity, changes in the audio track. However, with the advent of new technical capabilities, the skills of people who interact with video recorders and video recordings directly are also being improved. In recent years, the number of videos processed using machine learning on the Internet has increased rapidly. The so-called deepfakes can depict people who have never taken part in a video recording, as their faces are transferred to others. This raises concerns about the authenticity of the carriers, which requires more effective detection methods in forensic examination (Fjellström, 2021). Interference in the structure of the video sequence can be conducted at such a high level that it will be impossible to detect such an action with the naked eye, so the involvement of specialists in this field is required. Today, in the practice of investigating crimes, video materials are checked for interference with each video used as evidence, regardless of whether it arouses suspicion when analysed with the naked eye or not (Chornous & Leliuk, 2023). Regarding the content of video materials – that is, the external appearance of a person. It can be stated that due to the low quality of the source video materials, images of a person can also be distorted, the proportions of person's body, the ratio of different parts of the body, and the relative position of objects on the video recording can be violated. A specialist in working with video materials can, after conducting the necessary research and calculations, eliminate such errors and note the truthful quantitative and qualitative features of person's appearance (Gavilanes *et al.*, 2022).

This approach can sometimes involve handling vast amounts of sensitive personal data, including metadata and digital fingerprints, which raises significant privacy concerns. Therefore, to remain consistent with privacy laws, law enforcement agencies must limit data processing to what is strictly necessary for the investigation and ensure proper security measures are in place to prevent data breaches. According to the Criminal Procedure Code of the Republic of Azerbaijan (2000), digital evidence should be preserved in its original form to maintain its authenticity and integrity, making sure that any manipulations, such as deepfake detection, do not compromise the evidentiary value.

Therefore, when studying video materials, investigating crimes, a number of questions are raised that are of dual competence, namely, on the one hand, this is the state of the video recording and its technical characteristics, on the other hand, the content of the displayed event (place, time, number of subjects, their actions, the establishment of the identities of the participants in the events). All these issues can be solved by one expert if they have enough special scientific knowledge and experience in these areas, but most often for competent and complete research, it is necessary to create a committee of experts in various fields: computer technology, video technical expertise, physiognomists, criminologists. The main area in the study of video recordings and conducting forensic identification of person's appearance based on video materials is the automation of the stages of comparative analysis and the formulation of conclusions about the presence or absence of oneness of identified and identifiable objects. However, already at the stage of theoretical consideration of this issue, a number of problematic issues arise. Developers of video recording systems do not unify their products, often hiding algorithms for software processing of video frames, which complicates the comparison of video materials, while the quality of video images, the position of subjects on them, the angle, and other factors complicate the automation of examinations.

Modern technological advances and their implications for forensic identification. For quite a long time, video recordings have been an integral part of human life, including in the field of crime investigation and expert examinations. Therewith, when conducting forensic examinations, a number of new issues are raised, the solution of which is possible only in conjunction with the use of special scientific knowledge from various branches of science, and hence the involvement of new specialists. As video recording technologies and tools evolve, experts require new knowledge and methods, as well as special scientific information. The need to study computer forensics is growing (Buhara, 2021). The insufficient theoretical basis for the study of video materials is one of the main problems of forensic identification of person's appearance since the lack of a unified approach to this issue leads to a contradiction between the used methods of research, and as a consequence, to the incompleteness or unreliability of the results obtained. In view of the above, the use of methods, means, and techniques of identification by the appearance of a person based on portrait examination for the purpose of solving and investigating crimes today does not correspond to modern realities, and to consider a new type of research, such as forensic examination of dynamic features of a person, the study will be aimed exclusively at studying and identifying a person by dynamic features. Thus, it became necessary to revise and distinguish such a separate type of forensic research in the system of the existing classification of forensic examinations as a forensic study of person's appearance based on video images (Zeng *et al.*, 2022).

Modern computer technologies are designed to improve information about the image of a person in different weather conditions, both day and night, and to display functional elements of appearance and facial features in dynamics and static. In addition, a separate problematic aspect is the lack of competence of experts and specialists involved in the study of video materials. To save time and money, the expert or specialist alone examines the video, both its content

and technical characteristics, not always being sufficiently knowledgeable in these matters (Abdrasulov *et al.*, 2024). By comprehending the techniques of researching new objects of expertise, experts and specialists risk interfering with someone else's competence. Negative consequences can be avoided if various specialists who could cooperate are involved in the study of the appearance and its reflection on the research medium (Kozhevnikov, 2020). Solving these problems is the key to an effective, complete, and competent study of video materials for conducting forensic identification of person's appearance. This is important not only within the framework of a certain procedural action but also for the practice of solving crimes in general. To develop forensic research in the field of examination of video recording materials, it is necessary to create new methods and improve outdated ones. The involvement of advanced technologies would provide better initial information, which, in turn, would facilitate accurate and reliable identification conclusions in different conditions.

Discussion

Having analysed and compared the study results with the findings of Kazakh and foreign researchers, the following can be highlighted. A. Badiye *et al.* (2022) in their joint study within the framework of criminological identification of a person from video investigated a separate special aspect of such identification – forensic analysis of a person's gait. The paper draws attention to the problems of limiting the use of gait analysis and criticism of the admissibility of such examinations in courts. Due to the fact that the modern judicial system focuses on accuracy, clarity, and admissibility of evidence, gait analysis has been criticised for its reliability, reproducibility, and compliance with standards and rules, since there are practically no legal standards for such an examination. Gait pattern is a personality characteristic, but the use of such a characteristic is affected by the lack of databases that can be used to compare gait. Human gait is highly variable and has some individual variability, which makes identification difficult. Therefore, in the authors' opinion, gait analysis remains a weak identification method, but in some respects, it is quite reliable. For example, the paper shows that gait analysis helps identify people with a pathology or a specific disease that can affect the way they walk. In this way, traumatologists, neurologists, and orthopaedists can diagnose certain causes of pain that make people walk in this way by watching a video of a person walking. These include problems with the muscles, skeleton, and nerves, and this conclusion significantly narrows the range of suspects. The papers overlap in the importance of applying the method of identification by walking, but in this study, compared to the above, the emphasis is not on one type of research, but rather on the possibility of identification from video materials in general, considering their features. Thus, the method of identification by gait is also an integral part of identification from video material, but the paper also investigates the features of video materials independently without reference to playback, and with reference to the reproduced, recorded material on video with a person.

L. Fjellström (2021), studied the topic of forensic research on video materials in his thesis. The problems of modern video forgery, which makes identification impossible, and, above all, the problems of video materials created by artificial intelligence, are considered. The paper evaluates

the study of video duplication (artificially created video, the method of creating an image and video using artificial intelligence by image synthesis). The paper presents the results of an evaluation experiment by forensic experts and a criminalist. The study is also devoted to the evaluation of the method of using artificial intelligence in video duplication. The author proposes to use the superpixel method to study the tampering, but notes that it is difficult to recognise tampering with a high-quality level of manipulation. It is determined that deepfakes can represent people who have never participated in the video by taking faces from other visual materials, and therefore, there is a problem of identification and reliability, which requires new detection methods. It has been shown that the LIME artificial intelligence method (Local Interpretable Model-Agnostic Explanations) can examine fake videos and assist experts in detecting them. The papers agree with each other on the issue of interaction with modern counterfeiting technologies – deepfakes. Since such forgery methods exist, modern methods of detecting them, and therefore forensic examination, are needed. However, this paper differs from the above in that it is a comprehensive study of video identification based on various features, is theoretical in terms of several practical aspects and does not focus only on the technology of deepfakes. And the paper by the researcher focuses on artificial intelligence and a practical experiment on the study and detection of fingerprinting and modern video modifications by forensic scientists and forensic experts.

A. Singh and N. Mohan (2020) argue that CCTV footage is an important tool for forensic analysis and evidence retrieval. It is noted that investigators primarily use video testing methods by manually playing back and filtering, but such traditional methods are not always effective and time-consuming. Therefore, the researchers propose automated forensic video analysis using face recognition. However, low video quality and an inappropriate source of its acquisition do not allow for a full forensic assessment of the video or significantly reduce the reliability of such an investigation, and hence the evidence. The paper provides proposals that will help solve the problems of low-quality video reflections, namely, a detailed quality improvement procedure, a test scenario for comparing a neural network and relevant algorithms. Attention is drawn to the need to improve the efficiency of analysis methods, and therefore, a system of comprehensive object identification from video is proposed, which will use the relationship between the behaviour of objects, light sources, and subject areas.

D. Lorkiewicz-Muszynska *et al.* (2015) suggest that despite the active use of this method of collecting information, the question of the expediency of using video surveillance systems as a source of data for forensic identification of appearance from video materials is actively discussed by experts in this field, law enforcement officials, the media, and even ordinary citizens. The reason for this widespread concern is the risk of ineffective use of video footage in investigations, due to a number of reasons. One of them is the quality of the analysed material, which, in turn, is determined by the imperfection of the technical means of recording the material, the way it is stored and transmitted. The main role of visual surveillance is to register movement, so the image quality may not be sufficient to identify. Thus, these studies are devoted to improving the efficiency of image quality, quality of analysis methods, materials and methods of data

transmission (storage). The papers are aimed at the practical use and application of such methods, while this study is an analysis of theoretical issues with the definition of practical aspects of the topic, but without delving into specific methods and proposals, forms of their use.

In their study, O. Yukhno *et al.* (2023) focus on the forensic identification of individuals based on video materials, with an emphasis on integrating modern techniques and developments in video surveillance systems. The authors employ both theoretical and empirical methods, such as statistical analysis and synthesis, to investigate how video surveillance technology, artificial intelligence, and biometric data access contribute to identifying criminals. The researchers draw on the work of scholars from China, Ukraine, and other countries to assess how digitalization both aids law enforcement in solving crimes and raises concerns about privacy intrusions. The findings highlight the delicate balance between enhancing security and protecting individual privacy in the digital age, particularly in the context of current legislation. Compared to the current study, this research similarly addresses the issue of privacy violations while discussing the increasing use of video materials in forensic identification. However, the researchers take a broader, more global perspective, analysing legislation and developments across multiple countries. Both studies emphasize the technological advancements in video surveillance but differ in their scope and geographical focus.

J. Zeng *et al.* (2022) explore the use of medical indicators for forensic human image identification, a method the authors refer to as medical forensic identification of human images (mFIHI). The researchers argue that diseases, both physiological and psychological, influence a person's appearance and behaviour, and these changes can be used as key indicators for identifying individuals in forensic contexts. The study introduces a process of analysing medical signs observed in images or videos, comparing them with a suspect's medical history to determine identity. By conducting a conformity and difference analysis on these medical indicators, the method provides critical information for human identification. A case study within the research further supports the feasibility of this method, demonstrating its potential as an essential tool in forensic investigations. This research offers a more specialised approach by focusing on medical indicators as a means of forensic identification. Meanwhile, the current study involves more traditional methods such as descriptive comparison and mathematical techniques. Both studies emphasise the importance of using innovative methods to improve identification accuracy.

Based on all the above studies, it can be concluded that this topic has been investigated by various researchers and they all considered different aspects and problems. In this paper, the emphasis is placed on reflecting all the important aspects of the problem and various solutions. At the same time, each study concludes that it is necessary to improve expert research in connection with the spread of artificial intelligence and methods of modifying.

Conclusions

Having conducted a study in the field of the problems related to forensic identification of person's appearance from video materials, theoretical and practical aspects of the research were highlighted. Firstly, it should be noted that the concepts of forensic identification are investigated. The

identification process is defined as a way to establish a causal relationship between two objects. In turn, forensic identification of a person by external features on video materials involves determining the oneness or absence of such features through portrait, operational, and investigative identification methods, using both recorded displays and eyewitness memories. It was established that the objects of such forensic research are photographs, videos, films, X-ray images, and the technical properties of the studied video materials.

Moreover, the object of research in forensic identification is complex and includes also an information carrier containing the studied video recording, that is, a video recording device. The methods that are used in forensic identification were established: descriptive comparison, mathematical, and graphical. Problems during the forensic identification were discovered. In practice, the key problematic aspects are outdated methods and approaches. The study of a video recording by decomposing it into separate photographic images leads to the loss of the possibility of studying dynamic features of person's appearance, such as gait, gestures, limp, leaving it possible to study only static features (face, body parts). In addition, a problematic factor is the lack of competence of specialists who take part in the study. Thus, a comprehensive approach to conducting forensic identification is required using the knowledge of specialists from different

branches: computer technology, video technical expertise, physiognomists, and criminologists.

The study emphasises that specific forensic identification methods, such as descriptive comparison, mathematical techniques, and graphical methods, are generally aligned with the current confidentiality legislation of the Kyrgyz Republic and Azerbaijan. These methods are consistent with the respective privacy laws, such as the Law on Personal Data in both countries, which mandates the secure and lawful handling of personal information used during forensic investigations. In addition, the guidelines for managing private data seem to be in line with the new laws in both countries, especially when it comes to forensic investigations.

The prospects for future research in this area should focus on enhancing automated forensic identification systems, addressing the legal implications of emerging technologies like AI, and developing more comprehensive guidelines for handling sensitive biometric data to further safeguard individual privacy.

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Conflict of interest

None.

References

- [1] Abbasov, N.I., & Abbasova, M.N. (2023). [Reasons for not detecting fingerprints on the objects of expert examination and ways to eliminate defects](#). *Pakistan Journal of Criminology*, 15(2), 323-340.
- [2] Abdrasulov, E., Akhmetov, Y., Abdrasulova, A., Tapakova, V., & Mutalyapova, A. (2024). Legal basis for the application of the principles of legality and justice in the system of administrative proceedings of the Republic of Kazakhstan. *Statute Law Review*, 45(2), article number hmae026. [doi: 10.1093/slr/hmae026](#).
- [3] Abdrasulov, E., Saktaganova, A., Saktaganova, I., Zhenissov, S., & Toleuov, Z. (2023). Legal awareness and its significance when determining the nature of a person's legal behaviour. *International Journal of Electronic Security and Digital Forensics*, 15(6), 578-590. [doi: 10.1504/IJESDF.2023.133960](#).
- [4] Badiye, A., Kathane, P., & Krishan, K. (2022). *Forensic gait analysis*. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK557684/>.
- [5] Baker, K.A., Stabile, V.J., & Mondloch, C.J. (2023). Stable individual differences in unfamiliar face identification: Evidence from simultaneous and sequential matching tasks. *Cognition*, 232, article number 105333. [doi: 10.1016/j.cognition.2022.105333](#).
- [6] Buhera, A. (2021). [Use of modern methods of human identification on the signs of appearance as an effective means of prevention and investigation of criminal offenses](#). In *Scientific and practical conference "Actual problems of forensic and expert support of activity law enforcement agencies and courts in Ukraine"* (pp. 86-88). Kharkiv: Public Policy and Social Sciences Research Institute.
- [7] Bureau of National Statistics. (2024). *Statistics of crime: Dynamic tables*. Retrieved from <https://stat.gov.kz/ru/industries/social-statistics/stat-crime/dynamic-tables/>.
- [8] Chashnytska, T.G. (2021). Problem issues of personal identification by materials video recording. *Scientific notes of Lviv University of Business and Law. Series "Economics." Series "Law"*, 29, 279-284. [doi: 10.5281/zenodo.5795769](#).
- [9] Chornous, Yu., & Leliuk, T. (2023). Organization of forensic examinations in criminal proceedings as a condition for the effectiveness of the investigation of criminal offences. *Law Journal of the National Academy of Internal Affairs*, 13(2), 50-62. [doi: 10.56215/naia-chasopis/2.2023.50](#).
- [10] Criminal Procedure Code of the Republic of Azerbaijan. (2000, July). Retrieved from https://www.e-qanun.az/framework/46950#_edn1.
- [11] Decision of the Cabinet of Ministers of the Republic of Azerbaijan No. 227 "On the Approval of the "Rules for Maintaining the State Register of Forensic Expertise Research Methods and Entering New Methods into that Register". (2020, June). Retrieved from <https://e-qanun.az/framework/45314>.
- [12] Decision of the Cabinet of Ministers of the Republic of Azerbaijan No. 228 "On the Approval of the "Rules for the Creation and Use of the Methodical Fund of Forensic Expertise". (2020, June). Retrieved from <https://e-qanun.az/framework/45315>.
- [13] Fjellström, L. (2021). [The contribution of visual explanations in forensic investigations of deepfake video: An evaluation](#). (Master thesis, Umea University, Umea, Sweden).
- [14] Gavilanes, P., Carrillo, J., & Galarza, E. (2022). Person Re-Identification system in a controlled environment based on soft biometric features: Clothing colour and body silhouette collected on short video sequences using computer vision and machine learning algorithms. In *2022 third international conference on information systems and software technologies (ICI2ST)* (pp. 14-20). Piscataway: IEEE. [doi: 10.1109/ICI2ST57350.2022.00010](#).

- [15] Iswardani, A., & Sudiby, N.A. (2020). Forensic readiness analysis of CCTV system in Surakarta. *International Journal of Computer Applications*, 177(30), 36-38. doi: /10.5120/ijca2020919786.
- [16] Kaur, P., Krishan, K., Sharma, S.K., & Kanchan, T. (2020). Facial-recognition algorithms: A literature review. *Medicine, Science and the Law*, 60(2), 131-139. doi: 10.1177/0025802419893168.
- [17] Kobets, M. (2023). Extraction of information from a cellular phone (mobile communication device) during investigative (search) actions. *Scientific Journal of the National Academy of Internal Affairs*, 28(2), 52-60. doi: 10.56215/naia-herald/2.2023.52.
- [18] Kozhevnikov, O.A. (2020). *Features of complex use of special knowledge and OSINT technologies*. In *Application of information technologies in the activities of law enforcement bodies* (pp. 52-54). Kharkiv: Kharkiv National University of Internal Affairs.
- [19] Law of the Republic of Azerbaijan “On Forensic Expert Activity”. (1999, November). Retrieved from https://e-qanun.az/framework/91#_edn1.
- [20] Law of the Republic of Azerbaijan No. 998-IIIQ “On Personal Data”. (2010, May). Retrieved from https://online.zakon.kz/Document/?doc_id=30774627&doc_id2=30774631#pos=5;-106.5&pos2=0;0.
- [21] Law of the Republic of Kazakhstan No. 94-V “On Personal Data and Their Protection”. (2013, May). Retrieved from https://online.zakon.kz/Document/?doc_id=31396226&pos=3;-106#pos=3;-106.
- [22] Legal Statistics. (2024). *Pre-trial investigations started*. Retrieved from <https://qamqor.gov.kz/crimestat/indicators/criminal>.
- [23] León-Mendoza, R. (2019). What does an image prove? *Artnodes*, 24, 53-63. doi: 10.7238/a.v0i24.3207.
- [24] Lorkiewicz-Muszynska, D., Rychlik, M., Sidor, T., Szalapski, R., Przystanska, A., Sroka, A., Labecka, M., Swiderski, P., & Polaszek, S. (2015). Anthropometric and anthroposcopic analysis of face and body in forensic identification of living persons from video monitoring. In *23rd congress of the International Academy of Legal Medicine* (pp. 254-256). Dubai: International Academy of Legal Medicine. doi: /10.13140/2.1.1566.2403.
- [25] Malchenko, A. (2018). *How video from cameras improve crime prevention and detection statistics*. Retrieved from <https://mk-kz.kz/incident/2018/04/18/kak-video-s-kamer-uluchshayut-statistiku-predotvrashheniya-i-raskryvaemosti-prestupleniy.html>.
- [26] Model Instruction on the Confidentiality of Personal Information on Victims of Trafficking in Human Beings. (2019, September). Retrieved from <https://cbd.minjust.gov.kg/22-265/edition/1116713/ru>.
- [27] Pilyukov, Yu., Yusupov, V., Banakh, S., & Shramko, O. (2023). *Peculiarities of the investigator's inspection of buildings and structures subjected to artillery shelling and bombing during the investigation of war crimes*. *Law, Policy and Security*, 1(1), 41-54.
- [28] Podoprigora, R., Apakhayev, N., Zhatkanbayeva, A., Baimakhanova, D., Kim, E.P., & Sartayeva, K.R. (2019). Religious freedom and human rights in Kazakhstan. *Statute Law Review*, 40(2), 113-127. doi: 10.1093/slr/hmx024.
- [29] Poirier B., Charbonneau, É., & Boivin, R. (2024). Police body-worn cameras and privacy: Views and concerns of officers and citizens. *International Journal of Police Science & Management*, 26(2), 170-181. doi: 10.1177/14613557231214383.
- [30] Resolution of the Government of the Republic of Kazakhstan No. 429 “On Approval of the Rules of Classification of Information as Official Information of Limited Dissemination and its Handling”. (2022, June). Retrieved from <https://adilet.zan.kz/rus/docs/P2200000429>.
- [31] Singh, A., & Mohan, N. (2020). *Analysis of forensic video extraction using reverse*. *European Journal of Molecular & Clinical Medicine*, 7(4), 401-407.
- [32] The number of video cameras in Almaty will increase by almost 30 per cent. (2024). Retrieved from <https://vecher.kz/ru/article/v-almaty-kolichestvo-videokameruvelichitsia-pochti-na-30.html>.
- [33] The State Statistical Committee of the Republic of Azerbaijan. (2024). *Crime and offence*. Retrieved from <https://www.stat.gov.az/source/crimes/>.
- [34] What type of crime is the most common in Kazakhstan. (2021). Retrieved from https://forbes.kz/news/2021/05/24/newsid_250439.
- [35] Yukhno, O., Fedosova, O., Martovytska, O., Sezonov, V., & Sezonova, I. (2023). Solving the problem of forensic identification of a person's appearance based on video materials: An integrated approach. *Revista de Direito, Estado e Telecomunicacoes*, 15(1), 106-121. doi: 10.26512/lstr.v15i1.43472.
- [36] Zavotpayev, A.R., Khan, V.V., & Eremeev, D.V. (2023). The crucial role of timely forensic examinations in investigating crimes against the sexual integrity of minors: A case study of Kazakhstan's forensic analysis system. *Studia Iuridica Lublinensia*, 32(2), 133-148. doi: 10.17951/sil.2023.32.2.133-148.
- [37] Zeng, J., Qiu, X., Shi, S., & Bian, X. (2022). Forensic human image identification using medical indicators. *Forensic Science Research*, 7(4), 808-814. doi: 10.1080/20961790.2020.1838252.

Методологічні проблеми та соціальні ризики порушення приватності в процесі криміналістичної ідентифікації осіб за відеоматеріалами

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Анотація. Актуальність цього дослідження була зумовлена гострою необхідністю підвищення ефективності боротьби зі злочинністю з одночасним забезпеченням недоторканності приватного життя особи. Таким чином, метою дослідження було вивчення всіх аспектів проведення криміналістичного впізнання особи за відеоматеріалами, а саме: теоретичного, який охоплює характерні особливості та принципи цього виду діяльності, та практичного, який показує реалізацію закріплених принципів при проведенні цієї слідчої дії. У дослідженні були використані різні методологічні теоретичні та практичні підходи, необхідні для найбільш повного та ефективного розгляду цього питання, а саме: теоретико-методологічний підхід, аналіз та порівняльний аналіз, функціонально-методологічний підхід. У ході дослідження комплексного підходу до вирішення проблеми криміналістичної ідентифікації зовнішності людини за відеоматеріалами було розглянуто такі аспекти: теоретична складова у визначенні поняття, характерні ознаки та принципи проведення криміналістичної ідентифікації зовнішності людини за відеоматеріалами, досвід дослідників щодо цього питання та узгодження методів криміналістичної ідентифікації з нормами приватності в контексті чинного законодавства Киргизької Республіки та Азербайджану. Практичне значення дослідження полягає в тому, що його результати можуть бути використані правоохоронними органами, судовими експертами та юристами як Киргизької Республіки, так і Азербайджану для вдосконалення процесів криміналістичної ідентифікації, забезпечення дотримання законодавства про захист приватності та підвищення ефективності розслідування злочинів з використанням відеоматеріалів

Ключові слова: тіло людини; судово-медична експертиза; носії портретної інформації; кримінальні правопорушення; функціональні особливості; стандарти конфіденційності