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Hungarian Law Enforcement

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Editorial Greetings

The need for internationalisation is becoming increasingly prominent in today's academic discourse. Global challenges such as terrorism, illegal migration, technological crime or climate change go far beyond national borders. Accordingly, policing, security policy and related disciplines can no longer be understood in purely national terms. International cooperation and knowledge sharing in the field of law enforcement and police science are therefore not only useful but also essential for modern scientific thinking and practice.

Science is transnational by nature. Cognition, understanding, theoretical and practical knowledge have always transcended linguistic, cultural or political boundaries. Law enforcement is no exception. Although each country has its own legal, cultural and institutional systems, security as a basic human need means a fundamental value to all societies, making the comparison and sharing of law enforcement practices, methods and theories particularly beneficial for all nations.

The most important areas for internationalisation are education and scientific research. Providing the opportunity to learn about other countries' law enforcement systems, research directions, practices and methodologies for Hungarian law enforcement professionals, students and academics is crucial for the practice-oriented Hungarian law enforcement higher education that also provides broad theoretical knowledge.

The aim of the *Magyar Rendészet* [Hungarian Law Enforcement] is to be the leading forum for Hungarian police science, while at the same time we constantly strive to contribute to the international discourse. To this end, we regularly publish their studies in foreign languages, support the publication of foreign authors, and encourage members of the Hungarian academic community to include international results and examples in their analyses, and to contribute to the international knowledge base with their studies in foreign languages. Our main objective is to contribute to the expansion of international contacts between Hungarian scientific and professional communities and to promote effective and mutually beneficial cooperation between Hungarian and foreign experts.

We are convinced that all these will significantly contribute to increasing the visibility and recognition of Hungarian researchers and professionals. Internationalisation is not just a formal or technical issue. Presenting foreign knowledge and experience in Hungarian forums and making Hungarian results available in a foreign language also demonstrates an intellectual approach: curiosity, openness and willingness to cooperate. It shows that we are not only willing to learn from others, but also to offer our knowledge, experience and results in the common scientific space.

The special issue of the *Magyar Rendészet* [Hungarian Law Enforcement] 2024 will feature the most outstanding papers of the speakers of the IV Ludovika International Law Enforcement Symposium (LILERS). The LILERS international conference,

organised every year by the Ludovika University of Public Service, aims to promote dialogue between domestic and foreign researchers and law enforcement professionals and to share existing knowledge and experience. In this special issue of our journal, the latest analyses and findings in the field of law enforcement and related disciplines presented at the conference are published.

On behalf of the editorial team of the *Magyar Rendészet* [Hungarian Law Enforcement], I would like to thank our authors and reviewers for their work, as well as our readers for their attention and support.

Once again, we wish you a rich issue and a good read!

Budapest, 7 May 2025

Regards
László Christián, PhD, Police Brigadier
GeneralProfessor and Head of Department
Editor-in-Chief

Intellectual Property Infringements

Risks and Dangers behind the Phenomenon

Olivér Tamás CSIKI[1]

The aim is to demonstrate the importance of protecting and enforcing intellectual property rights (IPRs) from different perspectives, not only within the dimension of the European Union (EU) but also in relation to certain global actors. The research looked at specific product categories, and their threats to determine which products pose a direct or indirect threat or risk to users, consumers, or the environment. It also focused on the connection with other serious crimes.

The research systematically collected, analysed and evaluated reports and studies that are part of the relevant international literature.

The study is based on comprehensive statistics and reports published by the European Union Intellectual Property Office (EUIPO), the Organisation for Economic Co-operation and Development (OECD), the World Customs Organisation (WCO) and other relevant EU and non-EU organisations.

The IPRs are crucial for the economy of the EU. The IP sensitive industry is responsible for 47.1% of the GDP and 29.7% of employment. On average, 13% of citizens in the 27 EU countries have intentionally bought counterfeit products, during the period under review. The analysis reveals numerous harmful consequences of counterfeiting, such as endangering the health and lives of consumers, non-fulfilment of state revenues and the damage caused to economic operators. In addition to an overview of the problems and an assessment of the hazards, the author has also considered the responses and suggestions for solutions from public – law enforcement authorities and the private sector.

Given that the proportion of people aged 15 to 24 who deliberately bought counterfeit goods was twice as high as the average of the EU citizens of all ages, in cooperation with the IP enforcement community, particular attention should be paid to awareness-raising and training and education of youngsters.

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The conclusions drawn from the results of this work, regardless of their source, are the author's own and do not necessarily reflect the official position or opinion of the Hungarian National Tax and Customs Administration (NTCA) or of the EUIPO. The publication was prepared with the support of the Scientific Council of the NTCA.

Keywords: intellectual property rights, EUIPO, counterfeiting, cooperation, support, polycriminality, EMPACT

Introduction

The threat of counterfeiting is manifold and well documented, but the real scale of the threat can only be based on assumptions. To get around this, it is worth reviewing the relevant literature at a global level first and then moving to a regional level. According to the Belgium-based World Customs Organization (hereinafter: WCO) report, 43.7 million pieces of counterfeit goods were seized in 2022,[2] while in 2023,[3] 98 million pieces. The reports treat medical and pharmaceutical products separately, with 5,442 seizures of 221 million pieces and 195 tonnes in 2022 and 4,434 seizures of 158 million pieces and 338 tonnes in 2023. It should be noted that these figures exclude the last two quarters of seizure data from the United States of America for the year 2023.

According to a joint study[4] by the European Union Intellectual Property Office (hereinafter: EUIPO) and the Organisation for Economic Co-operation and Development (hereinafter: OECD), in 2019, around 2.5% of world trade was affected by counterfeiting and piracy, equivalent to approximately €412 billion, and 5.8% of EU imports were affected by counterfeiting and piracy in the same year, equivalent to €119 billion. More information on the European Union (hereinafter: EU) figures is available by reviewing the latest edition of the so-called detention report[5] produced as a result of the joint work of the Directorate-General for Taxation and Customs Union (DG TAXUD) of the European Commission (hereinafter: EC) and the EUIPO.

On average, nearly 80 million items are detained or seized annually by EU authorities in the internal market (dark blue) or through customs procedures (light blue). The yellow line represents the value of the goods seized/detained, which is around €2–2.5 billion. The assumed volume of EU imports and the amount of goods seized or detained by the authorities, and the unknown amount of intentional or negligent purchases of counterfeit products, put the EU economy as a whole at risk. A report[6] on the IPR-intensive sectors of the economy, jointly compiled by the European Patent Office (EPO) and the EUIPO, finds that these sectors accounted for, on average, nearly 30% of the jobs in the EU and 47% of Gross Domestic Product (GDP) in the period under review (2017–2019). This translates into 61 million jobs and €6.4 trillion.

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[2]   World Customs Organization 2023: 187.
[3]   World Customs Organization 2024a: 170.
[4]   European Union Intellectual Property Office – Organisation for Economic Co-operation and Development 2021: 4.
[5]   European Union Intellectual Property Office 2023a.
[6]   European Union Intellectual Property Office – European Patent Office 2022: 17.
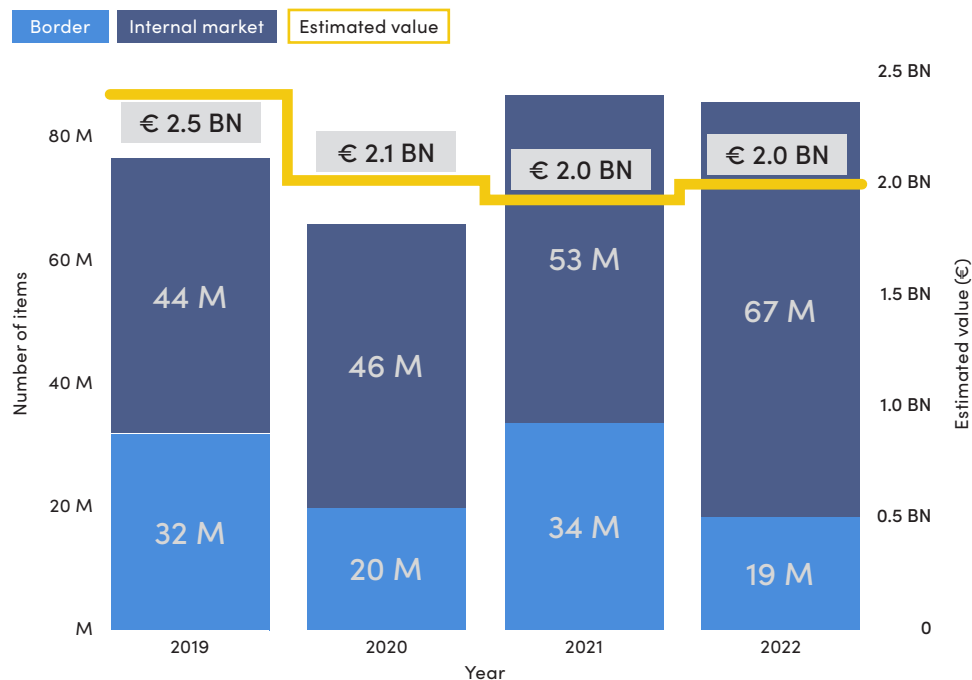
Figure 1: Enforcement of intellectual property rights in the EU: results at EU borders and in the EU internal market in 2022
Source: European Union Intellectual Property Office 2023a

However, the economic interests at stake are secondary to the risks and dangers to the life and physical safety of citizens. A study[7] published by the EUIPO provides a summary of the numerous alerts transmitted through the EC Rapid Exchange of Information (RAPEX) system on potentially dangerous products that carry the potential for electric shock, choking, fire, hearing damage and other injuries. From 13 December 2024, the RAPEX system will be known as the Safety Gate Raid Alert System in view of the Regulation (EU) 2023/988 of the European Parliament and of the Council of 10 May 2023 on general product safety. This system contains information on non-food commodities, with the exception of healthcare products. In the context of the warning messages, it will be possible to indicate whether the product is counterfeit or not. Product categories include, among others:

- clothing, textiles and fashion items
- cosmetics
- motor vehicles
- toys

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[7]   European Union Intellectual Property Office 2019.

In this work the different categories will be reviewed in line with the above categories in order to identify the threats to consumers. At the same time, some other product categories not mentioned are also included, in view of their potential negative impact on the population and possibly on the environment. In this process, not only the above-mentioned report has to be relied upon, but also more reports and studies will be systematically collected, analysed and evaluated as part of a secondary research, as part of the relevant international literature, have been used, complemented by the author's professional experience.

Products posing the greatest risk

We are facing a phenomenon of complex risks[8] from multiple sources. Counterfeit products pose a threat to the economy, the personal safety of consumers and the natural environment. The aim of this work is not to quantify specific risks, but rather to evaluate the characteristics, scale and potential impact of damage across the following product categories:
- toys
- clothes, cosmetics
- healthcare products
- plant protection products, improved plant varieties
- food and drink
- spare parts
- semiconductors

Toys

The threat is described in detail by the European Union Agency for Law Enforcement Cooperation (hereinafter: Europol) in its report[9] on international law enforcement operation LUDUS I. Two thirds of the seized goods were toys for babies, the most vulnerable members of society, which were put at increased risk of choking or poisoning due to the use of poor-quality paint of unknown origin. The results of the operation coordinated jointly with the EUIPO and OLAF can help in assessing the scale of the phenomenon. Operation LUDUS I, which ran from 19 October 2020 to 31 January 2021, involved 24 countries and resulted in 4,768 checks and seizures of nearly 5 million items – of which nearly 10% were counterfeit – worth €16 million. A total of 11 people were arrested. According to the EUIPO study[10] focusing on specific sectors, the toy sector is smaller than the clothing and cosmetics sectors, but it suffers from the highest loss of sales due to counterfeiting in the period under review (2018–2021). This loss represented an 8.7% drop in sales, a loss of €1 trillion and 3,600 job losses.

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[8]   Csaba–Gecsei 2021: 134.
[9]   European Union Agency for Law Enforcement Cooperation 2022a: 14.
[10]   European Union Intellectual Property Office 2024a: 7.
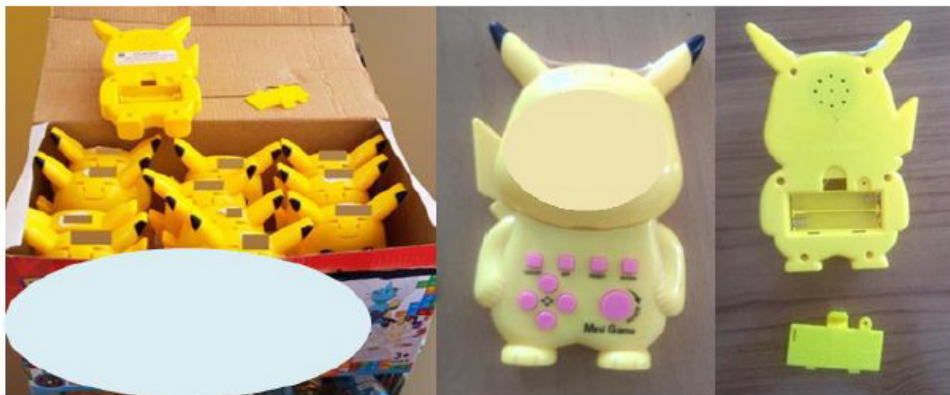
Figure 2: Dangerous, fake children's toys
Source: RAPEX 2017

The EUIPO study[11] focusing on products that pose a risk to users describes a case study in which the Cypriot market surveillance authorities found a battery-powered multifunctional toy that infringed IPRs. The panel holding the batteries was not properly fixed as shown in the Figure 2, making the batteries accessible and even ingestible by children. The toy did not comply with the relevant toy safety directive requirements.

Clothes, cosmetics

Both categories were merged for the purposes of the analysis, as they were the unified scope of the international law enforcement operations Fake Star.[12] The operation, coordinated by the Spanish Policia Nacional, involved authorities from a further 18 countries and was supported by a number of EU agencies – Europol, OLAF, EUIPO and the European Union Agency for Criminal Justice Cooperation (EUROJUST) – to ensure its success. While the first operation seized nearly 2 million counterfeit products worth €87 million with 378 arrests, the second operation seized nearly 14 million counterfeit products worth €121 million with 264 arrests. The vast majority of the products seized[13] – nearly 8.5 million items – were counterfeit clothing, footwear and accessories, but also included counterfeit toothpaste, detergent, bed linen and even lighters. A common characteristic is that these products are in direct contact with the user and that the unauthorised chemical ingredients of unknown origin can be dangerous to the health of users. According to the aforementioned EUIPO study[14] focusing on specific sectors, the clothing sector recorded a 5.2% drop in sales due to counterfeit goods over the period under review (2018–2021), which translates into a loss of €12 billion in revenue and 160,000 job losses.

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[11] European Union Intellectual Property Office 2019: 29.
[12] European Union Intellectual Property Office 2023b.
[13] European Union Intellectual Property Office 2023b.
[14] European Union Intellectual Property Office 2024a: 27.

Figure 3: Dangerous, counterfeit clothing and cosmetics
Source: RAPEX 2015a

The EUIPO study[15] includes case studies in both categories. The counterfeit children's sports clothing shown in the Figure 3 was found by the Bulgarian authorities and as the cords of the hood are too long, they could get caught and cause strangulation, for example during play. The findings of a report by the Spanish Asociación Nacional de Perfumería y Cosmética (hereinafter: STANPA) on counterfeit cosmetics are also presented. The laboratory commissioned by STANPA tested one genuine and one fake perfume. It was found that the original product contained 36 compounds, of which only 14 were present in the counterfeit product at lower concentrations. The other compounds did not match those in the original product and therefore pose a chemical hazard risk as the product, making it dangerous as it was likely not authorised. During the investigation, several samples were checked, and it was found that "diethylene glycol, found exclusively in the counterfeits, is a toxic substance whose use, beyond mere traces is forbidden in cosmetics".

Healthcare products

The international law enforcement operation, code-named STOP III, took place between 4 and 15 December 2023 with the participation of 111 customs authorities. The operation was coordinated by the WCO, with the International Olympic Committee (IOC), OLAF and the International Criminal Police Organization (Interpol) as partners. Preparatory meetings were held prior to the operation, with 230 participants. During the operation,[16] 48 customs authorities reported detections, representing 894 cases and 1,488 seizures, representing more than 45 million seized products, of which 43.5 million were illicit medicines and medical devices and 1.1 million goods infringing IPRs.

A joint EUIPO–OECD report[17] identified a number of harmful effects of trade in counterfeit medicines. It is estimated that between 72,000 and 169,000 children die each year from pneumonia and an additional 116,000 deaths linked to malaria derive from treatment with counterfeit medicines. The reputation of the legal participants in

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[15]   European Union Intellectual Property Office 2019: 23.
[16]   World Customs Organization 2024b.
[17]   European Union Intellectual Property Office – Organisation for Economic Co-operation and Development 2020: 12.

the pharmaceutical market is damaged by the counterfeit products. More than 80,000 jobs in the sector are at risk. At the national level, a significant loss of revenue could be as high as €1.7 trillion for EU Member States. Further harm to the health of patients treated with counterfeit medicines will mean additional costs for national level budgets. The production of counterfeit products can lead to serious environmental – toxic – contamination. During the Covid–19 pandemic, it became evident that organised crime groups (hereinafter: OCGs) can adapt very quickly to changes in circumstances and new business opportunities. Fake or poor quality medical and personal protective equipment was sold online and offline, and even managed to penetrate the legal supply chain. Fake Covid–19 vaccines were also identified later in the pandemic, according to the joint EUIPO and Europol study.[18]

Plant protection products, improved plant varieties

A mention of pesticides is essential in the context of adulteration and environmental damage. Pesticides are a highly controlled product, as unknown, unauthorised or untested active substances pose a serious threat to the environment through severe toxic pollution, primarily to soil and groundwater, and to human life and health. The entire food supply chain is under threat, both economically and reputationally. The number of people who are at risk caused by the movement of illegal chemical goods or a traffic accident is also worth mentioning, as they may come into contact with chemicals of unknown origin and chemical properties – e.g. firefighters. In recognition of this, the eighth edition of the international law enforcement operation Silver Axe has taken place involving authorities from 32 countries and several EU bodies, as well as the private sector. In the end, more than 2,000 tonnes of illegal pesticides were seized, resulting in the withdrawal of nearly 7,000 tonnes from the market since the start of the operation.[19] Understanding the danger posed by the seized quantity can be aided by information shared during a previous operation,[20] which revealed that 360 tons of counterfeit pesticides could be enough to spray 48,000 square kilometres, an area approaching the size of the United Kingdom's arable land.

In the author's view, the range of products can be associated with improved plant varieties that can be protected by plant variety rights (hereinafter: PVRs). The topic is linked to a much more complex issue, or more precisely, challenge. There is growing support from society at large for protecting our environment and tackling the degradation and climate change that is affecting the whole planet. This has also been recognised by EU policy makers and is partly the reason for the European Green Deal.[21] Improved crop varieties are particularly important in achieving the desired goals, as they can have a number of remarkable characteristics such as more intensive drought tolerance, reduced water requirements or higher yields. These characteristics[22] are particularly important in

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[18] European Union Intellectual Property Office 2022: 22.
[19] European Union Agency for Law Enforcement Cooperation 2023b.
[20] European Union Agency for Law Enforcement Cooperation 2018a.
[21] European Commission 2019.
[22] International Seed Federation 2017.

the light of what experts predict for the 2050s, such as a population of almost 9 billion, decreasing land capacity or increasing water demand. Protecting PVRs is key to sufficient food supply and food safety. Adulteration in this area is both a threat to food safety and a threat to the investment of plant breeders, which can only be profitable in the longer term due to the long research and development (R&D) period.

EUIPO has carried out a joint study[23] with the Community Plant Variety Office (CPVO), – the EU institution responsible for the administration of the Community Plant Variety Right (hereinafter: CPVR) system – to gain a broader understanding of the characteristics of the area. The study concludes that without CPVR, an IPR, EU citizens would face higher food prices. The innovation protected by the CPVR provides food (fruits, vegetables, etc.) to tens of millions of people. On the economic side, it generates approximately 90,000 direct jobs, while indirectly the sector has an impact on 800,000 jobs and its contribution to GDP is estimated at €13 billion. On the environmental side, impressive figures are also available, with annual greenhouse gas (GHG) emissions reduced by 62 tonnes. This amount is almost equal to the total greenhouse gas emissions of Hungary, Ireland or Portugal. In addition, water use in agriculture and horticulture is reduced by more than 14 billion cubic metres, which is the equivalent of a third of the volume of Lake Constance. Infringements threaten the innovations that secure these results.

Food and drink

In the context of food safety, it is inevitable to review the OPSON series of operations to combat substandard or counterfeit food and beverages intended for human consumption, which was conducted for the 12th time in 2023, with the participation of EU agencies and the private sector, as well as 25 Member States. Thanks to 400 checks reported[24] to Europol, 6 criminal networks were dismantled, 8,000 tonnes of illicit products and 6.5 million litres of mostly alcoholic liquids were removed from the market, among other things. The range of products seized is very wide, which also serves to raise awareness of the scale of the phenomenon. In addition to the alcoholic beverages already mentioned, cereals and cereal products, sweets, fruits, meat, dairy products and food supplements were also affected. The modus operandi is broad, for example, relabelling of expired products or preventing the traceability of the origin of the product. In terms of IPRs, infringements of geographical indications (hereinafter: GI) are the most common, where protected designations of origin (PDO) or protected geographical indications (PGI) are infringed. Examples include a cheese protected by a GI which is not produced in the way that is typical of the region, is not made from the specified raw material or is not produced there. There is no link between the quality characteristics of the product and its region of origin, which is typical of a legitimate product.

The above shows that counterfeit, poor quality food and drink products pose a particularly significant threat because of the wide range of products that can reach consumers once they enter the legal supply chain. Although the following example fortunately does not illustrate this, the dangerous fake product did not enter the legal supply chain, but it

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[23]   Community Plant Variety Office – European Union Intellectual Property Office 2022: 9.
[24]   European Union Agency for Law Enforcement Cooperation 2023c.

did reach a small group of consumers and caused a disaster. Just before Christmas 2017, nearly 20 people in Eastern Hungary were hospitalised with symptoms of poisoning. The investigation[25] found that the unknown composition of alcoholic liquid came from the same place and was sold in bottles of original alcohol products by a local offender who produced poisonous drinks on his farm. Two of the victims taken to hospital later died.

Spare parts

Continuing with the overview of the broad categories of products that pose a risk, the danger posed by counterfeit car parts deserves particular attention. Furthermore, the importance of this sector is critical for the EU economy. In order to map and better understand the phenomenon and to enhance cooperation, operation Spare Off was implemented in 2022.[26] In addition to the 18 participating countries, EU agencies and the private sector have contributed to achieving the objectives. Many dangerous items were identified during the operation, such as body and crash parts (e.g. bumpers, brake pads), safety equipment (e.g. airbags), diagnostic equipment and software or other related products such as mugs, key rings, caps, etc.

The Europol report[27] from 2023, which assesses the threat posed by financial and economic crime, specifically mentions counterfeit car parts as a growing threat to safety and the environment. One of the biggest dangers, as with food and medicines, is that these counterfeit products can enter the legal supply chain and reach an even wider range of users. Counterfeit products pose a threat not only to those who buy and use them, but also to other road users. The use of counterfeit diagnostic tools carries the risk that incorrectly calibrated equipment and components will not work according to the manufacturer's parameters, endangering the user and polluting the environment, for example in the case of potentially unjustified increases in fuel consumption and emissions. In its study on the potential risks to users, the EUIPO gives the example of counterfeit branded racing

Figure 4: Finding a product with a re-labelled expiry date – excerpt from an awareness-raising video
Source: European Union Agency for Law Enforcement Cooperation 2018b

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25   Police Headquarters of Hajdú-Bihar County 2017.
26   European Union Intellectual Property Office – European Union Agency for Law Enforcement Cooperation 2022.
27   European Union Agency for Law Enforcement Cooperation 2023a: 43.

harnesses. These posed a serious risk of injury as the harness could fail at several points and the passenger could be thrown from the vehicle in the event of an accident.

Figure 5: Car parts potentially involved in counterfeiting
Source: RAPEX 2015b

Semiconductors

In the context of the aforementioned large-scale threat, the aftermath of the Covid–19 pandemic and the risk of infiltration into the legal supply chain, it is essential to review counterfeit semiconductor products. The protection of topographies of semiconductor products is a specific form of IPR, the purpose of which "is to prevent original microchip or integrated circuit designs from being copied and subsequently commercialised, either as they are, or in any product in which they are incorporated" according to a summary of Directive 87/54/EEC[28] on the legal protection of topographies of semiconductor products. Semiconductors are becoming an increasingly important commodity, essential components of the electronic devices that make our lives easier. Industrial production declined as a result of the Covid–19 pandemic, and after the pandemic, the production could not

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[28]   European Union 2020.

keep up with the sudden increase in demand. Even though more than 1 trillion microchips were produced in 2021, the automotive industry, for example, suffered from a shortage.

Shortage and demand are the watchwords for OCGs, capable of rapid adaptation, as already seen in the case of healthcare products. This is of course known to enforcement bodies, which is why an international conference[29] on the subject was held in 2022 in cooperation between OLAF and the EUIPO. The already cited Europol report[30] also assesses the threat to the sector, as the infiltration of counterfeit semiconductors into the legal supply chain can cause failures in critical infrastructure, endangering health, transport and even military defence systems. For example, in case of an aircraft involved in air transport, where dozens of passengers may be killed, or in case of a submarine related to the military industry, where the lives of the crew and the vessel, which is of significant value, may be at critical risk of failure due to the use of a counterfeit component. For private devices, the possibility of data theft or loss could increase.

Possible attempts at a solution

The risks to consumers' lives and health, economic damage and lost revenues have all led policy makers to respond to this threat, which is why they have included IP crime as part of the priorities of the four years long policy cycle, European Multidisciplinary Platform Against Criminal Threats, better known as EMPACT.[31] This policy cycle provides a clear concept, a management environment to set, implement and evaluate priorities in the fight against organised and serious international crime, such as IP crime. The ultimate objective is to tackle – identify, prioritise and address – the most important threats with the cooperation of the IP enforcement community (including the EUIPO, EU law enforcement bodies, private sector and the competent authorities of the Member States). The current cycle expires at the end of 2025. The European Council (EC) is expected to decide on the priorities for the next cycle (2026–2029) in 2025. The decision relies heavily on the Serious and Organised Crime Threat Assessment (SOCTA) report,[32] prepared by Europol.

Keeping IP crime within EMPACT priorities is one of the main goals for the IP enforcement community.

This intelligence-led and evidence-based EU initiative was first implemented in 2012. Based on the priorities, the Operational Action Plans (OAPs) have specific operational actions to tackle specific crime areas, such the above-mentioned international operations: OPSON, Fake Star or Spare Off. One of the most important goals is to gather, exchange and cross-check information to act as effectively as possible against the threat. This element is crucial to detect any relation, any link to other criminal activities. In relation with the current study, the term *polycriminality* means that OCGs are involved in more than one criminal activity. As counterfeiting is a very lucrative illegal activity with high profit and relatively low risks – low chance of detection and lower sentences compared to other

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[29]   European Anti-Fraud Office – European Union Intellectual Property Office 2022.
[30]   European Union Intellectual Property Office 2022: 13.
[31]   European Union Agency for Law Enforcement Cooperation 2022b.
[32]   European Union Agency for Law Enforcement Cooperation 2025.

Involvement of OCGs active in the EU in different crime areas
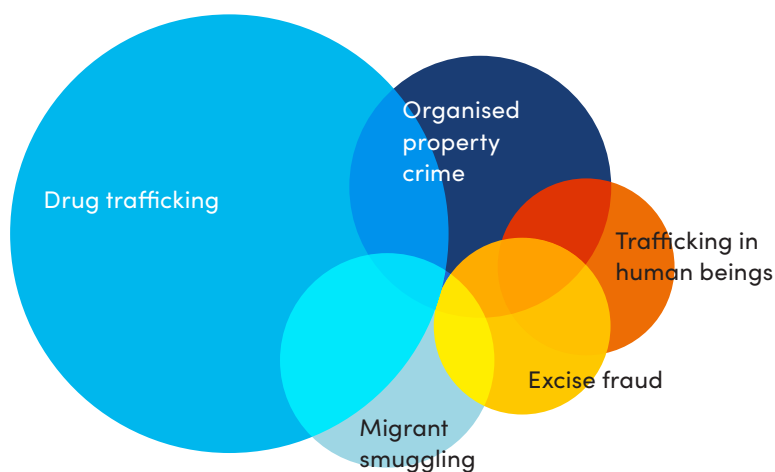
Figure 6: Representation of polycriminality by OCGs
Source: European Union Agency for Law Enforcement Cooperation 2017

types of crime –, it offers a great opportunity for OCGs, to support one criminal activity with another or run parallel activities. These linkages are described in detail, along with a number of specific examples, in a joint EUIPO and Europol report[33] on polycriminality.

In addition to IP offences, other crimes that occur most frequently include money laundering, drug production and trafficking, and VAT fraud. This was the case in the context of the Love2shop case,[34] where the perpetrator was arrested and charged with fraud and money laundering in the United Kingdom. The IP criminal created a deceptive, fraudulent website that closely resembled the legitimate Love2Shop site and linked it to a domain name nearly identical to the original. Through this misleading website, he managed to obtain the details of 12,000 credit cards and nearly 200 PayPal accounts.

In conclusion, EMPACT provides better visibility, effective cooperation and joint action, which help to facilitate awareness-raising activities. An example of this is the publication[35] of the EMPACT achievements for the year 2023, which shows that 1,096 arrests and 1,406 investigations were initiated in that year. The various operations, some of which are described below, resulted in the seizure of 25.4 million counterfeit cosmetics and body care items, 8.5 million counterfeit clothes and garments, 2,040 tonnes of fake or illegal pesticides and €19 million of toys packages. As the Silver Axe operation against illegal pesticides was not carried out under the EMPACT umbrella, the results of the operation may have been misreported.

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[33]   European Union Intellectual Property Office 2020: 4.
[34]   BBC News 2021.
[35]   General Secretariat of the Council of the European Union 2023: 27.
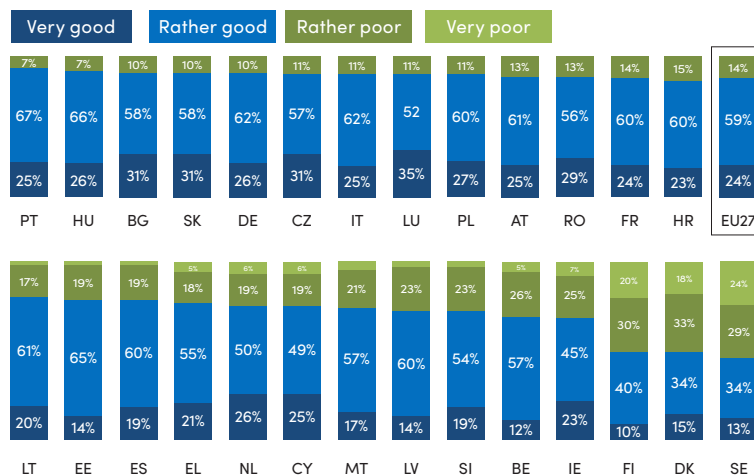
Q1: Personally, would you say that you have a very good, rather good, rather poor or very poor understanding of the meaning of the term "intellectual property"? (Total base; n = 25,824)

Figure 7: Understanding of the term IRP by EU countries
Source: European Union Intellectual Property Office 2023c

Society's attitude to the phenomenon

It can be concluded from the above that the key to effective response is broad cooperation, which should not happen without consumer involvement. In this respect, it is necessary to review their attitudes towards counterfeit products. According to the latest EUIPO IP Perception Study,[36] the proportion of people who claim they understand IP 'very good' or 'rather good' ranges from 92% in Portugal and Hungary to 47% in Sweden.

Across the 27 EU Member States, the average percentage of a good – including "very good" or "rather good" – understanding of IP is 83%, but more importantly the intent to buy counterfeit goods among EU citizens is 13% on average across Member States. The prevalence of self-declared purchases of counterfeit goods varies widely from country to country. They range from 8% in Finland to 24% in Bulgaria.

The study looked at the intention to buy counterfeit goods by age group and found that the younger generations, particularly those aged 15–24, are twice as likely to buy counterfeit goods (26%) as the EU average (13%).

This attitude is consistent with the findings of the latest EUIPO study[37] about online copyright infringement: "A higher proportion of young people tends to lead to an increase in piracy."

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[36]   European Union Intellectual Property Office 2023c: 27.
[37]   European Union Intellectual Property Office 2023d: 75.

Conclusion

A review of the range of product categories shows that some counterfeit products pose a direct risk to the user, while others can cause significant problems more widely. What is common, however, is that all counterfeit products indirectly have a negative impact on economic operators and public tax revenues. For example, in Hungary, more than 50% of GDP and more than 30% of jobs are linked to the economic activity of legal operators on the market, which is threatened by counterfeiting.
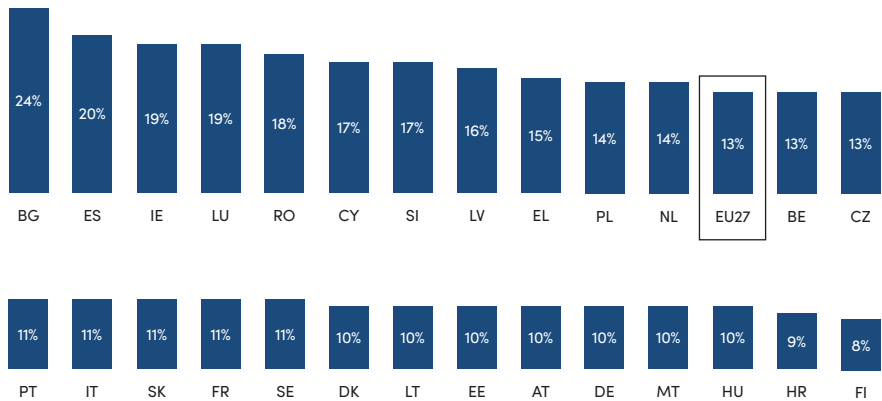
Q4a: During the past 12 months, which of the following have you done? (Total base; n = 25,824) – Percentage yes

Figure 8: Intentional buyers of counterfeit goods by country
Source: European Union Intellectual Property Office 2023c
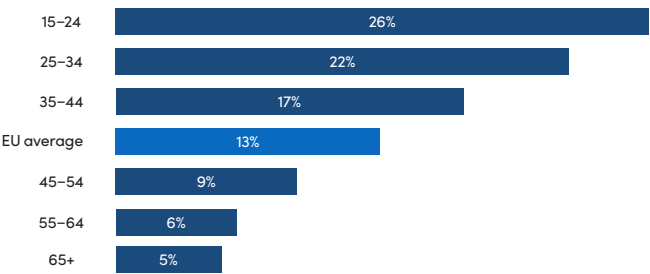
Q4a: During the past 12 months, which of the following have you done? (Total base; n = 25,824) – Percentage yes

Figure 9: Intentional buyers of counterfeit goods by age
Source: European Union Intellectual Property Office 2023c
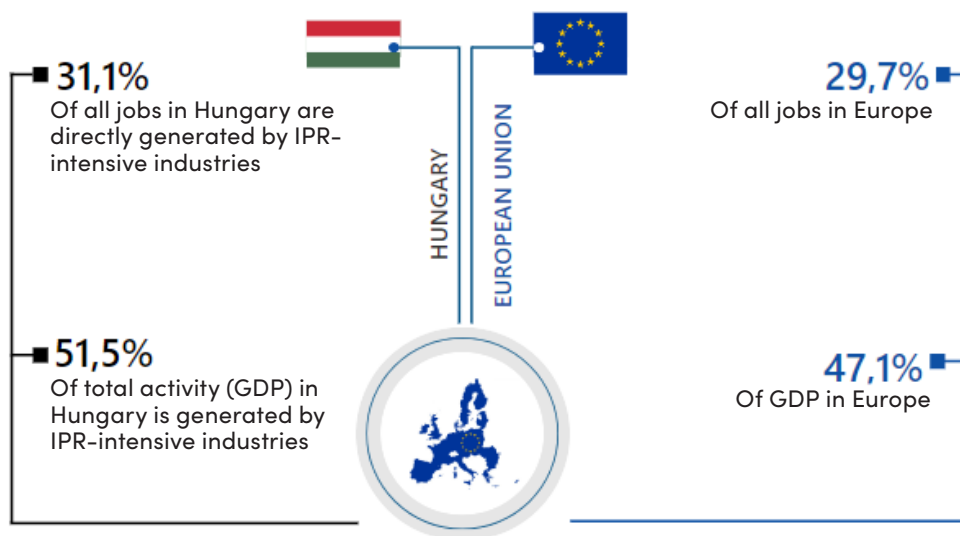
Figure 10: Contribution of IPRs to the Hungarian–EU economy
Source: http://bit.ly/4mzKCIk

Recognising the scale of the threat, the EC issued[38] a Recommendation on 19 March 2024 proposing measures "to foster collaboration between rights holders, service providers, and law enforcement, while encouraging best practices and the use of modern tools and technologies". EMPACT and the IP-enforcement community are specifically mentioned among the proposals to support and enhance cooperation. Agreeing with the proposal, it is of paramount importance that IP crime remains part of the next policy cycle. Considering the achievements and visibility that EMPACT provides, this should be a top priority for the IP enforcement community.

This cooperation is essential to reduce risk. As it can be seen from the categories of goods presented, in some cases – e.g. PVRs, semiconductors – it is only possible to combat this phenomenon if specialised expertise is available. Of course, other goods also require close cooperation with competent market surveillance authorities – e.g. food chain safety authority. There are also different forms of cooperation, beyond the EMPACT-related operations already described. Examples could be a training session[39] with face-to-face participation, or a working group meeting[40] with the rights holders and other EU agencies, a complex campaign[41] or an online webinar[42] involving the affected stakeholders.

Cooperation can also take a concrete, operational form, for example when the rights holders or their representatives support the authorities on the spot, as in case of a joint

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[38] European Commission 2024.
[39] European Union Intellectual Property Office 2024b.
[40] CropLife 2023.
[41] European Union Intellectual Property Office 2024c.
[42] European Union Agency for Law Enforcement Training – European Union Intellectual Property Office 2023.

inspection[43] by the Hungarian customs authorities with the representative of the association of the vehicle industry. The inspection resulted in the seizure of counterfeit fake brake system components. The really shocking aspect of the case is that the investigation showed that the counterfeit air dryer cartridges could have been used by the Hungarian state-owned bus company Volán.

Naturally, there are broader forms of cooperation as well. One example is the memorandum of understanding signed by the leaders of Hungarian authorities – customs, police and market surveillance authorities – as well as representatives from industry associations to ensure more effective action against pharmaceutical counterfeiting. The agreement[44] was signed on 23 July 2023, at the headquarters of the Hungarian Intellectual Property Office (hereinafter: HIPO), following the initiative and active involvement of the HIPO.

There are many ways for law enforcement authorities and rights holders to communicate, but one of the most innovative is the IP Enforcement Portal (IPEP),[45] developed and operated by the EUIPO, which provides a secure, native language communication channel between rights holders and the authorities, along with other fundamental services such as the submission of the application for action (AFA), which is one of the foundations of effective enforcement today.

In the area of training, which is also an element of the recommendations already mentioned by the EC, it should be mentioned that EUIPO, in cooperation with the European Union Agency for Law Enforcement Training (CEPOL), has set up the Virtual Training Centre on Intellectual Property Rights (VTC)[46] where online courses and modules are available for members of customs, criminal investigation and market surveillance authorities. Training officials and officers from the relevant authorities on IPRs and IP crime is a vital aspect. This is a key role for both the relevant EU agencies and the national authorities, not forgetting the contribution of the private sector, which is, after all, the best source of information on the difference between genuine and counterfeit products.

Although this study focuses on the dangers of offline counterfeiting, the SOCTA 2021 report[47] also highlights the dangers of online piracy. It is very important to be aware that users also put themselves at risk in the online space by downloading and/or purchasing illegal, infringing content. Some of these transactions and data flows may result in the destruction or compromise of their personal data, in particular financial information, or the content of their storage media.

When shopping both offline and online, we, the average people need to be more careful and cautious for our own safety and security and that of all of us and – recalling the slogan of the Hungarian customs authority – for the protection of the economy, because although the protection of human life and health is the most important aspect and task, a stable and balanced economy is also an indispensable condition for a safe everyday life through jobs and various public services.

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[43]   Balogh 2015.
[44]   Hungarian Intellectual Property Office 2023.
[45]   European Union Intellectual Property Office s. a.
[46]   European Union Agency for Law Enforcement Training 2024.
[47]   European Union Agency for Law Enforcement Cooperation 2021: 81.

EU CITIZENS

PHYSICAL GOODS — Hungary — EU

BOUGHT COUNTERFEIT PRODUCTS INTENTIONALLY — 10% — 13%

DIGITAL CONTENT — Hungary — EU

DOWNLOADED STREAMED FROM ILLEGAL SOURCES — 17% — 14%

EU YOUTH (15–24 YEARS OLD)

BUYING COUNTERFEIT GOODS ONLINE

HUNGARY — 18% | 45% | 37%

USING ILLEGAL SOURCES

HUNGARY — 11% | 64% | 17% | 8%

EU CITIZENS — 15% | 48% | 37%

EU CITIZENS — 12% | 60% | 21% | 7%

UNINTENTIONALLY — NO — INTENTIONALLY — DON'T KNOW
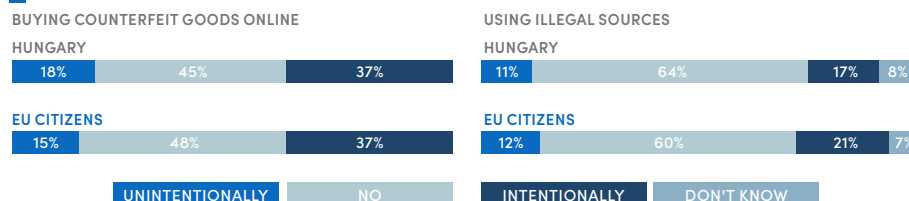
37%
OF HUNGARIAN YOUTH HAVE INTENTIONALLY BOUGHT FAKE GOODS ONLINE

37% of European youth have knowingly bought fake goods

17%
OF HUNGARIAN YOUTH HAVE INTENTIONALLY USED ILLEGAL CONTENT SOURCES

21% of European youth have intentionally used illegal content sources

Figure 11: IPR perception
Source: http://bit.ly/3HvoUWY

Given that the available information suggests that the younger generation is more permissive than the general public when it comes to counterfeit goods and online piracy, the IP enforcement community needs to make further efforts to change this through increased education and training, for which the EC has also made recommendations, particularly with regard to law enforcement and business studies.

The Hungarian situation is fortunate, as the proportion of Hungarian young people (17%) is below the EU average (21%) when it comes to using illegal content, while the proportion of those who are open to purchasing counterfeit products is in line with the EU average (37%). These results do not mean that there is no room for improvement. Close international cooperation allows for learning about and adopting of best practices, and it is worth taking the opportunity to improve on current performance indicators in the future.

The conclusions drawn from the results of this work, regardless of their source, are the author's own and do not necessarily reflect the official position or opinion of the NTCA or of the EUIPO. The publication was prepared with the support of the Scientific Council of the NTCA.

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POLICING AS A SCIENCE

Code of Ethics of a Police Officer in the Context of Shaping the Security Environment of the Slovak Republic[1]

Dominika DINUŠOVÁ[2]

In recent years, society has been marked by the occurrence of several risk factors (the pandemic, the war conflict in Ukraine, the increase in hate speech and the subsequent social polarisation that has reached a violent outcome). These aspects lead to a rethinking of the use of tools to eliminate tensions in different areas. One of them is the area of police ethics.

The paper is devoted to selected content and structural elements used in the code of ethics of a police officer, which were aimed at strengthening the relationship between civil society and the police with the intention of positively shaping the security environment in the Slovak Republic.

The paper is based on a theoretical analysis of three planes of the updated code of ethics: 1. the functions of the incorporated elements; 2. the means of implementation in the application practice; 3. research as a prerequisite for updating and a means of verification of the processing of the code of ethics. The third level is demonstrated on the field of credibility of the Police Force using the theoretical basis of the dialectical method.

In 2022, the Slovak Regulation No. 41/2022 on the Code of Police Ethics of the Ministry of the Interior was adopted. The document is divided into several parts, which are complementary to each other and fulfil mutual functions (explicative and motivational).

The area of police ethics is significantly represented in the public perception of police work and ultimately has an impact on the overall shaping of the security environment in terms of forming the social consciousness of citizens and members of the Police Force.

Keywords: Police Force, code of ethics, Slovak Republic, security environment, civil society

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Introduction

In recent years, society has been marked by the emergence of several risk factors (pandemic, war conflict in Ukraine, increase in hate speeches and subsequent social polarisation, which in the Slovak Republic has also reached a violent outcome). These aspects lead to a reassessment of the use of instruments to eliminate tensions in various areas. One of the areas that immediately reflects the current development tendencies towards deepening social tensions is the area of security theory and practice. In response also to the above social situation, it reassesses the tools for mitigating social tensions and strengthening the security environment. Security is a multidimensional social phenomenon – the state of the security situation is underpinned by a number of factors that the security forces cannot control (economic situation, social polarisation, discrepancy between social expectations and lived practice, etc.). Nevertheless, the state of the security situation is the indicator that influences the work of the security forces. And while the security forces cannot completely control the situation, they can, in response to practice, seek and use tools that contribute to the alleviation of social tensions and the formation of a security environment. The work of the security professional – in our case, the police officer – to some extent influences and shapes the security environment. Against the backdrop of the dialectic of freedom and necessity, the dialectic of the particular and the social, our focus is on the shaping of the particular, which consists of an emphasis on the particular situations in which the police officer acts and, therefore, on the citizen's immediate experience of police work. The above-mentioned area corresponds to issues of police ethics, which can thus play an important role in the formation of a security environment. They provide a basic orientation in the complex situations of security practice for the police officer on the one hand and stimulate the citizen's expectations of the police on the other.

In this context, the update of the Code of Ethics of a Police Officer in the Slovak Republic was also carried out in 2021, when a working group was established to update the Code of Ethics. After more than a year of intensive work, the Code of Ethics was issued by the Ministry of the Interior of the Slovak Republic in Regulation No. 41/2022 on the Code of Ethics of a Police Officer. Within the new form of the document, the intention was to bring innovative content and structure that would respond to the aforementioned current challenges of security practice with its implementation potential.

The present paper is devoted to selected content and structural elements used in the Code of Ethics of a Police Officer, which were aimed at strengthening the relationship between civil society and the police with the intention of positively shaping the security environment in the Slovak Republic. Through a theoretical analysis based on the dialectical basis of three planes of the updated ethical code: 1. the functions of the incorporated elements; 2. the means of implementation into the application practice; 3. research as a prerequisite for updating and a means of verification of the processing of the ethical code, it outlines the implementation potential of police ethics as a tool for the formation of a safe social environment, demonstrating the above in the area of the credibility of the Police Force.

Code of Ethics – Theoretical basis for updating the set of ethical standards of a police officer

In 2021, a working group for updating the Code of Ethics was established by a measure of the Minister of the Interior of the Slovak Republic. As a result of the cooperation of experts of the Police Force from several fields (ethicists, lawyers, psychologists, etc.), the Slovak Ministry of the Interior issued Regulation No. 41 of 24 February 2022 on the Code of Ethics of a Police Officer. The process of the aforementioned update pointed out the need to take into account three areas.

Harmonisation of the Code of Ethics of the Police Officer with European standards

In 2020, an international conference of representatives of the Ministries of the Interior of the Member States of the European Union was held at the Council of Europe in Strasbourg, entitled "The Role of the Police in a Democratic Society. Nearly 20 years of the European Code of Police Ethics" (20–21 October 2020). The anniversary of the adoption of the European Code of Police Ethics was an opportunity to reflect on the wording of the Code and to assess the extent of its practical application in the context of the current social situation. The content of the conference was concentrated in five thematic blocks: qualification, recruitment and provision of the police force; the role and place of women in the police; accountability and internal and external control of the police; research and international cooperation; institutional strengthening between the Council of Europe and the representatives of the Ministries of the Interior of the EU Member States. From the contributions of the participants, it was possible to compare the ways in which the European Code of Police Ethics has been incorporated in some Member States, but also to identify the challenges for updating police ethics and the wording of codes of ethics.

The previous version of the Code of Ethics of a Police Officer already took into account compliance with the normative regulation of the European Code of Police Ethics, but the update brought new issues: How to apply the European requirements to the national document? Which requirements need to be explicitly expressed and which are, for example, part of other documents (internal regulations, methodological manuals, etc.) regulating the activities of the Police Force? The previous version of the Code of Ethics, which consisted of eleven articles, was created after the adoption of the European Code of Police Ethics, but as Marta Thurzová points out, it did not show much continuity with it. Its small scope was out of proportion to the provisions of the European Code and its general wording sounds largely alibi-like.[3] The European Code of Police Ethics has a different character than the Code of Ethics of a Police Officer. The two documents differ in scope, but also in the content of the standards. These differences stem, among other things, from the different purposes of the adopted documents. The European Code of Police Ethics itself is comprehensive and structured, going beyond the standard scope of a code of ethics in its content and scope. It is broad in content, as it introduces rules also in areas that are not

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[3]   Thurzová 2012: 134.

usually dealt with in codes of ethics. These include, for example, rules on police action/ intervention, recruitment and training, or international cooperation. The European Code of Police Ethics thus represents the broader rules of police organisation, its pillars and mechanisms, manifested at organisational level, but also in the individual key situations of the police service. This introduces a uniform ethical dimension to police activity, while leaving room for the national development of the Code of Ethics. Thus, for example, it is not necessary to specify the norms of official action in the national code of ethics (they are contained in legislation, regulations of the Ministry of the Interior, methodological manual, etc.), but by preserving the standards of the European Code of Police Ethics it is desirable to abstract the values, and to create a rule valid for other actions, so that at the same time it covers the specific needs of the implementation of police activity in a particular state.

Modification of the content of the code of ethics in relation to the current needs of police practice

The Code of Ethics is not a dogmatic document. Its form should not be subject to radical changes in cyclical periods, i.e. it should always contain something permanent – the values of the police profession, based on the needs of security and social practice. Its innovation is thus not a process of new construction, but of building on the permanent by modifying the changeable, which are the particulars that spring (also) from social development. More than twenty years have passed since the adoption of the European Code of Police Ethics and the Code of Ethics, which represents the time in which changes in society may have taken place. We notice that society is more divergent, more multicultural, and we are facing some types of crime (e.g. cybercrime, illegal migration, etc.) much more strongly in the security sphere than in the past. The security environment is also influenced by social polarisation, which has deepened considerably in recent years.[4] It is accompanied by a low level of trust in public institutions, including the Police Force. In this sense, some values are expanding their normative scope – in the context of impartiality, we are talking about the integration of diversity in the workplace; in the context of sharing and rapid transmission of information, the need to define rules for handling sensitive data and to establish rules governing the confidentiality of the police profession are coming to the fore, or we are problematising the possibilities and limits of personal expressions on social networks. The challenge in updating was therefore to provide normative content that would respond to the current needs and social challenges affecting the police service.

Adopting innovations in the content and structure of the document that would strengthen its implementation potential

Until 2022, the Code of Ethics of a Police Officer consisted of 11 articles, while in 2020 the third article was amended, but no significant changes were made in terms of structure and content. However, the updating of the Code of Ethics, which started in 2021, brought

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[4]   Dinuš 2015.

the need to think more deeply about the structure and content of the document. It is in this area that the link between general ethics and police practice is evident. The Code of Ethics is traditionally a deontological document, i.e. it contains the rules that guide a police officer in the performance of his or her duties. Central to such deontological sets are norms – as regulations of a moral nature that regulate conduct – determining what a police officer should, may and may not do in his or her official activities. The nature of the document implies that the focus is on morally relevant circumstances. In the sense of emphasising deontology as the supporting ethical basis of police ethics, then, police ethics is primarily an ethics of duty. By deontology we mean the part of ethics that deals with the problems of duty, moral requirements and norms, and in general every kind of demanding and fulfilling of duties as a form of manifestation of social necessity, specific to morality. The central criterion of action is the duties of the moral subject, while the necessity of their general validity is emphasised.[5] At the same time, police ethics is also an institutionalised ethics, i.e. regulated in generally binding legal norms. In our conditions, these are: the Constitution, laws, international conventions, binding acts of the European Union and the Council of Europe; regulations within European structures to which the Slovak Republic is bound; internal legal norms that regulate certain areas of official activities.[6] With this in mind, however, the question of rethinking both the content and the structural elements always arises when ethical documents are updated. As Aristotle writes in the Nicomachean Ethics, the beginning seems to be more than half of the whole, and many of the things we seek are made clear by it. Here, too, Aristotle argues that it is fruitful to return to the origins of deontology as an ethics of duty in order to highlight a feature that has somehow remained in the background alongside the emphasis on the rules themselves, but which accompanies any deontological ethics.[7] In his work *De Officiis,* Cicero stressed, in contrast to the individualistic ethics of virtue (prevalent in antiquity), the duty of consideration for the social context of action. Society, in his conception, is an association of citizens who are represented by law, which functions as a bond in society. In relation to man, law is the external regulator of his actions, and in Cicero's interpretation it needs philosophical justification. It is not enough to appeal to the external validity of the law in order to act rightly. The law itself needs its justification in order for man to have a duty to act in accordance with it. Cicero illustrates this requirement in *De legibus,* when Atticus asks Marcus: "In your opinion, then, it is not from the Praetorian Edict, as many jurists say, nor from the Laws of the Twelve Tables, as the ancients say, but from the fountain of the deepest philosophy that the doctrine of law is to be drawn?" Marcus answers: "We must elucidate the nature of law from human nature, we must reflect on what laws every state must be governed by, and only then deal with the principles and precepts imposed by the will of men themselves."[8] Thus, from the depths of philosophy we learn what is for us the source of law. Although Cicero discusses laws, that is, legal norms, his reasoning is applicable to moral norms as prescribed rules of conduct, which are also contained in the code of ethics. Today we have regulations and guidelines, we have a set

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5   Dinušová 2024.
6   Thurzová 2012.
7   Aristotle 1979: 30/1098b.
8   Cicero 2009; Krsková 2011.

of moral requirements, but can we justify them? Can we clarify their nature or purpose? Perhaps this is where the potential for implementation opens up – if we do not understand the external regulation as divorced from the individual, in external relation to the police officer, but approach it through the prism of the need to understand the nature of the regulation, its rationale and its objective, its implementation potential will be greater.

In this context, there is especially the possibility of applying elements of general ethics that do not derive from deontology, but which can fulfil precisely the implementation dimension of the application of police ethics in practice. Paradoxically, or complementary to this, it can provide the means for such a grasp of the issue and the elaboration of a virtue ethics document. Virtue ethics orients human action to its presuppositions, i.e. to the personal qualities of the moral subject. It is not concerned with the question of how we ought to act, but focuses on the question of how we ought to be. Virtue as a fitness of character has played an important role in both idealist and materialist ethical conceptions. It manifested itself in some of the ethics of the Hellenistic period, and was central to the ethical theory of Thomas Aquinas, Benedict Baruch Spinoza, or Paul H. D. von Holbach. The interest in virtue ethics was strongly manifested in the twentieth century in the Anglo-Saxon ethical tradition as a manifestation of the demarcation against metaethical approaches in the attempt to rehabilitate normative ethics and also in connection with the revival of questions related to the possibility of the best way of life, value orientation, questions concerning the good life in relation to the character of the human being.[9]

Key tools for the implementation of ethical standards in police practice

The Code of Ethics of a Police Officer represents a set of moral principles, values, requirements and standards of integrity. It expresses the basic principles of ethical conduct and professional responsibility which guide the police officer during their service. It sets out the basic moral principles which are: 1. *Legality and Professionalism.* These principles are oriented to the initial and supporting areas of police ethics; professionalism is understood as a comprehensive equipment of a police officer, i.e. it is a requirement not only for physical readiness, professional preparedness, but also moral integrity. At the same time, this principle expresses the requirement for continuous education and improvement of a police officer, as well as the requirement for the stimulation of the quality preparedness of police officers by their superiors – the superior takes care of and supports the police officer in education and professional advancement. Legality frames all police activity. A police officer acts in accordance with the Constitution of the Slovak Republic, laws, legal regulations and internal regulations. This is the basic starting point for the other principles as well, and it permeates the entire activity of a police officer. 2. *Impartiality,* which expresses a requirement that police officers shall approach the performance of their duties without regard to race, gender, religion, class, political preference, sexual orientation and other factors. Every citizen has equal access to police services, and every police

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[9]   Dinušová 2021.

officer promotes this idea of an impartial approach to citizens. Impartiality in this sense is also a requirement governing workplace relations, where discrimination and its manifestations are not tolerated. 3. *Confidentiality* governs the requirements for the handling of information with which a police officer comes into contact. 4. *Professional responsibility and service discipline* establishes the requirements to enter the service mentally and physically prepared to perform the duties of the service. 5. *Credibility* is a prerequisite for the effective performance of official duties. The incorporation of the Code of Ethics focuses on cultivating the credibility of the Police Force through a respectful approach to citizens, a reliable and cultured demeanour. It is important that on an individual level, a police officer behaves in a trustworthy manner because this sends a message about the entire police organisation. It is in the interest of the effective performance of the tasks of the Police Force to maintain the highest possible credibility of the Police Force. Last but not least, on the contrary, a very strong emphasis is placed on the circumstances of 6. *integrity and conflict of interest.* The police officer promotes the public interest and needs of the whole of society over personal interests. The police officer shall not accept or solicit any gifts or other improper benefits for himself or any other police officer which may influence his conduct and decision-making. A police officer who reports a suspected violation of the Code of Ethics or points out unethical conduct shall not be disadvantaged or penalised in any way because of that fact.

It was not the only aim of the update of the Code of Ethics to bring innovative content, but to use other ethical tools to strengthen the implementation of the requirements of the Code of Ethics. These became elements of virtue ethics. They were inserted into a traditionally deontological document, manifested in particular in the structure of the document. The Code of Ethics contains the values and norms of the police profession. They are not set randomly, but work in cooperation with each other. The imperative expression of a value is a norm. The Code is divided into individual articles that represent the values – the principles of the police profession. Under each of these articles are subsumed norms – rules of conduct.

They fulfil two functions: the values in relation to the norms fulfil a motivational function: they convey the basic slogans expressing the moral needs for the exercise of the police profession; and the norms in relation to the values express an explicative function: the given content of the articles expressed in specific rules clarify, explain the content of the values of the police profession.

The aforementioned structure is intended to facilitate accessibility and thus more effective implementation of the Code of Conduct. Of course, this is not the end of the implementation. An important component is education and practice. In parallel to the aforementioned ethics of virtue, we could find a complementarity between the two approaches to the acquisition of virtue within the two great ancient systems. The emphasis on education and training that we find in Plato is manifested in the relatively strong presence of educational courses in the training of the police officer. At the Academy of the Police Force in Bratislava, police ethics is part of the courses at several levels of study. In the Bachelor's degree, students have the opportunity to choose from compulsory elective courses the subject of Professional Ethics, which introduces students to theoretical knowledge and its practical application in situations of police practice. Later in the

Impartiality (Article 3) VIRTUE/VALUE *motivation*

(1) When performing official duties, a
police officer always acts and makes
decisions
objectively, impartially, without
prejudice and bias, does not
discriminate against anyone,
including with regard to national,
ethnic, religious, racial, class, gender,
sexual, age, social,
political and economic differences.

(2) A police officer performs official
activities in such a way that his
personal feelings, personal
opinions, sympathies or antipathies do
not influence their actions.

NORMS *explanation*

(3) The police officer expresses their
civil attitudes and opinions in public,
including their
opinions on social networks and
Internet forums, taking into account
the moral content and
principles of ethical behaviour
established by this Code of Ethics.

(4) A police officer does not
participate in political activities while
performing official duties,
does not connect his person with any
political party or political movement,
nor do they perform
activities for the benefit or
disadvantage of any political party or
political movement.

Figure 1: Functions of virtue ethics in the Code of Ethics of a Police Officer
Source: Ministerstvo vnútra SR 2023

Master's degree, the subject Philosophy and Ethics is included in the education, which
is compulsory and is implemented in the highest possible time allocation. Within this
subject, police ethics is discussed in a deeper theoretical-ethical and philosophical con-
text. In addition to these, police officers are educated in specialised police studies, where
the course Police Ethics is implemented as one of the compulsory courses. This study
is intended for police officers who have been recruited into the Police Force with other
higher education. Also, police officers in practice return repeatedly to the regulations of
police ethics. And here we find a bridge, as it were, to the second plane of the acquisition
of virtue, in the Aristotelian sense as a fitness of character that is acquired in action,

in practice. Police ethics is part of practical performance, and it is reinforced every six months through the retraining of police officers in the code of ethics.

Following the practical application of the regulations of the Code of Ethics, in 2023 the Ministry of the Interior issued the Handbook to Regulation No. 41 of 24 February 2022 on the Code of Ethics for Police Officers of the Ministry of the Interior of the Slovak Republic,[10] which explains the Code, points out its practical application and provides a number of model examples explaining and solving relevant ethical problems. Both the Code of Ethics and the Handbook are publicly available on the website of the Ministry of the Interior.

Credibility of the Police Force – Research assumptions and results

One of the articles of the Code of Ethics of a Police Officer is credibility, which is an important principle stemming from the understanding of the position of the police in contemporary society. In the light of the foregoing, the impetus for reinterpreting trustworthiness–credibility can be found in the European Code of Police Ethics, where it is expressed in several articles through an emphasis on the importance of the relationship between the police and civil society. In this context, mention may be made of Article 1, which sets out as the main objectives of the police in a democratic society, regulated by law "the maintenance of public tranquillity, law and order in society". Article 12 states: "The police shall be organised with a view to earning public respect as professional upholders of the law and providers of services to the public." Subsequently, Article 18 specifies cooperation by stating: "The police shall be organised in a way that promotes good police–public relations and, where appropriate, effective co-operation with other agencies, local communities, non-governmental organisations and other representatives of the public, including ethnic minority groups." Last but not least, Article 59 states: "The police shall be accountable to the state, the citizens and their representatives. They shall be subject to efficient external control."[11] Subsequently, Article 18 specifies cooperation by stating: "The police shall be organised in a manner that promotes good police–public relations and, where desirable, effective cooperation with other agencies, local communities, non-governmental organisations and other representatives of the public, including ethnic minority groups."[12] Not only is the relationship between the police and the public important to the performance of police functions in the state, this relationship is constitutive by virtue of the legitimacy that the police enjoy from the public. That premise is evidenced by Article 59, which states: "The police are accountable to the state, the citizens and their representatives. It shall be effectively subject to external control."[13]

The incorporation of trustworthiness–credibility into the Code was based on indicators and research carried out in this area. Between 2020 and 2022, research on the

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10   Ministerstvo vnútra SR 2023.
11   Council of Europe 2002.
12   Council of Europe 2002.
13   Council of Europe 2002.

theoretical basis of the investigation of the credibility of the Police Force (Research 251) was conducted at the Police Academy in Bratislava, which monitored not only the level of public trust in the police in Slovakia, but also the factors that may influence public trust. The findings in this area include the following conclusions, which were also reflected in the perception of trustworthiness within the Code of Ethics.

Firstly. The police force has experienced relatively low levels of trustworthiness over the long term. Although the trend is upwards, the level of trust in the police was not satisfactory.

Secondly. Public trust in the Police Force needs to be understood dialectically, not metaphysically, that is, it needs to be examined in the broader context and developmental tendencies of the problem. Thus, the low level of trust in the police in Slovakia is not an isolated phenomenon, but is related to an overall even lower level of trust in other components of the state apparatus. The credibility of the Police Force cannot be understood in isolation (metaphysically) but precisely in relation to other social phenomena, which should also be reflected in the handling of this concept and the interpretations of the measured indicators.

In the given case, for a more plastic picture of the level of public trust in the Police Force, it is necessary to notice the trust of the population in other institutions (public administration, other armed forces, parliament, government, courts). Although public trust in the Police Force was not high in the period under review (2021) (45% tended to trust the Police, 53% to distrust it), it showed higher parameters compared to trust in the Parliament, the Government and especially the courts. Public administration was trusted by 45%, distrusted by 52%; Parliament was trusted by 23%, distrusted by 75%; the Government was trusted by 24%, distrusted by 74% and the courts were trusted by 28%, distrusted by 69%.
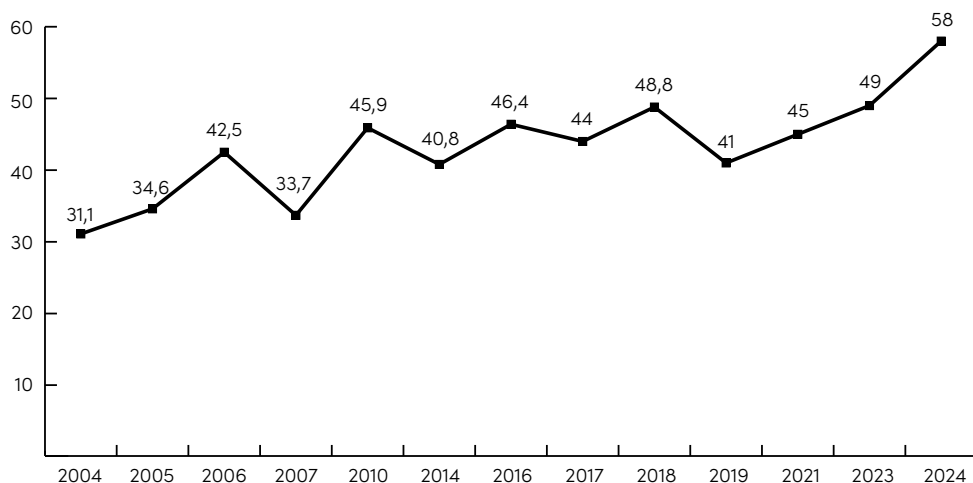
Figure 2: Development of police credibility in the Slovak Republic over the past 20 years
Source: compiled by the author

As Karol Murdza observes, people stop trusting institutions of social control, they lose their sense of security, faith in justice and enforceability of law. This is a persistent problem of the Slovak judiciary, which characterises a complex and long-term crisis of the entire judicial, legal or normative system. This crisis concerns not only the creators of social norms (Parliament, MPs), but also those who are supposed to enforce these norms and control their observance in practice (prosecutor's office, courts, police, etc.).[14]

Thirdly. Not all aspects underpinning public trust in the police can be influenced by the Police Force. The analysis of factors influencing the credibility of the Police Force, which was conducted at the Academy of the Police Force at the beginning of the 21st century, took into account the odiousness of the police profession, the ability to face organised crime, the results of work in protecting public order, securing property and the safety of persons and in reducing crime in the place of residence, the qualifications and ability to face new forms of crime, the behaviour of police officers, etc. as relevant factors with an impact on the credibility of the Police Force.[15]

From the above, the factors affecting the credibility of the Police Force could be classified into four categories. First of all, these are social factors, which include the general social climate, the security situation of the state, the economic situation, historical specifics of the development of society, political aspects, etc., which are not directly within the competence of the Police Force. The latter in interaction with them can modify their form (e.g. crime rate, cleared crime, etc.). The credibility of the Police Force may be underpinned by the international security situation, the social contradictions of modern capitalist societies, the general atmosphere in society, the legitimacy of the government and other
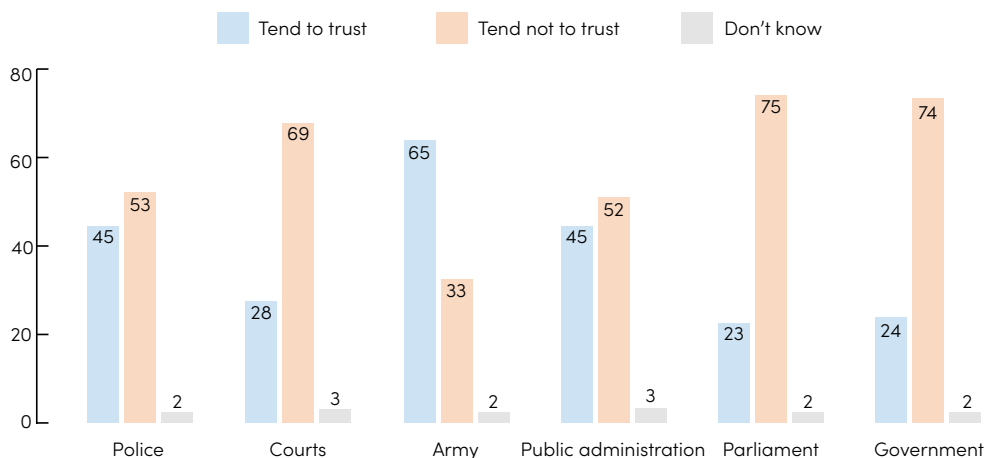
Figure 3: Credibility of selected institutions in the Slovak Republic in 2021
Source: Dinušová 2024

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[14]   Murdza 2021: 94.
[15]   Bilský 2006.

macro-social indicators. Secondly, at a more specific level, we can talk about the social factors directly determining the activities of the Police Force. Among them we identify, for example, the wording of laws and regulations (their consensual or adversarial nature), the statutory competences of police officers, etc. The third group of factors consists of the organisational area of the Police Force or the management of the police organisation, management policies, self-presentation of the police, image and communication of its activities towards the public. At a special level we identify a group of individual factors, under which we understand professional, ethical, psychological and communication competences of a police officer and other competences resulting from the requirements for the personality of a member of the Police Force.

Fourthly. Ethics play an important role in shaping public confidence in the Police Force. The ethical area was also referred to by the research findings of complaints registered in the first half of 2021 at the Complaints Department of the Control Division of the Presidium of the Police Force in Bratislava to define the areas which citizens perceive as sensitive in the work of the police in relation to trust in the police organisation. The given analysis was based on the data contained in 1. the Report on the handling of complaints and petitions within the competence of the Ministry of the Interior of the Slovak Republic for the year 2021; 2. own research of complaints registered in the first half of 2021 at the Complaints Department of the Control Division of the Presidium of the Police Force in Bratislava.

The qualitative research consisted in a content analysis of citizens' complaints and the subjectively accentuated misconduct of police officers in the performance of their duties. The available files containing the complaints in question were divided and examined in terms of: 1. misconduct of an administrative nature; 2. the ethicality of the police officer's actions; 3. dissatisfaction with the services of the police force conditioned by technical possibilities. The inductive approach made it possible to identify problem areas of action that need to be addressed in order to enhance credibility and strengthen integrity in the Police Force.[16]

Of the complaints investigated, 32% fell within the area of ethical issues. Noting the areas that the citizen perceives as problematic, we find the complaints against the allegedly unethical behaviour of the police officers most often directed against the investigators, during the interventions and in connection with the traffic accident and against the investigators during the implementation of the interrogation.

Another often negatively perceived ethical aspect of police activity was the speech of police officers (superiority, arrogance, inappropriate verbal language are reported); citizens perceived empathy when conducting body searches as problematic, indicating "disrespect", "injury to honour and dignity", "out of place comments and questions". These impulses respond to consideration as a moral value of the police profession, with which the overall culture of the police officer's demeanour is closely related as an essential attribute of his/her personal equipment.[17]

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[16]   Dinušová–Sabayová 2024.
[17]   Dinušová–Sabayová 2024: 260.

The indicators mentioned above helped to specify the content of the article dedicated to trustworthiness, which is now characterised by standards pointing to the areas mentioned. They are expressed in four rules:

1. A police officer shall act in such a way that his/her moral and honest behaviour, professionalism and responsibility contribute to increasing the credibility of his/her person and the credibility of the Police Force.
2. A police officer shall not misuse entrusted official financial resources and funds for private purposes in the performance of official activities.
3. A police officer shall show courtesy, decency, respect, tact and consideration in the performance of official activities.
4. A police officer shall, in the conduct of official business, treat colleagues fairly, in accordance with professional courtesy, and shall not disregard their professional competence. He/she shall also behave courteously and correctly towards colleagues holding opposing views. However, he/she shall not tolerate unethical behaviour on their part.[18]

Their implementation impact can only be examined with the passage of time since the adoption of the Code, and it will be interesting to observe both the level of public trust in the police in a quantitative and qualitative research framework, and the perception of the treatment of this aspect of policing by police officers themselves.

Conclusion

Police ethics is today an intensively developing applied social science discipline. It is formed in the interaction between general ethics, which provides theoretical frameworks and concepts, and police practice, which specifies and fleshes out general theoretical concepts with concrete content based on the practical experience of the police service. The most distinctive element of police ethics is the code of ethics, which fulfils several functions. Among them, it provides the police officer with a basic orientation in the complex situations of the police service and represents a summary of desirable ways of behaviour and action, which should be directed towards the effective performance of police tasks. In this context, there was a need to update the Code of Ethics, which was implemented in 2021 and resulted in the adoption of Regulation No. 41/2022 on the Code of Ethics of a Police Officer of the Ministry of the Interior of the Slovak Republic. The aim was to adopt a document that would respond to the tendencies of social development marked by social polarisation and civil society's mistrust of the police organisation. On the basis of several research findings, the content and structure of the document was innovated and the means of virtue ethics were used to increase the actual implementation potential of the document.

By definition of its scope and nature, the Code of Ethics cannot fully address and eliminate the risks of the present. Its impact is institutional, not societal. The factors that

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[18]   Ministerstvo vnútra SR 2022.

give rise to today's security challenges (cybercrime, illegal migration, deepening social polarisation, etc.) do not fall within the scope of police ethics. Nevertheless, these phenomena also underpin public trust in the police and, even if their solution does not fall within the ethical domain, ethics can play an important role in strengthening citizens' trust in the Police Force and thus contribute to the alleviation of social tensions. The security environment is influenced by several elements. Also the tools of police ethics, its development in the field of adoption of normative documents, education and application in practice can have a positive effect on the formation of the security environment of the Slovak Republic.

Police ethics plays an important role in strengthening the credibility of the Police Force, which was evident from the research on complaints, where 32% of citizens' complaints were directed to the ethical area of police service performance. At the same time, due to the influence of several indicators, we are observing an increasing tendency of citizens' trust in the Police Force.

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Current Status and Effectiveness of Artificial Intelligence Application in Police Law Enforcement in China[1]

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Currently, artificial intelligence, big data, cloud computing and other technologies are used in many aspects of policing in China. China's 2024 Public Security Work Conference emphasised the need to accelerate the improvement of the "professional + mechanism + big data" new policing operation model and to comprehensively popularise the application of artificial intelligence in China's police and law enforcement and enhance its effectiveness.

This study utilises qualitative and quantitative research techniques to explore AI's current status and effectiveness in Chinese police law enforcement. To improve the utilisation of AI in police law enforcement, this study also further explores the influencing factors and enhancement countermeasures of Chinese police officers' willingness to use AI in police law enforcement.

Study 1 used the survey method to select 180 civilian police officers in N city of F province to conduct a questionnaire survey, and 20 of them were randomly selected to conduct semi-structured interviews to clarify the current status of the application of AI in police enforcement in China. Study 2 randomly selected 200 public security police officers in the public security bureau of H city in Z province to conduct a contextual experiment, which used a between-subjects design of task type (objective/subjective task) + transparency (low/medium/high transparency) to analyse the factors affecting the willingness of Chinese police officers to use AI and to propose countermeasures.

Study 1 found that the current Chinese police work, relying on artificial intelligence, has strengthened data collection and governance, promoted data sharing and application, and strengthened situational analysis and research

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and judgment, which has effectively improved the ability of social stability, control and management. However, there is a lack of scientific management mechanisms, and the police are unwilling to use them actively enough. The type of police work and the transparency of the algorithm can interact with the police's trust in artificial intelligence and further affect their willingness to use it. Specifically, more complex subjective tasks can lead to the police's willingness to use AI, but if the algorithm can be moderately transparent, the influence of task type will be reduced.

Artificial intelligence has been used to a certain extent in China's police reform to innovate police work mechanisms and improve the effectiveness of social governance. However, due to the lack of scientific management and training mechanisms, the police are not willing to use AI. Objective police work and moderate algorithmic transparency can enhance the police's trust and willingness to use AI.

Keywords: police enforcement, artificial intelligence, application effectiveness, Chinese police, willingness to use

Introduction

Along with economic and social development, the structure of crime has produced new changes, and crime tends to be specialised, intelligent and hidden. In June 2022, the State Council issued the Guiding Opinions on Strengthening the Construction of Digital Government, encouraging innovations in digital governance models. Public security bodies, as important functional departments for maintaining social security and providing public services, must also use AI technology as the basis for public security work mode change, organisational structure optimisation, police process transformation and a series of explorations for policing and law enforcement. China's 2024 Public Security Work Conference emphasised the need to accelerate the improvement of the "professional + mechanism + big data" new police operation model and to popularise the application of AI in China's policing and law enforcement, and enhance its effectiveness. As a professional force for maintaining social security, how public security bodies can complete digital-driven police transformation in the context of the national strategy of building digital China and digital government and dynamically guard social security and stability under the pattern of great integration and great openness has become a significant issue in the modernisation of public security work.

The development of artificial intelligence provides unlimited possibilities for police work research, and the openness of police work will accept more new things. With the rapid development of the "Internet+" model, "intelligence + machine" has undergone a profound transformation not only in the industrial field but also in the field of public security. In police work, the continuous development of artificial intelligence technology has improved the high-tech content of police work and enhanced the efficiency of public security bodies in administrative law enforcement, thereby protecting the people's

legitimate interests and improving the credibility of public security bodies. As one of China's mega cities, Shanghai is a leading city in economic development and population, and its social governance faces high risks and challenges. For this reason, Shanghai has responded positively to the "intelligentisation" of public security work proposed by the state and has established the construction of an intelligent public security system for the first time in order to improve the level of police management and the ability of social governance. At first, the system played a significant role in public security work, significantly improving the speed of the Public Security Bureau's work and handling of cases and reducing the number of crimes in the jurisdiction.[6] However, the application of AI in police work also suffers from defects such as low levels of technical synergy and unstable algorithmic support. At the same time, public security work in other provinces and cities also differs in the current use of AI due to differences in the degree of development, development concepts and focus on modernisation. Overall, the construction of artificial intelligence in police enforcement in China is still in the primary stage, and the current relevant research mainly conducts theoretical analysis. There is a lack of empirical research support. Some scholars study the problems of intelligent police construction in China's J city from four aspects: data governance, information barriers, platform construction and professional talents,[7] and some studies put forward four significant dilemmas of collaborative governance for community smart policing, namely, insufficient organisational structure, lack of institutional construction, difficulties in data governance and lack of technological means.[8] This study will adopt a survey method to explore the current status of AI applications in Chinese police enforcement concerning the Chinese national context.

The effectiveness of the application of artificial intelligence in Chinese police work is closely related to the willingness of the police to use it. Analysing the factors affecting the police's willingness to use AI and improving the police's trust and willingness to use AI will help further improve the effectiveness of "Artificial Intelligence + Police Law Enforcement." The Unified Theory of User Acceptance of Technology (UAT)[9] points out that three factors influence users' willingness to use related technologies: performance expectation, effort expectation and social influence, to which Tran et al. add task complexity, technological innovation and trust, and investigate the relationship among healthcare professionals in the medical field,[10] i.e. the factors influencing healthcare professionals' willingness to use AI in healthcare. Based on this theory, this study will analyse the factors influencing police officers' willingness to use AI.

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[6]   Zhang 2023.
[7]   Hua 2023.
[8]   Liu 2023.
[9]   Kijsanayotin et al. 2009.
[10]   Tran et al. 2021.

Currently, the application of AI in policing is mainly focused on interrogation,[11] data acquisition and analysis,[12] community governance,[13] intelligence gathering[14] and other aspects involving a wider variety of task types. This study is based on Castelo et al. to categorise policing task types into subjective and objective tasks.[15] Subjective tasks refer to open-ended interpretations based on personal opinion or intuition, such as mediating disputes and accident determination. Objective tasks involve quantifiable and measurable facts, such as business processing and fraud stream analysis. It has been shown that for a given task, willingness to use AI is positively correlated with perceived objectivity.[16] For example, as a subjective task of talent acquisition, the study found that candidates perceived real-life interviews as more professional, fair, flexible and accurate than AI interviews.[17]

In contrast, the willingness to use AI is relatively high in objective tasks.[18] However, there is a lack of empirical research on the effect of subjective/objective tasks on the willingness to use AI in policing. Based on the above analysis, this study proposes First Hypothesis (H1): The type of task can influence police officers' willingness to use AI, and objective policing tasks will have a relatively high willingness to use AI.

In addition to the type of task, trust is a critical issue in technology adoption, as it affects initial adoption and subsequent sustained use of the technology.[19] Trust in the context of artificial intelligence refers to an individual's confident attitude that their weaknesses will not be exploited in a cyber risk environment.[20] Sun et al. proposed a threefold framework of algorithmic trust, which emphasises that when task objectivity is high, people have more confidence in the performance or reliability of the algorithm, corresponding to showing higher cognitive trust.[21] Subsequent studies have also shown that subjects hold trusting attitudes toward algorithms across experimental task types when engaging in objective tasks.[22] When people develop trust in AI, they are more inclined to use it. For instance, in Dietvorst et al. an experiment in which subjects were asked to choose between predicting the outcome of an experiment on their own or using an AI to make a prediction, 74% of the subjects chose to predict on their own and abandoned the use of an AI after seeing that the AI made multiple mistakes.[23] Pearson et al. also demonstrated that trust is highly predictive of AI use through a dual advisor decision task.[24] Accordingly, this paper proposes the Second Hypothesis (H2): Trust mediates the role of police enforcement task type and the willingness of civilian police to use AI.

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[11]   Noriega 2020.
[12]   Kuk 2015.
[13]   Rodríguez-Jiménez 2018.
[14]   Perrot 2017.
[15]   Castelo et al. 2019.
[16]   Castelo et al. 2019; Inbar et al. 2010.
[17]   Diab et al. 2011.
[18]   Logg et al. 2019.
[19]   Kizilcec 2016.
[20]   Corritore et al. 2003.
[21]   Sun et al. 2023; Johnson–Grayson 2005.
[22]   Logg et al. 2019; Reich et al. 2023.
[23]   Dietvorst et al. 2015.
[24]   Pearson et al. 2019.

The dual process model of attitude change suggests that individuals are constantly processing information, consciously and unconsciously, in response to external influences.[25] The dual process model of attitude change suggests that individuals are constantly processing information consciously and unconsciously when exposed to external influences.[26] Due to the "black box effect"[27] civilian police cannot understand the reasoning process and principles behind the use of AI, which in turn affects trust in AI and willingness to use it. For example, Yeomans et al. analysed the role of transparency in an experimental study, which found that the proportion of subjects who chose to accept the help of AI was significantly improved if they were informed of the working principle of AI.[28] Meanwhile, Kizilcec et al. further categorised transparency into low, medium and high levels in their actual study,[29] again verifying the moderating effect of transparency on trust, and this result was supported by several studies.[30] Therefore, this study proposes the Third Hypothesis (H3): Transparency of AI plays a moderating role in the process of policing law enforcement task types affecting trust.

In summary, this study uses survey and experimental methods to explore AI's current status and effectiveness in Chinese policing. Study 1 explores the current status of AI use in Chinese police enforcement through questionnaires and qualitative interviews; Study 2 explores the factors affecting police officers' willingness to use AI in law enforcement through situational experiments and analyses the specific roles of task type, algorithm transparency and trust. The hypothetical model of this study is shown in Figure 1.
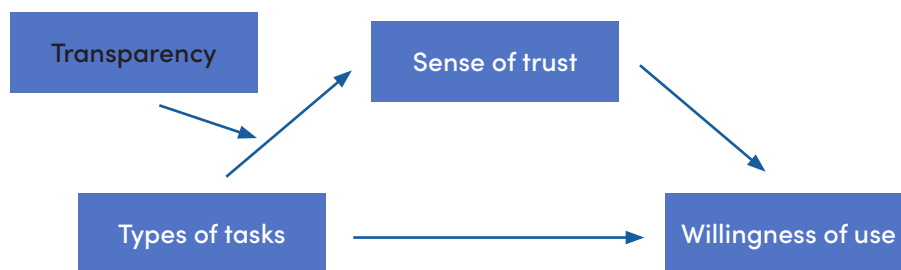

Figure 1: Artificial intelligence willingness to use model diagram (Hypothetical Model)
Source: compiled by the authors

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[25]   Petty–Cacioppo 1986.
[26]   Petty–Cacioppo 1986.
[27]   Castelvecchi 2016.
[28]   Yeomans et al. 2019.
[29]   Kizilcec 2016.
[30]   Cadario et al. 2021; Sun et al. 2023; Zhao et al. 2024.

Study 1 – Current status and problems of the application of artificial intelligence in Chinese police law enforcement

At present, China's social development is in a period of transition, and police work presents new situations and new characteristics, facing many challenges, such as the occurrence of problems, the increase of contradictions and the accumulation of risks. Although the construction of artificial intelligence has made specific achievements and stimulated the endogenous power of police and law enforcement, some aspects still need to match the development of social transformation, which restricts the high-quality development of police work. Taking N city of F province as an example, in order to actively implement the police modernisation requirements of the Ministry of Public Security, based on the solid deployment of the provincial department and the implementation of the municipal bureau, the civil police of N city of F province constructed an intelligent AI system after joint participation and joint efforts. This study focuses on the problems in the AI operation process in N city of F province. It investigates police personnel, the technical backbone of the scientific and technological information department, and police officers on duty at the N city police station, etc., to gain a deeper understanding of the situation of applying the AI system in their departments and to determine the current status of AI use in police law enforcement as well as the main problems existing in it. Then, the system, technology and talents were summarised based on the data and information obtained.

Status of artificial intelligence usage

Led by artificial intelligence technology, the field of policing is undergoing an unprecedented revolution. The traditional policing model is gradually being replaced by a new model of intelligence and data, which will provide more comprehensive, efficient, and precise protection for public security.

Creating intelligent law enforcement linkages

In past police work, due to the large population and limited police force, the public security bodies in the administrative enforcement work had cumbersome formalities, and the case-handling cycle was longer. The process is not transparent, resulting in increased pressure on the work of the staff and, at the same time, affecting the credibility of law enforcement. Artificial intelligence technology can effectively solve the above problems. For example, the relevant departments can use artificial intelligence technology to set up a specialised enforcement linkage working group responsible for the coordinated operation of linkage matters, which effectively safeguards the enforcement linkage operation mechanism and promotes the solution to the problem of difficult enforcement.

> "The implementation of the artificial intelligence system is of great convenience to us, since a lot of paperwork has been simplified compared to the time before when you had to go to court and run around between prosecutors, detention centres and lawyers to get a case heard,

now you don't necessarily have to go everywhere to get the necessary paperwork done; now it is much simpler, the direct system helps to submit the approval of the various departments in their competence within the scope of the operation on the line, and greatly improves the efficiency of our work!" (Interview transcript 20230819GBT)

The achievement of precise security prevention and control

The introduction of artificial intelligence technology into public security administrative law enforcement allows police forces to be assigned to places of higher risk by analysing existing violations in the past and situations from multiple perspectives where administrative penalty cases are frequent. At the same time, timely administrative inspections are carried out for subjects that may have violated the law, realising a more agile identification of dangers and, with the help of an extensive data analysis system, making police work comprehensively intelligent. Public security bodies can extract adequate data from a large amount of case information and then combine it with time, space and other factors for analysis to find a variety of crime elements and then summarise the common points of all types of cases for the accumulation of experience. The artificial intelligence system can analyse and summarise all the experiences, build a corresponding model and realise accurate prevention.

"Public security authorities have already been suffering from a shortage of human resources, and now artificial intelligence will use big data to provide us with key places to focus on during the 100-day campaign, and even provide policing warnings for special situations such as the movement of people; last month we investigated and dealt with a case of crowd gambling through the system." (Interview transcript 20230812SZK)

Promotion of scientific and technological investigations and evidence collection

In the investigation stage, artificial intelligence technology has become an indispensable and essential support for the police in analysing clues and collecting evidence. With the help of face recognition, natural language processing, voice recognition, graph data mining and other AI technologies, the police can efficiently analyse the diversified information in a case and accurately refine key clues, thus significantly improving investigation efficiency. In e-discovery, AI technology can assist the police in recovering deleted documents, parsing network chat records, detecting data anomalies and steganography. If done manually, these tasks are time-consuming, labour-intensive and prone to missing crucial evidence. AI technology makes this process more efficient, reduces human error and ensures that no clues are missed.

"Times are different now; in the past, we had handwritten transcripts; now, there is a set of templates and even voice input, greatly reducing the work time. The Internet Police Department has a lot of technical means also breathtaking; last year there was a fraud case and the

suspect deleted all the evidence which, in a short period, was restored by the Internet Police, and this provides a great convenience." (Interview transcript 20240816ZWH)

Limitations of artificial intelligence applications

The impact of technology on society is twofold. On the one hand, it brings significant social benefits and promotes the progress and development of society. On the other hand, the widespread application of technology is accompanied by increased risk and the escalation of potential threats.[31] Therefore, in promoting the application of AI technology in policing, it is necessary to fully recognise the duality of its impact and develop corresponding response strategies.

Lack of scientific management mechanisms

First, the legal status is vacant. The emergence and development of artificial intelligence have reduced the pressure of cumbersome police work and improved work efficiency, but it has also brought challenges. There is no specific legal basis for applying this new type of law enforcement, and the authority of the police and the legitimacy of police enforcement cannot be guaranteed.[32] In addition, the problems of algorithmic black box, insufficient transparency and interpretability also lead to the restricted application scenarios of AI in police law enforcement, and the enthusiasm of the police is affected.

> "Sometimes, it is not that we do not want to use AI; it is that the people do not believe in those machines, and the country does not have a unified plan for the credibility of AI, not to mention that they do not believe in it, but we are also weak when we use it for fear that something will go wrong. After all, we do not know too much about how artificial intelligence works." (Interview transcript 20240714DX)

Second, the platform construction could be better. Significant differences exist in constructing AI systems in China's provinces and cities. The police in each region work separately, and each regional system is self-contained. There is a lack of effective communication between different police departments, and there are information barriers. In addition, in the process of gradual construction and improvement of the system, there is a turnover of new and old systems, and there will be data garbage.

> "It took me ages to learn how to use that platform before, and now there is a new platform. How can I learn to understand it at my age? Every day I have to go to those young police officers for help: it troubles both the others and myself." (Interview transcript 20240827GBT)

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[31]   ZHANG 2019.
[32]   FENG 2022.

Risks at the technical level

Public security bodies are administrative institutions of an armed nature. However, the current artificial intelligence technology still lacks subjectivity, cannot promptly adapt to the local situation on a case-by-case basis, and cannot make value judgments.[33] In addition, the application of artificial intelligence in the public security administrative law enforcement field includes collecting, processing and using citizens' personal privacy information, and data security and confidentiality will also become a top priority. Currently, AI products are mainly constructed with the assistance of third-party organisations. If they are not protected promptly and comprehensively, they can easily lead to the illegal use of citizens' personal information by criminals and threaten social stability.

> "I feel that some simple work, such as data collection, suspect identification, track query with this artificial intelligence is more reliable; what concerns such complex work as mediation of civil disputes, accident liability determination, who dares to believe that the judgment of the artificial intelligence is flawless ah, the people will not be convinced." (Interview transcript 20240821ZXK)

Insufficient willingness to use AI

With the rapid development of artificial intelligence, public security has considerable data talents that have become a critical factor in modernising police work. On the one hand, the comprehensive ability of ordinary civilian police is insufficient. Policing in the era of big data requires that civilian police have a certain degree of expertise in big data. However, most of the community police just mastered data entry, query and simple statistics, and other basic operations, like data depth mining, correlation analysis, data modelling, comprehensive research and judgment, and other higher-order application capabilities are lacking, the ability to resolve and prevent security risks in advance is insufficient, and there is still a particular gap in the work concept, operational skills and the actual needs of the police work. According to statistics, more than 60% of the police do not know enough about AI and are even reluctant to use AI in police law enforcement, which is ultimately a lack of understanding of AI, resulting in the police not daring to use it and not knowing how to use it.

On the other hand, the number of artificial intelligence professionals needs to be increased. F province N city public security bodies specialising in science and technology work only occupy a small portion; most of them belong to the ordinary police or part-time auxiliary police, and they need to deal with all kinds of daily policing, have no time to participate in the relevant training. The unique nature and sensitivity of public security work determine that much of the work content cannot be interfered with by third-party organisations; many units have a shortage of talent dilemmas, and the police work of artificial intelligence is still a long way to go.

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[33]   Li 2023.

"I work in our police station and am responsible for the artificial intelligence platform business. I remember there was a notice for me to go to the training last year, but our police station would have had fewer people and more cases. I could not go, so I took a leave of absence." (Interview transcript 20240719TY)

Study 2 – Factors influencing the willingness to use artificial intelligence in police law enforcement in China

Subjects

Utilises G*Power 3.1 software[34] calculating the sample size required for this experiment, for the independent samples a t-test was applied, taking the medium effect size of d = 0.25 and the significance level of α = 0.05; the calculations showed that at least 158 subjects were needed to achieve 90% statistical test power. In this study, 200 public security police officers were randomly selected for the contextual experiment in the public security bureau of H city in Z province. According to the political audit requirements of the public security bodies, all the measurements were reported to the City's Political Department of the Public Security Bureau before the questionnaire survey, and the questionnaire test was conducted after the review was qualified. All participants were public security police officers who had been regularised. According to the number of questionnaire topics, excluding invalid questionnaires with less than 3 minutes of response time and regular responses, a total of 191 valid questionnaires were recovered, and the validity rate of questionnaire recovery was 95.5%. Among them, there are 158 males and 33 females; 82 people aged 20–30, 59 people aged 31–40, 41 people aged 41–50, 9 people aged 51–60; 1 person in junior high school and below, five people in high school/secondary school, 43 people in college, 134 people in bachelor's degree and eight postgraduates; 139 people below the rank of section, 48 people in the rank of section and four people in the rank of division or above; 153 grass-roots civilian police and 38 people in agency civilian police; the working time is 3 years and below 65 people, 4–6 years 32 people, 7–9 years 20 people, 10 years and above 74 people. All subjects carefully read the instructions and gave informed consent before the experiment began.

Experimental design and procedures

This experiment utilised a between-subjects experimental design with task type 2 (objective task/subjective task) + algorithm transparency 3 (low/medium/high transparency). Subjects were randomly assigned to six groups to complete demographic information. The independent variable was then manipulated by reading materials about using artificial intelligence in police enforcement.

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[34]   Faul et al. 2009.

This study builds on existing research[35] for the experimental design. Regarding the task type, the objective police enforcement task was set to query vehicle information (quantifiable, measurable, not relying on personal experience or intuition). The subjective police enforcement task was set as explicitly tracking hit-and-run vehicles (requires personal experience and intuition).

Scenarios involving quantifiable and measurable facts were chosen for vehicle searches, and subjective tasks were chosen for tracking a fleeing vehicle, which required personal judgment or intuition on the part of the civilian police and where the outcome was somewhat open-ended.

About transparency, the material in the low-transparency group describes the name of the platform used by the AI to handle police enforcement tasks; the medium-transparency group describes the AI's specific computational processes and the metrics on which decisions are based; and the high-transparency group, on top of the medium-transparency information, will provide further explanations of the AI's computational capabilities, thus enabling the manipulation of low, medium and high transparency. Take the objective low-transparency group and the subjective low-transparency group as examples.

The material read by the objective and low-transparency group reads as follows: Currently, the querying of information on target vehicles requires law enforcement police to test multiple systems one by one. The Public Security Bureau of City H in Province Z recently introduced an intelligent case-handling algorithm, "Smart Brain 800", to assist the city's public security authorities in querying target vehicles related to cases. "Smart Brain 800" is based on the police multi-dimensional information network on the trajectory of the target vehicle and accompanying personnel to query, the police only need to enter the license plate number of the vehicle in the algorithmic system, vehicle attributes and period, and "Smart Brain 800" will be able to calculate the vehicle's track and the number of accompanying personnel in the period immediately!

The subjective low-transparency group read the material: in hit-and-run accidents, it is often necessary for the police to analyse and clarify the hit-and-run vehicle based on the details of the scene and manual inference. "Smart Brain 800" can analyse the information of the vehicle and the driver at the time of the accident based on the multi-dimensional information network of the police.

After reading the material, the subjects' trust and willingness to use AI in that context were measured. Trust was measured through three question items:[36] "To what extent do you understand the use of AI in that context?" "How accurate do you think the results obtained from AI are in that context?" "To what extent do you believe the AI can perform this task well?" a 7-point Likert scale (from "1 = very little understanding" to "7 = much understanding") was used, with higher scores indicating that the subjects felt that the decisions made by the AI in the material they read were better understood and trusted the AI more. Willingness to use AI was measured as: "To what extent would you be willing to use AI in this task in your future work?" It was scored on a 7-point Likert scale (from "1 = very reluctant" to "7 = very willing").

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35   Castelo et al. 2019.
36   Kizilcec 2016.

Results

Variable correlation analysis

The correlation analysis of each variable is shown in Table 1, according to which task type has a negative predictive effect on trust (t = −0.05, p < 0.01), and task type also has a negative predictive effect on willingness to use (t = −0.30, p < 0.01), and Hypothesis 1 is verified.

Table 1: Correlation analysis

	1	2	3	4
1 Types of tasks	1			
2 Transparency	−0.01	1		
3 Sense of trust	−0.55***	0.45*	1	
4 Willingness to use	−0.30***	0.83	0.53***	1

Note: *indicates p < 0.05; **indicates p < 0.01; ***indicates p < 0.001
Source: compiled by the authors

The mediating role of trust

Using mode l4 in the plugin process to test the mediating role of trust between the type of AI task and the willingness of civilian police to use it,[37] where AI task type is the independent variable, willingness to use is the dependent variable and trust is the mediating variable. Among them, task type is a categorical variable (subjective/objective), and trust and willingness to use are continuous variables. This study standardised all the variables before the data analysis and then conducted a regression analysis. Figure 2 shows the path coefficients between the three variables of trust in task type and willingness to use.
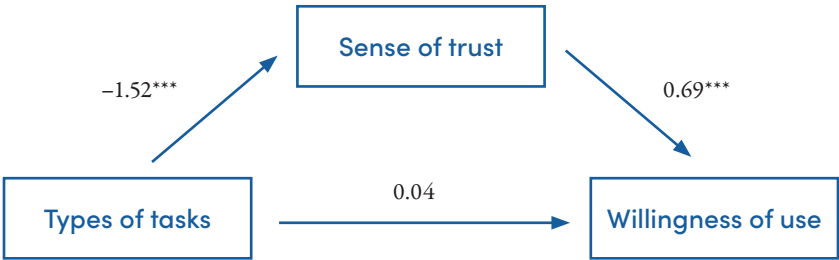
Figure 2: Schematic diagram of the mediator effect
Source: compiled by the authors

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[37]   Wen–Ye 2014.

As can be seen from Table 2, the mediation effect value of AI task type on civilian police's willingness to use through trust is −1.05, and the 95% Bootstrap confidence interval is [−1.38, −0.75], excluding 0, indicating that the mediation effect is significant; and after adding the mediator variable trust, the direct effect of task type on the willingness to use is 0.04, and the 95% Bootstrap confidence interval is [−0.45, 0.52], indicating that its direct effect is no longer significant. This result suggests that trust fully mediates between AI task type and civilian police willingness to use, validating Hypothesis 2.

Table 2: Influence of task type on willingness to use AI: Analysis of the mediating effect of trust

	Effect	se	t	p	LLCI	ULCI
Aggregate effect	−1.01	0.24	−4.28	0.00	−1.48	−0.55
Direct effect	0.04	0.25	0.15	0.88	−0.45	0.53
Indirect effect	−1.05	0.16	0.17	0.00	−1.38	−0.75

Source: compiled by the authors

The regulatory role of transparency

The moderating effect of transparency was tested using mode l7 in the Process add-in in SPSS, and the mediation model with moderation was tested by parameter estimation of 2 regression equations. Equation 1 estimated the predictive effect of task type on trust and the moderating effect of transparency between task type and trust, and Equation 2 estimated the overall effect of task type on inhibited constructive behaviour. All variables in each equation have been standardised and controlled for gender, education and age. A moderated mediation effect was shown to hold if the model satisfied the following three conditions:
1. The overall effect of task type on willingness to use was significant.
2. The predictive effect of task type on trust was significant.
3. The interaction term between task type and trust was significant in its predictive effect on trust.

As shown in Table 3, Equation 1 indicates that task type Condition (a) and the interaction term between task type and transparency Condition (c) both significantly predicted trust and Equation 2 indicates that task type positively predicted willingness to use, and trust positively predicted willingness to use, satisfying Condition (b). A significant mediation effect with moderation was indicated, where the mediation effect was fully mediated, constitutes a model with moderated mediated effects (Figure 3).

Table 3: Task type and willingness to use AI: Moderated mediation effect analysis

Predictor variable	Equation 1 (trust)			Equation 2 (willingness to use)		
	SE	β	t	SE	β	t
Type of mission	0.13	−1.52	−11.41***	0.25	0.04	0.15
Trust				0.09	0.69	7.66***
Transparency	0.26	−0.51	−1.97*			
Type of task x transparency	0.16	0.83	5.16***			
R2		0.57			0.30	
F		81.21***			41.27***	

Note: *indicates p < 0.05; **indicates p < 0.01; ***indicates p < 0.001

Source: compiled by the authors
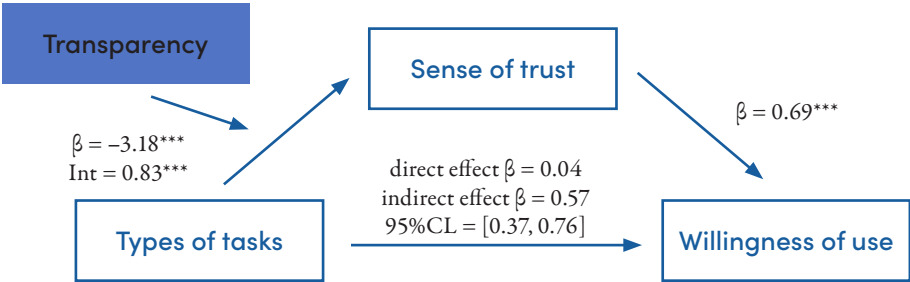
Figure 3: Moderated mediating effects
Source: compiled by the authors

Discussion

With the constant updating and development of artificial intelligence technology, policing technology also needs to be updated and improved accordingly. In this context, the concept of "intelligent policing" has emerged, representing the in-depth application of AI technology in policing, and heralds the innovation of the security governance model and the transformation of the policing work style. This study explores the current status of AI applications in Chinese police law enforcement through a survey method. It explores the effects of police task type and algorithm transparency on the police's sense of trust and willingness to use AI through a scenario-based experimental method.

Study 1 showed that the current AI is critical in law enforcement linkage, security prevention and control, and investigation and evidence collection for police law enforcement. However, there are still many limitations, especially the issue of the police's

willingness to use it, which constrains the modernisation process of police law enforcement and needs to be explored. Study 2 found that the type of task can influence the police's willingness to use AI. In objective police enforcement tasks, the willingness of the police to use AI is relatively high. This is consistent with the results of previous studies.[38] This shows that for the use of AI, we must objectively view its drawbacks, uphold the scientific concept of people-oriented, technology-enabled and shared governance,[39] and effectively utilise it on different occasions and at different times.

Regarding the specific path of influence between task type and willingness to use AI, this study found that trust fully mediates between task type and willingness to use civilian police and is moderated by transparency. This can be explained by the three-dimensional motivation theory of algorithmic rejection.[40] The theory reduces the willingness to use AI to three questions: whether decisions can be made, whether they are needed and how they will affect people. Whether AI can make the right decisions for policing is the primary question, as with AI, few technologies are immediately accepted by people upon introduction into the workplace.[41] First, people do not understand the new technology and may distrust it. However, as the application of AI becomes more popular or exposure increases, people will become more aware of it, less transparent and more accepting of AI in policing and law enforcement. Ireland argues that as AI develops, algorithms in the justice system will become commonplace depending on the increased knowledge and trust of law enforcement officers and the public in AI.[42] In the face of the impact of transparency and trust on the willingness of civilian police to use it, this study will further explore improvements to facilitate modernising policing.

Policing artificial intelligence enhancement strategies

The current application of artificial intelligence in Chinese police law enforcement has subjective and objective constraints. On the objective side, the lack of a scientific management system affects the synergistic development of policing modernisation, the loopholes in technological security significantly reduce the applicability of artificial intelligence, and the most critical lack of talent is a crucial factor in restricting the popularity of artificial intelligence. On the subjective side, the police's willingness to use AI is affected by the type of task, trust and transparency, and on the objective side, the deeper the police's understanding of AI, the stronger their trust and the higher their willingness to use it, which suggests that we can provide a good strategy for the modernisation of policing from the aspects of trust and transparency.

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[38]   DIAB et al. 2011; LOGG et al. 2019; YEOMANS et al. 2019.
[39]   Zhejiang Police College Subject Group – HUANG 2020.
[40]   ZHANG et al. 2022.
[41]   PARASURAMAN–RILEY 1997.
[42]   IRELAND 2020.

Systematic planning for top-level design

In the context of the era of the construction of China under the rule of law and the transparency of law enforcement, the application of artificial intelligence should provide a good opportunity for public security law enforcement personnel to effectively solve the problems that exist in the practical application of artificial intelligence. It is necessary to insist on digital reform as a comprehensive and systematic project and to form a good momentum for up-and-down integration and overall attack. At the same time, law enforcement transparency is an important indicator reflecting the modernisation of our government's governing capacity, and it is also essential for enhancing government credibility. When public security bodies use artificial intelligence technology, they should thoroughly follow the principle of transparency in law enforcement procedures.[43] On the one hand, the transparency of AI algorithms should be guaranteed to improve the scientificity and interpretability of their results. On the other hand, when researching and developing the system, technicians should pay attention to the research of procedural transparency and improve the visualisation characteristics of the system based on the understanding of the public. At the same time, the standardisation of police work should be promoted, the overall quality of police staff should be improved, and the public security bodies should be promoted to enforce the law strictly, by the rules and regulations, and impartially, to strengthen the standardisation of the team.

Cross-border integration to fill gaps

Public security big data application technology is complex and rapidly updated, so public security bodies should increase their efforts in technological research development and innovation. They can continuously improve their data processing and analysis capabilities by introducing new technologies, methods and tools. For example, using machine learning, deep learning and other artificial intelligence technologies can realise massive data's rapid processing and deep mining, providing strong support for public security work. At the same time, it has strengthened investment in technological research and development and innovation, encouraged and supported scientific research institutions and enterprises to carry out research and development and innovation of related technologies, and continuously improved the level and effectiveness of public security big data applications through the introduction and absorption of advanced technologies. Public security big data can be integrated and applied with other advanced technologies, such as cloud computing, the Internet of Things, blockchain, etc., to improve the processing speed further, analyse accuracy and expand the scope of public security extensive data application.

Systematic cultivation of digital literacy

The level of civilian police digital literacy determines the effectiveness of digital policing, which is directly reflected in the ability to perform specific police work. Systematic

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[43]   L1 2020.

cultivation of civilian police digital literacy comprehensively enhances the civilian police digital survival and development capabilities, not only in consciousness to guide the civilian police to fully understand the enhancement of digital literacy of the sense of responsibility, sense of mission and urgency, but also through effective and efficient education and training methods to comprehensively enhance the civilian police digital policing skills. In the face of the current shortage of artificial intelligence talents and the lack of professionalism, it is necessary to adhere to the professionalism, systematisation and long-term nature of the training of digital talents, focusing on the systematic selection and training of particularly outstanding talents, full-time instructors and different levels of echelon talents. Organise and carry out intelligent public security scene application and data modelling to support the actual combat and other business skills training in all business lines, build different police lines, application scenarios, and disposal levels of specialised teams, and form a publicity advocacy and practice orientation for promotion and reference.

Improve algorithmic trust across the board

The civilian police's cognitive characteristics, such as insufficient experience in AI, insufficient perception of AI capabilities and insufficient participation in AI decision-making can lead to distrust of AI, reducing the willingness to use AI. The easiest way to improve trust is to increase the expertise and familiarity of police officers with AI and, at the same time, demonstrate AI capabilities more often. As more and more algorithms and AI technology elements appear in human life, the knowledge and familiarity of human beings with algorithmic decision-making will gradually increase until they become accustomed to it. At this point, it is essential to demonstrate algorithmic capabilities. For example, professional and practical algorithmic advice will lead to more trust and thus increase the utilisation of algorithms.[44] Furthermore, if the civilian police can autonomously adjust the AI output to their needs,[45] their perception of the ability to learn or adjust AI decisions would also be more robust.

Conclusion

With the rapid development of artificial intelligence technology, "intelligence + machine" has undergone significant changes in the industrial field and profound changes in the field of public security. Study 1 found that artificial intelligence is essential in intelligent law enforcement linkage, investigation and evidence collection, and public security prevention and control. However, there are still problems of institutional deficiencies, technological risks, and the lack of willingness of the police to use it. Surveys show that more than 60% of Chinese police officers do not know enough about AI and are reluctant to use it in police law enforcement. On this basis, Study 2 found that the police's use of AI is influenced by the type of task and trust, and is moderated by transparency. Therefore,

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[44] Goodyear et al. 2016; Kramer et al. 2018.
[45] Greene et al. 2016.

we need to systematically plan top-level design and cross-border integration to fill in the gaps, cultivate digital literacy, and comprehensively enhance algorithmic trust to help the police better maintain social stability and protect public safety.

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POLICING AS A SCIENCE

Policing as a Profession in Social Media from a Comparative Perspective

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The need for publicity, transparency and accountability has increased as a pressure on police forces since the emergence of social media. But while initially the novelty and lack of experience with new tools excused police forces from uncertainties, shortcomings or mistakes in managing their profiles, a quarter of a century later, the police can be accountable for awareness and usefulness of their practice.

The main question of the research, based on social media monitoring, is how the different branches of policing, their specific activities and the content that highlights expertise and promotes and recognises policing to citizens are presented, beyond the organisational image-building function.

The applied method is the qualitative document and text analysis supported by computer software to analyse the Facebook activity of the Hungarian Police and a Hungarian (community) police officer in Canada. The sample included two different months' shared content for both profiles studied using purposive sampling.

The results show a strong contrast in terms of the direct law enforcement implications of the content. Hungarian communication is centralised, highly controlled, organisational and professional, but at a great distance from the day-to-day tasks, while Canadian communication is personal, semi-professional-layman and gives a direct insight into the working day of the police.

Our conclusion is that different policing models enable very different content along different practices, and the reasons are rooted in both regulation and culture. While the Hungarian legislation relegates the individual police officer to the background in order to strengthen the image of the organisation through propaganda, overseas it is the individual who brings the profession 'in the flesh' and gives it credibility and legitimacy.

Keywords: policing, social media, document analysis, comparative study

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Introduction

In the early and mid-2010s, publications reported that police forces around the world were using social media for everything from issuing alerts to building organisational image.[3] Since then, this 'everything' seems to have altered a bit and some shifts in emphasis from the potential to support policing functions to image building are emerging.[4] Alongside (or often instead of) the strengthening of a culture of dialogue, we are also witnessing the preservation of old relations (one-way, often authoritarian, highly hierarchical communication).[5] In our study, we therefore contrast two different communication practices conceived in two different policing models (cultures). We will look at how the service side of the police, the individual officer and the organisation appears on social media and how much its appearance has a direct link to the practice of the profession. Why is this necessary? If we accept that organisational communication management is never an end in itself but is subordinate to the central objectives of the organisation, then we must start from the premise that the social media presence of law enforcement agencies (also) serves law enforcement purposes.[6] How does the Hungarian Police and the (Canadian Hungarian) community policeman in the study contribute to this triple function? To do so, we first review and detail the possible goals and challenges of police officers' use of social media, and then turn to a deeper, qualitative content analysis of the content posted.

Literature review

Andrew Goldsmith said in 2015 that new media had brought "new visibility" to law enforcement, creating new challenges and new vulnerabilities. The need for transparency and accountability has been coupled with the possibility of criticism, and new smart technologies have become a threat to the integrity of the police organisation and profession in many studies. User or lay content is an opportunity to shed light on and expose police abuses and destructive organisational practices. Moreover, as De Graaf and Meijer (2019) point out, social media also bring role and value conflicts into the lives of police forces, which are inherently characterised by secrecy and control, as they are now faced not only with the demands of transparency and accountability, but also with the imperative of visualisation.[7]

But the counterpart of this threat and challenge is the possibility for the police to contextualise the content and, as content creators, to come up with exclusive content themselves. With its own content, the police can strengthen its own legitimacy and social acceptance. However, this requires police forces and police officers to communicate on social media in a way that is appropriate to their cultural and organisational characteristics, and to avoid content and expressions that could damage the reputation of the

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[3]   Van de Velde et al. 2015; Kriskó 2012; 2016.
[4]   Ralph 2022; Livingstone 2022.
[5]   Crump 2011.
[6]   Finszter 2018.
[7]   De Graaf – Meijer 2019.

organisation, call into question the effectiveness of its work and thus undermine its legitimacy. There is therefore an opportunity for police forces (or even individual police officers) to build an image that reinforces their existence and their specific mandate.[8] Before presenting our own research, there is only one thing we need to talk about: the process of 'legitimacy spillover'. This is the term used in the literature to describe the phenomenon whereby the legitimacy of an organisation, person or profession is built up through the action and communication of another actor, person or organisation. This is reported, for example, by Isaak and Walby (2022), who studied how police associations and unions or associations with multiple jurisdictions use social media. They found that the central purpose of police associations in Canada is to legitimise not only police officers but also the police as an institution and policing as a profession itself. They call this "horizontal legitimacy spillover". This, of course, has repercussions for police communication and the use of social media by police forces. By analogy, this phenomenon is referred to as "vertical legitimacy spillover", where the social media activity of an individual police officer reinforces the legitimacy of the organisation (police station or district).[9]

Going further in the literature, we see that in addition to the above, social media can be a tool for improving the (indirect) experience of the police,[10] for gathering information and evidence, and thus for detection,[11] it can also be a tool for professional public relations,[12] and it can be a means of control, a means of moderating discourse or even stifling dialogue.[13] In summary, social media can be seen as an interface for image building and establishing organisational legitimacy. The public relations activity of the police, on the other hand, is a process of transcoding, where the police adapt their communication to the medium that is social media.[14]

Methodology

There is no detailed methodology for qualitative research on Facebook content, we work with adaptations of traditional methods in the online space.[15] Virtual and, increasingly visual interactions are multiplying very rapidly, making their capture and retrieval a rather cumbersome process, constrained by the various media platform providers. It is easier for the present research to investigate not the interactions between the Hungarian Police and the selected community policeman and the public, but the role of the communicator in the communication process, the messages sent out and their professional content. This is a much narrower cross-section of the triad of intentions, rhetoric and professionalism of the entries. The text corpus is formed by content created and directed

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[8]   Bullock 2018.
[9]   Wood 2020.
[10]   Hu et al. 2020.
[11]   Lieberman et al. 2013.
[12]   Lee–McGovern 2013.
[13]   Crump 2011.
[14]   Wood 2020.
[15]   Franz et al. 2019.

by the Hungarian Police on its own timeline and on the profile page of the community policeman and together they form the basis of the analysis. We also look at user reactions (such as like, love, care, 'haha', wow or angry), comments and shares. We only engage with visual and aural content to the extent that its primary and central message has a clear law enforcement professional content (e.g. police dog in sunglasses is not included, but police dog at work as an embodiment of legitimate violence is included in the evaluation.) We conducted a passive analysis, i.e. we engaged as site followers by merely reading and not creating the content.[16]

The sample

We decided to examine the central profile of the Hungarian Police and a profile of a police officer, the top and the bottom of the hierarchy. The latter, of course, cannot be Hungarian due to national regulations. The sampling is deliberately contradictory, with community policing on one side and continental policing on the other side, framing the communication strategy. Meanwhile, the sample is comparable, as both profiles target Hungarian audiences on policing related issues. The Canadian Hungarian practice represents the bottom-up strategy, while the Hungarian one represents the top-down legitimising or communication strategy.

In total, 211 posts were included in the analysis, totalling more than 230,000 characters. For both profiles, content from two different months was sampled.

Table 1: The sample in numbers (posts and user reactions)

	Hungarian Police April	Hungarian Police June	Zanati November	Zanati March
Number of posts	79	74	28	30
Number of reactions	106,831	96,678	18,682	27,476
Number of comments	5,973	7,411	1,715	2,039
Number of re-shares	4,923	12,242	1,783	341

Source: compiled by the authors

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[16]   WALLACE–LLEWELLYN 2025.

Coding

Data analysis was carried out using the MAXQDA qualitative text analysis software. A mixed coding approach was used: first, the text was coded according to the research questions, i.e. research objectives and police service branches, followed by corpus-based coding. In this case, this means that the categorisation was based on Decree 30/2011 (IX. 22.) of the Minister of the Interior on the Police Service Regulation. The subcategories were created based on the service areas named in the regulation, and the main categories were created based on theoretical approaches to policing: prevention, patrolling, investigation, cooperation, private security, civil self-defence, legitimate violence, police power/force. Since we were performing a content structuring analysis,[17] in the next step we added new categories dictated by the text, such as non-policing, privacy, second jobs, etc. After the results of the double-blind coding were merged, redundant subcategories were removed, and the texts were recoded. The preliminary results of this process are presented in this conference paper.

Results

The official Facebook page of the Hungarian Police was created on 22 April 2020. A community of 226,000 people is currently built around the profile.[18] This means that the page can deliver messages to roughly one in every 30 Hungarian Facebook users, as according to the latest statistics, there are 7.11 million Facebook users in Hungary.[19] At the start of the period under review, the number of followers was lower, 190,000 at the time of the first sample (April 2023). The user data shows that 63% of the total population has a Facebook account, with the gender sharing rate tending towards parity, but it is still more popular among women, with the most active age groups being 25–34-year-olds and 35–44-year-olds.[20] If we look at the messages sent through this channel and the responses and reactions to them, it is worth bearing in mind that the number of followers of a Web 2.0 platform does not only include the fans of the site. Certainly, the community built around the site also includes individuals who are antipathetic to the profile, ranging from experts to lay people, from supporters to competitors, to counter-patrons.

 The contact details on the site contain adequate and up-to-date information, but there is only one link to the online presence (www.police.hu – the official homepage of the organisation). The contact details do not include a link to any other social media platform of the law enforcement agency, although they have built up a large following on both Instagram and TikTok.[21]

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[17] Sántha 2022.
[18] 20 October 2024.
[19] Statista 2025.
[20] Statista 2025.
[21] Instagram: 92,800 followers; TikTok: 154,500 followers.

The administrators of the site do not make use of the interpersonal contact facility that could be provided by the message button on the site. Nor is it allowed to express an opinion about the organisation in the form of a recommendation, so the Hungarian Police are not taking full advantage of all the opportunities Facebook offers to engage in multidirectional, interactive communication with their online community.

In terms of the visual identity of the site, both the profile and the cover image are of high quality and clearly identify the organisation. The profile picture shows the logo of the organisation, and the cover picture is thematically consistent. The content shared is free of spelling errors for the period under review. The periodicity of content sharing is well balanced, with an average of 3–4 posts per day, which suggests a high level of activity. However, this can be burdensome, especially when considering the volume of content shared. Users can be overwhelmed by content and distracted from truly relevant content to less relevant topics, or content can become a bland time-filler.

Research to help develop content marketing strategies for Facebook posts shows that the number of words of a post negatively affects the perception of the community. Long posts also reduce the propensity to respond, as long posts require more attention, which is less of a characteristic of the 21st century person's online presence.[22] The average length of the Hungarian Police's posts is around 1,085 characters, which means 8–10 sentence long reports. However, the deviation from the average length is 1,552, which means that they often share full-page texts. This is very far from the ideal and user-friendly length that is 40 characters, according to the relevant above-mentioned marketing research. The independent content production strategy of the Hungarian Police is not characterised by the production of extremely long posts. Self-written posts are often only one or two words, but as a result of the re-sharing of other police content, the site is cluttered with extremely long texts. They often include original posts from other police communication channels, such as full newspaper articles from *Zsaru Magazin* (Cop Magazine). This upsets the thematic and visual coherence of the site and makes it difficult to separate the audience reach volume of the site from that of other channels. (We are still in the process of cleaning up this data.)

The other profile under review was created in December 2019 by its owner, an Ontario neighbourhood officer, Balázs Zanati. The Hungarian-born Canadian police officer graduated from the Ontario Police College and has been a police officer since 2009, according to his profile. He now has about 37,000 followers. He is a digital content creator and official representative of the Toronto Police Department on Facebook. Other than his place of birth (Keszthely), there is no private information on his profile, although he regularly shares private content on his page. Visitors are reminded that his site is not for reporting purposes and is not monitored 24/7. For police reports, it provides the emergency phone number, 9-1-1, and an anonymous tip line. As our research shows, Officer Zanati shares content with his followers on a daily basis, and in most cases the content is self-produced, always with illustrations (pictures or videos). The cover image is a view of Toronto at night, perfectly matching the content of the page, showing the living environment and workplace of a community officer. The average length of posts is 335 characters,

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22   DROSSOS et al. 2024.

indicating that the site administrator is trying to adapt to the requirements of micro-marketing and the reading time constraints of digital content consumers. In this sample, the average deviation from the average length is 264. On an order of magnitude, we see that the Hungarian Police profile shares 3 times longer texts with their followers than the community police officer's. None of the videos posted by the neighbourhood officer exceeds 30 seconds. In contrast, the longest multimedia content of the Hungarian Police is a conversation of more than 41 minutes with the Canadian police officer we examined.

As can be seen in the figures below, long posts generate much less user activity than shorter content (see Figures 1 and 2).
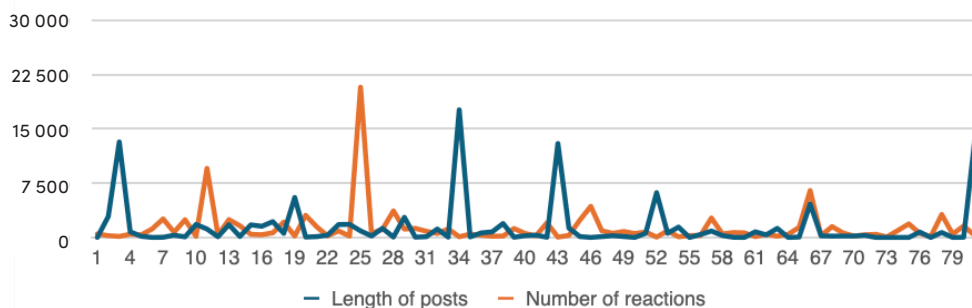
Figure 1: Length of content and number of user reactions
Source: compiled by the authors

However, we also see that after a year, the content on the Hungarian Police profile page is shortening, almost halving in length (see Figure 2).
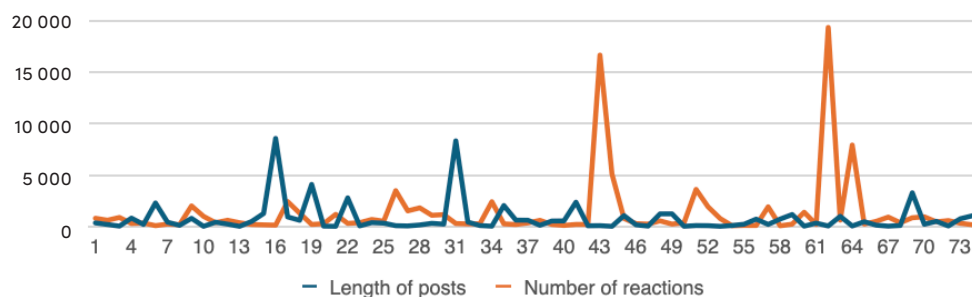
Figure 2: Length of content and number of user reactions
Source: compiled by the authors

In the case of the Canadian police officer, there is no significant change in the length of the posts (323 and 335 characters), but the user responses show increasing variation as can be seen in Figures 3 and 4.
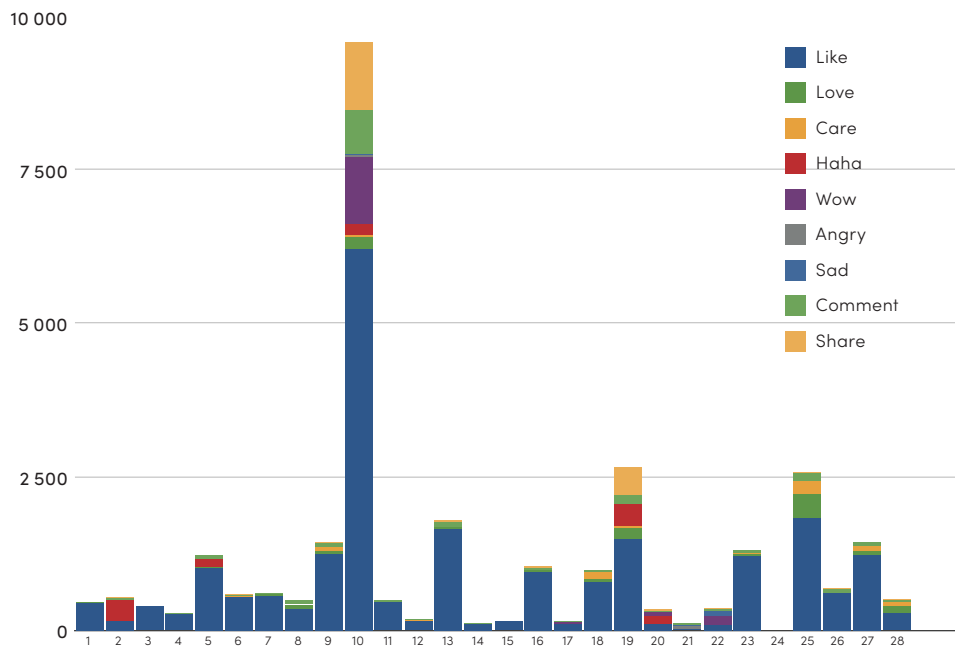
Figure 3: User reactions to the content – Zanati (November)
Source: compiled by the authors
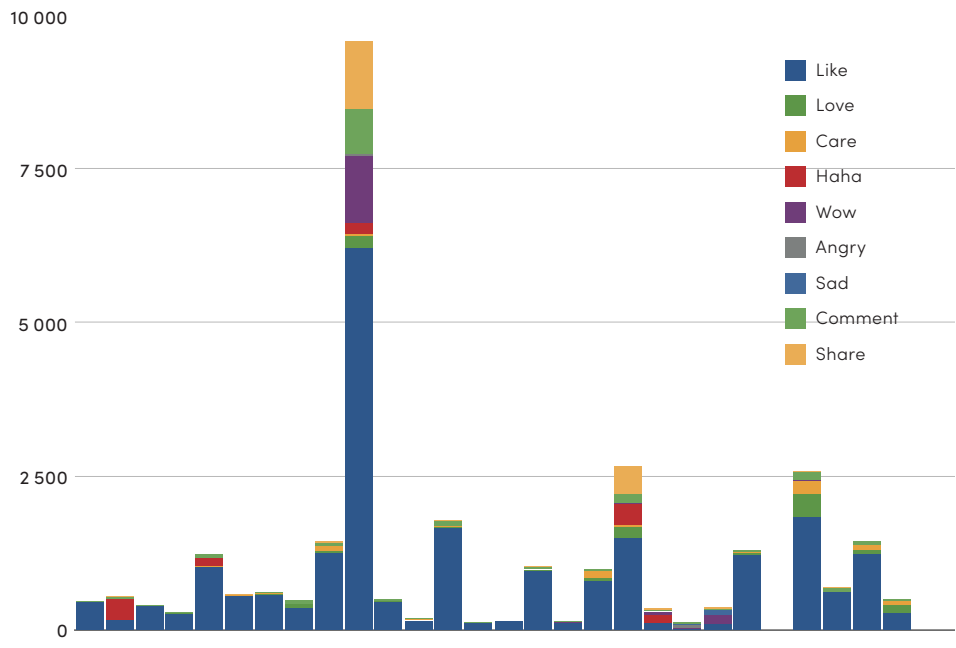
Figure 4: User reactions to the content – Zanati (March)
Source: compiled by the authors

And maybe here we can see that the content producer gained his routine and has a stable audience.

We have also carried out a thematic comparison in terms of the content coverage of law enforcement areas. We found that in the case of the Hungarian Police, traffic policing topics received the most coverage in the first month of the survey, followed by some form of legitimate violence, and emergency response and direct lifesaving in the second month.

In the case of the community police, both months were dominated by the themes of prevention of danger and presence in public places (patrols), and, unsurprisingly, issues of private security were also prominent (see Figure 5).
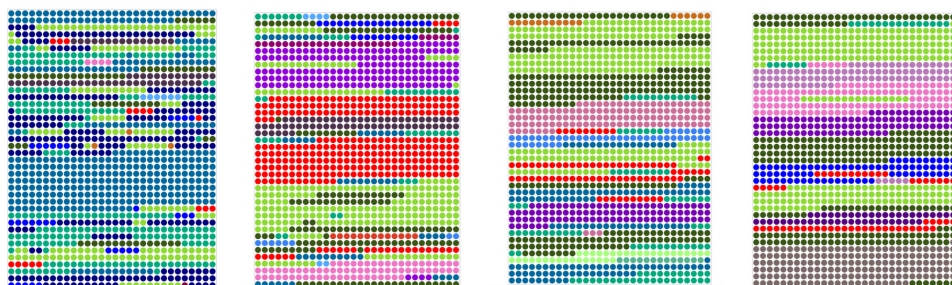
Figure 5: Thematic document portraits of the sample
Source: compiled by the authors in MAXQDA 2024

The Canadian community policing profile clearly shows a greater thematic consistency than the Hungarian Police profile. However, it must be acknowledged that the Hungarian pattern is somewhat distorted by two significant events, one being the visit of Pope Francis and the other the European Football Championship. One of them has increased the entries on the subject of traffic policing, the other on presence and cooperation. At the same time, the purple units in the figure indicate the emergence of the theme of professional cooperation. A counterpart of this can also be found in the Canadian sample, in connection with Easter.

Conclusion

As the study revealed, the Hungarian site ensures a continuous content sharing by re-sharing a lot of material from the county police forces and other policing channels. In contrast, the community policeman uploads almost exclusively self-produced material, which is rarely coloured by received posts and in that case, it has direct law enforcement content (CCTV and body-worn or security camera footage). The most shared post in both cases was about animals. The contents of the Hungarian Police with the highest audience reach are related to saving lives and a humorous Reels video. On the timeline of the community police officer, the most popular topics were the retirement of the service dog and a motorcycle chase. Both

profiles use the marketing tool of cuteness, which is proven to be effective in generating likes. The cuteness factor also communicates power relationships, power playfulness, brings in vulnerability, humility and weakness, which it then combines with dominance and control.[23] Cute things are disarming, and the armed forces benefit from this.[24]

The difference is striking in terms of everyday content. Here, we mean material that is not edited and created by a designated communication staff. The scene of the recordings is often the Canadian police officer's own office, his police car, his police station, his direct circle of colleagues and friends, his professional life and his direct experiences. As far as the publication times are concerned, in the Hungarian case we can observe a kind of mechanistic content production (content published at the beginning of the service, around 10 a.m. and at noon or before the end of working hours). There is no night and day content production or out-of-work coverage. Occasionally, public holidays take precedence over online users.

The content published is undoubtedly for public relations purposes and not for law enforcement functions. Education and promotion of safety awareness clearly take a back seat to the dominance of entertainment and reputation management. The popularity of fun and humorous content is also common in both profiles. Many law enforcement functions are not even marginally reflected in content on social media. We would definitely mention victim protection as a missing topic. But border management is also a missing issue, while Hungary has been in a crisis situation caused by mass immigration since 2015.

The results show a strong contrast in terms of the direct law enforcement implications of the content. The Hungarian communication is centralised, highly controlled, organisational and professional, but at a great distance from the day-to-day tasks, while the Canadian communication is personal, semi-professional-layman and gives a direct insight into the working day of the police.

Our conclusion is that different policing models enable very different content along different practices, and the reasons are rooted in both regulation and culture. While the Hungarian legislation relegates the individual police officer to the background in order to strengthen the image of the organisation through propaganda, overseas it is the individual who brings the profession 'in the flesh' and gives it credibility and legitimacy.

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The Civil Guard

Legislation on the Auxiliary Police

Pál KARDOS[1]

In the field of public security activities, volunteers play a significant role, of which we can see many examples both domestically and abroad. In our country, the civil police is the organisation that has the legal authority to carry out social crime prevention activities as an element of complementary policing. The author of the study undertakes to present, as a practicing law enforcement professional and civil police leader – after a brief look at the establishment of the movement and its reasons – the most important previous and currently running priority programs of the civil police, their reasons, implementation and significance. The author wishes to contribute to the comprehensive scientific research and mapping of the operation of the civil police, recognising the fact that the researched topic of crime prevention, civil participation in maintaining public order and public safety is a timely issue, that under the current circumstances, the role of civil police is an indispensable aid to the police, and that the priority programs contribute to the high-quality performance of civil police tasks, thereby improving the subjective sense of security of citizens. A necessary element of research conducted on this topic is the discussion of the above questions.

Keywords: civil guard, security, prevention, service, program

The creation and role of the civil police: a short introduction

The significant increase in crimes during the period of the regime change made it necessary for self-organising groups to be formed in order to prevent crimes and other illegal acts and to participate in the establishment and maintenance of public order and public security. Over time, self-defence groups were grouped into organisations, which was made possible by Act II of 1989 on the Right of Association. In order to achieve public security

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through civil cooperation and to assist state bodies, civil guards and civil guard associations began their activities, which became socially accepted and respected. As a result of their successful activities, the National Association of Self-Defence Organisations was established, which on 30 November 1991 – due to the significant expansion of tasks and the expectations of the population – took the name of the National Civil Guard Association.[2]

Under the leadership of the National Civil Guard Association, the civil guard associations and their regional associations, which operate legally in Hungary, are self-organised by the population, and were established for the purpose of preventing social crime and accidents, protecting children and youth, and protecting the environment in the interest of stronger public order and public safety, and have become social crime prevention organisations with unified action, the same approach, well-organised and with definite objectives, at the same time embracing the largest number of members. They have become organisations that could be suitable for contributing to the establishment and maintenance of public order and public safety and for cooperating with other organisations to this end. The establishment and maintenance of public safety is the result of the close cooperation of several actors – local governments, police, civil and private organisations – or, as László Christián puts it, the product of cooperation.[3]

The importance of programs in the activities of the civil police

Since its establishment in the early 1990s, the civil guard has undergone significant development in several aspects. The number of organisations and volunteer civil guards has increased. The role of the movement in creating and maintaining public safety has continuously grown, and its activities have become more diverse. Over the years, the police have increasingly viewed the civil guard as a strategic partner. Joint services have become regular, involving the civil guard in activities that could not be carried out solely with the capacities of the police. In addition, it has carried out social crime prevention as its own activity by providing public services and exercising other activities.[4]

When we mention crime prevention, security and public safety, we should talk about them in a broader sense. Perhaps the most accurate way to put it is to say that we consider it the task of the civil police to comprehensively participate in the prevention of illegal acts, including all those undesirable behaviours, phenomena and even events independent of human factors, which influence the subjective sense of security of citizens.

The goal of the civil guard is to improve the sense of security of the population, and in doing so, to deal with issues that affect the sense of security of the population of the settlement and the country as much as possible in their place of residence. The programs of the National Civil Guard Association are of particular importance in working towards this end, which are organised by the civil guard with the aim of preventing crime and taking

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[2]   Bacsárdi–Christián 2018.
[3]   Christián 2020.
[4]   Kardos 2024.

action against phenomena that disturb the population and negatively affect their sense of comfort, as well as providing assistance.

Priority programs of the civil police

The priority programs of the civil police gained special importance in the 2010s. The earliest and one of the most significant was the civil police program called "300 × 100 Safety", which is also worth looking back on because as a consequence or result of it, we can still encounter programs running today in the civil police's activities.

"300 × 100 Safety"

The experiences of the civil police activity in the two decades following the change of regime – in line with the results of criminological scientific research – have confirmed that crime is a complex social phenomenon, which can only be effectively combated with the cooperation of every citizen and the local community. Taking into account international and Hungarian "good practices" of environmental and community crime prevention, and based on the requests and guidelines of the National Crime Prevention Strategy, the Ministry of the Interior and other cooperation partners – in particular the police and local governments – the National Civil Guard Association regularly announced and successfully implemented crime prevention programs.

Creating and maintaining complex security, improving the quality of life, well-being and spirit of citizens, in addition to general measures, requires that we continuously pay special attention to the local characteristics of settlements and the environment. Based on these, measures affecting public safety and the crime prevention methods applied should be determined.

With the special support of the Ministry of the Interior, the professional guidance of the National Police Headquarters, and in cooperation with the National Crime Prevention Council, the presidency of the National Civil Guard Association initiated the announcement of the differentiated "100 × 100 Security" model citizen guard program strengthening public security in 100 settlements of the country. Based on the experiences of the successes achieved, an additional 150 settlements joined it in 2014, so the program was called "250 × 100 Security" in 2014–2015. In 2016, it already affected 300 settlements, where "100 percent public security" was announced, the name of the program was changed to "300 × 100 Security" and lasted until the end of 2017.

The programme aimed to:
– designating medium-term citizen guard action goals and priorities that can be implemented (to be implemented) in settlements (settlement parts) with public safety challenges that take into account the population's sense of security and that are different from the average, defining the methods of implementation and providing special support

- obtaining the support of the Ministry of the Interior and other cooperating organisations, as well as citizens, for a specific program that treats special characteristics and local peculiarities as a priority
- contributing with the practical results of the effective community-building, public safety-maintaining and security-improving programs of the National Civil Guard Association, county associations and associations to the elimination of inequalities, to the introduction and acceptance of norms and behavioural rules accepted in society
- popularising citizen guard, increasing its recognition, and increasing the number of citizen guard associations (with special attention to young citizen guards)
- research and implementation of cooperation opportunities, evaluation and utilisation of experiences
- documenting the main aspects and results of the program's implementation (in writing, audio and video recordings), making recommendations to competent institutions, organisations, as well as citizens and their communities

The program brought the civil guards and district commissioners closer together, and established and strengthened relationships and cooperation with public area supervisors (settlement guards), professional game wardens, forest and field guards, nature conservation guards, and social fish and game wardens. The association's system of relationships with other civil society organisations, established for crime prevention and charitable purposes, also expanded. In 90% of the participating settlements, the number of registered crimes decreased significantly, and the subjective sense of public safety of the residents increased.

As mentioned above, other programmes and tasks have been implemented in connection with the above, which are still ongoing and will be discussed later.

Metropolitan Crime Prevention Program of the Police and the Civil Guard

The crime prevention program described above was primarily aimed at small settlements with a small population, where the civil police are present. However, it is necessary to mention settlements with larger areas and populations, large cities, where civil crime prevention faced different challenges due to the characteristics of the settlement. The problems of large cities had to be addressed at least as much, which is why the Metropolitan Crime Prevention Program of the Police and the Civil Police was also carried out at the same time as the "300 × 100 Security" program.

The National Crime Prevention Strategy updated crime prevention tasks and provided a comprehensive analysis of the complex social phenomenon of violations that occurred in the previous decade. It set general objectives to enhance public safety, improve people's subjective sense of security, control the processes that lead to crime and reduce the quantity of crime. The implementation of the strategy was realised in action plans for specific periods, in which vigilante organisations played a significant role.

As we have previously predicted, with the experience of the first twenty-five years of the civil police, with legal authorisation, as the only civil society organisation for crime prevention, as a strategic partner of the police, and with the professional and service guidance of the police, it initiated crime prevention programs that met social and community needs, which it successfully implemented.

During the objectives, special attention had to be paid to urban crime prevention. Among other things, the place of residence also plays a significant role in becoming a victim, and crime is primarily a phenomenon associated with cities, especially large cities. In an urban environment, relationships between people are looser and community cohesion is weaker than in a small settlement. The most common places of commission are the streets of cities, deserted parks, other secluded areas, staircases or elevators of larger apartment buildings, public transport, busy meeting points visited by young people in large numbers (shopping malls, plazas, their parking lots, arcades, train stations and their surroundings, metro junctions, stops of surface public transport or popular night spots). A significant proportion of crimes committed in public areas, such as vandalism, disorderly conduct, assault and robbery are committed in or around entertainment venues.

The potential targets of criminals are invariably elderly people living alone in their homes. Perpetrators usually enter the property at night or in the early hours of the morning by deception or physical force, where they obtain the victims' money and valuables not only through intimidation but also with increasingly brutal violence. In order to increase the efficiency of urban crime prevention, the National Civil Guard Association and the National Police Headquarters – with the support of the Ministry of the Interior, the National Crime Prevention Council and Aegon Hungary General Insurance Ltd. – announced the Metropolitan Crime Prevention Program for the years 2016–2017.

The aim of the programme was to implement the partnership tasks included in Government Resolution 1744/2013 (X. 17.) on the National Crime Prevention Strategy. The defining task and objective were the police – civil guard cooperation that can be implemented (to be implemented) in large cities (or city districts) with public safety challenges that greatly influence the subjective sense of security of citizens, the designation of action goals and priorities, the definition of implementation methods and their special support.

For the specific programme that prioritises special urban characteristics and local specificities, it was necessary to obtain the special support of additional cooperating organisations and the population for the years 2016–2017.

The aim of the National Civil Guard Association, the county associations and other associations was to contribute to the dissemination and acceptance of accepted norms and rules of conduct in society with the practical results achieved during the effective community-building, public safety-maintaining and safety-improving program. In addition, the aim was to popularise the civil guard and police, increase their recognition, increase the number – and staff – of civil guard associations, the practical implementation and improvement of cooperation opportunities in cities (districts), and evaluate and utilise experiences.

Documenting the implementation, main moments and results of the program (in writing, on audio and video recordings) and making further proposals based on these

was essential for the competent institutions, organisations, as well as citizens and their communities.

The program involved:

- citizens' patrol associations operating in county capitals, supported by county associations and county police headquarters, with a crime prevention program that includes the specificities and vulnerabilities of the operating area
- citizens' patrol associations operating in the districts and agglomerations of the capital, supported by the Pest County and Budapest associations, the Pest County Police Headquarters and the Budapest Police Headquarters in the Budapest area
- the list of citizens' patrol associations participating in the program (making commitments) will be provided by the county–capital associations after the program has been accepted and the action plans have been compiled

The main content elements of the Metropolitan Crime Prevention Program (action plan) were as follows:

- developing the public safety and crime prevention strategy of the city (district – city district) with the cooperating partners, and if they already have a strategy, reviewing and modernising it
- learning, studying and thoroughly evaluating the locations and circumstances of events with unusual public safety challenges, the risks endangering young people, the characteristics determining the population's sense of security, the reasons enabling the commission of crimes and violations, and the processes leading to the commission; within this, the reasons for committing crimes, the factors influencing becoming a victim, the reduction of opportunities facilitating the commission of crimes and the determination of applicable methods of prevention
- planned implementation of the basic tasks of the civil guard associations (public area patrol service – surveillance service – signal guard activity) coordinated with collaborators (with the professional coordination of the police)
- multi-level, multi-sectoral reconciliation of interests in crime prevention and preparation and implementation of prevention plans based on consensus, including close cooperation with the police, the local government, professional organisations, local institutions and members of local society
- definition of priority objectives and tasks of great importance:
  - establishment of a coordinated duty and alarm system
  - establishment of communication conditions between collaborators
  - ensuring responses to emergency calls and reports
  - support for the establishment of civil guard associations in higher education institutions (organisation of the "Youth Patrol")
- effective transmission and continuous communication of the program and related information: informing all age groups of the population – with special attention to those at risk – distributing crime prevention and public safety and

traffic safety advice and leaflets with the involvement of young civil guards and young people performing community service and through the media

– proactive participation in architectural crime prevention, reporting situations requiring action (public lighting, vandalism, malfunctions, etc.)
– contribution to the suppression of the most common types of disorderly and violent violations in public areas
– strengthening community trust in the civil guard, the police and other state institutions, local governments and among citizens
– positive shaping of civil thinking
– implementation of the "Respect for the Years, Safety for the Elderly!" program in housing estates; organisation of a "Night Watch" service with the involvement of suitable elderly people
– organisation and management of the "Neighbours for Each Other Movement"
– active use of the opportunities of "Public Safety Coordination Forums", regular organisation of public information, participation in the operation of Crime Prevention Centres
– contribution to the organisation and support of useful leisure time, the development of social competencies of young people, the building of small communities (initiation of evening and night programs)
– reducing crime opportunities related to key events (holidays, shopping periods, cultural and leisure events), contributing to prevention and detection, and securing endangered areas
– participation in national campaigns initiated by partners and collaborators, especially in the police's "We're Going Home" crime prevention program

"The Periphery Security"

The Ministry of Agriculture and the National Civil Guard Association announced a program entitled "Safety of Outer Areas, Protection of Our Environment" in November 2019. The goal of the program was to pay greater attention to the protection of forests, fields, arable crops, vineyards and farms, and to contribute to the prevention of violations that harm the environment and destroy our environment.

Agricultural property protection is a particularly important task and a common interest of the country. In order to increase the efficiency of agricultural activities, it is advisable to further deepen the cooperation between field guards – as persons performing law enforcement tasks – and civil guards.

The aim of the civil guard program was to prevent violations of law – thefts from enclosed gardens, fields and forests – to guarantee the safety of people living on farms and in rural areas, to protect farms, valuable assets and resorts, and to perform field guard duties in settlements where there is no field guard service. The general goal is to take an active role in environmental and nature protection. The slogan has become: "Those who sow shall reap." To this end, civil guard associations must create a so-called "Outer Area

Security Network", which in practice means that the associations organise a significant part of the civil guard services in the outer areas.

Crime in the outer areas is moderate and seasonal. In winter, wood thefts are typical, and in summer and autumn, arable crops, vineyards and orchards are at risk. People living on farms can be potential targets for offenders.

The National Civil Guard Association declared 2020 the year of "Security of Rural Areas". The program was implemented primarily by civil guard associations, but also by field guards, nature conservation guards, fish guards, hunting associations, professional hunters and affected property owners.

Launched with the principled support of the Ministry of the Interior and the professional supervision of the National Police Headquarters, the program was attended by 2,000 associations of the National Civil Guard Association and approximately 63,000 civil guards, including the Mounted Section. The Ministry of Agriculture allocated 40 million HUF as funding, which covered the security of the outer areas and the resource and equipment requirements of the crop safety program.

Child and youth protection: "One School – One Civil Guard" Program

The family, the institutional system of child and youth protection, educational and upbringing institutions, the police and civil organisations, including the civil police, play a significant role in preventing children and young people from becoming offenders and victims.

The National Civil Guard Association stated in its medium-term strategy that, in order to reduce child and youth crime and prevent victimisation, the civil police should be more organised in schools and develop cooperation opportunities that promote accident prevention, contribute to improving school children's traffic knowledge, and prevent sources of danger to children.

To this end, in October 2006, it announced the "One School – One Civil Guard" program and asked the teaching community to implement it by mutual assistance in the following main areas:
- general crime prevention, as well as the prevention of child and youth crime and victimisation
- drug prevention in particular
- accident prevention, compliance with traffic rules
- training of civil guards, summer camps

The legal basis for the program is provided by Section 4/A (3) of the Civil Guard Act, according to which the civil guard – based on a cooperation agreement concluded with the civil guard and the kindergarten and primary school maintainer – is entitled to perform traffic signal duties in the immediate vicinity of kindergartens and primary schools in order to facilitate the safe crossing of children on the road.

The Statutes of the National Civil Guard Association highlight, among the goals and tasks, the contribution to the prevention and detection of crimes, the search for missing persons and the prevention of child accidents within the framework of the "One School – One Civil Guard" program. The Organisational and Operational Regulations of the National Civil Guard Association emphasise that in order to achieve the objectives of the civil guard movement, the activities of the civil guard organisation include participation in the educational work of child and school crime prevention.

After the program was announced, it started with 5 schools in each county, and more and more schools joined. Currently, 778 schools and nearly 1,000 teachers are participating in the program.

Within the framework of the program, it was recommended that students receive information and training on crime prevention issues affecting them during class (classroom teacher's class) or optionally (e.g. professional club) or as part of leisure activities (competitions, summer camps).

Its implementation requires that theoretical training be primarily conducted by civil guards or teachers who have pedagogical flair, sufficient professional preparation and sufficient practical knowledge.

During practical sessions, highly qualified professionals (police officers, civil guards, teachers) can also be involved. It is important that the person conducting the training has a thorough knowledge of the educational institution's legal requirements and related social expectations.

The training was implemented during a 3 + 1 hour theoretical and a 22-hour practical training. The practical and theoretical training ensured that the children learned about the regulations related to crime and accident prevention, the conditions for avoiding becoming a victim and the measures that can be expected of them in the event of surveillance, event security, minor accident scenes, etc.

The schools participating in the program included the training of civil police and crime prevention skills in addition to the development of correct traffic behaviour in the "Pedagogy Program" prescribed by the National Core Curriculum and the Education Act.

The schools must appoint their own specialist teacher who is responsible for the training included in the program. A suitable non-teacher member of the civil police association may also participate in the training as an instructor. The civil guard associations have designated those civil guards who are contact persons, liaison officers, and directly assist the institution in training, education and maintaining school order.

An important element of the program is traffic safety, which is most prominent in the life of schools in connection with periods (school start, events). The civil guards typically assist in classic police tasks – patrolling, securing the area. As a result, the area of prevention is the one in which they can participate effectively, and this is the basis of the program. They can do excellent work in this educational propaganda activity by using its widest possibilities. A key period is the start of school in September, when the civil guards participate in traffic control in cooperation with the police. The police have now made a decade-long commitment to assess the traffic safety situation around schools even before the start of the season, and the civil guards also have a role in this.

Civil guards for the safety of the start of the School Year Program

As part of the program, timed to coincide with the start of the school year, the civil guards, independently and in cooperation with the police, primarily participate in crime prevention and traffic safety tasks. The declared goal of their presence is to prevent harm to children – related to drugs, alcohol, sexual and property crimes – and to avoid child accidents.

As part of the start of the school year activities, the civil guard associations strive to prevent child accidents around schools and to prevent illegal acts aimed at harming children (distribution of drugs and pornographic products, pedophilia and other violent incidents).

The safety of children is a common concern for all of us, therefore it is necessary to activate and involve teachers and parents. Civil guard associations must be involved in the implementation of the police's "School Police" program. They must provide regular information about the measures and initiatives taken to prevent crimes and traffic accidents and protect youth with the help of local media. Preventive and investigative actions are constantly necessary, the organisation of which must be coordinated with educational institutions and parent working groups. It is particularly important to keep away deviant persons and homeless people who pose a great danger to children, to expose these persons and to prevent their illegal behaviour. In this context, reporting to the police – and the civil police – is essential.

Based on a cooperation agreement between the civil police and the kindergarten and primary school operator, the civil guards regularly perform traffic signal duties in the immediate vicinity of kindergartens and primary schools to facilitate the safe crossing of the road by children. In many cases, police officers and municipal police inspectors are involved – at least during the first few weeks of the school year in September.

"Respect for the Years, Safety for the Elderly!"

By the mid-2010s, the number of crimes committed against the elderly – primarily property crimes, petty crimes and violent crimes – had increased. Unworthy, rude and insulting treatment of the elderly became common. The crimes were characterised by the credulity of the elderly, their inability to defend themselves due to their deteriorating condition, and the exploitation of their poor living conditions.

Within the framework of the Hungarian Red Cross's "Crime Prevention and Social Safety Net" program, the National Civil Guard Association launched the "Respect for the Years, Safety for the Elderly!" program in order to improve the living conditions and sense of security of the elderly, the basic principles of which were:
  – prevention of victimisation
  – humanity
  – neutrality
  – independence
  – voluntariness

- activity
- complexity
- continuity
- publicity
- direct partnership
- responsiveness

During the implementation of the program, the association leaders must coordinate the plans of the crime prevention public patrol and joint patrol services within the framework of police cooperation. They organise personal contact between patrols and elderly people in need, and inform those affected about the options for requesting help and raising an alarm. The continuous transfer of information necessary to prevent becoming a victim of crime between and towards law enforcement actors is essential.

In order to ensure continuous protection and rapid assistance, good neighbourly relations must be continuously strived for in the living environment of elderly people in need of support, to strengthen them, and to ensure that they become familiar with the good practices of the Neighbours for Each Other Movement. Elderly people with limited mobility but who want to take action for the safety of themselves and their living environment must be prepared and involved in Neighbours for Each Other Movement activities.

With broad cooperation, special attention should be paid to organising outlying patrol services in settlements with significant farm areas. Depending on the conditions, regular (daily) telephone contact should be maintained with elderly people living on farms far from settlements who can be considered potential victims.

Charitable activity indirectly, and sometimes directly, significantly improves the subjective sense of security of the elderly, who are struggling with basic livelihood problems and who have a pessimistic view of their future. In order to provide effective assistance, the primary task is to identify problems and find solutions based on local cooperation. County and association civil leaders and association members should take the initiative in positively shaping the attitudes of people living in their areas of competence and be active in helping elderly people in need of support.

Efforts should be made at regional and local levels to use modern communication tools, especially the most popular emergency call devices among the elderly, such as mobile phones, signalling systems and remote monitoring. In order to increase the effectiveness of their use, elderly people should be informed about the purchasing and use options for the most advantageous devices for them.

The "standby duty" system and the response capability must be further developed at the association level. In order to provide more efficient, quality crime prevention and victim assistance activities, it is necessary to initiate the provision of personal and material conditions for 24-hour permanent county duty, which can relieve the duty of state agencies and provide significant assistance to the remote surveillance system serving charity, victim assistance and crime prevention for those in need.

Neighbours for Each Other Movement

"It is better to prevent crimes than to punish them" – we know from Cesare Beccaria.

Crime threatens what is most precious to every person: our loved ones, our own lives, our health, our cherished values and our safety. In the fight against crime, we cannot do without the help and participation of the community in crime prevention. Crime can be prevented where it can be realised, and it can be prevented by those who are primarily threatened.[5]

The National Civil Guard Association, during its decades-long activity, has purposefully and consistently spread its wings towards various segments of civil crime prevention. This led to the establishment of the Neighbours for Each Other Movement Working Committee. The years that have passed have proven that the renewal and reorganisation of the Neighbours for Each Other Movement has become relevant. From experience, we can say that this is the cheapest and most effective segment of crime prevention, which only requires adult thinking and will. As many young people and women as possible should be involved in this work, because this form of crime prevention is not just a question of men and women, and it is not age-dependent.

The aim of the movement's activities is to reduce the causes and circumstances that enable crime at the local level, to help prevent victimisation, to improve the community awareness and spirit that support each other, so that everyone can contribute to the protection of their own, their neighbours' and community property, so that they can help each other not only in the event of a crime, but also in other events (e.g. accidents, illnesses, fires, etc.).

The importance and expansion of the Neighbours for Each Other Movement can be a very serious force in the palette of crime prevention, because an immeasurable amount of power is hidden within the walls of houses, which is why we want and need to activate their residents. When we talk about the Movement, we are talking about a social crime prevention program that aims to prevent crimes and other dangerous events occurring in the residential community, and to create safer living conditions. To this end, it is necessary to strengthen people's respect for each other, devotion and community awareness.

In general, despite the decrease in the number of crimes, cruel acts committed against the elderly and single people increase, and in order to prevent these acts, we must get ahead of them. One of the equivalents of this is the Neighbours for Each Other Movement. In order for our program to expand sufficiently, we can think of different methods and solutions with the same goal. In order to operate more efficiently, the necessary organisational structure must be developed within the National Civil Guard Association, those responsible must be determined, and the leaders of the county associations must be made aware that the program should be broken down into regions to find the appropriate personal conditions who will make these noble ideas a success, both for the benefit of society and for the common good of all of us.

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[5]   Földvári 2001: 43.

Pick it! – Volunteer for a Clean Hungary campaign

Pick it! is the largest volunteer movement in our country. As part of the garbage collection campaign, TeSzedd! [Pick it!] volunteers clean up all over the country.

The National Civil Guard association also considers the protection of our environment to be a particularly important task, which is why it participates in the national Pick it! campaign with great effort every year. It is committed to implementing the program, and accordingly asks everyone to register and participate in the campaign as much as possible.

2024 is the year of preventing illegal dumping

The theme of the campaign was that 2024 was the year of prevention of illegal waste dumping by the civil police. Illegal waste dumping has increased significantly in many locations across the country, both in the inner and outer areas of settlements. In March 2024, the National Civil Guard Association announced a program to detect landfills, which the government supported with 200 million HUF. The associations participating in the program received a reimbursement of 150 thousand HUF each.

During their patrols – a significant part of which was carried out in rural areas – the associations sought to detect illegal waste dumps. In addition to detection, the civil guard's job was to collect evidence. If anything was found in the waste that could lead to a conclusion about the owner or the transporter, i.e. the possible perpetrators, they recorded it by taking photos or videos, and then notified the local government, or, if it was industrial quantities of waste, the police.

The mounted section of the civil guard helped find illegal dumps at several locations in the country on the Serbian–Hungarian border, for which the civil guards could now also use drones.

The program was a significant success. As András Túrós, President of the Hungarian National Police put it, the civil police fulfilled what they undertook with five stars. 25,000 civil police from a thousand civil police associations collected 15,000 cubic meters of waste nationwide, and approximately 3,000 reports were made to the authorities regarding illegal waste dumps.

Young civil guards – Community service

As we have mentioned, there is a unanimous opinion that young people are needed in the civil guard organisation. They need their drive, their will to do, their new outlook, their modern worldview and their knowledge.

There is an opportunity that can ensure that young people get to know the civil guard and get a taste of the beauty of working for the community. They experience the joy and satisfaction that a person feels after overcoming obstacles and difficulties, knowing that

they have done a lot for the community. This opportunity is School Community Service, which can take place at the civil guard.

Students can participate in the following activities at civil guard associations:
– "Respect for the Years, Safety for the Elderly!" program
– "Local Environmental Protection Program"
– "Peer Helper"

Students participating in the programs do the work in pairs or trios. If only one student works in a small town, a civil guard will accompany him.

The aim of the program is for young people to recognise the need for community volunteer work and civil guarding can be the perfect base for this. If we can fill these 50 hours – which are mandatory – with meaningful activities that also motivate young people, they can become members of the civil guard after the program.

Summary

As this study also shows, the civil police has undergone significant development over the past three decades. It was the efforts of neighbours concerned about the order of their neighbourhoods, looking after each other and their immediate surroundings for their own safety, that led to the nationally established organisation of today's citizens, with its diverse activities, diverse responsibilities and qualified membership, which, as a strategic partner of the police, is one of the custodians of the country's public security – as András Túrós, the President of the National Civil Guard Association, underlines it in an interview.[6] Its role is decisive in the performance of law enforcement tasks aimed at creating and maintaining public order and public security. Its service activities are uniform and of high quality, therefore the government, strategic partners and the country's population can count on it to perform a wide variety of public security-related or people-helping tasks.

The various programs of the civil police, primarily aimed at preventing crime and other violations of the law, or traffic safety and public cleanliness, or charitable purposes, enrich the activities of the civil police, significantly contributing to achieving results, efficient task performance, and thereby improving the subjective sense of security of citizens.

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CRIME FORENSICS

Research on Improving the Interviewing of Suspects[1]

Ray BULL[2] ⓘ

This publication overviews some of the author's involvement regarding international developments in recent decades related to the improving of interviews with suspects. Its aim is to demonstrate how research has been informing policies and practices around the world. In light of psychological research, a growing number of countries/organisations have decided to adopt a model/approach of "investigative interviewing" of suspects that does not rely on coercive or oppressive methods. This article will overview 1. the evolution of the 'PEACE method'; 2. some of the research on the effectiveness of aspects of the 'PEACE' method; and 3. the 2021 publication of the 'Principles of Effective Interviewing' (drafted at the request of the United Nations). In 2016, the United Nations "Special Rapporteur on torture and other cruel, inhumane or degrading treatments" (law professor Juan Méndez) submitted his report to the United Nations, which stated that "The Special Rapporteur [...] advocates the development of a universal protocol identifying a set of standards for non-coercive interviewing methods and procedural safeguards that ought, as a matter of law and policy, to be applied at a minimum to all interviews by law enforcement officials, military and intelligence personnel and other bodies with investigative mandates". The current publication here demonstrates that police and other investigative agencies can be willing to update/improve their interviewing of suspects by taking note of the findings of relevant research.

Keywords: investigative interviewing, interrogation, suspects, the "PEACE method", LILERS

Introduction

In 2016, the United Nations' "Special Rapporteur on torture and other cruel, inhumane or degrading treatments" (law professor Juan Méndez) submitted his report to the United Nations, which stated: "The Special Rapporteur [...] advocates the development of a universal protocol identifying a set of standards for non-coercive interviewing methods and procedural safeguards that ought, as a matter of law and policy, to be applied at a minimum to all interviews by law enforcement officials, military and intelligence personnel and other bodies with investigative mandates." When mentioning this "universal protocol" in 2016, the UN Special Rapporteur noted: "The essence of an alternative information-gathering model was first captured by the PEACE model of interviewing adopted in 1992 in England and Wales. [...] Investigative interviewing can provide positive guidance for the protocol." The "universal protocol" took three years to produce and was published in 2021.

The 'old' way/method

Some decades ago in England, at 8:58 P.M. a bomb exploded. Six pounds of high explosive, placed under a seat and detonated by a crude pocket-watch timing mechanism, blasted a bar apart. The front of the building was blown out, the floor collapsed, and the debris rained down on the customers inside, killing five and injuring more than fifty. Limbs had been ripped off, faces disfigured, flesh set on fire.

According to official police written notes, one of the suspects was taken to the police station and left undisturbed in a cell that evening. At that point, the police records claim, the police officers merely asked him a couple of questions and he began to confess. The suspect was subsequently convicted of multiple murder.

However, several years later this man was released from prison following investigations into the way the police treated him. Fifteen years later the suspect provided his recollection of events. "I was petrified" he said. "I had firearms pointed at me. I was told I would be left by the side of the road – shot dead. They put me in a cell where I was spread-eagled, abused, my head was banged against a wall. That night I was interrogated". "At one stage they took away my clothes. I was naked but for a pair of handcuffs. I was shown pictures of bodies in the mortuary. I was brutalized and threatened. I was dragged around the police station by my hair. One of the people beat me down a flight of stairs. I had not a lucid thought in my head."[3]

Threatened that his girlfriend would be arrested for the bombing, he broke and began to name names – any names. "All right, I will tell you all I know" the police account begins. His "confession" still haunts him he has said.

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[3]   Bull–Rachlew 2020.

Reasons for coercion

While this case may well have been unusual within the United Kingdom, it influenced people's expectations of what can happen in investigative interviews/interrogations of suspects. One of the major assumptions underlying reasons for the use of coercive interrogation techniques is the pervasive, common-sense belief that "suspects almost never confess spontaneously but virtually always in response to police pressure"[4] and that "confessions, especially to serious crimes, are rarely made spontaneously. Rather they are actively elicited [...] typically after sustained psychological pressure".[5]

In England, in the 1980s, two studies found that a notable proportion of the general public believed that police officers used physical force and threats when questioning people.[6] How frequently such things happened is difficult to determine, especially since it was not until 1986 that new legislation in England and Wales required that all interviews (with suspects) be audiotaped.

Nowadays the use of physical force and threats is probably less frequent in some countries (but not in others) due to factors such as the rights for people to have a lawyer present when they are interviewed and to changes in investigator training and management. Nevertheless, a few high-profile media cases can have a strong impact on public opinion. In 1994, a senior police officer in London stated: "Unethical behaviour by interrogators has undermined public confidence and left the police service with a serious skills deficit in its ability to obtain evidence through questioning."[7] Williamson also stated that "it does not take much skill to beat a confession out of a suspect detained in police custody" nor "much skill to fabricate a confession and allege that it was made during police questioning".[8] However, he noted that "the police in this country would correctly deny that such things happen, but unfortunately, a considerable proportion of the general public thinks that it happens regularly".[9]

Mandatory recording of interviews

In the mid-1980s, in light of media and public concern about police interviewing and various decisions by the (national) Court of Appeal for England and Wales to quash previous convictions based on confessions that were "unreliable"/not voluntary (e.g. because of police behaviour – see above), the Government in England and Wales brought in the "Police and Criminal Evidence Act" (often referred to as "PACE"), which mandated 1. safeguards for suspects (such as the right to a lawyer, sleep, food and drink); and 2. that from 1986 all interviews with suspects be recorded (e.g. on audiotape). This was probably the first country to mandate this.

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[4]   Leo 2009: 162.
[5]   Leo 2009: 119.
[6]   Jones et al. 1986; Smith 1983.
[7]   Williamson 1994: 107.
[8]   Williamson 1994: 107.
[9]   Williamson 1994: 107.

In 1992, the Home Office (part of the government in England and Wales) published the pioneering research by Baldwin that it had commissioned in the late 1980s. Prior to this, very little research had been published on what actually goes on in police interviews with suspects. Baldwin (1993) noted that people believe that interviews with suspects are largely difficult, complex encounters with awkward, aggressive people. However, of the several hundred recorded interviews he analysed, "most were short and surprisingly amiable discussions in which it often seemed that officers were rather tentative in putting allegations to a suspect. [...] Indeed, in almost two-thirds of all cases [...] no serious challenge was made by the interviewers to what the suspect was saying".[10] "Even when the suspect denied the allegation, no challenge was made by the interviewers in almost 40 per cent of cases."[11] In fact, "over a third of all suspects admitted culpability from the outset",[12] perhaps because of the typical police (untrained) strategy at that time of revealing to suspects near to the beginning of the interview all the evidence/information the police had (in the hope that an admission/confession would then be forthcoming).

In only 20 of the interviews that Baldwin examined did suspects "change their story in the course of an interview. In only nine of these cases was the change of heart attributable to the persuasive skills of the interviewer, and even here only three involved offences of any seriousness. [...] The great majority of suspects stick to their starting position – whether admission, denial, or somewhere in between – regardless of how the interview is conducted."[13]

Pearse (a senior detective) and Gudjonsson also noted, in their study of interviews conducted in 1991, that people rarely changed from denying to admitting the offence in the interviews. They stated that "suspects enter a police interview having already decided whether to admit or deny the allegations against them" and that interviewer techniques (at that time) "had minimal influence on whether the interviewees decided to provide relevant information".[14]

McConville and Hodgson noted that the most common tactic was telling interviewees that because of evidence against them, they might as well admit to the crime.[15] Moston et al. found that in the majority of several hundred taped interviews, the police interviewers spent little time trying to obtain suspects' accounts of events. Instead, they accused the suspects of the offences and asked for their response to such accusations. Not surprisingly, they found that when the evidence was strong, confessions were more likely. When the police evidence was not strong, the suspects soon became aware of this, and thus, many did not confess.[16] In Taiwan, in their survey of several hundred detectives/interviewers, Lin and Shih found that a substantial proportion (especially of those who

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[10]   BALDWIN 1993: 331.
[11]   BALDWIN 1993: 331.
[12]   BALDWIN 1993: 335.
[13]   BALDWIN 1993: 333.
[14]   PEARSE–GUDJONSSON 1996: 73.
[15]   MCCONVILLE–HODGSON 1993.
[16]   MOSTON et al. 1992.

had not received training) indicated that they usually commenced their interrogations/ interviews by revealing "evidence of guilt".[17]

However, the early revelation of incriminating information/evidence to suspects may well assist liars (e.g. guilty suspects) to incorporate aspects of it into their accounts. Early revelation also runs the risk, especially in vulnerable people, of innocent suspects then involuntarily or voluntarily including some of this information in their subsequent accounts/confessions.

The studies that I have mentioned so far[18] all concerned interviews conducted before a major change in police interviewer training occurred in England and Wales. Indeed, such studies brought about the change. This change involved several highly experienced police investigators forming a national working party (in 1991) to develop up-to-date training on interviewing/interrogating. At the same time, draft reports of the "early" research studies mentioned above (conducted soon after the recording of interviews with suspects became mandatory in 1986) led the senior London police officer Tom Williamson to convene (also in 1991) a different small working party of detectives and psychologists (including Eric Shepherd, Stephen Moston and myself) that produced in 1991 an unpublished overview of aspects of psychology that might be useful to the improving of such interviewing. This overview was made available to the national team of detectives that was developing a new approach, that they called "PEACE". Once that team of detectives had drafted all of their guidance documents, they sent drafts of these (written in everyday language) to me, asking if they had "got the psychology correct?" – They indeed had. They recommended what they called the "PEACE" method/approach. This change began in 1992, and it involved guidance documents and training courses that all police interviewers in England and Wales must attend and that contained much research-based cognitive and social psychology.

What is the 'PEACE method'?

The PEACE method involves the five phases of 1. planning/preparation; 2. explain/ engage; 3. account; 4. closure; and 5. evaluation. The first stage involves understanding the purpose of the interview, knowledge of relevant laws and regulations, defining aims and objectives, information about the interviewee, and analysing and preparing the already available evidence/information. The second phase involves explaining the reasons for the interview, covering the legal requirements, explaining the 'ground rules', the interviewer introducing her/himself and establishing rapport with the suspect. The third phase focuses on trying via an invitation for 'free recall' to obtain some information from the interviewee (hence the importance of rapport and preparation), not (yet) interrupting his/her account, when their account has finished, first only asking (open) questions relating to that account, only then asking other (appropriate) questions, after that *gradually* introducing information known to the interviewer that the suspect has not yet

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[17] Tsan-chang – Chih-hung 2013.
[18] For a comprehensive review see Milne–Bull 1999.

mentioned, and only then pointing out contradictions/inconsistencies. The fourth phase involves correctly summarising what the suspect has said, inviting the suspect to mention any misunderstandings, asking the suspect if he/she has any questions, explaining what may/will happen next, and the interviewer doing her/his best to ensure that the suspect leaves the interview in as positive a frame of mind as possible. The final phase involves evaluation of the information obtained during the interview (including information contrary to what was expected) and assessment of the interviewer's performance during the interview by a) self-evaluation; b) a peer/colleague; and c) a supervisor.

Evaluations of the PEACE method

In the mid-1990s, I was asked by the Home Office to identify any skills gaps in specialist police interviews (e.g. of suspects in serious cases, adolescent suspects, and/or suspects with a "low IQ") conducted by the recently PEACE-trained, experienced investigators.[19] We first asked experienced detectives what they believed the most important skills were, and from their responses, plus the relevant professional and academic literature, we compiled a questionnaire containing 28 skills. Then a much larger sample of police detectives/interviewers were asked to say how necessary each of the skills listed in the questionnaire was. The skills deemed most necessary included (in rank order) 1. listening; 2. preparing; 3. questioning; 4. being knowledgeable about the subject; 5. being flexible; 6. being open-minded; 7. building rapport; and 8. showing compassion/empathy.

We then obtained recordings of specialist interviews with suspects. Each of four experts on investigative interviewing independently rated these for the 28 skills (plus for "overall skill level"). We found that skills which differentiated between interviews judged as 'skilled' and those judged as 'not skilled' were a) communication skills; b) empathy/compassion; c) flexibility; d) keeping the interviewee on relevant topics; e) responding to what the interviewee said; f) open-mindedness; g) use of closed questions; h) interview having structure; i) use of open questions; and j) appropriate use of pauses and silences. Even in the more skilled interviews, some skills were rarely present, such as appropriate use of pauses and silences, avoidance of closed questions, flexibility and empathy/compassion. This indicated that the training in the new PEACE needed to focus especially on the acquisition of these "missing" skills. Even in the less skilled interviews, some skills were often present: not releasing all the information at the beginning, and the absence of 1. inappropriate interruptions; 2. undue pressure; 3. long/complex questions; and 4. overtalking. These are skills that seemed to have been absent in earlier studies (i.e. of interviews prior to the introduction of the PEACE method).

Some years later, in our study of 142 interviews with people who may have been involved in committing crimes, we examined for the first time whether interviewing in a way that is compatible with the PEACE approach bore any relationship to the actual outcomes of these interviews.[20] For every interview for each phase (i.e. planning, engage,

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[19]   Bull–Cherryman 1995.
[20]   Walsh–Bull 2010.

account, closure) and each PEACE skill within a phase, we classified that skill as being demonstrated either at a) an acceptable or above level ("skilled" or "highly skilled"); or b) at an unacceptable level ("not quite adequate" or "needs training"). Overall, we found that better PEACE interviewing was associated with securing a greater number of comprehensive accounts, such as admissions and confessions (as well as exculpatory ones).

Another of our studies with Leahy-Harland in 2017 focused on real-life taped interviews with serious crime suspects (suspected murderers/rapists). It examined 1. the strategies used and types of questions asked by police; and 2. suspects' responses to these. It involved analyses of audiotape-recorded interviews with 56 suspects, some of which lasted many hours. We found that interviewers employed a range of skills, with presentation of evidence and challenge being the most frequently used. Closed questions were by far the type of question most frequently used, and open questions, although less frequent, were found to occur more during the opening phases of the interviews. The frequency of very ineffective question types (e.g. negative, repetitive, multiple) was low. We found several significant associations between interviewer skills and suspect responses. Interviewers' use of 1. rapport/empathy; and 2. open-type questions was associated with an increased likelihood of suspects admitting the offence, whereas negative questions were associated with a decreased likelihood. We also examined which skills were associated with these suspects continuing to respond relevantly and found positive associations for the use of rapport/empathy, presentation of evidence and requesting attention, but negative associations for explicitly asking for an account/tell the truth, emphasising seriousness of the offence and situational futility.[21]

In other countries

In a "ground-breaking" study of actual suspects' comments on their police interviews, Holmberg (then a senior detective) and Christianson analysed the questionnaire responses of men in Sweden convicted of murder or serious sexual offences. Within the questionnaire, 22 items focused on how the interviewers had behaved when interviewing these men (i.e. in the role of suspects) and a further 16 items on the men's reactions. Another question asked about the extent to which the prisoners had admitted to (or denied) the crime during the police investigation (around half had admitted). Whether denial or admittance occurred was then related to the reported style of interviewing. A relationship was found between the interviewees' reactions and denial/admittance, in that those who reported being frightened, stressed, or insulted were less likely to have admitted. These researchers concluded that a dominant interviewing style is associated with suspects denying crime.[22] This was a superficial case-oriented approach, characterised by impatience, aggression, and a brusque and obstinate condemning approach, presumably aiming to extort a confession. The actual relationship between interviewer characteristics and interview outcome/information gain was studied in Japan. Police officers who interviewed

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[21] Leahy-Harland – Bull 2017.
[22] Holmberg–Christianson 2002.

adult suspects filled in a questionnaire that included their own level of empathic under-
standing. The adult suspects were those who denied having committed a crime when
arrested but later confessed while or after being interviewed. For most types of crime
studied (murder, rape, robbery), a significant positive association was found between offic-
ers' (self-reported) level of empathic understanding and their obtaining full confessions.[23]

The effect of cognitive empathy

Above was mentioned our finding in the 1990s that a large sample of police interviewers
(in England and Wales) put the skill of compassion/empathy in their top ten important
skills when interviewing suspects. However, empathy is not easy to define or operational-
ise.[24] Baker-Eck and I gained access to real-life recorded interviews with suspects in serious
sex crime investigations. In both of our studies, we found that the amount of (cognitive)
empathy demonstrated by the interviewers was significantly associated with the amount
of investigation-relevant information provided by the suspects.[25]

Jail/prison inmates' views

The belief that perpetrators will deny being involved in serious wrongdoing has not bene-
fitted from research on the views of offenders themselves. Research in Australia by Kebbell
et al. found that only 20% had planned to deny but that 30% had planned to confess; the
other 50% entered the police interview not yet having decided whether to deny or con-
fess.[26] In Canada, St-Yves and Deslauriers-Varin found that a minority of offenders said
that they entered the police interview/interrogation with their minds set on denial,[27] and
in another study, this proportion was just over one-half.[28] Recently, we found in a large
sample of U.S. jail inmates that just prior to their most recent police interrogation/
interviews 39% had planned to deny, and 36% had entered the interview not yet having
decided whether to deny or confess; thus, 25% had entered the interview having already
decided to confess.[29] Therefore, interviewers of suspects need to behave in ways that 1.
allow those who have already decided to tell the truth/confess to do so (without treating
them in ways that alter their initial decisions); 2. assist those initially undecided to decide
to tell the truth/confess (without behaving in ways that cause them not to do so); and 3.
ethically/within the law encourage those whose initial decision was not to talk nor to tell
the truth/confess to decide of their own volition to do so, using a variety of skills.[30]

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[23]   Wachi et al. 2014.
[24]   Baker-Eck et al. 2021; Bull–Baker 2020.
[25]   Baker-Eck – Bull 2022; Baker-Eck et al. 2021.
[26]   Kebbell et al. 2006.
[27]   St-Yves – Deslauriers-Varin 2009.
[28]   Deslauriers-Varin et al. 2011.
[29]   Cleary–Bull 2021.
[30]   Bull 2014, 2019.

A new way – The United Nations Special Rapporteur

In light of psychological research, a growing number of countries and organisations have decided to adopt a model/approach of investigative interviewing of suspects that does not rely on a coercive or oppressive approach.[31] Indeed, in 2016 the United Nations (UN) "Special Rapporteur on torture and other cruel, inhumane or degrading treatments" (law professor Juan Méndez) submitted his report, which was then transmitted by the UN Secretary-General to the UN General Assembly. Its summary stated that "The Special Rapporteur [...] advocates the development of a universal protocol identifying a set of standards for non-coercive interviewing methods and procedural safeguards that ought, as a matter of law and policy, to be applied at a minimum to all interviews by law enforcement officials, military and intelligence personnel and other bodies with investigative mandates." When mentioning this "universal protocol" in 2016, the UN Special Rapporteur noted that "encouragingly, some States have moved away from accusatorial, manipulative and confession-driven interviewing models with a view to increasing accurate and reliable information and minimizing the risks of unreliable information and miscarriages of justice" and that "the essence of an alternative information-gathering model was first captured by the PEACE model of interviewing adopted in 1992 in England and Wales [...] investigative interviewing can provide positive guidance for the protocol".[32]

Following on from the United Nations' acceptance of Professor Méndez's proposal that a "universal protocol" be written, a small international multi-disciplinary steering committee was set up in 2017 to draft such a document. I had the honour of being on this steering committee, which spent three years combining into one document information not only a) on interviewing/interrogating; but also b) on laws/safeguards. We were always aware that the finalised document should be shorter than 40 pages, but at one stage during our three years of deliberations its draft length was over 100 pages. The agreed-on finalised (i.e. shortened) version was published in June 2021.[33] Among its principles are that effective interviewing 1. is instructed by science, law and ethics; 2. is a comprehensive process for gathering accurate and reliable information while implementing associated legal safeguards; 3. requires identifying and addressing the needs of interviewees in situations of vulnerability; 4. is a professional undertaking that requires specific training; 5. requires transparent and accountable institutions; and 6. requires the implementation of robust national measures. Such principles are of fundamental importance.

The document "Principles on Effective Interviewing for Investigations and Information Gathering" (2021) has sections both on effective practice and on ineffective practice. "Research conducted by professionals and practitioners from a wide range of disciplines [...] provides significant evidence that the application of coercion can both initially enhance resistance on the part of the interviewee and, if continually applied, lead to the provision of false information or a false confession" (Paragraph 21).[34] Histori-

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[31] Bull 2014, 2019; Bull–Rachlew 2020.
[32] Méndez 2016: 13.
[33] *Principles on Effective Interviewing for Investigations and Information Gathering* 2021: 6.
[34] *Principles on Effective Interviewing for Investigations and Information Gathering* 2021: 6.

cal assessments and case studies have shown that the application of coercion can backfire by obstructing the collection of factual information. Moreover, studies in neuroscience have shown that coercive techniques interfere with and may damage the memory-retrieval capacity of the brain.

This document also states: "Research has proven that unreliable information and false confessions arising from abusive practices are a frequent and foreseeable consequence of poor interviewing techniques. They have led to wrongful convictions and faulty intelligence around the world, thus undermining the objectives and effectiveness of law enforcement and intelligence gathering. Scientific evidence demonstrates that the use of coercive interviewing methods is more likely to lessen the interviewee's propensity to cooperate during an interview and to create resistance on the part of the interviewee, even when they might otherwise have chosen to answer questions. In cases where interviewees facing ill-treatment comply with the demands of their interviewer, the information provided is of dubious reliability, as false or misleading information is frequently provided to placate the interviewer and avoid or stop abuse" (Paragraphs 22 and 23).[35]

With regard to effective practice, the document states: "Robust research supports the efficacy of an information-gathering approach to interviewing. Rapport-based, non-coercive methods offer an effective suite of techniques that can be applied successfully by trained professionals to gather criminal and intelligence information from interviewees – including criminal suspects, victims, witnesses, and intelligence sources. Establishing and maintaining rapport is an adaptive skill that helps create a working relationship between persons and enables better communication. It is achieved by the interviewer establishing a connection with the interviewee based on trust and respect for human dignity. This requires demonstrating genuine empathy as well as reassuring them that they will receive fair treatment. Rapport-based techniques offer the interviewee autonomy over what they do or do not say and facilitate a positive interaction between the interviewer and interviewee, thereby increasing the likelihood of collecting accurate information. Findings from the large body of research into how human memory encodes, stores and retrieves information have led to interviewing methods that are effective in both promoting detailed, accurate reporting by interviewees and minimising the effects of factors that can influence their accounts. This includes the use of open-ended, non-suggestive questioning and allowing a person to freely recall the event or information from their own memory without interruption by the interviewer" (Paragraphs 29 to 33).[36]

Our most recent study

In a sample of over 200 individuals incarcerated in two jails in the USA, our analysis revealed a four-factor structure of interrogation techniques they indicated (via questionnaire) that they recently experienced, which we labelled as humanity, rapport/relationship-building, confrontation and dominance/control. These factors and the respective

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[35]   *Principles on Effective Interviewing for Investigations and Information Gathering* 2021: 7.
[36]   *Principles on Effective Interviewing for Investigations and Information Gathering* 2021: 9–10.

items loading onto them are consistent with prior interviewee-focused research. Respondents who reported experiencing humane strategies were more likely to confess, cooperate completely and disclose incriminating information. Dominance/control-oriented strategies predicted partial confession (but not cooperation or disclosure), and confrontational techniques did not predict outcomes – neither did rapport techniques; however, two of the three rapport/relationship-building items were reported as the least used techniques, thus constraining the rapport findings.

Respondents in the present sample were most likely to agree that the USA police used confrontation and dominance/control strategies. These factors included items related to presumptions of guilt and direct accusations (confrontation), and hostility, aggression and authority (dominance/control). Given that police in the United States have most often been trained in and use accusatorial methods, it is not particularly surprising that this sample of individuals incarcerated in the United States reported being questioned with these techniques. Indeed, over three-fourths of respondents strongly agreed or agreed that the interrogating officer already seemed to believe they were guilty before they started talking.

Respondents tended to disagree that these police used humane and rapport/relationship-building strategies, both of which are key components of information-gathering methods.[37]

The humanity technique emerged as the approach most predictive of interrogation outcomes. Specifically, the use of humane interrogation strategies significantly predicted respondents' likelihood to partially or fully confess (versus denial). Such findings are consistent with prior studies. These findings are particularly meaningful – police who doubt the utility of humanity approaches may be encouraged to learn that persons suspected of a crime reported providing confessions in interrogations where humane techniques were employed.

We also found that respondents' confession intent predicted full confession, cooperation and disclosure. To the extent that respondents' retrospective assessments are accurate, this finding echoes prior work undermining the assumption that all persons suspected of a crime enter police interrogations intent on denial, silence or proclamations of innocence. Aggressive questioning techniques in these instances may be unnecessary at best and counterproductive at worst.[38]

Conclusion

In the United States, Kelly et al. analysed real-life investigative interviews about jail inmates' possible wrongdoing and found that the results of their study "support existing models of science-based investigative interviewing".[39] They noted that "research consistently demonstrates that where the PEACE model is adhered to, suspects disclose more

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[37]   MÉNDEZ 2016; MILNE–BULL 1999.
[38]   CLEARY–BULL, 2021; WACHI et al. 2016.
[39]   KELLY et al. 2021: 1179.

information and the risk of false confessions is significantly reduced".[40] Some others have also been advocating a change in interviewing methods toward the PEACE model. For example, Akca et al. stated that "PEACE-based interviewing has now become the gold standard in many law enforcement organizations around the world"[41] and Marques and St-Yves commented that "the PEACE framework is often considered the current best practice and has the advantage of being suitable for interviews with victims, witnesses and suspects".[42] May et al. stated regarding information they gathered from offenders in Germany that their "findings substantiate the benefits of an open-minded interviewing approach and fail to support a confession-oriented interrogation approach".[43] In Japan Wachi et al. conducted a questionnaire study involving inmates convicted of serious crimes and stated that "relationship-focused interviewing was preferable not only because it seemed to promote confessions but also because it was associated with variables such as satisfaction with confessions and admissions at trial".[44] Their latter point is a crucial one deserving of more research. The major challenge for those who do not yet employ what is advocated in the Méndez Principles and/or by the PEACE method is to be professional enough to admit that updating and improving one's knowledge and skills is indeed indicative of being a professional.

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[40] Kelly et al. 2021: 1169.
[41] Akca et al. 2022: 184.
[42] Marques – St-Yves 2022: 221.
[43] May et al. 2021: 42.
[44] Wachi et al. 2016: 225.

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Enhancing Law Enforcement Efficiency

A Comparative Study of Manual and Biometrics Systems in PSP[1]

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The urgent need for technological modernisation in law enforcement, particularly to combat cybercrime and enhance IT security, is evident. Current manual procedures are increasingly questioned regarding efficiency compared to advanced technologies like biometrics and AI, which are widely used elsewhere. This study evaluates the time, cost and security benefits of biometric sensors versus manual data entry. The methodology is post-positivist with an applied, explanatory approach using quantitative descriptive and inferential statistics. A post-positivist, applied and explanatory methodology, using quantitative descriptive and inferential statistics, was employed. Results from 175 records show that biometric sensors reduce data entry time to 13 minutes, compared to 8 hours and 21 minutes manually. Officers strongly support these technologies. Data from 2023 shows that 89% of 6,113 repeated item merges involve personal identification, highlighting the efficiency of automation. Biometric inputs improve data accuracy, essential for timely legal processes. The findings also reveal higher state expenditures on manual procedures, underscoring the need for technological investments to optimise resources. These results advocate for increased funding to modernise law enforcement, emphasising AI and biometrics as critical for enhancing operational efficiency and decision-making in combating cybercrime and securing IT systems.

Keywords: technological modernisation, biometrics, artificial intelligence, operational efficiency, decision-making effectiveness

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Introduction

The Public Security Police (PSP) plays a critical role in maintaining societal order and upholding the rule of law, with a strong citizen-centric focus.[5] a citizen-oriented approach, in practice, aims to ensure public satisfaction, fostering trust and "loyalty". Customer satisfaction is defined as the degree to which a person's expectations align with their perceived experience.[6] Customer loyalty, inherently linked to satisfaction, increases when satisfaction levels are high.[7] According to Mismiwati, the likelihood of customer loyalty is 65% when satisfied and rises to 95% with higher satisfaction levels.[8]

For the PSP, this loyalty translates into establishing a trusting relationship with citizens, one that dissolves barriers between them and law enforcement. This operational work is carried out daily by police officers through various means, including community policing, foot patrols, motorised patrols and frontline services at police stations.

As Morgado notes, "in the economy, AI has both macro and microeconomic implications, particularly positive ones, such as the growth of productivity and the labor market".[9] In this context, technology is seen as a driver of efficiency. In the field of law enforcement, "security is a vital public good and a fundamental right, essential to life in society".[10] The demanding task of ensuring the safety and protection of society creates a trophic link between societal sectors and technology, which induces systemic stimuli and feedback.[11]

To address modern security challenges, "it is the duty of the police to be prepared to follow the path of technological policing, as it is the lever for combating crime".[12] Technological advancements, including AI and biometric technologies, play an increasingly important role in supporting law enforcement. Yet, as emphasised by Morgado and Felgueiras, the human element of policing (HumPol) remains at the core. While technological policing (TechPol) can enhance efficiency, it complements rather than replaces the essential human interventions that define effective policing.[13]

The human element of the police force – HumPol – plays a pivotal role in fostering proximity with citizens, making each interaction meaningful. However, to achieve this goal, the PSP must be equipped with adequate material resources to ensure high-quality service. Quality, in this context, is multidimensional, encompassing reliability, responsiveness, competence, courtesy, credibility, safety, accessibility, communication and consumer knowledge.[14] Achieving these quality standards requires financial investment.

Investment by the state in resources that enhance police services is, in essence, an investment in service quality and, consequently, in the well-being of citizens. Although the return on such investment may be difficult to quantify, it is essential both from the

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[5]   Dinis 2020.

[6]   Gunawan 2022.

[7]   Hutabarat–Prabawani 2020.

[8]   Mismiwati 2016.

[9]   Morgado 2023.

[10] Morgado–Felgueiras 2021: 57.

[11] Morgado et al. 2024b; Morgado–Mendes 2016.

[12] Morgado–Felgueiras 2021: 149.

[13] Morgado–Felgueiras 2021.

[14] Zeithaml et al. 1990.

perspective of the citizen-client and the police officer, who serves as a state asset. As the employer, the state expects productivity and efficiency from its assets, which can be max-imised by providing the necessary tools for optimal performance.

The scope of this issue becomes clear when considering that in 2022, the PSP recorded 47.4% of all criminal reports nationwide. In 2023, within the Lisbon Metro-politan Command (COMETLIS) alone, 103,653 reports were filed, 61,211 of which were criminal complaints. Given PSP's critical role in processing civil and criminal reports, this study seeks to evaluate the efficiency of current registration procedures: Are officers maximising productivity during the reporting process? Are records being uniformly pro-cessed? Do the recorded data contribute to the generation of valuable police intelligence? Is there room for improving these processes?

These questions prompted an investigation into the role of Information and Com-munication Technologies (ICT) in this process, specifically their impact on the produc-tivity of police officers. The study also explores the potential of integrating fingerprint scanning into registration processes, comparing its efficiency to manual data entry.

Amidst the Fourth Industrial Revolution, which Schwab describes as "unlike any-thing humanity has experienced before",[15] added up by Fifth (5IR),[16] Portugal has sought to align itself with global technological advances, as outlined in its Digital Transition Action Plan (2020).[17] This strategy aligns with national and international political direc-tives, particularly within the European Union's 2021–2027 Cohesion Policy. Investment in technological modernisation extends the principles of the New Public Management, bridging the public and private sectors by adopting traditionally private methodologies and techniques,[18] ultimately increasing efficiency, reducing costs and improving organi-sational transparency.[19]

In this context, many private healthcare institutions have streamlined data entry through direct electronic reading of citizens' ID cards, including biometric data access. However, despite such technological advancements in the private sector, public institu-tions, such as the PSP, have yet to fully implement similar systems.

As Morgado and her co-authors state, technology is a critical resource in law enforce-ment – TechPol – and its integration is directly linked to mission-oriented security objec-tives. The irreversible role of technology in modern society has created an interdependence between its use and societal function.[20] This research aims to evaluate the current citizen registration processes in high-volume PSP subunits within COMETLIS, particularly in the manual entry of personal data, to assess the efficiency of current methods and explore the potential benefits of digital ID readers and fingerprint scanning, comparing the time spent on manual data entry versus automated processes and evaluating the impact on officer productivity.

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[15]   Schwab 2019.
[16]   Ali et al. 2022.
[17]   República Portuguesa 2020.
[18]   Dias 2023.
[19]   Morgado 2013.
[20]   Morgado et al. 2024a.

Biometric technology

History has shown that a country's economic development is closely tied to industrial progress, making this sector a key driver for innovation and competitiveness on the global stage. The way nations exploit their raw materials and modernise production processes determines their evolutionary pace, directly influencing their international competitiveness. Toffler identifies three waves of transformation in human and societal development: the first, the transition from a nomadic lifestyle to a sedentary agricultural society; the second, the rise of industrialisation and the industrial society; and the third, the post-industrial society, characterised by the emergence of the Information and Knowledge Society, encompassing art, finance, education and business sectors.[21]

In his *Green Paper on the Information Society* (1997),[22] Toffler, a visionary regarding the trajectory of society, stated that "the evolution of modern society will no longer be driven by energy or force but by the mastery of information".[23] Among the four recognised industrial revolutions, the latter two are particularly relevant to our context. The Third Industrial Revolution, also known as the Digital Revolution, began to take shape between the 1950s and 1970s, marked by the proliferation of semiconductors, computers, automation and robotics in production lines. These advancements allowed for digital information processing, mobile communication and the rise of the internet.[24]

Since the early 21st century, we have witnessed exponential growth in the development of advanced hardware and software, driven by decreasing production costs of electronic components and continuous innovation in machinery. At the 2011 Massachusetts Institute of Technology (MIT) Industrial Technology Fair, the concept of Industry 4.0 was introduced. This evolution in Information and Communication Technologies (ICT) has influenced not only industrial productivity but also the communication dynamics between manufacturers, customers and suppliers.[25]

The primary goal of Industry 4.0 is to enhance production systems, making them more flexible and collaborative. These cutting-edge technologies, often integrated with the internet, are designed to enable machines to self-optimise and self-configure, even utilising Artificial Intelligence (AI) to complete complex tasks more cost-effectively.[26] As Santos and his co-authors emphasise, "companies aiming to progress toward Industry 4.0 must evaluate their capabilities and adapt their strategies to implement them in appropriate scenarios".[27] Biometric technology plays a pivotal role in this transformation.

According to the Biometrics Identity Management Agency (BIMA), human characteristics can be categorised as either static (physiological features such as fingerprints, facial structure, iris patterns, etc.) or dynamic (behavioural traits such as gait, voice, or handwriting).[28] For

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[21]   Toffler 1999.
[22]   European Commission 1997.
[23]   Gonçalves 2009: 4.
[24]   Coelho 2016; Ferreira 2020.
[25]   Urbikain et al. 2017 cited in Santos et al. 2018.
[26]   Bahrin et al. 2016.
[27]   Santos et al. 2018: 112.
[28]   Jain et al. 2008.

decades, biometrics has been associated with security systems,[29] and over recent years, biometric data has gained prominence in identification and recognition methods, used both by authorities and in consumer electronics. For instance, LG (2020) ranks facial recognition and fingerprint scanning as the most effective screen lock security mechanism.

Given that everyone possesses unique, distinguishing characteristics, biometric recognition systems identify individuals by extracting relevant features from a specific part of the body to create a digital "signature".[30] This signature is then compared against a stored reference in the system to establish a match, allowing for identification.

Today, biometric recognition systems, particularly fingerprint recognition, are widely integrated into daily life, enabling access to common technology such as mobile phones, computers and secure entry systems. According to Matos, fingerprint recognition is one of the most popular identification methods globally, often used in forensic investigations due to its high accuracy.[31] Fingerprints are now commonly used to unlock devices and track workplace attendance.

Historical overview

The interest in fingerprints dates to ancient civilisations, such as the M'ikmag people, Egyptians, Greeks and Chinese, who used fingerprints to sign contracts or authenticate transactions.[32] Scientific studies on fingerprints began in 1684 with Nehemiah Grew, who pioneered research into dermatoglyphics and published his findings in the *Philosophical Transactions of the Royal Society of London.* Marcello Malpighi later expanded on this work, describing the ridged patterns on human skin and their role in gripping objects.[33]

The recognition of the uniqueness of fingerprints came from anatomist Johann Christoph Andreas Mayer in his publication *Anatomical Copperplates with Appropriate Explanations,* making him the first to document the individual specificity of ridge patterns.[34] Around 40 years later, Johannes Evangelista Purkinje contributed to this field with a detailed description of nine distinct fingerprint patterns in his thesis *Commentary on the Physiologic Examination of the Organs of Vision and the Cutaneous System.*

Fingerprint recognition gained legal and forensic significance in the 19th century. By 1902, the first trial in England using fingerprints as forensic evidence took place, and New York's Civil Service implemented systematic fingerprinting of criminals. In the same period, scientists like Francis Galton and Henry Faulds developed classification systems and methods for documenting fingerprints, significantly advancing the field.

In the digital era, biometric systems evolved with the advent of computing. In 1974, the Automated Fingerprint Identification System (AFIS) was created by the FBI, which digitally stored minutiae – distinctive points on the ridged skin – used for matching

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[29]   Teixeira 2008.
[30]   Matos 2010.
[31]   Matos 2010.
[32]   Barnes 2011.
[33]   Ghosh–Pahari 2021.
[34]   Ghosh–Pahari 2021.

fingerprints.[35] Modern AFIS systems can search through millions of fingerprint records in seconds, playing a critical role in criminal investigations and cross-border information sharing between law enforcement agencies worldwide.

In this context, fingerprint recognition has become a cornerstone of biometric security systems globally. Advanced systems like the FBI's Next Generation Identification (NGI) and India's Aadhaar identification program demonstrate the scalability and potential of biometric databases. The Aadhaar system, for example, is the world's largest biometric database, used for identity verification across various public services.[36]

Moving from Asia to Europe, we examine the Visa Information System (VIS), which has been operational since 2011, encompassing all Schengen Agreement member states. VIS facilitates the exchange of visa-related information among member states and law enforcement agencies, allowing the European Union to establish an area of freedom, security and justice. To streamline visa procedures and enhance external border control, biometric data (including digital fingerprints and photographs) of visa applicants are collected and stored in VIS for five years.

Integration of biometric data and information systems in public security operations: The case of Immigration and Borders Service – SEF and PSP

With the recent transfer of airport security duties from SEF to the Public Security Police (PSP), PSP officers now manage visa verification at airport border control booths. According to the informational brochure of SEF on VIS, the system contains biographic and biometric data of all individuals applying for Schengen visas – amounting to approximately 80 million identities. This biometric database is crucial for verifying the identity of travellers at external borders.

Modern organisations rely heavily on Information Systems (IS) due to the value that data and its processing hold across various sectors. These systems enable the collection and management of large volumes of data, playing a vital role in organisational activities.[37] Within the PSP, the need to adopt an IS for managing operational data has become increasingly evident, particularly for supporting decision-making processes in security operations.

The Strategic Information System (SEI), implemented in May 2004, was the result of a long-term project aimed at improving PSP's data management capabilities, culminating in the Information Systems Plan (PESI) in 2022.[38] However, following the garbage in, garbage out principle,[39] poor quality data inevitably leads to poor quality information, which diminishes its usefulness. For a public security organisation tasked with maintaining public order and safety, the handling of inaccurate, incomplete, or inconsistent data severely hampers both strategic and operational efficiency, undermining the organisation's core mission.

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[35]   GIBB–RIEMEN 2023.
[36]   Government of India 2024.
[37]   PEREIRA–ALMEIDA 2023.
[38]   PEREIRA–ALMEIDA 2023.
[39]   VALACICH–SCHNEIDER 2017 cited in PEREIRA–ALMEIDA 2023.

Ensuring consistent and standardised data entry across the organisation is not always achievable, which highlights the considerable effort and resources required for data detection and correction. Financially costly and time-consuming, unreliable data leads to inefficiencies that could otherwise be avoided through correct initial input, freeing up resources for more critical tasks that require specialised intervention.

There is a consensus within academic circles that organisations should develop tools and processes aimed at both correcting data errors and preventing the causes of poor data quality,[40] which is a key objective of this study.

Within the PSP, data is collected across a range of security-related activities, including data on locations, organisations, objects and individuals. While the volume of collected data is generally sufficient, the quality remains variable, depending on who performs the data collection and entry.[41] In 2021, there were 630,652 data entries, of which 13,525 were identified as duplicates. In 2022, the number of entries increased to 762,461, with 19,052 duplicates identified.

Pereira and Almeida further note that the percentage of duplicated entries may be even higher than reported, as items entered with typographical errors or incomplete data were not classified as duplicates.[42] Given this, it was deemed essential to determine the number of NIP (National Identification Process) merges that occurred in 2023. A request for criminal data extraction was made, revealing a total of 6,113 NIP merges.
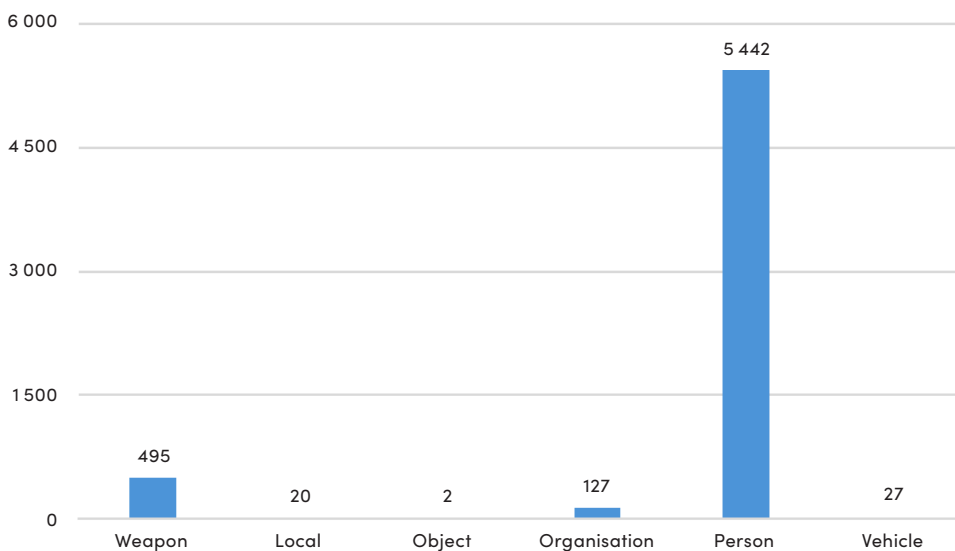

Figure 1: Total NIP merges by item
Source: Adapted from SEI criminal data extraction by the National Directorate of the PSP. Copyright: DN–PSP

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[40]   Janssen et al. 2020, 2017 cited in Pereira–Almeida 2023.
[41]   Mitar 2004 cited in Pereira–Almeida 2023.
[42]   Pereira–Almeida 2023.

As expected, the Person Item accounted for the largest share of NIP merges, with 5,442 merges, far surpassing the next highest category, Weapon, which had 495 merges. The Organization Item accounted for 127 merges, while the remaining items (Location, Object and Vehicle) showed residual values, with less than 50 merges each.

It is important to note that the data provided by the Police Information Department reflects only the number of NIP merges, representing a reduction in the total number of duplicates. Despite ongoing efforts, duplication remains a significant issue, requiring routine management of duplicate items and subsequent merges – an accepted and ongoing task within the organisation.

Furthermore, despite the high percentage of duplicated entries related to the Location Item (averaging 87.70%), only 20 NIP merges were recorded in this category, indicating a potential area for improvement in data handling.
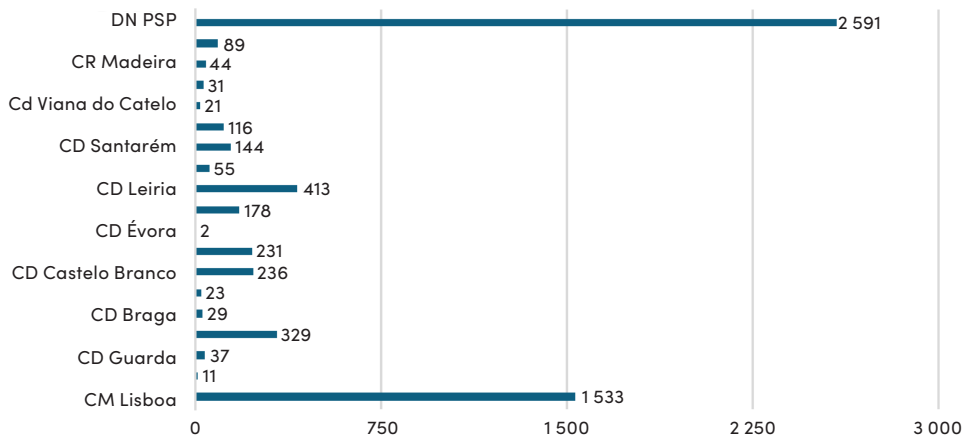
Figure 2: NIP merges by command
Source: Adapted from SEI criminal data extraction by the National Directorate of the PSP. Copyright: DN–PSP

The National Directorate (DN) PSP had the highest number of merges, with 2,591 merges, representing 42.39% of the total. These merges are distributed across various departments, including Arms and Explosives, Private Security and Police Information. COMETLIS followed with 1,533 merges (25.08%), while the District Commands of Leiria (6.76%), Aveiro (5.38%), Castelo Branco (3.86%) and Coimbra (3.78%) also showed significant numbers of merges (Figure 2).

Initial analysis suggests that the second-largest command in the country registered only 11 NIP merges, representing a mere 0.18% of the total, while significantly higher values were observed in the District Commands of Leiria, Aveiro, Castelo Branco and Coimbra.

For our study, it is crucial to understand the impact of these merges, specifically on the Person Item. Given the disproportionality in the totals, the DN PSP recorded the highest number of merges (42.15%), followed by COMETLIS (26.06%). The District

Commands of Leiria (6.87%) and Aveiro (5.79%) maintained their positions, as did Castelo Branco (3.93%) and Coimbra (3.64%).

These figures suggest a significant effort by the Helpdesk to manage these cases. Based on a rough estimate of 6,114 merges over 227 working days (excluding weekends, holidays and vacation days), the Helpdesk would need to process an average of 27 NIP merges per day, indicating the substantial workload involved in resolving these duplicates.

In summary, biometric technologies, particularly fingerprint recognition, have become indispensable in modern security and identification systems. Their implementation has transformed both criminal investigations and everyday personal security, with a clear trajectory of continued integration and development in the digital age.

Methods

To accurately measure time during operational service in police subunits, direct observation was employed. This observational technique, as described by Quivy and Campenhoudt (2005), involves a set of procedures in which the analytical model is tested against observable data. Direct observation entails the collection of information without intermediaries, relying solely on personal observation without interference in the observed process.

Given the need for an indefinite observation period dictated by the flow of citizens to police stations, a data extraction from the Strategic Information System (SEI) was requested. This extraction identified the subunits within the Lisbon Metropolitan Command (COMETLIS) with the highest volume of reports and complaints. Using Microsoft Excel, the extracted data was processed to determine which stations actively engage in public service, analyse the volume of both complaints and reports and identify instances of lost documents, such as Citizen Card loss reports.

To capture the time required for filling in the "Person" data field in the SEI and to check for duplicates, fieldwork was conducted using a stopwatch to measure the interval from "Associate Person" to "Save" in the system. A Data Recording Form was developed to systematically document the time measurements, capturing the researcher's details, the officer entering the data and the exact time required for the data entry process.

Additionally, sociodemographic information about the police officers was gathered, including age, gender and educational background. Professional details were also recorded, such as rank, years of service, training (whether they completed the Agent or Chief training program), subunit, and shift during which the data was collected. Furthermore, the type of service (i.e. complaint or report), the method of identification (verbal or by document), duplicate record verification and the duration of the identification process were also noted.

As part of this study, the performance of a fingerprint scanner (Suprema BioMini Plus) used at airport border control was evaluated. Five readings were taken to measure the time required to authenticate fingerprints and verify visa authenticity, yielding the following times: 5.1 seconds, 4.5 seconds, 3.6 seconds, 4.3 seconds and 4.9 seconds.

Considering the research objectives and the operational context, we hypothesise that the implementation of biometric fingerprint scanners will improve efficiency by reducing both the time required for data entry and the associated labour costs (Hypothesis 1).

Participants

To calculate the Mean Operational Time (MOT), the study focused on a defined scope of analysis constrained by the available fieldwork time for direct observation. After processing the SEI data, it was determined that a total of 78 police stations provided public service, with a total of 103,653 reports filed in 2023.

The representativeness of each subunit within COMETLIS was calculated by dividing the total number of records into quartiles, with the third quartile (75%) used as the reference, yielding a minimum threshold of 1,786 records per station. Based on this threshold, 20 police stations were identified, and their proportion within the total universe was calculated. To ensure a statistically representative sample, a margin of error of 5% and a confidence level of 95% were applied, resulting in a necessary sample size of 381 records, which were stratified accordingly. Data collection was phased, focusing on the top 10 subunits, aiming to gather 190 records for analysis.

Descriptive statistical techniques were used to analyse the collected data, focusing on central tendency (mean, mode, median) and dispersion (standard deviation). All analyses were conducted using Microsoft Excel (Microsoft 365).

For data collection, an extraction request was submitted to SEI for Lisbon 2023 records, including Police Process Number, Command, Division, Station, type of occurrence, as well as personal data related to the "Person" field (e.g. sex, age, nationality, profession). Additionally, the number of NIP (National Identification Process) merges completed in 2023 was requested to assess workload volume in this aspect.

Upon approval, the extracted data was refined, excluding subunits that do not provide public service (e.g. the Hospital São José Police Post), as well as tourism-specific stations, where biometric sensors are not applicable due to foreign citizens being the primary users. A Data Collection Form was refined based on earlier academic work conducted as part of a security technologies course.

Once the highest-volume police stations were identified, authorisation was requested from the COMETLIS Training Unit to visit these subunits and notify the station commanders of the researcher's presence. Given the uncertainty of data collection speed, all 20 stations in the quartile were included in the request. Scheduling was aligned with the availability of the researcher and the station's operational demands.

As data was collected, it was recorded in Microsoft Excel, along with the days spent at each station and the time required to gather the necessary records.

Results

Over a total of 124 hours and 50 minutes (approximately five days), 175 records were collected, with the assistance of 32 police officers. Of these officers, 12 were Agents, 11 Principal Agents and 9 Chiefs. Four officers held university degrees, with a mean age of 36 years and an average service time of 11 years and 7 months. The majority (31) were male, with only one female officer observed.

Regarding the types of reports, it was noted that 100% of the lost Citizen Card reports relied on verbal identification without any supporting documentation. The total time dedicated solely to filling out the "Person" field amounted to 8 hours, 21 minutes and 33 seconds. The mean time for data entry was 2 minutes and 52 seconds (SD = 0.0015 minutes), with a mode of 1:50 and a median of 2:32. The low standard deviation indicates minimal dispersion, increasing confidence in the reliability of the meantime. The proximity of the median to the mean further supports the consistency of these time measurements.

To estimate the cost per hour of the observed labour, 2023 remuneration rates from the Public Administration Salary System (SRAP) were applied. As the precise remuneration rates of the observed police officers were unknown, an average hourly wage was calculated for Agents, Principal Agents and Chiefs, yielding the following results:

Table 1: Cost per hour

Rank	Average salary	Representativeness	Hourly rate
Agents	€1,107.28	38%	€6.29
Principal Agents	€1,412.30	34%	€8.02
Chiefs	€1,526.34	28%	€8.67

Source: compiled by the authors

Based on these data, the weighted hourly labour cost (H/H) was calculated to be €7.56. For the 175 records collected, the total monetary cost associated with the data entry process amounted to €63.24.

Extrapolating this analysis to the 103,653 records processed in 2023 and using the average time per record (2:52), the total annual labour cost for manual identification processes would be €26,922.31.

By introducing a fingerprint scanner for this task, such as the BioMini Plus used in airport border control, with an average processing time of 4.48 seconds, the cost for the same 175 records would drop to €1.64, resulting in a savings of €61.60. For the total 2023 records, this would reduce costs from €26,922.31 to €700.20, yielding savings of €26,095.03.

The current market price for the latest BioMini Plus 2 model is €153.75. For the entire COMETLIS subunit, the acquisition cost, including a 10% discount, would be €11,992.50, and €61,500.00 for all national police stations.

These results validate Hypothesis 1, confirming significant improvements in police productivity using fingerprint scanners compared to manual identification processes. This conclusion is further supported by the literature, which highlights the adoption of biometric sensors by law enforcement agencies in other countries.

Conclusions

The results of this study demonstrate the productivity gap between the current manual data entry system and the potential benefits of adopting biometric technology. Rather than asking "how much can we gain, and how quickly, if we invest", the findings illustrate how much is currently being lost due to the lack of investment in more efficient systems.

During the fieldwork, the analysis of the Mean Operational Times (MOT) for citizen identification revealed an average data entry time of 2 minutes and 52 seconds. Notably, in three instances, the MOTs were significantly longer, reaching 13:51, 11:45 and 11:09 minutes for the simple entry of personal data. This led to observable discomfort in citizens waiting at the police stations. In contrast, the fastest MOTs were 00:07, 00:09 and 00:19 seconds, all achieved using pre-existing National Identification Process (NIP) numbers provided by the citizens themselves, demonstrating the impact of optimisation.

Converting the MOTs into financial terms enabled us to quantify both the productivity and cost-effectiveness of police operations. The findings highlight the potential financial savings from adopting biometric fingerprint scanners, revealing the significant losses incurred by maintaining manual processes. For example, in 2023, the total cost of manually entering personal data in the Lisbon Metropolitan Command (COMETLIS) amounted to €26,922.31. In contrast, with the use of fingerprint scanners, the cost would be reduced to just €700.42. These scanners are already in use by the PSP at border controls, in the National Registry Office (IRN) and public healthcare facilities. The savings generated by this technological innovation could cover nearly half the cost of purchasing 400 fingerprint scanners, enough to equip all police stations, further increasing financial savings through improved hourly cost-efficiency (H/H).

This study, focused on police operational services, also sought to understand the perception of police officers regarding this technological shift. The verification of the first and second hypotheses, coupled with the refutation of the third, led to the conclusion that police officers generally support the introduction of biometric sensors. They recognise the technology's potential for improving productivity, are receptive to integrating the Strategic Information System (SEI) with Citizen Identification Systems (SIC), and acknowledge the need for innovation in public administration. Furthermore, they identify limitations in the current process, particularly the repetition of NIP entries and the introduction of incorrect data.

The fact that out of 6,113 NIP merges conducted in 2023 5,449 were related to the "Person" field underscores the inefficiency of the current system. This task is consuming

human resources that could be better utilised in other areas. With an average of 27 merges per day, the adoption of biometric technology could significantly reduce the workload, freeing up resources for other critical tasks.

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Investigation of Fatal Road Traffic Accidents Involving Passenger Cars Based on Vehicle Age in Hungary

Gábor MÉSZÁROS[1] ⓘD

Amongst the causes of road traffic accidents, mechanical failure of cars due to their mechanical condition appears with the most minor proportion. Authorities do not examine the possible impacts of the vehicles' mechanical condition and age on the severity of the road accidents they are involved in. The data on fatal road accidents involving cars will be presented and analysed based on the age composition of the vehicle fleet. The basis of the research is the deep analysis of the concluded investigation documents of fatal road accidents between 2016 and 2017 in all the counties of Hungary since the accident statistics of the Central Statistical Office do not include the data uncovered during the investigation or the accident causes determined at the end of the process. In 2016, the average age of passenger cars was 13.9 years, while the average age of passenger cars involved in accidents where fatalities occurred was 15.5 years. In 2017, the average age of passenger cars was 14.1 years, while the average age of passenger cars involved in accidents was 15.5 years. In cases where another vehicle was involved in the accident, but no one died, the average age of vehicles was 12.1 years in 2016 and 10.9 years in 2017. During accidents, nearly 40% of road users did not use seat belts, which also adversely affected the outcome of the accidents. The ageing of the vehicle fleet harms the severity of accident outcomes, as the passive safety features of more modern vehicles – if used – provide more effective protection for road users.

Keywords: traffic accident, average age of vehicles, vehicle fleet, Hungary

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Introduction

Data analysis of road traffic accidents is an important feature of the prevention of road traffic accidents. Data is collected by the Police during the case investigation of the accident. Collecting the data enables the National Accident Prevention Committee, as the responsible organisation, to elaborate on accident prevention strategies.[2] The Central Statistical Office and Police collect various data on the circumstances of the accidents. Such data includes the accident location, weather, visibility and road conditions, the categories of vehicles, the gender and age of the individuals involved in the accident, all categorised by causative factors, as well as the causes of the accident.[3] Regarding vehicles, the make, year of manufacture and location of the vehicle is also recorded, and this information is forwarded to the Central Statistical Office (KSH) by the police. However, data on the ages of vehicles in fatal road accidents is not collected, making such an analysis unavailable. The database of the Central Statistical Office contains information about the average age of vehicles present on the roads in Hungary, with breakdowns available concerning the types of passenger cars.

The technical malfunction of the vehicle is rarely named as the cause of most of the incidents. In the years I examined, 2016 and 2017, technical malfunction was indicated as the cause of the accident in only two cases. In one case, the wheel of a vehicle detached, and in the other case the accident was caused by a punctured old tire. However, this does not mean that the overall technical condition of the vehicle does not play a role in the occurrence of the accident, as well as in the severity of its outcome. During the on-site inspection of accidents and later in the forensic vehicle expert examination, the primary focus is to determine whether there was a technical malfunction of the vehicle. The quality of the vehicle's technical condition is not examined. Factors such as how aged or worn the suspension, braking system, or the vehicle's body, etc. are not evaluated. Yet, these could have played an important role in the occurrence of the accident, for instance, due to increased braking distance, or in how well the vehicle could protect its occupants through passive safety systems.

Regular maintenance and technical inspection of vehicles is crucial for maintaining road safety. In Hungary, mandatory technical inspections are taken regularly; however, for older vehicles, maintenance costs are higher, which may lead many owners to postpone or neglect necessary repairs.

"The deadline for periodic inspection for a new vehicle is calculated from the date of registration, and for a used vehicle, from the date of the inspection prior to registration: For passenger cars, in the case of a new vehicle, it is four years; for a used vehicle, within three calendar years following the year of first use, it is three years; beyond three calendar years, it is two years."[4] The police check these during traffic control, but the possibility of a technical inspection of the vehicle is limited.[5]

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[2]   MÉSZÁROS 2017: 61.
[3]   KSH s. a.
[4]   5/1990 (IV. 12.) KöHÉM rendelet a közúti járművek műszaki megvizsgálásáról [Regulation of the Ministry for Transport, Communications and Construction on the Technical Inspection of Road Vehicles], 11. § (3) b).
[5]   MAJOR–MÉSZÁROS 2015.

Hungarian and international research on the topic

Vehicle manufacturers placed increased emphasis on both active and passive safety features of vehicles in recent years. Safety systems that were previously only found in high-end vehicles now became mandatory equipment in the European Union. As a result, the safety level of newer vehicles is higher than that of vehicles manufactured 15–20 years ago. Therefore, it seems logical to assume that in fatal traffic accidents, where people die in vehicles, older vehicles are primarily involved.

This is justified by a Hungarian study that claims: "The result of the analysis also duly finds that vehicle age has an emphatic role in the occurrence of accidents."[6]

This statement was not only justified in Hungary. According to a study made in the United States of America: "In fatal crashes, the study shows that a driver in a vehicle of age 4–7 years was 10 percent more likely to be fatally injured than a driver in the baseline vehicle age category of 0–3. The model produced comparable estimates for drivers of vehicles age 4–7 (10%), 8–11 (19%), 12–14 (32%), 15–17 (50%), and 18+ (71%). Each of these estimates show the increased risk of being fatally injured in older vehicles, compared to the baseline 0–3 vehicle age category."[7]

The report also shows that "driver restraint use plays a large role in the relationship between vehicle age and the percentage of drivers fatally injured. The percentage killed among restrained drivers dropped fairly steadily from 46 percent among vehicles 19 years old, down to 26 percent among vehicles of age less than 1. This pattern was seen less among unrestrained drivers. Among vehicles of age 19 all the way down to vehicles of age 3, the percentage killed among unrestrained drivers varied little, remaining consistently between 76 and 78 percent."[8]

Vehicle age increases the expected proportion of injured occupants, with the greatest impact being found for cars that are 18 years or older.[9]

In Poland, the number of fatalities caused by passenger cars analysed by the age of a vehicle indicated that "the risk of being killed increases with the age of the vehicle. Chances of the loss of life of people involved in accident participants are three times more in the case of more than 21 year old cars compared to 5 years old cars".[10] The relationship between the age of vehicles and the severity of the outcome of their accidents was also examined in New Zealand. "The significant proportions of older vehicles being driven on the roads and the magnitude of the increased risk for these vehicles make this an important public health issue. Our study supports previous research in finding occupants of older vehicles to be at increased risk of car crash injury and provides important quantification of this risk. Given the trend for increasing age of vehicles being driven on the roads, this is likely to remain a road safety challenge."[11]

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[6]   Török 2020: 794.
[7]   U.S. Department of Transportation 2013: 6–7.
[8]   U.S. Department of Transportation 2013: 7.
[9]   Santolino et al. 2022.
[10]   Sicińska 2019: 105.
[11]   Blows et al. 2003.

Research methodology

Since I could not find data on the ages of vehicles in which travellers died during traffic accidents, I included data on the make, model and age of vehicles in my research on fatal traffic accidents that occurred in 2016 and 2017 in all the regions of Hungary. My assumption was that the proportions of vehicles of different ages involved in fatal accidents would mirror the average age of the vehicle fleet in Hungary. Considering that the average age of vehicles is continuously increasing, I found it important to investigate the age of vehicles involved in accidents, primarily those in which travellers in passenger cars lost their lives.

During the data collection, I aimed to obtain data on all fatal accidents in the examined years. The years under review were 2016 and 2017. In order to understand the results of the investigation and the causes of accidents determined at the end of the procedure, it is necessary to wait for the completion of the procedures, which often takes a long time. However, data collection was only partially successful, as some counties (e.g. Békés, Heves, Komárom-Esztergom and Zala) did not provide data for 2016, citing the destruction of records. Nevertheless, I obtained data on nearly 90% of the accidents, which already provides a clear picture of the age of vehicles involved in fatal road traffic accidents in Hungary. The research exclusively pertains to fatalities occurring in passenger cars.

The average age of vehicles in Hungary

The average age of passenger cars in Hungary showed a decreasing trend until 2007, with an average age of 10.3 years. In 2008, the trend reversed, and since then, the average age of vehicles has been continuously increasing, reaching 15.8 years in 2023. Compared to 2007, the average age of passenger cars has increased by one and a half times by 2023 (Figure 1).
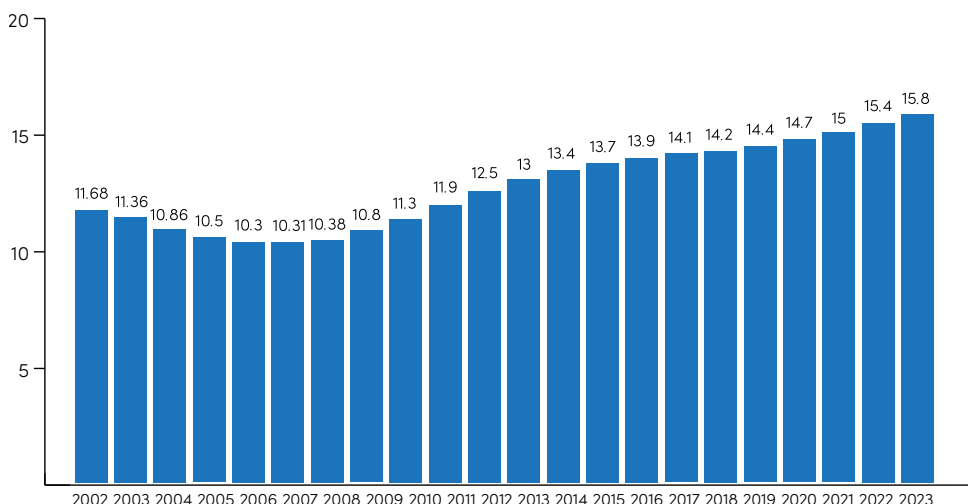
Figure 1: Average age of passenger cars in Hungary 2002–2023
Source: compiled by the author based on KSH 2023

The European Automobile Manufacturers' Association (ACEA) states that according to statistics on road traffic safety in the European Union, the average age of vehicles in the EU was 12.3 years in 2022, which is 3 years lower than Hungary's average of 15.4 years. Between 2017 and 2022, similarly to the car fleet in Hungary, the average age of cars in the EU also showed a continuous aging trend, at a similar rate to that in Hungary. There are significant differences between EU countries. Luxembourg is in the most favourable situation with an average car age of 7.9 years, while Greece is in the worst situation with an average of 17.3 years. Hungary, along with other former socialist countries except for Slovenia and Croatia, is located in the lower third of the EU ranking (Figure 2). This data is noteworthy on its own, but it becomes even more interesting when compared to statistics on fatal road accidents.
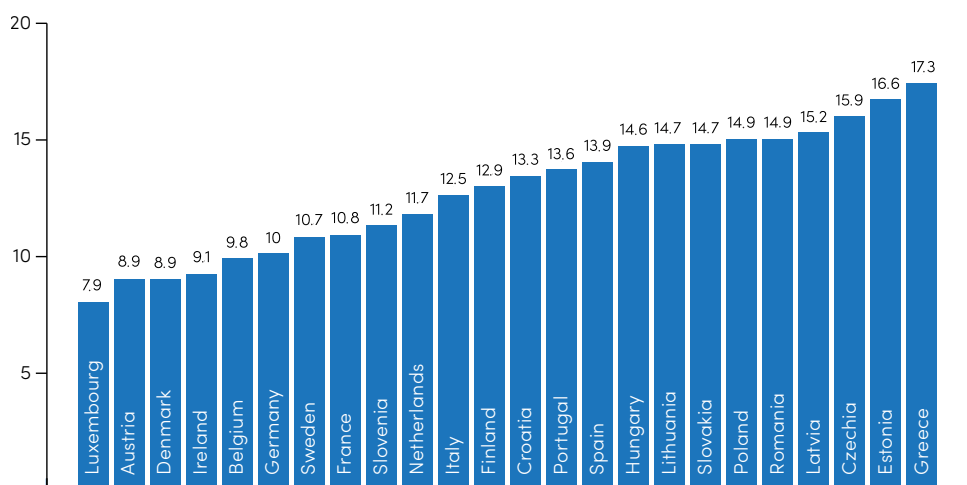
Figure 2: Average age of the EU vehicle fleet, by country
Source: compiled by the author based on ACEA 2024

Examining the trends, the average age of vehicles shows a similar change in both the European Union average and the Hungarian average. Only the starting values are differing. In 2017, the EU average age was 11.1 years, while in 2022 it was 12.3 years. In Hungary, the average age was 14.1 years in 2017 and 15.4 years in 2022. The increasing trend of the average age of passenger cars is practically the same in the Union and Hungary. However, this also means that Hungary is unable to get closer to the EU average age (Figure 3).
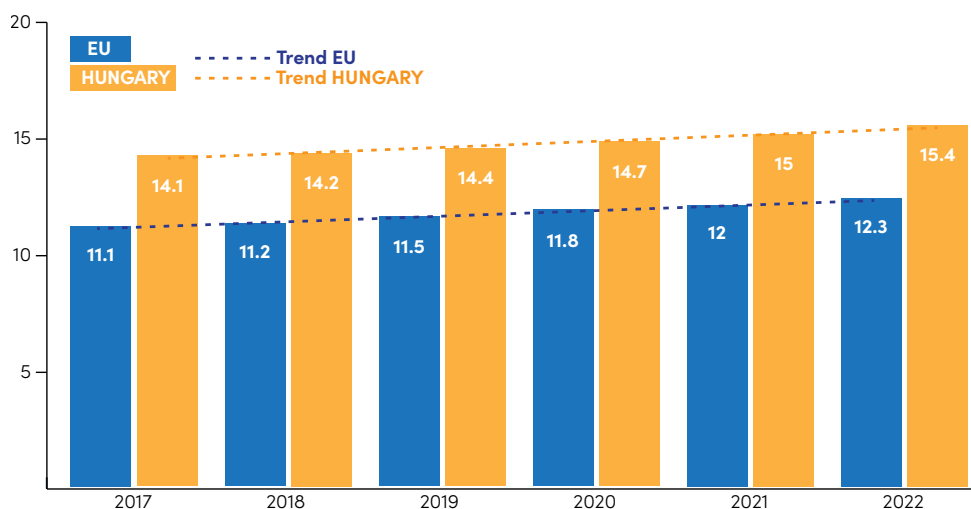
Figure 3: Average age of passenger cars in the EU and Hungary 2017–2022
Source: compiled by the author based on KSH 2023; ACEA 2024

According to Eurostat data, in Hungary, during the years examined in the research, in 2016, 6.1% of the passenger car fleet was 0–2 years old (204,007 pieces), 6.0% was 2–5 years old (201,034 pieces), 20.7% was 5–10 years old (686,154 pieces), 54.1% was 10–20 years old (1,793,815 pieces) and 12.9% was older than 20 years (428,196 pieces). In 2017, 7.0% of the vehicles were 0–2 years old (244,719 pieces), 6.2% were 2–5 years old (215,458 pieces), 16.8% were 5–10 years old (585,118 pieces), 56.3% were 10–20 years old (1,957,207 pieces) and 13.5% were older than 20 years (468,495 pieces). The situation has not improved since then; in 2022, 6.1% of passenger cars were 0–2 years old (249,140 pieces), 9.3% were 2–5 years old (381,469 pieces), 13.0% were 5–10 years old (533,877 pieces), 50.9% were 10–20 years old (2,086,727 pieces) and 20.7% were older than 20 years (842,916 pieces).

The situation in Poland is the same as in Hungary: "The number of passenger cars fleet driven in Poland showed that: more than 60% of passenger cars is between 11 and 20-year-old, the rate of oldest (more than 21 years old and more) vehicles of this type is very low, estimated to be 9.9% of all passenger cars, and the rate of newest vehicle (up to 5-year-old cars) is also at low level, 10.3%."[12]

The result of the research

During the research, I examined the cases in which individuals traveling in passenger cars died, either as drivers or passengers, during accidents. According to Eurostat data, in 2016, there were 565 traffic accidents resulting in 607 fatalities, of which 270 were in passenger

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[12]   Sicińska 2019: 113.
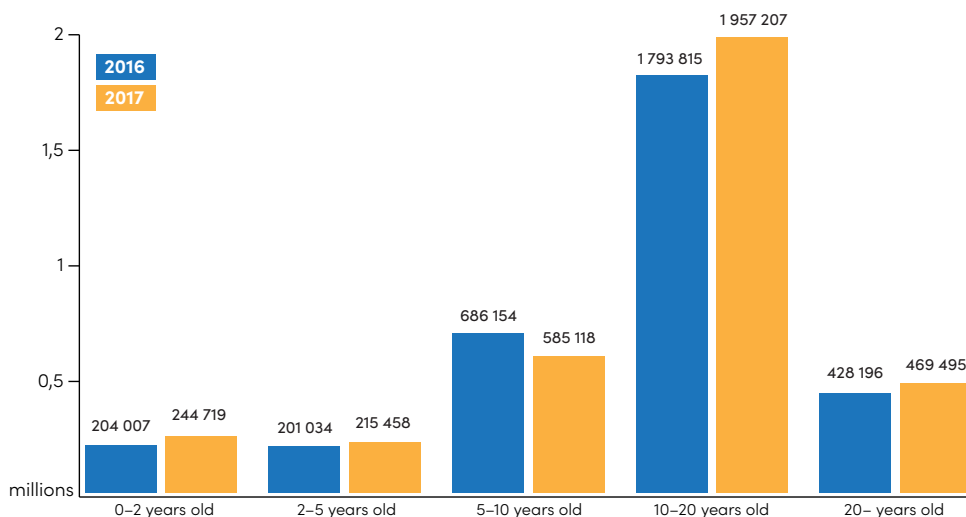
Figure 4: Age composition of passenger cars in Hungary 2016–2017
Source: Eurostat 2023

cars. In 2017, there were 575 traffic accidents resulting in 623 fatalities, of which 277 were in passenger cars (Figure 5).
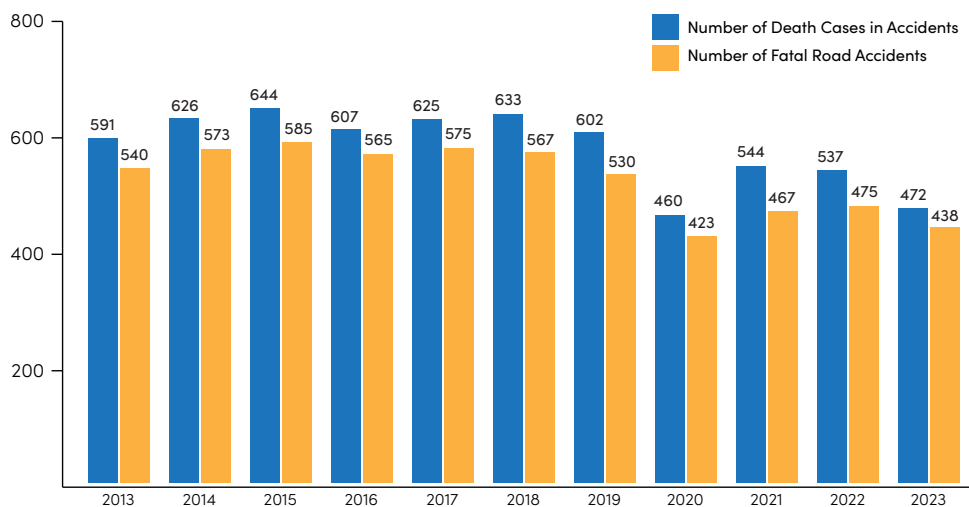
Figure 5: Number of fatal road accidents and number of death cases in road accidents
Source: compiled by the author based on Eurostat 2022

In 2016, the counties reported data on 200 fatal road traffic accidents, totalling 245 individuals. This means I received data on 90% of the fatalities in accidents that occurred in 2016. For 173 of these accidents, I also received data about the age of the vehicle, meaning that I was able to analyse nearly 80% of the accidents that were the subject of the research in that year.

In 2017, I received data on 215 such cases, in which a total of 260 people died. This means I received data on 93.4% of the accidents that occurred in that year. I received information about the age of the vehicle in 198 accidents, allowing me to analyse nearly 86% of the accidents studied that year.

In 2016, the average age of passenger cars was 13.9 years according to the Hungarian Central Statistical Office. Data revealed during the research period indicated that the average age of passenger cars involved in fatal accidents was 16.13 years. In cases where a passenger car collided with another passenger car (considering only passenger cars in the range of accidents) the average age of the vehicles in which no one died was 12.92 years in 2016.

In 2017, the average age of passenger cars was 14.1 years, while the average age of passenger cars involved in accidents was 15.52 years. In cases where another vehicle was involved in the accident and no one was killed, the average age of passenger cars was 12.46 years in 2017.

In both years, it was evident that the passenger cars in which fatalities occurred were significantly older than those they collided with, and in which no fatalities occurred. In both years, it was observable that the average age of the vehicles in which deaths occurred was higher than the average age of the vehicles in circulation, while the average age of the vehicles in which no deaths occurred was lower. The difference between the two categories was more than 3 years in both years.
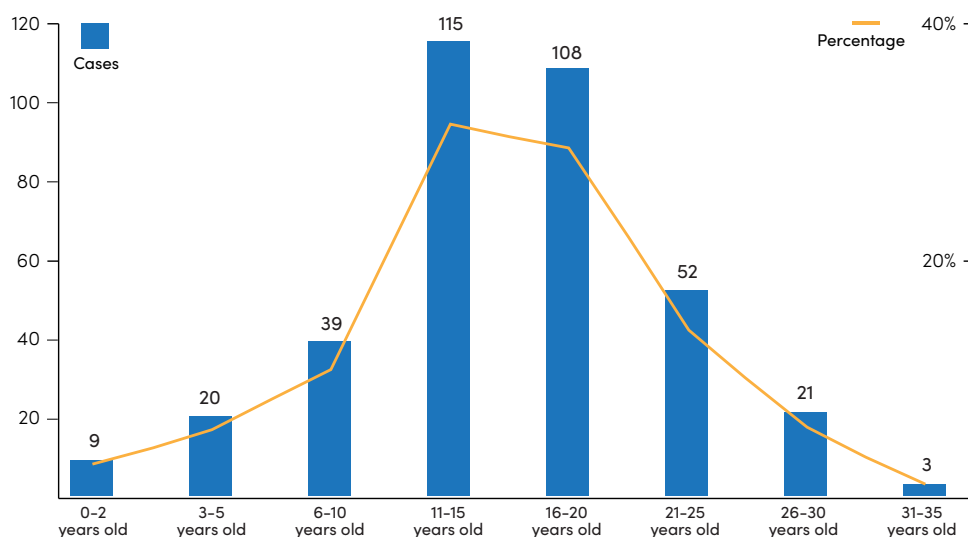
Figure 6: Age groups of vehicles
Source: compiled by the author based on his own research

Figure 6 shows the average age of vehicles sorted by group, in which fatalities occurred in car accidents. In 60.76% of the accidents, the age of the cars falls within the range of 10 to 20 years, while 18.53% of the vehicles are younger than 10 years, and the proportion of vehicles older than 20 years is 20.71%.

I examined the age distribution between counties; however, it was not possible to establish a trend based on the two years studied. In some counties, the average age decreased over the two years, while in others it increased, sometimes being below and other times above the average. Only in Budapest was it noticeable that in both years, the average age of the passenger cars involved in fatal accidents was lower than that of the vehicles in circulation.
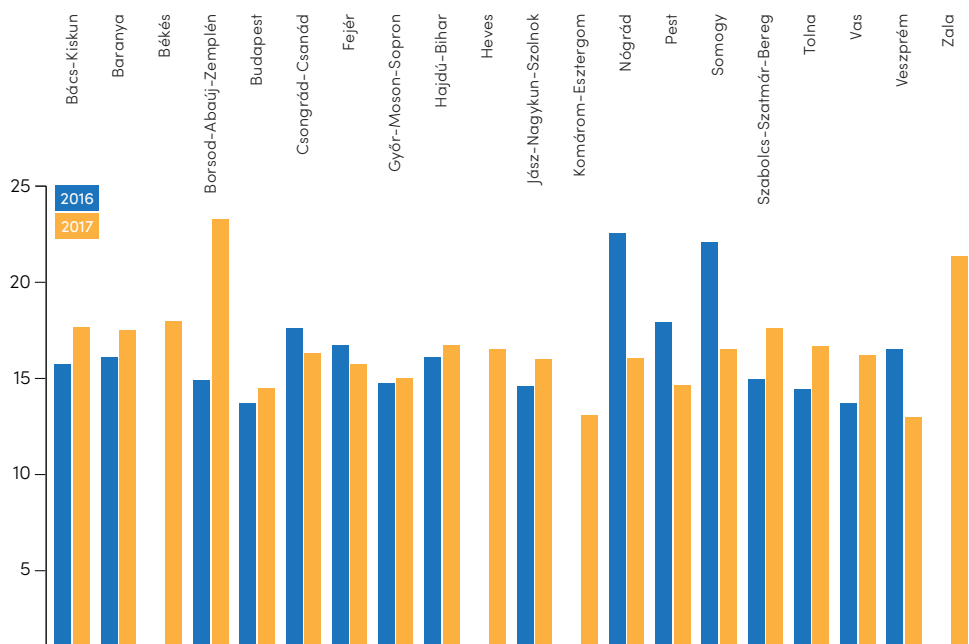
Figure 7: Age distribution of the vehicles involved in fatal accidents between counties 2016–2017
Source: compiled by the author based on his own research

Analysis of the 2016 data

In 2016, in 27 cases, no other vehicle was involved in the accidents. Passenger cars collided with objects and trees during the accident and overturned. In 8 cases, the vehicle collided with a railway vehicle, and in 44 cases, it collided with much larger vehicles, such as buses and trucks.

In 2016, I obtained data on the collision speed in 116 accidents. In each case, I considered the speed of the vehicle that collided with the other vehicle or object at a higher speed. Taking this into account, the average collision speed in 2016 was 75.5 km/h.

While examining collisions with lower-than-average speeds (53 cases), it was found that in 18 cases the vehicle collided with a stationary object, with the lowest collision speed of 45 km/h. The passenger car collided with much larger vehicles in 24 cases, such as buses, trucks and agricultural tractors. In these cases, the lowest collision speed was 34 km/h. Passenger cars collided with other passenger cars in 11 cases, where in 6 cases people died in the vehicle that was hit from the side during the collision of cross-moving vehicles, and in five cases, vehicles collided head-on.

The collision speed was greater than 100 km/h in 18 cases, of which 10 were single-vehicle accidents involving a collision with a stationary object. The highest collision speed was 135 km/h on a road section where the maximum allowed speed was 60 km/h. In 8 cases, the passenger car collided with another vehicle. The highest value was when a passenger car traveling at a speed of 170–190 km/h and collided at 140 km/h with a turning bus traveling on a road section where the maximum speed allowed was 90 km/h.

In 2016, in the 200 accidents examined, I received data on speed in 116 cases, of which the expert determined an absolute speed violation in 70 cases, resulting in the deaths of 80 people. This means that when the speeds of the vehicles were examined, a speed violation was established in 60.3% of the cases. The average age of the speeding vehicles was 15.64 years.

The seatbelt was not used in 70 cases, of which 35 vehicles were also speeding. Among those who did not use seatbelts, the average age of the vehicles was 16.31 years.

Analysis of the 2017 data

In 2017, I received data on 129 cases, and the average collision speed was 77.4 km/h. Examining the lower-speed collisions (61 cases), it was found that in 15 cases, the vehicle collided with a stationary object, with the lowest collision speed being 28 km/h. In 32 cases, the passenger car collided with significantly larger vehicles, such as buses, trucks, or agricultural tractors. In these cases, the lowest collision speed was 66 km/h. In 14 cases, passenger cars collided with other passenger cars, with one case resulting in a fatality during a collision between crossing vehicles, where a person died in the vehicle that was hit from the side. In 11 cases, vehicles collided head-on.

In 19 cases, the collision speed was greater than 100 km/h, of which 5 were single-vehicle accidents involving a collision with a stationary object. The highest collision speed was 130 km/h (the speed before the accident was 140 km/h) on a stretch of road where the maximum permitted speed was 90 km/h, and in all 5 cases, there was a speed violation. In 6 cases, the passenger car collided with another vehicle of significantly greater weight. The highest value was when a passenger car traveling at a speed of 130–140 km/h before its accident collided with a truck at 130 km/h on a stretch of road with a maximum permitted speed of 130 km/h. In 8 cases, a passenger car collided with another passenger car, and in 7 cases, there was a speed violation. The

highest value was when a passenger car traveling at 150–160 km/h before the accident collided with an oncoming passenger car at 135 km/h on a stretch of road where the maximum permitted speed was 90 km/h.

In 2017, out of the 215 accidents examined, I received speed data in 129 cases. In 87 cases, the expert determined that there was a speeding violation, resulting in the deaths of 110 people. This means that when the speed of the vehicles was examined, speeding was established in 67.4% of the cases. The average age of the speeding vehicles was 10.54 years.

The seatbelt was not used in 86 cases. Out of these cases, 34 vehicles were also speeding. In the case of those who did not use a seatbelt, the average age of the vehicles was 16.67 years.

Summary

Based on the data from the two years 2016 and 2017, the overall picture is withering. In 2016 and 2017, I received data on a total of 415 cases where passengers in a car died. In both years, I found that the average age of the cars in which the fatalities occurred (16.13 and 15.52 years) is higher than the average age of cars in traffic (13.5 and 14.1 years). This number is clearly higher than the average age of the colliding vehicles that were involved in fatal traffic accidents with cars, but where passengers did not die (12.92 and 12.46 years).

I received data on the speeds of vehicles in motion and collision speeds in 245 cases. Out of these cases the expert determined absolute speeding in 157 cases. In accidents involving aging vehicles, where individuals died in passenger cars, speed violations were identified in 60% of the cases that were examined. When looking at all accidents in which individuals died in passenger cars, speed violations were also found in 37.8% of these accidents. This is significantly higher than the rate I found in a previous research regarding the speed violation rate in all fatal road accidents, which was around 30%.

The usage rate of seat belt, which is a passive safety device, is not better either. Over the two years, I found 156 accidents (37.5%) where seat belts were not used, and in half of these cases, speeding was also present. The research also revealed that the average age of passenger cars in which occupants died without using seat belts is the highest (16.31 and 16.67).

The rejuvenation of the vehicle fleet would improve traffic safety. "The influence of new-car safety on the fleet's average safety is not immediate. Of course, if all vehicles were replaced instantaneously with new vehicles, there would be a significant benefit, but the reality is that a benefit of that sort of magnitude takes many years to realize."[13] Unfortunately, the sales figures for new vehicles do not indicate that the vehicle stock will become younger. According to the data of the Central Statistical Office, fewer new passenger cars are being registered in Hungary (Figure 8).

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[13]   ANDERSON et al. 2009.
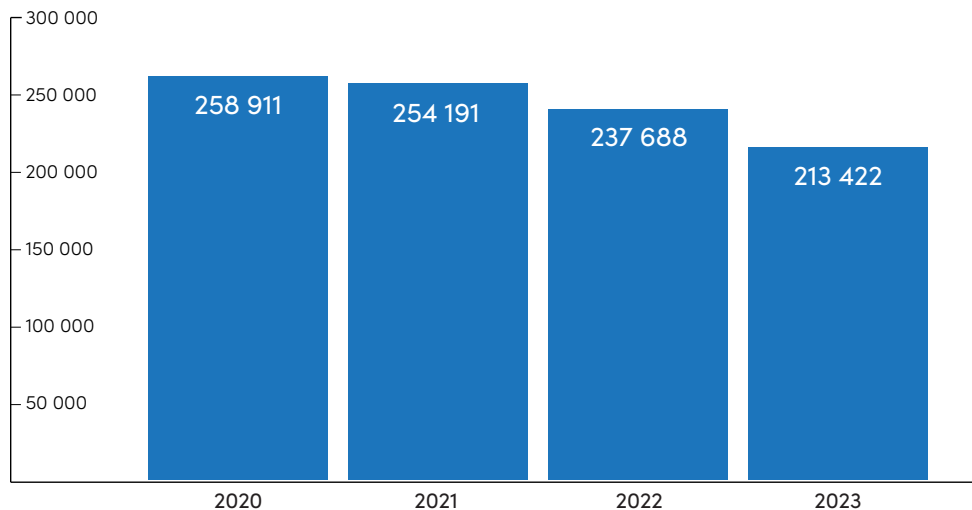
Figure 8: New passenger cars in Hungary
Source: compiled by the author based on KSH 2024

The aging vehicle fleet is further compounded by a lack of responsible driving behaviour. Driving at speeds greater than the speed limits increases the risk of accidents and worsens the outcomes of such accidents.[14] The inconsistent use of passive safety devices, such as seat belts, further exacerbates the severity of accidents. Therefore, it is necessary not only to refresh the vehicle fleet but also to promote responsible driver behaviour.

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[14]   HOLLÓ 2008.

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The Role of Geographical Factors in the Investigation

Szabolcs MÁTYÁS[1]

Criminal geography in Hungary is a field of science that is researched by few people despite the fact that the research results can be used in practice. In Western Europe and North America, research results are widely used in every-day police work. Moreover, in Germany, all criminology books contain a chapter on criminal geography.

This paper aims to examine the impact of geographical factors on investigative processes, focusing on how location, terrain and accessibility influence crime scene investigations and evidence collection.

The author gathered factors that may influence investigations from both previous sources and his own research.

The present study not only presents the role of geographical factors in the investigation but also highlights their practical implications. It lists the physical and social geographical factors that can affect crime. When presenting the factors, specific criminal cases are described where geographic knowledge was necessary during the investigation. It was this specialised knowledge that led investigators to the perpetrator.

The author is confident that, based on the practical examples, more and more people in Hungary will recognise the importance and practical applicability of this field of science.

Keywords: criminal geography, law enforcement, crime, geography

Introduction

The spatial investigation of crime has a history of nearly two hundred years. André-Michael Guerry was the first to examine the spatial distribution of crimes in France

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in 1833. Since then, crime geography research has come a long way. In most countries, criminologists or geographers deal with this field.

In the opinion of the author, the examination of individual geographical factors is given little emphasis during crime geography investigations. This study aims to show how wide the range of geographical factors that can be examined is.

Even in the wars of antiquity, knowledge of geographical factors was important because certain elements could help or hinder a military operation.[2] It is no different for law enforcement work, some factors can help an investigation, while other factors make it more difficult. Although the role of geographical factors was recognised in ancient times, it took a while before systematic military geography works were prepared. In the field of law enforcement, the situation is even worse. Few people have investigated the role of geographical factors so far, and crime geography focuses on something other than the role of geographical factors, with crime being approached from a criminological point of view, the role of geography receding into the background.

In practical crime geography, it is necessary to examine many factors that can affect crime. As yet, there is no unanimous recognition of these in police circles, although in some countries, some geographical indicators have been used for decades (for example, during organisational performance evaluation). Moreover, in case of predictive software, nowadays we can also witness the fact that some software uses physical geographic data to predict crime, as well as social and economic data.[3]

In order to analyse and predict the process of crime, it is not enough to know only the basic crime data (place and time of commission, type of crime). In order to be able to understand and explore a process in depth, knowledge of many other factors is also necessary. One possible route to resolving these issues can be crime geographical analysis.

The geographical factors that can affect the evolution of crime can be divided into two parts (just like geography): physical and human. The latter have a more significant impact on crime, but the influence of physical factors should not be neglected either. Regarding the role of physical factors, we can state that their role is negligible in some countries. Nevertheless, in certain cases (e.g. extreme weather situations), they can affect the development of the crime. However, natural factors may play a more significant role in countries with more extreme weather and topography (e.g. the United States of America and China).

The article is based on the author's *Crime Geography* book, as it may be said that it is an extended version of one of its chapters.[4]

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[2]   Kozma et al. 1993.
[3]   SoundThinking s. a.
[4]   Mátyás 2024.

Human geographical factors

Economic indicators

Analysis of the relationship between economic data and crime can be classified as one of the well-researched areas. In many cases, a close correlation can be discovered between the quality of economic indicators and crime. Among the most frequently analysed indicators are the number of taxpayers per 1,000 inhabitants, the amount of the income forming the personal income tax base, the GDP – showing the economic potential of residents, the commercial value per 1,000 inhabitants, the number of shops (purchasing power parity) and unemployment.[5] It is important to emphasise that none of the indicators should be treated as the cause of crime in themselves; they should only be interpreted in a complex manner.

One essential economic indicator is the unemployment rate. A high unemployment rate negatively affects the number of crimes. It is worth emphasising that a person does not become a criminal just because they lose their job. However, if someone is out of work for a long time, the chances of that person committing a crime are higher.

A clear correlation can be shown between the economic indicators of a given area and the number of crimes. However, it is worth noting that the number of crimes will not necessarily be higher in areas with worse economic indicators. In poorer areas, crimes against property will be higher (e.g. robbery, burglary, theft) and crimes committed for daily living.

We should also mention an interesting connection between economic data and traffic accidents. In areas where wealthier people live, there are fewer traffic accidents related to the poor technical condition of cars (e.g. more money is spent on car repairs, cars are better equipped with safety features, and they use tires that are appropriate to the season).

Of course, more economic indicators affect crime, but these are the ones that have the greatest impact. The weight and role of individual indicators should be examined locally, within a specific area. Certain indicators may have a decisive role only in certain social conditions.

Economy structure

The structure of the economy also affects the number and structure of crimes. The economic sector can be divided into primary (agriculture), secondary (industry), tertiary (services) and quaternary (research and development [R&D]) sectors. Today, individual sectors are less dominant in settlements than a few decades ago, and the proportion of the tertiary sector is largest in developed countries. Despite this, there is demonstrable variance in the number and structure of crimes between settlements with different economic structures. This may be due to the different levels of education of the people living in them, the higher number of men, the higher number of tourists, etc.

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[5]   Piskóti-Kovács 2014; Vári 2015.

The size of the tourism sector (as part of the tertiary sector) also significantly affects the number, structure, and temporal and spatial distribution of registered crime.[6] Where the number of tourists is high, there is usually a higher number of minor property crimes (e.g. pickpocketing, car break-ins). The higher damage values primarily affect tourists and not the local population.[7] The number of significant tourist arrivals also affects the spatial and temporal distribution of crimes. Where crimes are committed naturally affects the most frequented tourist destinations and the period peaks in the tourist season (this can vary depending on whether it is a winter or summer resort).

Large differences can be observed between the individual tourism branches. For example, religious tourism attracts different people than party tourism. Based on this, it is not enough to examine the number of tourists but also look at what branch of tourism is typical in a given settlement.

Population of settlements

Settlements are also categorised by population. It can be seen that differences in size (population) also lead to significant differences in the number, structure, distribution, etc. of crimes. It is a demonstrable fact that as the population grows, so does the incidence of crime.

In police materials, it can often be seen that attempts are made to compare two settlements by proportioning the population; that is, if one of the settlements has half the population, there must be half as many crimes. Still, it is not possible to compare crimes with each other in this way.[8]

In connection with this, laws are also formulated through the *universal scaling law,* a theory developed by Geoffrey West, a British theoretical physicist and professor at the Theoretical Research Institute of the University of Santa Fe (New Mexico, USA). According to Professor West, comparing a municipality with a population of × to a municipality with a population of 2×, most social and economic factors (e.g. length of roads, crime rate, size of the water supply network, the number of patents filed, the number of flu cases, etc.) will increase. It will not be twice as large but increase by 2× + 15%.[9]

It should also be mentioned that it is not always possible to compare the crime values of two settlements based on the number of inhabitants alone. The reason for this is that the demographic situation, function, economic data, etc. of the settlement must also be examined.

In addition to this, the examination of the structure of settlements is also a very important factor, as this also greatly influences the number, distribution and structure of crimes. It impacts not only crimes but also police measures and the philosophy of police measures. It is necessary to act differently in an inner-city area than in a rural environment.

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[6]   ERNSZT et al. 2018.
[7]   PÉTER et al. 2018; KELLER – TÓTH-KASZÁS 2021.
[8]   TIHANYI 2017.
[9]   HERKE 2016.

Demographic factors and family structure

The analysis of demographic indicators (e.g. number of live births/deaths, population decline/reproduction, migration) is extremely important in the crime geographical analysis of settlements, as they can provide information that can explain some causes of crime. Demographically unstable settlements are generally characterised by higher crime rates.

Knowing the migration differential can be particularly important. If a settlement is characterised by large values, either in a negative or positive sense, it will have a negative impact on the number of crimes. In particular, a large positive migration differential can increase the number of crimes. This is primarily because newcomers to a settlement will be mainly from the younger age group (who have a higher propensity to commit crimes), the first round of arrivals tend to be mainly men (without families; who commit more crimes than women) and, in breaking away from their usual environment, the newcomers will be rootless, which also has a criminogenic effect. A large negative migration differential results in an increase in the proportion of elderly people in a given settlement, who are less able to protect themselves from various crimes.

Knowing the age structure of a settlement can significantly contribute to successful crime prognostication, thereby predicting the expected volume and structure of crime. To give one extreme example of this that clearly illustrates its importance: imagine two settlements each with a population of 1,000 people. One settlement is inhabited exclusively by people over 80 years old (village 1), while the other is inhabited by young and old people (village 2). Many families with 4–5 children also live in the settlement. These families live at a below-average standard of living. There are significant differences in the number and structure of crimes in the two settlements. In village No. 1, the likelihood of elderly people committing crimes is low since they mostly stay at home and can hardly move due to their age. Several types of crimes are committed in village No. 2, as many young adults live there. If we look at the settlements a decade later, we see that very few people now live in village No. 1 as many residents have died. Crimes are much reduced in that village. Most of the children living in village No. 2, however, have become adults, several of them are also criminals.

This example clearly illustrates the importance of knowing the age structure of the population of a given settlement. The best way to learn about this and to carry out the analysis is to create an age (population) pyramid. This shows the current situation, and the expected demographic trend can be easily predicted. An essential indicator in the social disorganisation theory is family structure (e.g. the proportion of divorcees).[10] Children who grow up in a harmonious family environment with two parents (father and mother) are less likely to commit crime.

As with economic indicators, we can also state that, in case of demographic indicators, compared to the indicators described above, there are a larger number of indicators that can impact crime. However, these are either of minor importance or are only locally significant.

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[10]   Ceccato–Dolmen 2011; Vavró 1995; Piskóti-Kovács 2014.

Gender ratio

It is a criminological fact that men commit more crimes than women. Approximately 80% of registered crimes are committed by men. With the progress of emancipation, the proportion of female criminals is getting ever higher, but in the coming decades, there will still be more male than female criminals.

Above average numbers of crime can be registered in settlements where the proportion of men in the population is above average. Decades ago, industrial towns and mining towns were common, where tens of thousands of men worked, but whose families stayed at home elsewhere, and to whom they only returned at weekends. Today, fewer and fewer cities of this type can be found. However, there are settlements where factories employing thousands of people have been built, where usually only men go to work initially, and whose families stay at home. If, after a few months, they see that the working conditions are adequate, and the conditions for the family's stay there have been created, and once the trial period is over, the family will then also arrive in the new city. The first few months (about half a year) created a significant surplus of men in the settlement. Many men work without their families for years in the settlement, resulting in a significant surplus of men overall. The effect of this can also be seen in the crime statistics.

In the author's opinion, this will be evident in some Hungarian cities in the future. In cities where significant industrial development is planned. Debrecen, for example, is expected to have a population of 250,000 by 2050. The extra 50,000 people are mainly foreign male workers who come to the city from abroad.

Transport geography features

Several studies have already highlighted that the transport infrastructure significantly determines the mobility of criminals.[11] There are economic laws at work in the relationship between criminals and the route taken. The greater the distance an offender travels, the more serious the crime they have to commit to make it "worth" travelling the greater distance (travel cost, time spent, etc.). An inverse correlation between the number of criminals and the distance travelled to commit crime can be observed. A developed transport network in a settlement is an attractive factor for criminals and thus broadens the area of attraction for criminals within the settlement.

Road and rail transport have the greatest relevance in transport geography studies. When examining road traffic, it is recommended that all factors that may affect crime (connection with primary spatial structure lines and urbanisation axes, highway connections, etc.) be analysed. The greater accessibility of a settlement has advantages not only for law-abiding citizens but also for criminals. Hence, the area of attraction for criminals in easily-accessible settlements is much broader (travelling and transiting criminals) than that of less accessible settlements. The linear transport infrastructure affects traffic safety (e.g. the presence/absence of cycle paths, bypasses), and local public transport junctions form hot spots in many places in the city (tram, trolleybus, bus and metro stops).[12]

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[11] Gabor–Gottheil 1984; Smith–Clarke 2000.
[12] Bói 2024.

Good rail accessibility also increases the size of the criminal catchment area (criminal agglomeration), and railway stations appear in many places as neuralgic points on the crime map of settlements.

In case of water and air transport, we can draw the following conclusions. Water transport is not significant for passenger transport, but it is for freight transport. Large ports (e.g. Rotterdam, Hamburg, New York) are therefore important targets for smugglers, so they appear as hot spots on crime maps (e.g. drug, arms and human trafficking). Air traffic is heavily controlled, yet smugglers still often attempt to smuggle certain goods. The number of drug smugglers on flights from South America to North America and Europe is particularly high.

Transport geographical factors also affect the number of thefts. In particular, the number of pickpockets increases in busy metro stations, bus stops, tram stops and railway stations. Not only the stops themselves, but also the means of transport are suitable venues for crime to be committed, especially when many people are travelling on them.

The role of geographical transport factors is obvious in the case of Attila Ambrus. The robber mainly targeted financial institutions that were not far from the highway and were close to tram or bus stops.

Function of settlements

The responsibilities of a municipality can also significantly influence the number, structure, temporal distribution, etc. of crime.[13] a settlement can be characterised in various ways, as an industrial town, or a market town, a mining town, a trade town, a tourism town, a religious town, a cultural town, and so on. The function of a specific settlement is an area of responsibility that has an importance that extends far beyond all others. Most settlements have several functions (especially larger ones), and these functions can change over time (disappear, become stronger, etc.).

Decades ago, the primary function of most settlements could be determined much more clearly (e.g. mining town, industrial town, cultural town). Nowadays, individual functions are less sharply defined, and one function is less frequently dominant.

Therefore, the comparison of settlements with the same population contains dangers since, if the settlement function is different, it is not possible to make a meaningful comparison (e.g. a Hungarian example would be that Hajdúszoboszló can be compared with Siófok but not with Komló). Hajdúszoboszló and Siófok are tourist centres, whereas Komló is a former industrial town where few tourists visit. However, we could just as easily mention the capital of Switzerland, Bern and Sarh, a big city in the south of Chad, which have almost identical population sizes but entirely different functions. Moreover, the two countries have differing legal systems, different names for the types of crime, and a variety of demographic conditions regarding the population, etc. which hinders any meaningful comparison.

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[13]   Dürr 2023a.

Size of settlements

The size of a settlement also provides essential information during an analysis. It is not enough to know the size of the administrative area in km^2, it is also necessary to know the settlement structure and the ratio of the individual settlement parts to each other (urban, rural and agricultural parts). Each type of settlement area requires different police measures, and they also have a variety of requirements for coverage by the police force.

In the case of police stations, special attention must be paid to the ratio between the central settlement and the area of jurisdiction (area, population, etc.). Two police departments, for example, are not necessarily meaningfully comparable just because they have the same size and population.

A common mistake is to compare two police stations with the same population or the same number of crimes. Two police stations can only be meaningfully compared if their size and settlement structure are similar.

Structure of settlements

Few people have investigated the relationship between the settlement's structure and crime. Representatives of the Chicago school first studied this. We should also mention Dennis Szabó, who wrote his doctoral dissertation on this topic.

It is evident that in many settlements marked differences in the structure and economic performance of the resident population can be discovered in the individual parts of the settlement as a consequence of different urbanisation development.[14] It is essential to examine these as they largely determine the spatial distribution of crime.[15] With regard to the investigation of the structure of a settlement, the quantitative and qualitative examination of the building stock that defines its structure is important. It can be stated that very significant differences can be observed between the level of comfort and the structure of the population of the various building types in some parts of the settlements, which are also clearly apparent in the individual types of crimes and methods of committing them.

Education, presence of educational institutions

Numerous studies have demonstrated that education significantly influences criminality (quantity, structure). A relationship can be shown between crime and education (literacy). The tendency to commit crimes decreases as a result of higher levels of education, (e.g. higher average earnings, lower unemployment rate). However, it cannot be said that a directly proportional decrease can be observed with increased education. The number of crimes committed decreases, but a structural transformation can also be observed (white collar crime).[16]

At university centres in particular, it can be seen that student numbers in a city can be in the tens of thousands. The characteristics of the lifestyle, way of thinking, etc. of

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[14]   Dürr 2023b.
[15]   Mátyás 2024: 77–97.
[16]   Piskóti-Kovács 2014.

young people have an impact on crime (e.g. frequency of theft at entertainment venues, physical assault and disorderly conduct); therefore, it is essential to look for the presence of educational institutions.

Anthropogenic landmarks

Human constructions can serve as important hiding places for criminals. Knowledge of these structures can be particularly important in border areas, where illegal border crossers hide in disused buildings (e.g. abandoned houses, huts, hunting lodges and agricultural buildings). Mapping them out and recording such locations on a map can be extremely useful during an investigation. The easiest way to check them is in person or by drone.

Of course, knowledge of anthropogenic landmarks is important not only for the police, but also for the military. This is especially important for borders.

By understanding the layout and purpose of such structures, authorities can identify vulnerable areas where criminal activity is more likely to occur. Well-maintained and monitored spaces tend to discourage such activities, while neglected areas can attract illicit behaviour. Crime prevention through architectural design (CPTED) can enhance the safety of public and private spaces by eliminating opportunities for concealment. This may include better lighting, controlled access and regular inspections. Collaboration between law enforcement, urban planners and local communities can significantly reduce risks. Combining technology and human expertise can ensure that these sites are used safely and responsibly.

Ethnic and religious features

Examining ethnic and religious characteristics is sensitive, so many people do not deal with it. Struck politics does not solve anything. If we are to fight crime, we must deal with this issue as well as with several geographic features.

In relation to the population, it is worth examining the ethnic characteristics of an area, because in case of some settlements (or parts of those settlements), you will encounter significant ethnic or religious minorities (e.g. London, Berlin, Paris, Brussels, Stockholm).

Ethnic homogeneity reduces the number of crimes, while ethnic heterogeneity increases it. The number of crimes is usually higher in settlements (districts) where several ethnic or religious groups live together.[17] The reason for this lies in cultural differences, language and communication problems, economic performance, and so on, and must be searched for. This is especially true for non-native minorities who have been residing in a new country for just a few years or decades. Coexistence causes many problems between a nation state and immigrants.

As an example, we can cite some large cities in Western and Northern Europe where significant numbers of immigrants (religious and ethnic minorities) live. Integration is made difficult by the fact that they tend to live in segregation and, due to the initial level of their linguistic and social integration, some of these groups are characterised by

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[17]   Xiaobing–Huafu 2012.

higher levels of criminality. We can cite sad examples of this disharmonious coexistence. Organisations promoting extreme Islamic views (e.g. al-Qaeda, Islamic State [ISIS]) and individuals have carried out a number of acts of terrorism. These have caused the death of hundreds of people in Western Europe since 2004 (e.g. terrorist attacks, trampling attacks, stabbings).[18]

The difficulty various cultures (e.g. Christian and Islamic) have in coexisting is also apparent in the difference in the relationship between men and women. During several New Year's Eve and mass events in recent years, hundreds of women have been sexually harassed in European cities.[19]

The difficulty in coexistence for Islam and Judaism is evident in the increase in attacks against Jews and synagogues in Western Europe. It must be emphasised that these problems are mostly caused by religious extremism and fanaticism.

Regarding religion and crime, however, we should mention that some studies have established an inverse relationship between crime and religiosity (the more religious people are, the lower the number of crimes),[20] but other researchers were unable to demonstrate this.[21]

In areas where a significant religious or ethnic minority lives, we have to reckon with a different type of criminal behaviour and criminal structure. Dealing with this is only partly a law enforcement task, the problem must be dealt with jointly with other professionals (e.g. social workers, education specialists). In such areas, it may be necessary to know the minority's language and the rules of the dominant religion, because misunderstandings caused by language deficiencies and differences in customs can be the source of many conflicts.

From the author's point of view, as many scientific fields as possible should be involved in the resolution of problems of ethnic and religious criminality, as this is in the common interest of all of us. Crime geography also has a place among these scientific fields, which, due to its particular approach, can also contribute to the treatment of the problem.

Examination of dialects

Geography has few points of connection with linguistics. However, if we examine them, significant spatial differences can be observed between individual dialects. On the other hand, there is a forensic aspect to this, which is dealt with by the linguistic field of forensic linguistics.

Forensic linguists deals with several areas, such as forensic text linguistics, forensic phonetics, language profiling, creating crime dictionaries, prison language tests and courtroom discourse analysis.[22]

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[18]   VAJDA 2022.
[19]   For example in 2016: Cologne, Hamburg, Stuttgart; in 2022: Milan.
[20]   ELLIS–PETERSON 1996.
[21]   CARNEIRO et al. 2005.
[22]   RÁNKI 2019.

In case of languages that are spoken by many people (in several countries, e.g. English, French, German, or in large countries, e.g. Russia, the USA, China), this issue does have a forensic aspect. However, there are also often significant differences in spoken language in case of smaller languages and smaller countries (e.g. in the case of Scotland and Wales in the United Kingdom). Likewise, different language usage between settlements of various sizes (village or city) can be observed.

Forensic linguistics is, therefore, a kind of linguistic profiling, the identification of characteristic vocabulary, pronunciation, accent, and so on, based upon which we can attempt to infer a place of origin or residence, that is, the geographical environment.

Forensic linguistics is the most applied field in studies of the language of legal processes, and usually covers two tasks: the analysis of linguistic evidence, and the detection of the perpetrators of language based crimes, such as threatening, bribery, abetting, requesting sexual services, blackmailing, verbal harassment and hate speech.[23] The fundamental task of forensic linguistics is the analysis of linguistic evidence.[24] Considering the localisation of a perpetrator, the involvement of a forensic linguist is indispensable, one who can pick out stylistic and idiolect elements that characterise one particular region or a particular person's language use, or who perceives a certain dialect from the recorded sound that characterises a certain region as well.

Sports facilities and entertainment venues

The number of entertainment venues and sports facilities greatly influences the number and structure of crimes. Both places attract crowds, which make them "ideal" places to commit many types of crime.

In entertainment venues (e.g. pubs, bars, nightclubs and discos), taking advantage of the inattention and intoxication of guests, thefts and frauds are commonplace. As a result of drunkenness, public nuisance and battery also occur in and around entertainment venues. Clubs are nests for drug-related crimes, too.

Some sporting events attract tens of thousands of people. Fights are common around them, mainly due to opposing fan interests. However, conflicts also occur within the sports facilities.[25] Predictive software plays an increasingly important role in predicting crimes at sports events (see HunchLab software).

Given that, in some cases, tens of thousands of people gather at a sports event, it can also be a target for terrorists. Preventing this is not only the task of the police but also of the secret services.

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[23] Ürmösné Simon – Nyitrai 2021.
[24] Ürmösné Simon 2019.
[25] Tóth 2021.

Physical geographical factors

Water network

Water transport can be divided into the categories of passenger transport and commercial goods transport. For most countries, it is evident that the role of rivers and lakes in passenger transport is not significant. However, there are some countries where a proportion of city dwellers live directly adjacent to rivers or canals (e.g. Venice, Amsterdam).

Commercial shipping has several dangers. River and sea vessels are ideal for smuggling, and large port cities (e.g. New York, Rotterdam) play a significant role in drug smuggling, human trafficking and the distribution of counterfeit goods. Millions of containers arrive at a major port every year, and checking all of them would be impossible, thus the risk analysis method is generally used to filter out containers containing illegal goods.

Some rivers, lakes and beaches are major tourist destinations that pose a significant risk from a criminal point of view. Where many people gather, there is usually a greater incidence of crime, a higher number of drug users, etc., and water is in itself potentially dangerous, for example, drowning accidents.

Boggy, swampy areas around waters can serve as hiding places for criminals. Checking such places can be important when seeking a wanted person. These places should be inspected by someone who visits the area routinely (fishing warden, dam guard, ranger) and knows the main hiding places well (e.g. fishing houses, huts).[26]

Lakes and rivers are also neuralgic places from the point of view of migration. For many countries, the state border is marked by a natural one (e.g. a lake or river, such as between Hungary and Slovakia: the River Danube and the River Ipoly; Hungary and Croatia: the River Dráva; Bulgaria and Romania: the River Danube; the Republic of South Africa and Botswana: the Limpopo River), so regular inspection of these is vital.

Relief

Topography largely determines the extent of human settlements. The higher the altitude, the fewer and smaller settlements we encounter. The highest settlements are to be found in the Andes and Tibet.

Settlements located between high mountains are difficult to access. There are winding roads, and large differences in height within the settlement, thus police action is more difficult there than in a flat area. In an extreme weather environment (e.g. heavy rain, snowfall), the above factors make the work of the police even more difficult, and can impair their effectiveness.

American researchers studied the relationship between crime and topography in San Francisco. Higher areas of the city were found to have less crime. This proves that criminals think logically; for example, it is more difficult to escape from an area that is more difficult to access.

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[26] LIPPAI 2023.

Climate, weather

The climate largely determines where settlements are formed. The temperate zone is where the largest cities are found. The weather is becoming increasingly extreme these days, which has a significant impact on crime and accidents. From the point of view of law enforcement, we can consider extreme cold and heat, heavy precipitation, large amounts of snow, wind and sandstorms as being negative. Criminals do not like extreme weather either. Fewer crimes are committed in extreme cold or heat. However, the police may be obliged to take action during extreme weather, which means that they will be exposed to much greater danger (e.g. slippery roads, getting sunstroke, or frostbite). The location of a crime scene must be approached, but this must be done cautiously as it poses a greater danger for officers.

Extreme weather also increases the number of accidents (e.g. slippery roads, sandstorms), which imposes extra tasks on the police force, which must be prepared for such eventualities, both technically and mentally. They need to participate in simulation exercises when they have the opportunity to practice taking action, driving, etc. in extreme conditions.

Weather and climate affect river levels. After heavy rains, rivers can overflow and floodplains become a continuous surface of water that makes walking difficult, and swimming or boating likewise becomes more difficult during floods due to strong currents.[27]

Wind conditions (direction and strength) can also affect police work. Strong winds can destroy certain tracks and fool police dogs. Strong winds can make it difficult to use drones, or for police helicopters to take off and land.[28]

Tourist destinations that attract large crowds are mostly located in areas with pleasant weather. Consider the beaches, for example, where millions go. A close correlation can be observed between the climate, the number of tourists, the type of destination and the crimes committed.

Soil type

Knowledge of the soil type can also be important during an investigation. Even at the beginning of the last century, criminologists attached great importance to soil remains because they could be used to prove whether someone could have been at the scene of a crime.[29] Examining the soil is particularly important in cases where there is evidence that the offender has changed their residence. Soil samples can serve as important evidence of whether or not a given person has visited a location relevant to a criminal case (e.g. where they have crossed a border, or visited another county). Soil samples can be obtained from many objects, the most obvious of which are the soles of shoes and the tires on vehicles; however, soil particles can also remain on the legs of trousers, unused shoes and rubber boots, work clothes, tools and any other means of committing crimes.

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[27]   KOZMA et al. 1993.
[28]   KOZMA et al. 1993.
[29]   BALLÁNÉ FÜSZTER 2019.

Knowing and examining soil is also important because the soil residues can be clearly distinguished from each other. A significant difference can be determined even in samples that are from places relatively close to each other. These soils were tested by a geological expert.[30]

The type of soil affects track formation. In dry, gravelly or sandy soil, track formation is much weaker than, for example, in humus-rich chernozem (black) soil. When collecting evidence at the scene of a crime, it is also necessary to take soil samples on-site.[31]

Soil type determines natural or secondary vegetation. Vegetation affects the possibilities of hiding (e.g. when crossing the border) and the speed of travel. Different soil types have various absorption capacities, which are apparent in a variety of meteorological conditions. Certain soil types store precipitation well, thus becoming difficult to walk on following rain ("sticky"), which reduces walking speed (e.g. clay soil).[32]

Some types of soil significantly affect pedestrian activity and vehicular traffic. Some soils are easy to walk on in dry weather (e.g. clayey, salty, meadow soils), but are challenging to drive on in rainy weather, which significantly affects driving speed. On the other hand, it is not easy to walk on sandy soils in dry conditions, but they are easy to walk on when it rains.[33]

In many criminal cases, the soil led investigators to the perpetrator. Consider, for example, the Adeleine double murder, where a young man killed his mother and grandmother. However, the soil residue left on the shovel led the investigators to the mine where the man buried the bodies.

Vegetation

In addition to knowing the soil type, it is also necessary to know the natural or secondary plant cover. The soil type is what largely determines the plant cover. Traces from the plant cover can serve as important evidence during procedures. Primarily, pollen tests are able to prove or rule out whether or not the perpetrator has visited a specific location (occurrence of plants, flowering season). Pollen easily sticks to hair, clothing and certain parts of a vehicle (e.g. seat covers); so, during the collection of evidence, a great deal of emphasis must be placed on them. When looking for clothes, it is worth confiscating even dirty clothes, as the perpetrator could have also used these or, if clothes were used in the commission of the crime previously, pollen might also have adhered to other clothes.

During the expert examination, the most essential task is to compare plant remains and determine their place of origin. In case of a homicide, for example, plant remains can help find the primary location, but pollen can also determine the approximate time of death.[34]

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[30] Balláné Füszter 2019.
[31] Balláné Füszter 2019.
[32] Cselleng 2022.
[33] Kozma et al. 1993.
[34] Balláné Füszter 2019.

In connection with analysis of vegetation, its type and density must be examined, too. Dense vegetation slows walking speed and makes it difficult or impossible to drive by car, but it also makes hiding and hidden movement more possible.[35]

Regarding vegetation, let us mention that, for example, pollen analysis would have been of great importance in the O. J. Simpson case. The perpetrator hid in the flowering bush in front of the house. However, the court did not consider the pollen test necessary. If this had happened, it would have been possible to declare with 100% certainty that O. J. Simpson was guilty or not guilty.

Summary

The study looked at geographic factors that could aid the investigation. The author divided geographical factors into two: natural and social factors. Social factors are more numerous. Regarding both factors, they not only help the detectives during the investigation but can also impact the commission of the crime. Such a factor is, for example, the road network, which significantly impacts the mobility of criminals.

The research emphasises that understanding these factors is essential for improving law enforcement strategies. Geographic profiling, for instance, helps narrow down suspects based on spatial patterns of crimes. Practical examples highlighted in the study show that incorporating geographical knowledge can lead to breakthroughs in solving complex cases. Additionally, advancements in technology, like GIS (Geographic Information Systems), offer tools to analyse and visualise these factors effectively. The study underlines the necessity of integrating such tools into everyday police work. Moreover, raising awareness about the importance of criminal geography within police training programs could enhance investigative efficiency. Geographical factors provide a unique lens through which crime dynamics can be better understood and addressed.

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[35]   KOZMA et al. 1993.

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The Role of Forensic Linguistics and Case Studies, Demonstrating the Effectiveness of Linguists' Contribution to the Investigations

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This paper explores the multifaceted role of forensic linguistics in which linguists have assisted in the investigation of crime authorities.

The purpose of the study is to represent the role of forensic linguist in the detection of crimes, and it also covers the investigation of methods and authorship, as well as the identity and affiliation of the perpetrator.

Using a prescriptive method, the study explores the task and work of forensic linguists and forensic text linguistics, and also illustrates the methods of forensic linguists through four case studies, with the help of which the linguists tried to wrap up two cases.

The study demonstrates that in many cases it is essential to involve a forensic linguist in certain investigative phases, even in relation to certain cases, such as voice recordings or written texts (suicide notes, blackmail letters, text messages).

The mentioned cases clearly testify the extent to which linguists can play a role when an investigation stalls at a certain point, and the authorities need authorship investigation, voice recognition, the discovery of linguistic evidence, text analysis, comparison with other texts and the profiling of the perpetrator.

Keywords: forensic linguistics, case studies, incriminated texts, idiolect, linguistic fingerprint

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Motto: "It is good for the linguist to know that he can be useful, and that applied linguistics need not to be identical with language teaching or machine translation"[3]

Forensic linguistics in a nutshell

There are some instances at certain stages of an investigation where the authorities cannot solve the case, and the linguist has to be involved to investigate the case. Investigating agencies usually ask forensic linguists to help them narrow down the possible suspects, based on their gender, age and education. They may also try to describe the region[4] and social milieu from which the offender may have come, based on the incriminated text. In many cases, it is essential to involve a forensic linguist to localise the offender, who can extract from the offender's letters stylistic elements and idioms that are specific to a particular region or person, or find dialects in the offender's voice that are also localised to a particular region. In such cases, a branch of applied linguistics – known as forensic linguistics – comes into light.

Forensic linguistics is an interdisciplinary field of linguistics that deals with the use of language in justice, law and crime. Forensic linguistics is concerned with questions that focus on the use of language in legislation and criminal proceedings that require linguistic analysis. Questions such as "whether the transcript of a witness statement is the same as the confession" or "whether the anonymous blackmail letter could have been written by the accused or by someone else" may both arise. The forensic linguist expert is responsible for examining authorship as well. One may also seek to find out whether the author of the text seized as evidence is the same as the author of another text written by the suspect during the investigation; at the same time, one may also examine the demographic-sociological variables that characterise the author of the incriminated text.[5]

The International Association of Forensic Linguists (IAFL) summarises the main tasks of forensic linguistics in five points, which are the study of legal language, comprising legal documents, the use of languages in courts, police and prisons, court translations and interpreting services, professional linguistic expert opinions, and linguistic support in the drafting of legislation and official documents.[6]

Criminal linguistics is the most practical area of forensic linguistics, with two tasks: analysing linguistic evidence and detecting linguistic crimes. Linguistic crimes were first listed by Roger Shuy as being related to speech acts.

Within forensic linguistics, we study incriminated texts, i.e. textual, written products used in the vernacular, which in most cases can be linked to a speech act and appear in written form. This includes subtypes of anonymous letters such as threatening letters,

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[3]   Professor of Linguistics Jan Svartvik 1967, Göteborg.
[4]   MÁTYÁS 2024a.
[5]   SZAKÁCSNÉ FARKAS – VÁGÓ 1988.
[6]   NAGY 1980.

blackmail letters, unsolicited fan letters, signed letters, in which case there is doubt about the identity of the writer, as in the case of a suicide note.

The new techniques have also opened up new areas for criminals, as anonymous letters can now be sent by e-mail or SMS, the victim can be identified on a social networking site or chat room, and the perpetrator can blog or create a website. The work of the forensic linguist can be divided into two parts: on the one hand, he can assist the investigative services by establishing information about the author of the incriminated text; on the other hand, he may be asked to carry out a comparative analysis during the evidentiary process in order to compare the incriminated text with the suspect's writing. Other genres that can be studied by forensic linguistics comprise confessions. With regard to oral confessions, however, it is substantial to interrogate (ask the question) in such a way, that they solely involve new information for the interrogated person to the extent necessary, otherwise his confession becomes unverifiable, and the interrogated person should also be provided the opportunity to present a coherent confession.[7]

The examination of written linguistic evidence using linguistic methods is also referred to in the literature as forensic stylistics and stylistometry. The primary task of forensic linguistics is to test authorship, which identifies who wrote the text in question, and also examines whether the text may have been written by the suspect. The method of authorship analysis is called linguistic profiling. A person's linguistic profile can be created because everyone "uses language differently", i.e. the idiolect of the author – his individual language variant – can be isolated from the text and profiled on the basis of the multiple features that can be inferred from the text. An individual's idiolect is determined by factors such as the individual's personality, affiliation and communicative environment.

Incriminated texts are usually quite short, and the offender's objective is to avoid revealing his identity, so he tries to manipulate the text. Another difficulty is that the author may deliberately distort his language and disguise himself in order to make it harder for the authorities to trace him. There are diverse types of distortion: the author's objective may be to disguise his own language use, or it may be to imitate the language use of another person. Distortion can occur at different linguistic levels: spelling, grammar, lexemes, stylistic, or content distortion.[8] The inventive author may try to distort the signs of gender, age, education, literacy, or even occupation as well.[9] The author can only distort what he is aware of. In an optimal case, the linguist can determine the gender, age, location, dialect, education and other characteristics of the author, based on the linguistic signs left behind.[10] Even if the perpetrator tries to distort the language used, certain factors can be inferred, because the perpetrator can only manipulate certain levels of language, and he is incapable of doing it consistently.[11] However, the manipulation can be detected after a while, because the offender can only distort certain language features, and cannot manipulate many of them, which are unique to him, because his language use

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[7]   Nyitrai 2020; Nyitrai 2021.
[8]   Szegedi 2018.
[9]   Szegedi 2018.
[10] Szegedi 2013.
[11] Szegedi 2013.

is not conscious.[12] Although, for example, one may distort one's spelling in order to be perceived as uneducated, one may escape this conscious distortion in the case of a longer text, but literacy is also reflected in other language use features, not only spelling. Another method of authorship analysis is the comparative analysis, where the linguist compares the incriminated text with the suspect's text, a procedure that is essential in the context of a trial, yet, also for prisoners serving a prison sentence.[13]

Linguistic evidence can be both written and spoken language. Within forensic linguistics, the former is dealt with by forensic text linguistics, while audio materials are examined by forensic phonetics. The task of forensic phonetics is to identify the speaker and to exclude him from the list of the possible speakers. Acoustic-phonetic analysis can be complicated if the speaker deliberately tries to make his voice unrecognisable, and if the incriminated audio material is short or the recordings are made in noisy conditions.

The objective is always to find the perpetrator of the crime and to prove the suspect's guilt or innocence. Our linguistic fingerprints can also convey messages and evidence about who the perpetrator might have been, who might have written the letter, whose voice we hear on an audio recording, thus the linguistic expert can also profile the perpetrator in terms of age, gender, ethnicity, social milieu and other attributes.[14]

The concept of forensic linguistics was introduced by the linguist Professor Jan Svartvik,[15] whose work *The Evans Statements. A Case for Forensic Linguistics* is the beginning of a series of events that could be memorable in the context of the linguistic investigation of criminal cases.

Case studies related to forensic linguistics

The Timothy John Evans case

On 30 November 1949, 25-year-old Timothy John Evans, although confessed at Merthyr Tydfil police station in Wales to killing his wife Beryl and 14-month-old daughter Geraldine, gave four contradictory statements to the police.[16] In one of his confessions, he reported that his wife wanted to abort their child and after telling the story to an acquaintance who had given him a drug to kill his wife, sadly, she subsequently died of poisoning. Timothy then left the town. According to his next testimony, he had received a drug from a downstairs neighbour, (the 51-year-old John Reginald Halliday Christie), and after taking it, found his wife dead. Christie was an expert in medicine and, after consulting the pregnant wife, administered the drug to her. After the husband returned home, Christie told him the bad news that Beryl had bled to death. The question arose as to what to do with the child, and Christie said a couple he knew would raise the little girl. The husband had got rid of his wife through the drainage canal and when asked where his family had gone,

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[12]   Szakácsné Farkas – Vágó 1988.
[13]   Czenczer 2014.
[14]   Ürmösné Simon 2019.
[15]   Szegedi 2018.
[16]   Seppänen 2013.

he said they had gone on holiday. In his next statement at Notting Hill police station, he reported that his wife had accumulated a lot of debts and in the course of an argument he strangled her with a rope.[17] In his fourth statement, also referring to his wife's debts, he testified that he strangled her, referring to the ongoing argument, and when others asked about his wife, he referred to a holiday in Brighton. Timothy Evans was hung in 1950 as the authorities found no other clues and no other suspects. In 1953, however, three women's bodies were found by a lodger in a wall cavity in the kitchen, and suspicion was then cast on the jailed John Christie, who had not only been involved in theft but had also murdered his wife and strangled two women. Suspicion was also aroused by the name of the aforementioned John Christie, who shared a building with Evans. Some politicians also became suspicious of Evans' conviction, so the four confessions were re-examined and a public inquiry led by Sir Daniel James Brabin was launched in 1965. The linguist Professor Jan Svartvik was involved in analysing the confessions and concluded that all four different confessions recorded by the police officers could not have been written by Evans, because some of them were written in different styles of speech and had different grammar.[18] Since Timothy Evans was illiterate and uneducated, the two statements that his wife had got into debt and ended her life could not have been derived from him, because the style, grammar, and the standard language of these two statements suggested an educated, cultured man. Such a reported language use, related tense agreement, i.e. "She said, she was going to take the baby down to Brighton" could not have been used by an illiterate person of the mental capacity of a 10-year-old child like Evans. Nor could Evans have used standard verb agreement, substandard verb forms, elliptical subject use and conjunctions such as the following sentences illustrate:

– "She asked me where Beryl and the baby was"
– "At 12.55 a.m." – which he had already testified at the trial as "5 to 1 train"
– "from which I used to borrow it"
– "She was incurring one debt after another"
– "Whilst", "in a bit of a temper", "in his presence"

He could not have used the sentences enumerated before, if only because, according to the experts, he had the vocabulary of a 14-year-old child, and the speaker's idiolect did not indicate illiteracy.[19]

From the aforementioned examples, it can be seen that Evans's language use did not reach the standard level of language use.[20] The latter, 1965 investigation, with forensic linguistic research hand in hand, led to the conclusion, that it was not Timothy Evans who ended his wife and his little girl's life, but John Reginald Halliday Christie with a criminal record, therefore Timothy Evans was posthumously pardoned 15 years after his hanging.

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[17] SVARTVIK 1968.
[18] SVARTVIK 1968.
[19] SVARTVIK 1968.
[20] SVARTVIK 1968.

The JonBenét Ramsey case

The death of a 6-year-old Colorado girl, JonBenét Ramsey, has been an unsolved crime for more than 25 years, treated by authorities as both a kidnapping and a murder. The girl had been a pageant contestant and had a brother Burke, a few years older than her, with whom she had a rocky relationship.[21] The girl had been taken to the doctor several times for various bruises and Burke had shown signs of mild autism. According to the experts, he also involved JonBenét in his sick games, against her will, and this may have caused JonBenét's chronic urinary tract infection and possible vaginal injury.[22] Finally, on 26 December 1996, the charming Maneken girl JonBené passed away.

Although the case appeared at first reading to be a kidnapping, several signs pointed to something else: among others, the length of the ransom note, which consisted of two-and-a- half pages. It was suspicious because a ransom note of this length had never been seen before at the FBI. According to experts, no kidnapper would write a two-and-a-half-page letter in a stranger's house and then never come back with his demand. According to Fitzgerald, the letter could have been written by a woman, because of typical maternal phraseology such as "when you get home" and "listen carefully", and the excessive use of exclamation marks and acronyms.[23] The expert had not seen such a long ransom note within 60 years and found it inconceivable that a stranger could have written the message. It was shocking that some of the lines in the ransom note were taken from films, and it was well known that the couple, Patsy and John, were known to be film buffs. In the letter, the threat "If we catch you talking to a stray dog, she dies" is taken from the ransom note of the film "Dirty Harry", while "Don't try to grow a brain!" is from a scene in the film "Speed". The Ramseys were known to have been big movie fans, and the house was also full of movie posters.[24] More than half of the writing experts used in the original investigation attributed the writing to Patsy, the mother. It was suspicious that the suspected kidnapper had torn pages from Patsy's notebook and then placed it back exactly where it was in the hallway. It was also astounding that he wrote the letter at the kitchen table and then took it to the upstairs stairwell. He also put her pen back in its original place after writing the nearly three-page-long note. Experts measured the time it took to write the text, which lasted for 21 minutes, and it is likely that it could have taken much longer if the wording was included. And all this with the parents asleep in the house and the abducted victim lying dead in the basement. No wonder that it rose suspicion that this is an excessively bold and incomprehensible behaviour on the part of an intruder. Since the gist of the three-page letter could have been condensed into four sentences, it seems as if the writer was too focused on justifying the hostage's death.[25] If the audio recordings are anything to go by, even during the distressed call, John can be heard saying in the background: "We're not talking to you." The switchboard operator claimed to have heard a third voice in the background, which most likely was Burke, the brother, who had been

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[21]　The True Crime Edition 2022.
[22]　The True Crime Edition 2022.
[23]　ÜRMÖSNÉ SIMON 2023.
[24]　The True Crime Edition 2022.
[25]　The True Crime Edition 2022.

instructed to be silent by his father. However, this contradicted the parents' testimony that Burke had slept through the events.

According to James Kolar's investigation, the murder was presumably committed by Burke, the older brother, after an evening of playing with his sister, Burke opening Christmas presents, and the little girl supposedly threatening to tell the parents, which the older brother could not tolerate, and he used a tool to strike JonBenét on the head with a huge blow. There was also a theory[26] that the girl had also consumed pineapple, presumably the brother's ration, which may have also upset him. The parents, realising that they could lose both their children at the same time, took a desperate step: Patsy wrote the ransom note while John, the husband, tried to disguise the incident as a forced entry.[27] The ransom note was, undoubtedly, attributed to Patsy alone by more than half of the writing experts, although neither the parents nor the victim's brother were charged. In 2008, after the introduction of more modern DNA procedures, the parents were officially cleared of the charges, but Patsy the mother was no longer worthy of the accusation. In the 2016 digitally recorded audio recording, experts heard the following phrase in the 911 call: "We're not talking to you!" John Ramsey's voice calling for help. "What did you do? Help me, Jesus!" – Patsy Ramsey. "What did you find?" – asked a thinner voice, most likely Burke Ramsey, JonBenét's brother, the possible owner of the voice. Dispatcher Kim Archuletta also overheard the background conversation and had a feeling that Patsy might have rehearsed the call: "I sensed something was wrong because we had to read the caller's mind. The frantic panic in her voice sounded falsely rhapsodic and about as if she had said: "Okay, we called the police and now what?" "What I really didn't understand was why he had broken the line while I was still calling him."[28]

At the behest of Agent Ron Walker, husband John, grabbed his friend Fleet White by the arm and went straight to the basement wine cellar to search for his little girl – without logically checking the upstairs playrooms first – where he promptly found her body. He removed the plaster from her mouth, then clutched her lifeless body to him, took her into the dining room and put her on the floor, destroying a vitally substantial investigative site and any DNA samples.

Subsequently, as evidence, experts tested a brand new pair of underwear in factory packaging and the laboratory revealed the presence of foreign DNA. However, the DNA found on the girl's underwear could also have come from anyone, not necessarily the killer, and could have been found on the fabric during the manufacturing process.[29]

Detective Lou Smith was asked to come out of retirement to assist in the case three months after the murder by the District Attorney, who believed that an outside intruder may have killed the victim. Detective Smith insisted that the intruder entered the house through an open basement window, despite police claim that the window was too narrow for an adult to fit through and that cobwebs covered the shutters.[30] According to Detec-

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[26]   The True Crime Edition 2022.
[27]   The True Crime Edition 2022.
[28]   The True Crime Edition 2022.
[29]   The True Crime Edition 2022.
[30]   The True Crime Edition 2022.

tive Smith,[31] the killer intended to take the little girl with him, but something must have disturbed him, and he decided to carry out his horrific crime on the spot. It is also likely that he still wanted to take the body with him, but was unable to climb out of the window with the limp body. Leaving JonBenét behind, the killer could have left through the door. Gary Howard Oliva was also a suspect in the investigation, and the fact that John Mark Karr had perjured himself in the frame-up, made the case more subtle to solve. In any case, there was no sign of forced entry, the basement windows were covered in cobwebs and the Ramseys were not very helpful to the investigators. All in all, experts claim, that the JonBenét murder will join the ranks of unsolved cases.

The Coleman and the Jenny Nicholl case

The Coleman case was a famous case of the respected professionals Robert Leonard and James Fitzgerald.[32] Chris Coleman, a father of two, first mentioned to friends in 2009 that he was receiving threatening messages from an unknown person on a regular basis. Initially, he was the recipient of the threats, but later the threats became more aggressive and extended to his family. Coleman therefore asked his neighbour, who worked as a police officer, to set up a camera at his house so he could see if anything unusual or suspicious was happening in the area. The husband, while exercising one day, called Sheri, his wife, who did not answer the phone. Coleman, allegedly frightened that something had happened to her, asked the neighbour–policeman to check on them, who found Coleman's wife and children strangled. The graffiti on the wall said: "U have paid!" The police suspected Coleman, but they did not have enough direct evidence against him. After two linguist experts were brought in to investigate, it was found that the writing style of the killer and Coleman's were very similar. The use of "U" occurs in short messages and text messages, while it is less common in e-mails. Since both the killer and Coleman used "U" in e-mails, and Coleman also regularly omitted apostrophes, as did the killer, the suspicion was increasingly focused on him. After more evidence was found against him linguistically, Coleman was sentenced to three life sentences.

The Jenny Nicholl murder was investigated by the police when they brought in a forensic linguist to help them by analysing the messages, which led to the identification of the killer, David Hodgson. The expert examined the style of Jenny's previous text messages and the style of the text messages her father received after her disappearance.[33] The forensic linguist expert's examination revealed that the message was out of the ordinary, as Jenny spelled "my" and "myself" correctly in her messages, while her last messages used the pronouns "me" and "meself" instead, which is most typical of the Yorkshire dialect. Although David Hodgson was convicted in court on the evidence against him, her body was never found.

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[31]   The True Crime Edition 2022.
[32]   Hitt 2012.
[33]   Grant 2010.

Difficulties and conclusions

The aforementioned cases are testimony to the substantial role linguists can play when an investigation stalls at a certain point and the authorities need to examine authorship, voice recognition, linguistic evidence, text analysis, comparison with other texts or the profiling of the perpetrator. Finding the perpetrator of the crime and proving the suspect's guilt or innocence is the crucial aim of the collaboration between the authorities and the linguist.

As we could learn from the cases mentioned so far, forensic linguists managed to reveal the perpetrator, or contribute to the investigation by comparing standard and substandard language variants, which includes grammar use, lexical and morphological patterns, see the Timothy John Evans case. Concerning the JonBenét Ramsey case, linguists tried to clear up the case by gender bound discrepancies, comparison to film slogans, the length of the ransom note, and the utterances of audio recordings and sound pitch. As regards the Coleman and the Jenny Nicholl cases, the omissions of apostrophes and the irregular reflexive pronouns deriving from texting, revealed the perpetrator. Note, that in any context, the authority may even be a penal institution, where the suspect is serving his custodial sentence.[34]

Forensic linguists often encounter obstacles. It is difficult, for example, to analyse tweets from the Twitter, where solely a limited number of characters can be typed.[35] Given the literacy and verbal competence of the offender, the source of the error may be the interaction of languages or language variants, namely interference. Typically, the mother tongue influences the foreign language or the primary, dominant language variant influences other language variants, but there is also a backflash interference. The quality and the quantity of the errors depend on the linguistic socialisation and the linguistic literacy of the author, and therefore, useful information can be obtained.[36] When determining the age of the perpetrator, the problem is that language use can be influenced by socio-cultural context and education. The language use of rural and cross-border people is more archaic, which may make the author appear older than he actually is.[37] Although one would think that in the digital age it is easier to preserve the anonymity of the author of the text, the linguist can help the authorities even if the offender does not use a pen, but a computer.[38]

Roger Shuy, who has served as an expert witnessing in more than 200 civil and criminal cases in the U.S. and as a forensic linguist in 35 trials, likens the difference between linguists and lawyers to the difference between doctors and their patients: "The structure of a conversation or text is not always understood by a lay listener or a reader of a transcript. What a linguist detects in a conversation using the tools of discourse analysis is similar to what a doctor sees in an X-ray. The average lay person can recognise an X-ray, but this does not mean that he can recognise what an X-ray shows about the structure of the human body. The average lay person, if they hear or see a conversation, will recognise it. But it is the linguist who can identify the nuances in the structure of the conversation

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[34] Czenczer 2018.
[35] Ürmösné Simon – Nyitrai 2021.
[36] Fobbe 2011.
[37] Szakácsné Farkas 2011.
[38] Ürmösné Simon 2023: 58.

that are necessary for accurate understanding."[39] According to Shuy, it happens that the problem of interpretation is frequently caused by the contamination effect. For example, if two people are talking on a recording and one of them swears but the other does not, the listener may get the impression that they are both swearing, i.e. the listener may overhear something in a speaker's text that is not there.

The development of technology has meant that most of the incriminated texts are no longer handwritten. A few decades ago, the use of typewriters was common, but nowadays we use printers or simply send letters by e-mail. The competence of the graphologist does not extend to non-handwritten texts, only the linguist can answer certain questions.

Forensic linguistics has evolved a lot over the years and will continue to do so with the technology available today. This process of development can be assisted if forensic linguistics also opens up to new fields that explore the territoriality of crime. The spatial perspective of crime geography[40] which is different from the traditional one, allows for the acquisition of additional information by linguists working in the field of forensic linguistics.

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[39] Shuy 1990.
[40] Mátyás 2024b.

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Changing Perceptions and Security Challenges Related to Descendants of Immigrants in France

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The perception of descendants of French immigrants by mainstream society and policymakers and the nature of the country's security challenges have significantly changed in recent decades. This study explores these changes and analyses their impact on France's social cohesion and security environment. The situation of the group concerned (who are often referred to, mistakenly, as second and third-generation immigrants) is particular since they were born in France (and, in many cases, already have French nationality). However, they often face discrimination, exclusion and social prejudice.

During the research, I meticulously analysed the results of empirical studies on this topic in the French and international literature.

The study is based on the comprehensive analysis of the former and actual French laws, analyses and studies, and the careful analysis of statistical data provided by the French Government.

In the second half of the 20th century, immigrants typically arrived in France for economic and employment purposes, but their descendants faced a very different situation. In many cases, they start from a disadvantaged and marginalised position. In recent years, public attitudes towards the descendants of immigrants have been in transition, mainly due to the media, political discourse and current international events.

Security challenges include the potential for radicalisation (which may stem from a sense of "belonging nowhere", as in many cases they do not feel French and have few ties to their parent's country of origin) and an increase in certain types of crime, particularly (but not exclusively) concentrated in the peripheral areas of large cities. These problems are often the result of economic and social exclusion, different educational and labour market opportunities and other (often misunderstood) cultural backgrounds.

Keywords: France, immigration, descendants, security

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Introduction

The increasing arrival of people and groups with cultural characteristics not common in Western Europe is a major issue in the political arena and the social and everyday life of almost all European countries. Furthermore, France, because of its particular geographical and historical characteristics and its role on the international stage, is particularly exposed not only to the challenges posed by the recently arrived immigrants but also to the relatively new dilemmas posed by people who have been living in the country for some time, and many of whom are already nationals. Not only does France have to contend with a relatively stable year-on-year influx of recent immigrants due to its attractive economic and social characteristics, but also with a large number of multigenerational descendants of immigrants, partly due to its colonial past. It is important to distinguish between these two categories of persons since recent immigrants have entirely different backgrounds and motivations and face completely different problems from those who may not have had the experience of migrating, the decision to migrate and, in many cases, have already acquired French nationality.

The generation whose parents' arrival the country was prepared for, the labour market, the factories and the state welcomed them with open arms, as the events and changes in the world created a desperate need for labour. Their children, widely assumed to be in a much easier position, face many problems in their daily lives and their integration into society. On the one hand, the jobs mentioned above are generally not equipped to provide livelihoods and jobs for the new generations, and they may also face rejection from the host society (to some extent due to past and recent events). This generation is searching for itself, as they have not experienced migration, have not been involved in the decision to migrate and therefore may not identify with it. They are often confronted with the fact that they no longer feel like they belong in the "sending" country, but they also do not feel like they belong in the "receiving" country, France. In extreme cases, this typical case of "between two chairs under the bench" can lead to the radicalisation of one part of the generation concerned.

In this paper, I will present statistics on immigrants and their descendants, and then I will discuss the role that migration has played in France's daily life and political scene through the example of historical changes and altering legislation. I will then analyse the current situation of descendants of immigrants and first-generation immigrants and the challenges they face in France. Through these examples, I will demonstrate why the descendants' situation radically differs from the previous generation's and how this discrepancy can lead to radicalisation in some extreme cases.

In the language of numbers

In order to understand the issues and problems that arise, I think it is important to clarify some basic concepts that I will use in this paper.

An immigrant is a person who was born abroad as a foreign national and is currently living in France. Therefore, we do not include citizens born abroad as French nationals.

However, it should be noted that, by definition, a person born abroad as a foreigner who acquires French nationality remains an immigrant.

Second-generation immigrants (descendant d'immigrés de deuxieme génération), or descendants of immigrants, are defined as people born in France to at least one parent who is not a French citizen. It does not include people who arrived in France as children with their parents.

Third-generation immigrants (descendant d'immigrés de troisieme génération) are citizens born in France with at least one grandparent who is an immigrant, i.e. not born in the country.

A person without an immigrant background (personne sans ascendance migratoire) is a person who is neither an immigrant nor a descendant of an immigrant, who was not born in an overseas territory of France or who is not a descendant of such a person.[2]
In order to understand the situation and difficulties of the descendants of immigrants in France, it is necessary to look at the migration processes affecting the country and the composition and characteristics of the immigrant population.

According to the National Institute of Statistics and Economic Studies (*Institut national de statistique et des études économiques, INSEE*), the first census in modern French history to include citizenship data in the census questionnaires was the 1851 census.

From this, it is clear that the motivation, composition and intensity of migration to France are constantly changing and in flux. While in the 1800s, economic reasons dominated, with Swiss, northern Italian and Belgian immigrants predominating, after the Second World War, the labour motive became dominant, which to some extent alleviated the pressure on the French labour market resulting from demographic problems and the loss of life in the World War. Subsequently, until the 1973 oil crisis, migration for family reunification was the dominant form. However, the crisis forced France, like many other countries, to suspend its immigration and family reunification programmes. The enlargement of the European Union and the economic crisis of 2008–2009 have also brought marked changes in immigration figures, as has the 2011 'Arab Spring' and the Covid–19 pandemic.[3]

France, due to its former colonial status, has received large numbers of immigrants from the Maghreb[4] and former colonial countries, not only in the past but also nowadays. Nothing shows this better than the fact that in 1975, of the 3.4 million registered foreigners, some 710,000 were of Algerian origin, and the latest figures show that this trend has continued, with 47.5% of the approximately 7 million foreigners coming from Africa, 12.7% from Algeria, 12% from Morocco and 4.5% from Tunisia.

However, the proportion of immigrants in the French population is increasing not only in numbers but also in proportion, from 5% in 1946 and 7.4% in 1975 to 10.3% in 2021. New arrivals are 200,000 per year, which illustrates the impact of globalisation and the growing propensity for mobility, the increasing spread of the internet and

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[2]   INSEE 2023a.
[3]   Hamilton et al. 2004.
[4]   Geopolitically, the Maghreb region includes Morocco, Western Sahara, Algeria, Tunisia and Libya.

telecommunications, and the historical and geographical links mentioned earlier on international mobility.[5]

France is one of the few countries in Western Europe where population growth is relatively slow but steady due to several factors, in addition to the arrival of immigrants and birth rates. According to statistics, there is one emigrant for every four immigrants in the country, most of whom leave the country because they have completed their studies, expired their fixed-term employment contract or retired and then returned to their country of origin. In terms of fertility rates, one in five births belongs to an immigrant mother (around 143,000 out of 760,000), and while the average fertility rate in France is 1.88, the average for 'native' French is 1.77 and the average for immigrants is 2.6 (with some differences, of course, such as 2.5 for immigrants from the Maghreb and 3.3 for immigrants from other African countries).[6]

It is also noteworthy that around a third of French people live in a neighbourhood where the proportion of immigrants exceeds 10% and that more than half of the Algerian immigrants (56%) live in the Saint-Denis district (suburbs) of Paris, which is also widely considered to be a hotbed of segregation.

Descendants of immigrants in society

In line with the above, the statistics show that not only is the proportion of immigrants in relation to the total population increasing (1968: 3.2%; 1990: 4.2%; 2011: 5.6%; 2021: 6.9%) but also in parallel and as a consequence, the descendants of immigrants are becoming increasingly numerous in French society (2005: 4.2%; 2011: 6.5%; 2021: 7.3%). Since the early 2000s, the composition of the immigrant population has been steadily diversifying, with an increasing number of countries of origin. It should be noted, however, that 41% of the new arrivals in 2019 came from an African country, 33% from Europe (the right of free movement and residence within the EU facilitates their migration) and 15% from Asia.

It is an interesting fact, although not unexpected, given the historical background, that around 80% of the descendants of immigrants over 50 have European ancestors since the trend at the time their parents arrived in France (before the 1973 oil crisis) was migration from European countries. By contrast, in the under-18s, only 16% of those concerned have parents of European origin, 41% from the Maghreb and 20% from other African countries. For those with European ancestry, the number of conflicts and problems arising from cultural differences is much lower, as they come from almost the same cultural background and from a society with almost the same composition and expectations.

Contrary to what was previously assumed, 57% of the descendants of immigrants have only one immigrant parent (the other being a French national), and these are typically parents who decided to migrate at a young age before starting a family, as the older the newcomer, the more likely they are to arrive, the more likely it is that the parents will

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[5]   INSEE 2022.
[6]   INSEE 2023b.

meet before the journey, in which case both parents of the offspring are immigrants (this is the reason why this proportion is reversed for Turks, 65% of descendants have both parents who are immigrants).

Around 10.2% of the under-60s are third-generation immigrants (4.8 million people), but less than 1% have all four grandparents who were immigrants. Those in this category typically (90%) have European ancestry (Italian, Spanish, Portuguese), but the proportion of people under 18 with African ancestry is rising rapidly.

The spatial distribution of immigrants and their descendants is uneven, with a strong over-representation of these groups in urban agglomerations, particularly in the Île-de-France region and around Lyon and Marseille.

Although around 10% of the French society is made up of immigrants, the figure is 20% in the Paris region and around 32% in Saint-Denis. Moreover, cities and regions close to the borders tend to have a higher proportion of immigrants, and it is noteworthy that 23 départements have half of the French population, while 13 départements have half of the immigrant population, which underlines the concerns about the inequality of territorial distribution, as the concentration of immigrants in smaller areas can be a source of many problems (such as social integration and similar issues). The spatial distribution of descendants also follows this pattern, as they remain in their parents' environment due to the strong ties with their parents: around half of the descendants are concentrated in 12 counties.[7]

The political focus on immigration issues in France

With immigration being so central to French life, it is important to consider how policy addresses the challenges and problems immigrants pose. There is a general perception that the French political elite is dismissive of immigration and migration. However, a closer look reveals that the situation is far from clear-cut, as it depends to a large extent on who is leading the country.

Legislation

Although the first accurate data series on immigration issues is only found in the 1851 census, looking at French data, the phenomenon itself dates back much earlier. However, migration processes are invariably adaptive, reflecting the social, economic and global political changes at the time. It is for this reason that, while in the second half of the 1800s, migrants, mostly from Europe, were mainly motivated by economic reasons to change their place of residence, in the period between the two world wars, migration for employment became increasingly dominant to compensate for the serious demographic and labour market problems, and was gradually replaced by migration for family reunification in the later years (late 1960s, 1970s).[8]

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[7]   INSEE 2023c.
[8]   Hamilton et al. 2004.

One of the tasks of the country's political system is to keep abreast of changes and to adapt the legal and legislative environment to changing circumstances. This was no different in France in the case of immigration, where the dynamic changes in immigration legislation since the 1980s have been witnessed, and it is worth examining how the focus and target audience of the legislation has changed over the years in light of changes in migration processes.

The Pasqua laws of 1986 and 1993 affected foreign students studying in France (they were not allowed to work in the country after graduation), families (the waiting time for family reunification applications increased), non-French spouses of French citizens (they could not obtain a permanent residence permit, if they had not resided or arrived in the country in accordance with the legal conditions prior to the marriage), and the descendants of immigrants born in France (tightened the conditions for obtaining French nationality).[9] This law was repealed by the 1998 Guigou law,[10] which again allowed the children of foreign parents to acquire French nationality on reaching the age of majority, provided certain conditions were met. The descendants of immigrants were also (partially) covered by the Chévénement law,[11] which institutionalised the 'brain drain' since it was intended to facilitate the employment of highly qualified workers and graduates. The 2003[12] and 2006[13] laws, which were named after Nicolas Sarkozy, then President of the Republic and Minister of the Interior, further tightened the rules by introducing a 'selective immigration policy', to the detriment of less well-off immigrants, and by reducing the number of asylum seekers.

Nicolas Sarkozy was first confronted with the challenges posed by migrants as Minister of the Interior, notably in the context of the 2005 riots in France. He called people living in cheap public housing (*habitation à loyer modéré,* HLM) in the suburbs a mob, adding to existing tensions. Sarkozy also took a firm stance on migration during his presidency of the Republic, as he was responsible for the so-called 'selective immigration policy' ('immigration choisie'), which meant that only economically and socially useful immigrants were welcome and encouraged by the French state.[14]

Presidential election campaigns

The presidential elections of the Republic were and are also heavily influenced by immigration issues; in the 2002 elections, Jean-Marie Le Pen,[15] for example, would have taken his usual radical line, including excluding people from the labour market who are immigrants or have an immigrant background and banning migration for family reunification

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9   Loi n° 86-1025 du 9 septembre 1986 relative aux conditions d'entrée et de séjour des étrangers en France; Loi n° 93-1027 du 24 août 1993 relative à la maîtrise de l'immigration et aux conditions d'entrée, d'accueil et de séjour des étrangers en France.

10 Loi n° 98-170 du 16 mars 1998 relative à la nationalité.

11 Loi n° 98-349 du 11 mai 1998 relative à l'entrée et au séjour des étrangers en France et au droit d'asile.

12 Loi n° 2003-1119 du 26 novembre 2003 relative à la maîtrise de l'immigration, au séjour des étrangers en France et à la nationalité.

13 Loi n° 2006-911 du 24 juillet 2006 relative à l'immigration et à l'intégration.

14 Harzoune 2022.

15 Le Pen 2002.

altogether. Jaques Chirac[16] strongly focused on abolishing "ghettos". At the same time, French society was so shocked that Le Pen, who held extreme right-wing views, had made it to the second round that Chirac became President of the Republic with an unprecedented unity, winning 82% of the vote.

Twenty years later, Marine Le Pen[17] and Emmanuel Macron[18] reached the second round of the elections, where ideas on migration issues were also put forward. Both candidates, although with different emphases, stressed the need to reform the Schengen system and rationalise deportations, as well as the reform of the asylum system and illegal migration.

It is clear from the programmes that French politics is constantly trying to keep abreast of events and changes on the international scene. However, the dynamic and specific nature of the situation means that it can only do so with some delay. For example, a comprehensive reform of the asylum system and a reform of the French residence permit system are long overdue. However, world events continue to challenge the immigration systems of France and almost all countries, so these reforms are being delayed and are still to come.

Generational differences, challenges

However, what receives little or no attention today, both in politics and in social dialogue, is the integration of immigrants' descendants, the promotion of their integration and the problems related to this. This is a group of people who have not experienced the difficulties of migration, who have not had to decide to leave their home country or country of origin (because they were either very young or not alive at the time) and who have not had to face the difficult conditions in their country of origin. Why should the French State pay more attention to integrating the descendants of immigrants?

This is necessary for a number of reasons: for example, the fact that these people have not participated in emigration in practice can easily lead them to feel that they no longer have a strong connection with their country of origin, that they no longer feel they belong there (despite their parents' efforts to preserve traditions), and that in France (although they often have citizenship) they feel like outsiders, whether because of their skin colour, their origin or their place of residence. The fact that immigrants and their descendants very often live in suburban housing estates where their numbers increase over time, thus creating – even if unknowingly and unintentionally – a form of spatial segregation may also be a major factor in this process. As a result, because they will, after a while, have neither the opportunity nor the desire, the possibility and frequency of contact with French society will be considerably reduced, which will become a counterproductive process so that if the descendant wants to integrate, he or she may not be able to, because he or she will be rejected by society in some way, which will make him or her subsequently make no

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[16]   Chirac 2002.
[17]   Le Pen 2017.
[18]   Macron 2022.

attempt to contact and integrate. This situation is also actual in reverse, as the majority society, drawing on its previous bad experiences, closes ranks and adopts a negative attitude, which can further increase the negative attitudes on both sides and, in extreme cases, lead to the radicalisation of the descendants concerned. It is also worth looking at attitudes towards immigrants and their descendants to better understand this process. As a complete spectrum analysis covering all areas is impossible due to the study's limitations, I have chosen to focus on the labour market, education, living standards and the challenges of generational differences.

The present part of the study draws on the annual opinion poll "France – new fractures" ("Fractures françaises") carried out by the IPSOS polling company, where attitudes and perceptions of immigrants and their descendants have been prominent for several years (even before the 2015 migration crisis);[19] on the other hand, the regular publication (most recently at the end of March 2023) by the French National Institute for Statistics and Economic Studies (INSEE) on the situation and difficulties of immigrants and their descendants.[20]

General perception of immigrants and their descendants

It should be emphasised, however, that the perception of immigrants depends on many factors (geographical area, education, political views, etc.) and that there is no clear social consensus on immigration issues in France today, which shows that migration and immigration issues are more subjective.

In the aforementioned annual poll, immigration issues have been consistently ranked around 4–5 in the list of public issues of most concern to the French for several years, closely behind concerns about crime, purchasing power and the environment and ahead of fears about terrorism.

The survey highlights the social prejudices against immigrants mentioned earlier, with 66% of respondents in the 2022 survey saying there are too many foreigners in the country and 61% saying there are enough workers in the country without immigrants. It is an interesting proportion in light of the so-called 3D jobs.[21] Immigrants or people with an immigrant background are the main occupants of these jobs, and "native" French people are reluctant to take on these types of jobs.

55% of the respondents believe that immigrants do not do enough to integrate effectively. In the face of such social rejection, looking at the following statistics is interesting.

Immigrants, in general, find it harder to get into higher-skilled jobs and are about twice as likely to be unemployed as "French by birth".[22]

Because of the mixed attitudes towards immigrants and their descendants mentioned above, these groups often face problems affecting their daily lives. It is not possible to

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[19]   Teinturier et al. 2022.
[20]   INSEE 2023c.
[21]   Dirty, Dangerous, Demeaning.
[22]   Teinturier et al. 2022.

generalise, since, as mentioned earlier in this study, descendants of European, African or Asian descent may face different problems and challenges, and the nature of these depends to a large extent on social, economic and societal relations. All these factors can play a role in pushing immigrants and descendants towards exclusion.

- labour market difficulties
- economic – financial situation
- health problems
- education-related issues
- discrimination and integration problems

Labour market situation

Around 80% of immigrant men are active in the labour market (compared to 76% of men from non-migrant backgrounds) and 62% of women (70%). This figure varies considerably by the sending country, with only 45% of women from Turkey and the Middle East, as well as the Maghreb, for example. These differences may be partly due to different educational backgrounds and societal cultural differences (e.g. different roles for women).

For descendants, the situation is slightly different, with 64% of women and 70% of men, on average 67% of those concerned, active in the labour market. It is also interesting to note that those with only one immigrant parent are more likely to be active in the labour market than those with both immigrant parents.

Slightly less active participation in the labour market may be due to language differences (since, in many cases, in the home micro-communities, people use their mother tongue, French may be marginalised, which may even hinder their progress in the labour market), discrimination (because of their origin or even their skin colour), different motivation (doubts about their chances of success), or even different socio-economic circumstances.

Due to their different labour market situation, descendants can often face a sense of "otherness", of not being accepted, of rejection, which can even trigger a counterproductive process.[23]

Economic and financial situation

While the average annual income of French nationals is around €26,170, immigrants have a much lower annual income (€20,520), and their descendants bring home moderately lower average wages (€23,150) but higher than their parents' incomes. An important point to note is that while 15% of people without an immigrant background live below the poverty line, this proportion is very high for immigrants (32%) but also very significant for their descendants, at around 21.7%. It is striking that while around 59% of people from a non-migrant background live in owner-occupied housing, 32% of immigrants and 46% of their descendants do so. However, there is also a significant difference between descendants and immigrants, with 13% of those from the Sahel living in owner-occupied

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[23] INSEE 2023c.

housing compared to 61% of those from the South Asian region. It is also important to note that one in four immigrants live in an overcrowded dwelling, while the proportion is more moderate for their descendants (one in eight). Overall, the financial situation of descendants shows an improvement compared to that of their parents but still remains below that of non-migrants. As descendants, through their parents, start from a poorer financial position, it is more difficult for them to secure adequate living conditions, which, given the environment around them, can be a source of further frustration.[24]

Health problems and education

11% of women and 10% of men self-report poor or very poor health, which is a cause for concern in itself and almost alarming compared to those from a non-migrant background (7%). This figure can only partly be explained by age (immigrants from Europe tend to be older and, therefore, more likely to develop certain diseases). In many cases, it can also be linked to prevention and barriers to access to healthcare. The mental health of the citizens concerned also raises serious questions, with relatively high rates of mental/psychological problems, striking for humanitarian migrants at 45% and significant for non-humanitarian migrants at 31%.

Perhaps most striking in case of education is the differentiation by country of origin/sending country. On average, they have a similar level of education as non-migrants, and in some countries, they can be much higher than the proportion of graduates (40%): 53% for non-EU European countries and 62% for Middle Eastern countries (and much lower for Maghreb countries).[25]

Discrimination

In 2019–2020, 34–40% of immigrants from each African (non-Maghreb) region and 41–46% of their descendants reported that they had experienced discrimination and were not treated equally in the past five years. In the Maghreb countries, descendants also reported higher rates of discrimination (33% and 25%, respectively), compared to 29% for those with two immigrant parents and 20% for those with one immigrant parent. They said that the most common grounds for discrimination were origin, nationality or different skin colour, especially when looking for a job, in public transport or in everyday life.[26]

When radicalisation takes shape

Of course, the existence of these factors does not automatically mean that the descendants concerned will become radicalised. However, it can be observed that the worse social situation, economic circumstances, discrimination and social exclusion of people from

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[24] INSEE 2023c.
[25] INSEE 2023c.
[26] INSEE 2023c.

a migrant background are all factors that can contribute to the extremism of the attitudes of these people.

Discrimination and integration difficulties also play an important role in this process because if a young person sees that he or she is trying to integrate but is constantly rejected by the host society or is disadvantaged because of his or her origin or colour, whether in the labour market or public administration, the feedback is that it is not worth trying. After a while, the host society sees that he or she does not want to integrate, which becomes a self-perpetuating process. Another important factor in the shift towards extremes is that the descendants have not experienced the act of migration themselves and have not been actively involved in the decision-making process or the act of migration, and this can lead to an identity crisis, as they no longer want to/are no longer (so much) able to relate to their parents' country, and they do not feel that they belong to France, where they have problems integrating.

Social and cultural segregation may also be strongly influenced by the housing conditions described above, as many people still live primarily in the suburbs, with a high proportion of immigrants (due to financial problems, which may lead to social segregation). Experiences of disadvantages in the education system, language barriers, everyday difficulties and discrimination can often result in a feeling of not belonging to the community. In some cases, these facts can also result in descendants feeling that their culture and religion are not given the respect they deserve, and this feeling can be exacerbated if racism and anti-Islamic sentiments prevail in the micro-environment around them.

In recent times, a number of events and terrorist attacks have brought firstly the radicalisation of immigrants and then of their descendants back to the forefront of social and political discourse. Many people have assumed that the perpetrators of the terrorist attacks in Western Europe since 2015 have all been immigrants, but the data shows quite the opposite. The vast majority of perpetrators were either already French (or from another Western European country) or dual nationals. Of the perpetrators of successful, unsuccessful or foiled terrorist attacks between 2015 and 2021, 78% were French (French or dual) nationals.[27]

What can France do?

Following the terrorist attacks in 2015, a severe constitutional debate has been launched on the extension of the deprivation of French nationality. According to the then President of the Republic, Francois Hollande: "The consequence of deprivation of nationality should not be to render the person concerned stateless, but it is necessary to create the conditions for depriving the perpetrators of crimes and terrorist acts against the fundamental interests of the Nation of their French nationality, even if they were born French, only if they also hold the nationality of another country." The idea is that dual nationals who acquired their French nationality more than 15 years ago or French by birth who have acquired the nationality of another country in the meantime could be deprived of

[27] Pezet 2021.

their French nationality. This measure would have been possible only in case of serious offences against the state or terrorist acts, but the fact that a French citizen by birth could have been deprived of his nationality whipped up such a furore that the President of the Republic withdrew his proposal.

There are many doubts about the possibility of depriving a person of French nationality, but the law allows applying this legal instrument under certain conditions. This sanction is only available for acts committed before the acquisition of French nationality or within 15 years of the acquisition of French nationality which are contrary to the fundamental interests of the French nation or for terrorist acts and is currently only applicable to persons who have acquired French nationality (by marriage or naturalisation).

Removal from the country is an option for those who are radicalised and commit serious crimes against the state, but recent events (not by a descendant but by a first-generation immigrant) have shown that this process is far from smooth in France. In October 2022, Dahbia B., an Algerian national, murdered a 12-year-old French girl in the 19th arrondissement of Paris. The woman (who had a number of mental health problems that had never been treated, including access to healthcare) had entered the country in 2016 on a regular residence permit for study purposes and only came to the attention of the police in 2018 as a victim of domestic violence. In 2022, it was discovered that she was already in France irregularly and without a legal basis, and the competent authority ordered her to leave the country (*ordonnance de quitter le terrotoire français,* OQTF), but she did not do so. There has been much criticism of the French authorities in this case that these OQTF decisions are not – and are not being – enforced effectively enough, and the case has also shown that this process needs to be further improved.[28]

One option could be to tighten and strengthen screening and vetting for national security purposes and to monitor more closely those who are on the radar screen, as the terrorist attacks since 2015 have involved a large number of planners and perpetrators who were already known to the authorities.

Summary

As the above shows, immigrants and their descendants play a vital role in the life of France, whether in terms of the labour market (skills shortages, filling 3D jobs), demographics (the ageing population, the arrival, settlement and childbearing of immigrants at a younger age can have a beneficial effect on Western European societies), or from a cultural point of view (the fact that immigrants contribute to social diversity is undeniable). However, the specific characteristics of these people must be borne in mind, which may contribute to their more extreme orientation. Their role in the labour market, their more modest housing, livelihood and health opportunities compared to people without an immigrant background, and the fact that they have to deal with discrimination and integration difficulties regularly are all factors which not only constitute obstacles in their daily lives but also make integration more complex and can also trigger a process of segregation.

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[28]   France 24 2022.

It is already proven that additional programmes are required to help immigrants integrate; greater attention should be paid to the situation of their descendants, whose possible radicalisation could pose a serious security risk for France. It can manifest at a micro level when problems arise in the local community, regardless of whether there is an increase in certain types of crime or priority cases for the country or even the international community. Although the study has not been given sufficient space in this paper due to space constraints, I think it is important to stress that immigrants and their descendants positively impact the life and functioning of a country, in addition to the risks and problems they pose. I believe it is important to implement programs and measures that promote integration and reduce the tendency toward extremism. These initiatives can benefit not only descendants and their families but also society as a whole.

This would, of course, be complementary to the process that the French State is currently pursuing to address security risks, as it is impossible to create a secure environment without prevention.

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LAW ENFORCEMENT PRACTICE

The Fight against Organised Crime in Serbia and International Police Cooperation

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This report outlines the legislative framework and institutional mechanisms in the fight against organised crime, as well as international police cooperation between the Republic of Serbia and its foreign partners. The legislative framework includes key international and national sources, particularly the Palermo Convention against Organized Crime, the Law on the Organisation and Competencies of State Bodies in the Fight against Organised Crime, Terrorism and Corruption, the Criminal Procedure Code, the Criminal Code and the Law on Confiscation of Property Acquired through Crime, among others. Institutional mechanisms crucial for combatting organised crime encompass various forms of police and intelligence operations alongside various authorities, organisations and agencies. In the final section, the report offers several proposals for enhancing the legislative framework and the operational practices of police and law enforcement agencies. Given Serbia's application for EU membership, the importance of aligning national laws with EU regulations in the fight against organised crime and other serious criminal activities is particularly emphasised.

Keywords: organised crime, legislative framework, institutional mechanisms, international cooperation, Serbia and the EU

Introduction

After the fall of the Berlin Wall at the end of the 20th century, social reforms were initiated in the countries of the Socialist Bloc along with the process of their economic transition. The former Yugoslavia also entered the process of transformation, which was not peaceful at all. It caused armed conflict, massive destruction, displacement and significant loss of human lives. When the armed conflicts ceased and peace was established, the newly

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formed states faced numerous problems that could not be adequately solved due to the lack of the rule of law and inappropriate mechanisms.

A particular problem for the successor countries of the former Yugoslavia and the Republic of Serbia was the eruption of crime, primarily organised crime and other severe forms of crime. Organised crime has a highly pronounced transnational dimension because profits and organised criminal groups do not recognise physical barriers and national borders. Illegal production and trafficking of drugs are a top priority issue for Serbia, the Balkan countries, developed EU states and the USA.

The fight against organised crime and other severe forms of crime in the Republic of Serbia gained importance after the withdrawal of Serbian forces from the territory of the Autonomous Province of Kosovo and Metohija and the establishment of UN jurisdiction,[4] especially after the assassination of Prime Minister Zoran Đinđić in 2003. These events have significantly complicated the already extremely slow process of transition and social reforms, which has further facilitated the development of organised crime and the linking of organised criminal groups throughout the region. A wide space has been created for the almost unhindered operation of transnational organised criminal groups, with the achievement of extra profit and minimal risks of detection. The problem particularly escalated when operational information revealed that numerous terrorist organisations were funded from the proceeds of organised crime.

The social response to the challenges, risks and threats of organised crime, as well as other serious forms of criminal activity, was achieved at both the domestic and international levels, and it encompassed legislative and law enforcement measures and actions. After the assassination attempt on the Prime Minister, Serbia enacted the Law on the Organisation and Competence of State Authorities in Combating Organised Crime, Terrorism and Corruption. The mentioned law largely relies on solutions adopted by the international community within the framework of the Palermo Convention against organised crime. In addition, at the national level, a multi-agency approach has been developed in the fight against organised crime, terrorism and corruption. On the international level, Serbia has reaffirmed its international cooperation at the multilateral (e.g. Interpol), regional (e.g. Europol, SELEC) and bilateral (e.g. USA, Germany, France, Israel, Hungary) levels. As an example, we cite the good cooperation with the Hungarian Police in criminal matters, through the police attaché in Serbia (Lt.Col.T.B).

The purpose of cooperation lies in the joint fight against organised crime, the prosecution of suspects and the confiscation of assets acquired through criminal activity. This further contributes to strengthening the rule of law and other standards in each country and preserving the heritage of human civilisation and the values of the modern world.

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[4]   Stevanović 2016: 11–56.

The legislative framework for combating organised crime and international police cooperation

The legal sources for combating organised crime and international police cooperation consist of national and international legal norms, which are applied in accordance with the Constitution of the Republic of Serbia (2006, Article 194, para. 4), which states that ratified international agreements and generally accepted rules of international law become an integral part of the national legal system.

International dimension

International legal sources include well-known general norms of international law and individual acts such as resolutions, declarations, conventions, memoranda and agreements.[5]

At the multilateral level, undoubtedly the most important international legal sources for combating organised crime, police and criminal cooperation are the documents accepted by the Republic of Serbia (former Yugoslavia), such as the *Constitution of the International Criminal Police Organization* (Interpol) (1956) and other acts, the United Nations *Convention against Transnational Organized Crime* ("Palermo Convention", 2000), international conventions against terrorism, etc.[6] a particularly significant part pertains to Serbia's membership in Interpol[7] and cooperation with other member states.

At the regional level, the most significant legislation is the *Convention on International Police Cooperation in the SEE* ("Vienna Convention", 2007) and the *SELEC Convention* (2011), which Serbia (former Yugoslavia) has accepted.[8] Additionally, Serbia has joined and accepted important regional initiatives and mechanisms such as the Stability Pact for SEE (SPSEE), the Regional Cooperation Council (RCC) and the Process of Cooperation in SEE Countries (CPSEE).[9]

The agreements on cooperation with Europol are crucial because the Republic of Serbia is applying for EU membership, whose specialised agency is Europol. First, Serbia concluded a Strategic Cooperation Agreement with Europol (2008), which provides for the exchange of information, harmonisation of definitions of crime manifest forms, and identifies authorised bodies for combating serious crimes including the Ministry of Internal Affairs of the Republic of Serbia – Police Directorate, Criminal Police Department; the Ministry of Finance – Customs Administration, Tax Administration and Anti-Money Laundering Administration; Security Intelligence Agency (BIA) (Law on the Ratification of the Agreement on Strategic Cooperation).[10] However, it did not allow the exchange of "hard data" (personal data) between the parties. Based on this framework, the Agreement on Operational Cooperation (2014) between Serbia and Europol was subsequently

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[5]   KREĆA 2017.
[6]   KREĆA 2017.
[7]   Interpol 2001.
[8]   Official Gazette of the Republic of Serbia 2007e; Official Gazette of the Republic of Serbia 2011b.
[9]   NIKAČ–JURAS 2015.
[10]   Official Gazette of the Republic of Serbia 2009b: Annex III.

concluded, following pre-accession documents (2010).[11] The Operational Agreement enables data exchange, liaison officer deployment and other collaborative forms, resolving previous limitations on information sharing. This solution aligns with Europol Regulation 2016/794,[12] which governs classified information exchange.

The most important goal of cooperation is the fight against all forms of organised crime, terrorism and other serious manifestations of crime.[13]

In cooperation with Europol, the Ministry of Internal Affairs of the Republic of Serbia has adopted a new strategic document entitled *Threat Assessment of Organized and Serious Crime (SOCTA)* (2023), which was presented in detail at the University of Criminal Investigation and Police Studies in Belgrade on 19 April 2024.[14] The main editor of the document (one of the co-authors of this report) emphasised "the importance of combining practical experience and science for the development of a holistic and effective approach in the fight against organized crime".

National dimension

National legal sources encompass the norms of domestic legislation that regulate the suppression of organised crime, international police cooperation and criminal-legal cooperation. In this regard, the most important sources are: Constitution of the Republic of Serbia,[15] Criminal Procedure Code,[16] Criminal Code,[17] Law on International Legal Assistance in Criminal Matters,[18] Law on Police,[19] Law on the Organisation and Competence of State Authorities in Combating Organised Crime, Terrorism and Corruption,[20] Law on Foreign Affairs.[21]

The most important internal legal source relevant to the police and its organisation, duties, powers and work control is the *Law on Police.* Following Article 19 of this law, the Ministry of Internal Affairs of the Republic of Serbia carries out international cooperation at the level of the minister and representatives with foreign authorities, as well as international and other organisations. The Ministry of Internal Affairs of the Republic of Serbia carries out international operational police cooperation through the *Police Directorate,* based on confirmed international agreements, while respecting the principles of reciprocity and membership in international (police) organisations.

Some of the other national regulations relevant to international police cooperation in the fight against crime are the Law on the Ratification of the Agreement about the

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[11]   European Commission 2014.
[12]   European Union 2016: Article 25.
[13]   Radović–Đurđević 2016.
[14]   Ministry of the Interior of the Republic of Serbia 2024; University of Criminal Investigation and Police Studies 2024a.
[15]   Official Gazette of the Republic of Serbia 2006.
[16]   Official Gazette of the Republic of Serbia 2011a.
[17]   Official Gazette of the Republic of Serbia 2005a, amended in 2019.
[18]   Official Gazette of the Republic of Serbia 2009a.
[19]   Official Gazette of the Republic of Serbia 2016a, amended in 2018.
[20]   Official Gazette of the Republic of Serbia 2016b, amended in 2018.
[21]   Official Gazette of the Republic of Serbia 2007a, amended in 2009.

Readmission of Persons Illegally Residing between the EU and the Republic of Serbia,[22] Law on the Prevention of Violence and Improper Behaviour at Sports Events,[23] Law on Travel Documents,[24] Law on Foreigners,[25] Law on Citizenship,[26] Law on Asylum and Temporary Protection,[27] Law on Border Control,[28] Law on the National DNA Registry,[29] Law on Records and Data Processing in the Field of Internal Affairs,[30] Regulation on Principles of Internal Organisation in the Ministry of Internal Affairs,[31] Regulation on Conditions and Procedures for Opening and Closing Border Crossings,[32] Regulation on Special Police Units,[33] etc.

Institutional mechanisms for combating organised crime in Serbia

We explain details about the police and internal security sector, the judicial authorities and other state authorities supplementing the mission of law enforcement.

Police and security services

The National Police

The Ministry of Internal Affairs of the Republic of Serbia (the Police) is indisputably the most important subject in the fight against organised crime and crime in general. Within the Ministry, protocol – administrative and police – operational cooperation with foreign partners takes place.

The Minister of Internal Affairs and the Minister's Cabinet are responsible for implementing political cooperation with foreign partners, as well as protocol and legal matters related to cooperation with international partners.[34] The Cabinet includes the Department for Protocol Affairs, which performs the same tasks for the needs of the Minister and, when necessary, for other organisational units within the Ministry of Internal Affairs of the Republic of Serbia. The Cabinet–Department prepares and conducts meetings in which the minister participates, organises receptions and stays for foreign delegations, collaborates with other units to prepare and carry out official trips for the Minister, appears in public and organises Ministry events. The position and legal status of the minister are

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[22] Official Gazette of the Republic of Serbia 2007b.
[23] Official Gazette of the Republic of Serbia 2014a.
[24] Official Gazette of the Republic of Serbia 2007c, amended in 2018.
[25] Official Gazette of the Republic of Serbia 2018a.
[26] Official Gazette of the Republic of Serbia 2004, amended in 2018.
[27] Official Gazette of the Republic of Serbia 2018b.
[28] Official Gazette of the Republic of Serbia 2008, amended in 2018.
[29] Official Gazette of the Republic of Serbia 2014b.
[30] Official Gazette of the Republic of Serbia 2016c.
[31] Official Gazette of the Republic of Serbia 2023.
[32] Official Gazette of the Republic of Serbia 2018c.
[33] Official Gazette of the Republic of Serbia 2019.
[34] Official Gazette of the Republic of Serbia 2006.

determined by the provisions of the Law on Police,[35] as well as the provisions of the Law on Ministries[36] and the Law on the Government.[37]

At the recent 10th ministerial meeting of the Western Balkans Summit "Berlin Process" (17 September 2024, Berlin), data was presented regarding a significant reduction in the number of illegal border crossings (61.8% compared to 2023), as well as a unified, regional and global response to this phenomenon, and intensive cooperation with partner agencies in the region, Europol and Frontex. Significant results have been achieved in combating organised crime because numerous parallel investigations and joint investigative team activities have been successfully carried out, with the aim of confiscating assets derived from criminal offences.[38]

The Department for International Cooperation and Cooperation with the EU within the Minister's Cabinet organises, analyses, plans, proposes and implements tasks related to international cooperation, European integration, public policies, development and project management. The Department is responsible for bilateral and multilateral international cooperation, dispatching liaison officers abroad, planning and organising the participation of the Ministry of Internal Affairs of the Republic of Serbia in regional initiatives and peacekeeping operations of the EU, UN and other organisations.[39]

The General Police Directorate is the most important part of the Ministry of Internal Affairs of the Republic of Serbia, serving as the executor of traditional police duties and tasks within the community related to public order, combating all forms of crime and other responsibilities. The Directorate is organised based on linear and territorial principles in accordance with the principles of hierarchy and subordination.[40] The General Police Directorate is led by the General Police Director, who is responsible for its functioning.

The most significant part of the General Police Directorate in the field of crime is the *Criminal Police Directorate,* which has inherent jurisdiction in the fight against crime. The Directorate within the Ministry of Internal Affairs of the Republic of Serbia includes several specialised services, such as the Service for Combating Organised Crime, the Service for Combating Drug Trafficking, the Service for Crime Suppression, the Service for Special Investigative Methods, the Service for Criminal Analytics, the National Center for Criminal Forensics, and others.[41] The Service for Combating Organised Crime is the most important segment of the Criminal Police Directorate for combating organised crime, and it includes departments for combating general organised crime, organised financial crime, etc.[42] International cooperation takes place with the participation of this Service and through a special Department for international operational cooperation, which includes sections for cooperation with Interpol–NCB, also known as Interpol Belgrade,

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[35]   Official Gazette of the Republic of Serbia 2016a.
[36]   Official Gazette of the Republic of Serbia 2020.
[37]   Official Gazette of the Republic of Serbia 2005b.
[38]   Radović–Đurđević 2016.
[39]   Radović–Đurđević 2016.
[40]   Nikač 2019: 36–39.
[41]   Official Gazette of the Republic of Serbia 2011b.
[42]   Official Gazette of the Republic of Serbia 2011b.

cooperation with Europol, and others.[43] International police cooperation in combating organised crime encompasses various activities in the suppression of smuggling: weapons and ammunition, drugs, illegal migrants, human trafficking, cybercrime and other severe manifestations.[44] The collaboration, activities, planning and other elements are unified by criminal operations,[45] as a shared discipline aimed at solving work-related issues, using the criminal intelligence model and analysing information.[46]

The Special Antiterrorist Unit plays a particularly significant role within the police structures. It is responsible not only for combating terrorism but also for bringing to justice individuals suspected of organised crime and other serious criminal offences. The Special Antiterrorist Unit almost always participates in risky operations, and it has specialised teams and a logistics support team. This unit is known for its close international cooperation with special units from the USA, France, Germany and others, with whom it conducts joint exercises, education, technical support and contacts.[47] One of the important recent activities of this unit was the arrest of an organised criminal group (V. Belivuk – M. Miljković), which committed a series of murders, extortion and other serious criminal offences on the territory of Serbia.

The Border Police Directorate[48] plays an important role in combating organised crime and other serious offences, given that the majority of these crimes have elements of transnational organised crime. This particularly applies to the suppression of cross-border crime, illegal migration, human trafficking and organ trafficking, among others.

The National Security Services

The Security Intelligence Agency,[49] formerly a secret service within the Ministry of Internal Affairs of the Republic of Serbia, has transitioned from the Ministry's structure and now operates as an agency under the authority of the Government of the Republic of Serbia. It is a special organisation that primarily carries out tasks related to the protection of security and constitutional order of the Republic of Serbia, including the collection, processing and assessment of security and intelligence data. A particularly significant part of its work pertains to combating acts of domestic and international terrorism, organised crime and criminal offences with elements of foreign involvement, as well as crimes against humanity and international law.[50]

The National Security Council was established by the Law on the Basics of Organisation of Security Services (2007/2012) as the overarching institution for coordinating security services. The Council is under the jurisdiction of the President of the Republic and is responsible for coordinating the work of security services and other law enforcement

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[43] Official Gazette of the Republic of Serbia 2011b.
[44] Nikač–Juras 2015.
[45] Đurđević–Radović 2012.
[46] Radović et al. 2014.
[47] Džamić–Leštanin 2023.
[48] Official Gazette of the Republic of Serbia 2023.
[49] Official Gazette of the Republic of Serbia 2002, amended in 2018.
[50] Official Gazette of the Republic of Serbia 2002, amended in 2018: Article 12.

agencies.[51] The Bureau for Coordination handles logistics for the needs of the National Security Council, coordinating the operational work of security services and implementing decisions on matters within its jurisdiction.[52]

In the context of combating organised crime, the Council can ensure better multiagency cooperation, faster exchange of information, coordination and joint activities of law enforcement agencies. The Minister of Internal Affairs is mandatory to attend Council sessions as a member, and the Director of Police and chiefs of individual police departments attend upon invitation.

Judicial and other authorities

The Prosecution for Organised Crime is a specialised department of the State Prosecutor's Office with inherent jurisdiction in prosecuting all criminal offences related to organised crime. Like other specialised bodies combating organised crime, the prosecution was established after Serbia signed and ratified the Palermo Convention on combating organised crime.

The competent authorities for combating organised crime, terrorism and corruption are provided for by the Law on the Organisation and Competence of State Authorities in Combating Organised Crime, Terrorism and Corruption (2016/2018): a) Public Prosecution Office for Organised Crime; b) Ministry of Internal Affairs and the relevant organisational unit (Criminal Police Directorate – Department for Combating Organised Crime); c) Special Department of the Higher Court in Belgrade for Organised Crime; d) Special Department of the Court of Appeal in Belgrade for Organised Crime; and e) Special Detention Unit of the District Prison in Belgrade. The law is applied for the detection, prosecution and trial of the following criminal offences: organised crime; the murder of high state officials and armed rebellion; abuse of official duty, giving and receiving bribes related to voting; against the economy; terrorism and related offences; against state authorities and the judiciary.

The Prosecutor's Office for Organised Crime is competent for proceedings throughout the territory of the Republic of Serbia, and it is led by the Chief Public Prosecutor for Organised Crime. Prosecutors and employees have a special legal status due to the risks associated with their work. Within the prosecutor's office, it is possible to establish a specialised Financial Forensics Service that assists in analysing money flows and financial transactions for criminal prosecution. These areas include finance, accounting, auditing, banking, stock exchange and business operations.

Specialised units play a significant role in combating organised crime, as they can be formed with the aim of more effective work in detecting and prosecuting criminal offences.

The Special Court is the colloquial term for a separate court handling cases related to organised crime. As the first-instance court for organised crime within the territory of Serbia, it is the Higher Court in Belgrade, specifically its Special Department for

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[51]   Official Gazette of the Republic of Serbia 2007d.
[52]   Official Gazette of the Republic of Serbia 2007d: Articles 12–14.

Organised Crime.[53] As the second-instance court for criminal offences related to organised crime, the Appellate Court in Belgrade has jurisdiction.

The legal status of judges, employees and other matters are regulated by the provisions of the Law on the Organisation and Competence of State Authorities in Combating Organised Crime, Terrorism and Corruption, as well as by judicial regulations regarding the organisation of courts and prosecutors' offices in Serbia. This particularly applies to assigning judges, etc. to the Special Court. The President of the Higher Court in Belgrade further regulates the work of the first-instance Special Department, and the President of the second-instance Appellate Court follows the same procedure.[54]

Other authorities are primarily state authorities, which, by the nature of their work, complement the police and judicial authorities.

These are primarily the authorities within the Ministry of Finance, such as the Tax Administration and its organisational units: Tax Police, Customs Administration and the Administration for the Prevention of Money Laundering. The National Bank of Serbia also holds significant importance as the central bank, possessing crucial data, resources and personnel capable of monitoring financial flows and potential criminal activities, particularly those related to money laundering and terrorism financing.[55]

Conclusion

Today, organised crime in modern society of the 21st century is a global phenomenon with a pronounced international dimension, similar to terrorism and other severe forms of criminal activity. In this sense, combating organised crime involves a set of activities that have a strong international aspect and require the engagement, anti-criminal solidarity and cooperation of all states and specialised international organisations such as Interpol, Europol and others.

Southeastern Europe and the territories of the former Yugoslavia are particularly vulnerable, as this region has been affected by armed conflicts and severe consequences in recent history. The reconstruction of newly formed states and the establishment of legal systems and functional institutions have been hindered due to the intense infiltration of all forms of crime, especially organised crime and terrorism. Effective combat against this menace requires domestic measures by individual states, a multi-agency approach, and international police and criminal justice cooperation. On a regional level, a significant step forward was the signing of the Convention on International Police Cooperation in the SEE, and the SELEC Convention, based on which numerous bilateral agreements between Serbia and other former Yugoslav states were later concluded, and mechanisms for regional cooperation were established.

The Republic of Serbia currently has developed international cooperation with many countries and international organisations. Cooperation primarily takes place in the field of

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[53] Official Gazette of the Republic of Serbia 2016b, amended in 2018: Article 7.
[54] Official Gazette of the Republic of Serbia 2016b, amended in 2018: Article 8.
[55] Đurđević 2013: 133–148.

combating organised crime, terrorism and other serious forms of criminal activity that deeply disturb the public and cause fear and insecurity in the community. It is about versatile cooperation on bilateral, regional and multilateral levels. Today, our country is highly regarded as a reliable partner by the United States, EU member states, and other significant countries and organisations. A critical aspect of this cooperation relates to personnel education and technical support, with the authors emphasising the role of the University of Criminal Investigation and Police Studies, which has established excellent collaboration with U.S. organisations such as the International Criminal Investigative Training Assistance Program (ICITAP)[56] and the Federal Bureau of Investigation (FBI), the Federal Criminal Police of Germany (BKA) and the Police Academy from Wiesbaden.[57]

We believe that effective combat against organised crime, terrorism and other serious forms of criminal activity cannot be conducted without comprehensive international police and legal cooperation. In this regard, existing procedures should be further streamlined, and the mobility of criminal investigative teams and joint investigative teams should be increased.

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[56]   University of Criminal Investigation and Police Studies 2024b.
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`LAW ENFORCEMENT PRACTICE`

Functioning of the Police under Martial Law

The Experience of Ukraine

Yuliia ZAHUMENNA[1]

The military conflict in Ukraine has created unprecedented challenges for law enforcement agencies, which have had to adapt to new conditions and threats. During martial law, the police perform not only their traditional functions of maintaining public order and combating crime but also contribute to national security and civil protection. This paper examines the key aspects of the Ukrainian police's work under martial law, analysing their adaptive strategies and the effectiveness of their actions. With the onset of hostilities, the police faced a number of new tasks, such as maintaining law and order in combat zones, evacuating civilians, protecting humanitarian corridors and cooperating with military units. A significant role is played by the coordination of actions between various law enforcement and security structures, which allows for rapid response to threats and maintaining stability in regions affected by the conflict.

The adaptation of the police to martial law conditions includes the implementation of new working methods, personnel training and the use of advanced technologies. For instance, the use of unmanned aerial vehicles and surveillance systems helps to monitor situations on the ground and quickly transmit information to command centres. Psychological support for law enforcement officers working in stressful conditions is also a crucial aspect, contributing to their resilience and effectiveness. Ukraine's experience in addressing these challenges can be valuable for other countries facing similar situations. Analysing the adaptive strategies of the Ukrainian police during martial law allows for the identification of best practices and the development of recommendations to enhance the effectiveness of law enforcement agencies in crisis situations.

Keywords: police, martial law, Ukraine, law enforcement, national security, civil protection, adaptive strategies, crisis management, public order, hostilities

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Introduction

Ensuring public safety and order is one of the key responsibilities of the state, particularly in the context of armed aggression and the legal regime of martial law. The Russian invasion of Ukraine in 2022 posed an unprecedented challenge to the entire national security system, including the National Police of Ukraine. In wartime conditions, the effective functioning of law enforcement agencies becomes critically important for maintaining the resilience of the state and society.

The relevance of studying the peculiarities of police activity during martial law is determined by several factors. Firstly, the large-scale armed aggression against Ukraine necessitates the adaptation of the entire security and defence sector to operate under wartime conditions on the national territory. Secondly, the experience of resistance in 2022–2023 has revealed an urgent need to transform police operations in response to new challenges and threats. Thirdly, analysing and generalising best practices in law enforcement activities under extraordinary conditions is essential for improving the regulatory framework and organisational foundations of Ukraine's security sector.

Thus, research on the functioning of the National Police in the context of repelling armed aggression and operating under martial law is highly relevant from both theoretical and practical perspectives. A comprehensive analysis of this experience will allow for the development of scientifically grounded recommendations to enhance the effectiveness of law enforcement activities and strengthen the state's resilience to military threats.

Objectives

The primary objectives of this study are to analyse the impact of martial law on the activities of the police in Ukraine, as well as to examine the adaptive strategies employed by the police to address the new challenges that have arisen as a result of the military conflict. This includes an evaluation of the coordination between various law enforcement and military structures, as well as the implementation of new technologies and methods of operation.

Methods

The study of the activities of the National Police of Ukraine under martial law is based on a comprehensive methodological approach, integrating formal-legal, comparative-legal, sociological and empirical methods. This approach allows for a thorough examination of the legal framework governing law enforcement operations, an assessment of adaptation strategies and an evaluation of the effectiveness of modern technologies in ensuring public security under wartime conditions. The formal-legal method was applied to analyse the regulatory framework governing police operations during martial law. This included an in-depth examination of the Law of Ukraine on the National Police, resolutions of the Cabinet of Ministers, orders of the Ministry of Internal Affairs, and relevant

international legal instruments. The application of this method facilitated the identification of legal foundations, their adaptability to contemporary challenges, and the extent to which legislative changes addressed the realities of law enforcement in wartime. The comparative-legal method was used to analyse the experience of law enforcement agencies in other countries that have operated under martial law or armed conflict. Specifically, the study examined the security and counter-sabotage strategies employed by the police forces of Israel, France and the United States. This method enabled the identification of best practices and innovative solutions that could be adapted to enhance the operational effectiveness of the National Police of Ukraine. The sociological method was utilised to assess the impact of law enforcement activities on societal processes. This included the examination of law enforcement reports, public opinion surveys on trust in the police, and studies on public safety perceptions during wartime. The findings provided insights into the effectiveness of police measures from a social perspective and highlighted the key challenges in police–community relations under crisis conditions. The empirical method involved the analysis of real-life law enforcement operations conducted under martial law. Particular attention was given to civilian evacuation efforts, maintaining public order in humanitarian corridors, countering sabotage and reconnaissance groups, and the deployment of modern surveillance technologies, including unmanned aerial vehicles (UAVs) and video monitoring systems. This approach provided an empirical basis for assessing the practical effectiveness of security measures and law enforcement responses to emerging threats. To synthesise the research findings, the synthesis and system analysis method was applied. This allowed for the formulation of evidence-based recommendations aimed at improving law enforcement strategies and enhancing the overall effectiveness of policing in crisis situations. By integrating legal, comparative, sociological and empirical methodologies, this study provides a comprehensive framework for analysing the transformation of law enforcement practices in wartime Ukraine. The findings contribute to the development of strategic solutions for strengthening police resilience and optimising public safety mechanisms in times of crisis.

Results

The imposition of martial law in Ukraine following the large-scale invasion by the Russian Federation has significantly expanded the role of the National Police of Ukraine. According to the Law of Ukraine on the National Police (2015), its primary responsibilities include ensuring public safety, upholding law and order and protecting citizen's rights and freedoms. In wartime conditions, the police take on additional functions critical to national security and stability.[2]

One of the key wartime duties of the National Police is enforcing curfews and special legal regimes. These measures prevent enemy infiltration, sabotage and other threats. Police officers conduct patrols, identity checks, movement control and rapid responses

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[2]   Shevchenko–Zinchenko 2023.

to violations, ensuring stability in high-risk areas.[3] Another critical task is securing war-affected regions. Officers oversee evacuation routes, shelters and critical infrastructure, reducing the risks of looting, crime and social unrest.[4]

Additionally, the police play a vital role in documenting war crimes. In cooperation with the Prosecutor's Office and international human rights organisations, they collect evidence, record violations and prepare materials for prosecution. These efforts ensure justice and the protection of victims' rights.[5] Collaboration with military units is another strategic priority. Law enforcement assists in vehicle inspections, identifying threats and neutralising enemy agents, reinforcing national security.[6] To enhance operational efficiency, police forces rely on advanced technologies, including UAVs, automated threat detection and digital intelligence systems for rapid decision-making.[7] Moreover, psychological resilience programs help officers cope with extreme stress, ensuring their sustained effectiveness in combat zones.[8] Thus, under martial law, the National Police of Ukraine assumes a multidimensional role, balancing law enforcement, crisis response and national security. Evaluating these wartime strategies is crucial for strengthening legal frameworks and improving emergency response mechanisms.[9]

As part of its European integration efforts and commitments under the EU Association Agreement, Ukraine began introducing the 112 system in 2012, particularly in preparation for the UEFA Euro 2012 Championship. However, the full-scale implementation of the system occurred later, especially after the onset of the war, when the urgent need for efficient coordination of emergency services became apparent. Given this necessity, the Ministry of Internal Affairs of Ukraine undertook a large-scale transformation, not only to enhance the 112 system but also to adapt the forms and methods of work for all central executive authorities within its structure. These efforts aimed to strengthen the state's ability to respond to contemporary security challenges and threats posed by military actions and criminal activity. To achieve this, the Ministry of Internal Affairs of Ukraine launched a series of security projects in 2022, aimed at improving the internal security environment of the state.

One of the key communication projects aimed at ensuring the effective response of state authorities to emergencies is the "Service 112" project. The creation of the "Service 112" communication centre will centralise the organisation of emergency assistance to the population based on the "one-stop-shop" principle, utilising electronic communication technologies. This initiative is designed to streamline and enhance the response of state agencies to various critical situations, improving the overall security landscape within the country.[10]

The outcomes of the implementation of this project include the following:

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[3]   BERENDIEIEVA 2024.
[4]   KRYZHANOVSKA 2023.
[5]   Council of Europe Office in Ukraine 2024.
[6]   FRIEDRICH 2024.
[7]   BERENDIEIEVA–SHEVCHUK 2024.
[8]   Council of Europe Office in Ukraine 2024.
[9]   SHEVCHENKO–ZINCHENKO 2023.
[10] Cabinet of Ministers of Ukraine 2024.

- the operational execution of emergency communications via the single phone number 112 across the entire territory of Ukraine, allowing for voice calls, SMS messages, message exchanges, video and other forms of communication based on the "one-stop-shop" principle
- automatic determination of the caller's location
- remote "visualisation" of the situation at the site of the emergency event
- reduction of response time by emergency services to emergency calls[11]

The "Service 112" project is a significant step towards enhancing the safety of Ukrainian citizens, particularly under the conditions of martial law. Through the centralised organisation of emergency assistance based on the "one-stop-shop" principle, this project ensures rapid response to emergencies, automatic determination of the caller's location and remote "visualisation" of the situation at the site of the incident. The implementation of this project contributes to reducing the response time of emergency services, which is critically important for saving lives and preserving the health of citizens.

The escalation of the crime situation in Ukraine, particularly due to the ongoing military actions, has prompted the National Police and the Ministry of Internal Affairs to focus on developing a comprehensive video surveillance system to strengthen security. As of October 2024, efforts are underway to form a unified integrated video monitoring and surveillance platform, covering key public areas throughout the country. This system aims to integrate more than 50,000 existing video cameras, significantly reducing street crime, improving the efficiency of investigative efforts for "hot pursuit" cases, and enhancing the investigation of war crimes committed by the occupying forces. Additionally, it will serve as a tool for detecting and preventing offenses.[12]

To ensure the legislative framework for this initiative, in February 2024, the Verkhovna Rada of Ukraine introduced a draft Law of Ukraine on the Unified System of Public Safety Video Monitoring.[13] The objective of this bill is not only to ensure national and state security but also to improve the overall level of public safety and order, particularly the safety of citizens' residences and public spaces, through the introduction of a unified video monitoring system that will operate at the state and local government levels.[14]

According to this bill, the objects of video monitoring will include vehicles, public spaces, critical, social, economic, residential, transportation, engineering and other infrastructure. Additionally, the system will cover streets, roads, alleys, pedestrian and bicycle paths, parking lots, government buildings, and facilities of educational and healthcare institutions.

The creation of a unified video monitoring system will improve coordination between central, regional and local authorities, as well as ensure effective interaction with departmental monitoring systems of enterprises and organisations. As a result, this system

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[11]   Bugaychuk 2023.
[12]   Ministry of Internal Affairs of Ukraine 2024.
[13]   The Verkhovna Rada of Ukraine 2024.
[14]   The Verkhovna Rada of Ukraine 2024.

will become an effective tool for maintaining security and preventing offenses at all levels, contributing to the overall enhancement of public safety during wartime.[15]

The police have assumed new functions, such as controlling humanitarian corridors, evacuating civilians and cooperating with military units. This requires not only adapting traditional methods of operation but also integrating modern technologies, including drones and specialised software for data analysis. These innovations enable law enforcement agencies to respond more swiftly to threats and maintain stability in conflict-affected regions, highlighting the critical role they play in ensuring national security.[16]

In January 2023, the Cabinet of Ministers of Ukraine adopted Resolution No. 30, which concerns the establishment of an interregional territorial body of the National Police – the "Liut Brigade" (Ukrainian: ЛЮТЬ, lit. "Fury"). This brigade is tasked with carrying out critical missions in countering armed aggression and participating in security and rescue operations.

The primary objectives of the "Liut Brigade" include participating in repelling and deterring armed aggression, conducting assault and search-and-destroy operations, as well as organising rescue operations to ensure the safety of the population. The brigade is also responsible for territorial defence tasks, detecting and neutralising explosive devices, conducting counter-sabotage operations, aerial reconnaissance, and engaging enemy forces in areas under occupation. In addition, an important aspect of the brigade's work is conducting stabilisation and search-and-filter operations in liberated territories.

The "Liut Brigade" has become a key component of the National Police's efforts to respond to the challenges posed by the ongoing war, highlighting its critical role in ensuring both national and public safety.[17]

Thus, the formation of the "Liut Brigade" represents a significant step in strengthening Ukraine's security system under martial law, and its activities have greatly contributed to maintaining public order and protecting the population during military operations.

As of September 2024, the special evacuation units known as the "White Angels" continue to carry out their vital mission in Ukraine. During this time, these teams have evacuated more than 9,000 people, including over 800 children. They have provided medical assistance to around 300 wounded individuals and transported the bodies of 89 deceased.[18]

Overall, the "White Angels" have delivered more than 700 tons of humanitarian aid to combat zones, including food packages, generators, sleeping bags, and other essential items for civilians affected by the war. The evacuation teams are also documenting the consequences of Russian war crimes, with the aim of using this evidence in international courts.[19]

This work is critically important for ensuring the safety of civilians, and the "White Angels" continue to demonstrate courage and professionalism, saving lives in dangerous conditions.

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[15]   The Verkhovna Rada of Ukraine 2024.
[16]   Ministry of Internal Affairs of Ukraine 2024.
[17]   National Police of Ukraine 2023.
[18]   BUGAYCHUK 2024.
[19]   RBC Ukraine 2024.

The military actions in Ukraine have significantly intensified the issue of effective control over the circulation of firearms, driven by a sharp increase in cases of illegal handling of weapons. In 2023, more than 5,260 criminal offenses were registered under Article 263 of the Criminal Code of Ukraine, which provides for liability for the unlawful handling of firearms, ammunition, or explosives.[20] This statistic reflects the scale of the problem and the need for the implementation of effective mechanisms to control the circulation of firearms in the country. Furthermore, the issue of arms circulation is becoming more complicated due to new challenges. For example, many FPV kamikaze drone pilots participating in military operations independently equip their drones with improvised explosive devices (IEDs). According to traditional interpretations of Article 263-1 of the Criminal Code of Ukraine, such activities may be regarded as illegal manufacturing of ammunition, which further complicates the legal regulation of this area.

To enhance the effectiveness of arms control, the Ministry of Internal Affairs of Ukraine (MIA) has introduced a new information project – the Unified Register of Weapons (ERZ). This register has been developed to automate and improve the processes related to the circulation of firearms, ammunition, explosives and key firearm parts with identification numbers. The primary purpose of the register is to ensure easy access to information about ownership and the circulation of weapons, as well as their registration and verification. The register allows relevant state bodies to share data, ensuring reliable information storage and effective control over the circulation of arms.

The issue of arms circulation became especially critical in the early days of the war when a significant number of weapons were distributed to citizens who joined the Territorial Defence Forces and volunteer formations. These citizens are ready to defend the country, and therefore, during martial law, the weapons should remain in their possession unless they are the subject of a criminal investigation. Currently, approximately 1.2 million registered firearms are in the hands of the population, including hunting, smoothbore, rifled firearms and rubber-bullet guns, among others.[21] However, as of today, not all weapons have been entered into the Unified Register of Weapons. As of June 2024, the register recorded 371,000 units of firearms, while the number of registered owners is only 256,000, as some individuals possess multiple firearms. The process of updating the data is ongoing, and by 2026, the register is expected to be fully operational.[22]

On 3 February 2022, the Verkhovna Rada of Ukraine passed in the first reading of the draft Law of Ukraine on the Right to Civil Firearms. This draft law aims to regulate the circulation of firearms among the civilian population by defining the legal status of firearm ownership. In particular, it proposes to define the concept of ownership of civil firearms; classify civil firearms; develop and implement the procedure for creating and maintaining the Unified State Register of Civil Firearms; and establish general principles for the circulation of firearms and ammunition, as well as the procedure for obtaining the right to possess them. This draft law is an important step towards regulating firearm circulation among civilians and ensuring appropriate state control in this area.

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[20] Article 263 of the Criminal Code of Ukraine.
[21] Дзеркало тижня 2024.
[22] Юрліга 2024.

At the end of March 2024, the Verkhovna Rada considered a new draft law, No. 9538, aimed at improving the regulation of firearm handling, particularly concerning civil firearms during martial law. The draft Law on Ensuring Civilian Participation in the Defence of Ukraine was passed in the first reading and is intended to regulate the issues of obtaining, declaring and using firearms by civilians during martial law. Special attention is given to weapons issued to civilians during the war. After the end of martial law, firearm owners will be required to return their weapons to the police within 90 days. This draft law also ensures that civilians who used weapons against aggressors during martial law will not be held liable for their use under specified conditions.

Despite the positive trends related to the implementation of automated control systems, a serious problem with unregistered firearms in the hands of civilians may arise after the war. According to international partners, the number of unregistered firearms after the war could reach three million. This poses a threat to social stability in the country, as uncontrolled circulation of firearms could potentially lead to an increase in crime and disruption of public order. Therefore, regulating the circulation of civil firearms is one of the most critical issues affecting public safety in Ukraine.

In July 2022, the Law of Ukraine on the State Registration of Human Genomic Information was adopted, which provides for the creation of a national system of biometric identification and verification. This law regulates the processes of identifying individuals who have committed criminal offenses, searching for missing persons, identifying unidentified bodies and identifying individuals who cannot provide information about themselves due to health conditions or other circumstances.[23]

The National Police of Ukraine actively implements biometric technologies such as fingerprinting and facial recognition for identifying individuals. The use of portable fingerprint scanners enables the police to quickly verify a person's identity by their fingerprints at the scene of an arrest. This significantly increases the efficiency of law enforcement agencies, particularly under martial law conditions, when the speed and accuracy of identification are critically important.

During martial law, when the number of crimes and missing persons cases is increasing, biometric technologies become an indispensable tool for the police. They allow for the rapid identification of individuals, aiding in solving crimes and locating missing persons. Furthermore, the automation and structuring of biometric identification processes help reduce the workload on law enforcement agencies and improve the accuracy of identification.[24]

Despite the significant advantages, the implementation of biometric technologies also presents challenges. These include issues related to personal data protection and ensuring the confidentiality of information. It is crucial that these technologies are used in compliance with the law and with respect for human rights.[25]

In the system of the Ministry of Internal Affairs of Ukraine (MIA), the Expert Service is responsible for maintaining the register of DNA profiles. Additionally, specialised

[23]   The Verkhovna Rada of Ukraine 2024b.
[24]   State Migration Service of Ukraine 2019.
[25]   Klymchuk 2021.

units handle biometric identification issues (fingerprints, facial recognition). While this technology has long been used in the law enforcement sector, there is now a need for the automation and structuring of these processes.

The MIA of Ukraine aims to systematise and adapt the relevant records for quicker use in practical work. For instance, when detaining an unidentified person, police officers will be able to use portable fingerprint scanners, enabling them to verify the individual's identity through unique fingerprints. If it is found that the detainee is listed in a relevant database, including the wanted persons database, they will act accordingly and follow other law enforcement procedures.

The implementation of biometric technologies by the National Police of Ukraine under the legal regime of martial law is a necessary and effective step in ensuring security and maintaining public order. These technologies allow for the rapid identification of individuals, solving crimes, locating missing persons and identifying the deceased, which is especially important during an armed conflict.

In its activities under martial law, the National Police of Ukraine actively uses unmanned aerial vehicles (UAVs), which enables them to effectively carry out a range of key tasks in ensuring public safety and order. The integration of drones into law enforcement practices has become a vital tool for monitoring territories, documenting violations and gathering evidence during investigations. The role of drones is particularly significant in recording the aftermath of military actions, documenting crimes resulting from Russian aggression and assisting in coordinating rescue operations.

As part of the preparation of specialists for working with UAVs, in February 2023, a training program for drone operators was launched at one of the educational institutions of the Ministry of Internal Affairs, responding to the urgent need for the use of drones in law enforcement activities during the war.[26]

In the context of martial law, when many regions of Ukraine are under threat of shelling and active hostilities, drones are an indispensable tool for assessing the situation in dangerous areas, monitoring movements and gathering information on potential threats. This enables the National Police of Ukraine to make quick decisions and ensure the safety of citizens, even in the midst of active combat. As a result, the integration of drones into law enforcement activities significantly enhances the effectiveness of police operations, providing more reliable control over public order during wartime.

New challenges, threats and stressful situations arising under martial law necessitate the implementation of a systematic psychological support framework for the employees of the National Police of Ukraine. It is important to note that even under normal circumstances, police work involves numerous stress factors, such as irregular working hours, constant interaction with offenders, the need for rapid decision-making in high-risk situations and a high level of responsibility. However, during martial law, these factors intensify significantly.

Police officers are required to operate in combat zones, face threats to their own lives and health, and deal with victims of violence and destruction. Frequent relocations, uncertainty and separation from their families further exacerbate stress levels. Performing

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[26]   Ukrainian Military Portal 2023.

law enforcement duties in such extreme conditions results in increased emotional and physical strain, which can lead to burnout, stress disorders, post-traumatic stress disorder (PTSD) and other psychological challenges. Therefore, ensuring adequate psychological assistance tailored to the specific demands of policing during wartime becomes an essential component of support for law enforcement personnel.

Under martial law, psychological support for police officers includes both immediate assistance and systematic measures to prevent stress-related conditions. National Police psychologists and other units of the Ministry of Internal Affairs are actively working to create conditions that promote emotional stability among employees. Key elements of this work include regular stress management consultations, training and individual psychological support for those working in high-risk areas.

In addition, special attention is paid to the psychological rehabilitation of law enforcement officers who have experienced traumatic events while on duty. Due to active combat operations, police officers frequently encounter difficult situations that require particular attention from psychological services. Rehabilitation measures for restoring the mental health of employees include individual counselling with psychologists and group therapy sessions.[27]

A particularly pressing and sensitive issue is the rehabilitation of the personnel of the Ministry of Internal Affairs who have been released from captivity. The return to normal life for these servicemen is a complex and lengthy process that requires a comprehensive approach, including both physical and psychological support. The first stage of rehabilitation involves medical examinations by various specialists, including trauma surgeons, dentists, urologists, surgeons, psychiatrists and psychologists. These assessments help to identify physical injuries as well as evaluate the psychological condition of the freed servicemen.

Psychological support is a particularly important part of the rehabilitation process, as many servicemen suffer from post-traumatic stress disorder (PTSD) and other psychological consequences after captivity. Each serviceman undergoes an individual recovery process that may last from several months to several years, depending on the nature of their experience.

To draw attention to the issue of rehabilitating servicemen released from captivity, the Ministry of Internal Affairs of Ukraine presented the documentary film "The Way Home". This film tells the difficult story of the servicemen's journey from the moment of their release to their first steps in returning to peaceful life. The film crew accompanied the servicemen during the initial hours after the exchange, documenting their physical and psychological state, as well as the process of their early rehabilitation.[28]

The film vividly demonstrates the stages of medical and psychological assistance and emphasises the importance of rest and recovery after the harrowing experiences in captivity. These measures are crucial for the soldiers' adaptation to new circumstances and their return to normal life.

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[27]   ROMANENKO 2024.
[28]   Ministry of Internal Affairs of Ukraine 2024.

Therefore, the implementation of psychological support for the personnel of the National Police of Ukraine under martial law is a key factor contributing to their emotional stability and maintaining their effectiveness in performing their duties. This is critically important for maintaining law and order in the country during times of crisis.

Conclusions

The findings of this study confirm that the activities of the National Police of Ukraine have undergone significant transformations due to the imposition of martial law. Under these new conditions, the police have not only maintained their traditional law enforcement functions but have also expanded their role to include controlling humanitarian corridors, evacuating civilians, collaborating with military units and countering sabotage groups.

One of the key factors enabling the police to adapt effectively has been the integration of modern technologies. The introduction of unmanned aerial vehicles (UAVs) has significantly enhanced territorial surveillance and rapid threat response. Additionally, the implementation of video surveillance systems, comprising over 50,000 cameras, has strengthened public safety oversight, particularly in conflict-affected areas. Furthermore, the establishment of the Unified Register of Weapons has improved state control over firearms circulation, preventing potential crime surges in the post-war period.

Psychological support for law enforcement personnel has also been a crucial aspect of police operations. Given the continuous exposure of officers to high-risk environments and extreme stress factors, rehabilitation programs have been introduced to mitigate emotional burnout and prevent post-traumatic stress disorder (PTSD). Psychological assistance initiatives, including individual consultations and group therapy, have become an integral part of police support mechanisms during crisis situations.

In addition to technological advancements and social support, legislative reforms have played a pivotal role in strengthening law enforcement capabilities. The adoption of the Law of Ukraine on the Unified System of Public Safety Video Monitoring has contributed to enhancing public security, while updated regulations on civilian firearms circulation have reinforced safety measures for the general population. These legal adjustments are crucial in preventing the unlawful proliferation of weapons after the war.

The establishment of specialised police units has further improved the effectiveness of law enforcement operations. The "Liut" Brigade, for instance, has been actively involved in assault, stabilisation and defence missions in de-occupied territories, enabling a swift response to security threats. Simultaneously, specialised evacuation teams known as the "White Angels" have conducted over 9,000 evacuations, rescuing more than 800 children and delivering over 700 tons of humanitarian aid to affected communities.

Given these findings, Ukraine's experience in maintaining law and order under martial law could serve as a model for other nations facing similar security challenges. The use of advanced technologies, the expansion of police responsibilities in crisis situations, and a comprehensive approach to psychological support represent key strategies that could be adapted for international law enforcement practices.

Future research should focus on assessing the long-term implications of these transformations, particularly concerning the reintegration of military personnel into civilian life, the control of illegal arms circulation and the overall impact of war on crime rates in Ukraine. A thorough examination of these factors will enable the development of effective law enforcement strategies for crisis and post-crisis conditions.

Thus, the activities of the National Police of Ukraine during wartime demonstrate a high degree of adaptability, effective resource management and innovative technological applications. The strategic flexibility exhibited by law enforcement agencies highlights their critical role as a cornerstone of national security and societal stability.

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Education in Police Training

A Case Study of the European Training Platform on Domestic Violence[1]

Sérgio FELGUEIRAS,[2] Sónia M. A. MORGADO[3]

The Covid–19 pandemic has significantly impacted police higher education in Portugal, necessitating a shift to web-based learning environments. This study underscores the transformative potential of digital education in improving police training using the European Training Platform on Domestic Violence as a case study. The study employs a multiple-methods approach, combining a case study analysis of the platform's architecture, modules and features with a scoping review of the literature on digital education in police training. It draws on constructivist principles and the SCRUM framework to analyse the platform's pedagogical approach. The analysis highlights the platform's strengths in promoting active engagement, critical thinking and continuous professional development. It also reveals the potential of digital education to foster collaboration, knowledge sharing and proactive intervention in addressing domestic violence. This research underscores the transformative potential of digital education for police training, offering insights into how digital platforms can be leveraged to enhance professional development and improve responses to critical issues like domestic violence.

Keywords: police training, e-learning, IMPROVE, domestic violence

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Introduction

The landscape of police work is in constant flux, shaped by evolving societal demands, technological advancements and the emergence of new forms of criminality. This dynamic environment necessitates a continuous re-evaluation of police education and training to ensure that officers are equipped with the knowledge, skills and competencies required to effectively address these challenges.[4] Traditional training models, often characterised by their emphasis on physical conditioning and rote learning, are proving insufficient in preparing officers for the complexities of modern policing.

Digital education models offer a promising avenue for transforming police training by providing innovative and engaging learning experiences. These models leverage technology to create interactive and immersive learning environments that cater to diverse learning styles and promote deeper understanding. E-learning platforms, virtual reality simulations and online collaborative tools are just some examples of how technology can be integrated into police training to enhance its effectiveness and adjusted to society challenges.[5]

The shift towards digital education, hybrid models and the new educational ecosystem is not merely a matter of adopting new technologies; it represents a fundamental shift in pedagogical approaches.[6] Constructivist theory, which emphasises active learning and knowledge construction through experience and interaction, provides a theoretical framework for designing and implementing digital learning environments that foster critical thinking, problem-solving and collaboration.

In this context, the SCRUM principle, a framework widely used in agile software development, emerges as a valuable tool for structuring and managing digital learning experiences. SCRUM emphasises iterative progress, close collaboration and continuous feedback, enabling learners to actively participate in the learning process and adapt to changing requirements. The application of SCRUM in police education can facilitate the development of essential skills such as critical thinking, problem-solving and teamwork, which are vital for effective policing in the 21st century.

This paper delves into the transformative potential of digital education in police training, focusing on the European Training Platform on Domestic Violence[7] as a case study. This platform exemplifies how technology can be leveraged to create engaging and accessible learning experiences for police officers, providing them with the knowledge and skills necessary to effectively respond to domestic violence incidents.

Through a comprehensive analysis of the platform's architecture, modules and features, we explore how it integrates constructivist principles and the SCRUM framework to foster active learning and skill development. Furthermore, we examine the platform's role in promoting collaboration and knowledge sharing among police officers across

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[4]   Felgueiras 2024; Morgado–Felgueiras 2021.
[5]   Morgado–Felgueiras 2021.
[6]   Andryukhina et al. 2021; Aparício–Bacao 2013; Chen et al. 2012; Chen et al. 2010; Guo et al. 2016; Schwarz et al. 2015; Sequeira–Morgado 2022; Shao 2018; Steiner et al. 2013; Wolff et al. 2021.
[7]   See European Training Platform on Domestic Violence s. a.

Europe, highlighting its potential to enhance cross-border cooperation in addressing domestic violence.

By showcasing the European Training Platform on Domestic Violence as a successful example of digital education in police training, this paper aims to inspire further exploration and adoption of innovative pedagogical approaches that leverage technology to equip officers with the skills and competencies needed to navigate the complexities of modern policing.

Theoretical framework: a SCRUM–inspired approach

This study's theoretical foundation is grounded in constructivism, a learning theory that posits knowledge acquisition as an active and constructive process. Learners build understanding through experiences and interactions, rather than through passive reception.

Sprint 1: Foundational learning theory

The primary theoretical framework is constructivism, which posits that learning is an active and constructive process. Learners build knowledge through experiences and interactions, not through passive reception. This aligns with SCRUM principles that emphasise collaboration, critical thinking and problem-solving as key components of effective learning environments. This is particularly relevant to police education, where the development of physical and mental capabilities is essential.

Sprint 2: Digital ecosystems and learning environments

The study also incorporates the concept of digital ecosystems, where technology, pedagogy and space intersect to create dynamic learning environments.[8] This perspective acknowledges the importance of both biotic factors (learners, teachers, content) and abiotic factors (technologies) in shaping digital education. The evolution of these environments is marked by a shift from traditional teaching methods to the integration of e-learning, online learning and immersive technologies.

- Evolution of learning: Traditional teaching has long incorporated technological advancements, albeit gradually.[9] The growth of e-learning and events like the SARS-CoV-2 pandemic[10] have accelerated the adoption of digital education.
- Key concepts and definitions: Key concepts such as e-learning, distance education, web-based learning, digital education systems and online learning are explored. These concepts involve computer-assisted instruction, synchronous and asynchronous learning[11] and networked learning systems that support

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[8] Moreira et al. 2020.
[9] Sun et al. 2008.
[10] Sun et al. 2008; Murphy 2020.
[11] Zinn 2000.

cooperation and knowledge sharing.[12] Digital learning ecosystems involve the interaction of inhabitants, digital organisms and the digital environment.[13]

– Technology's role: The knowledge shared between givers and receivers is facilitated by technology.[14] While online learning focuses on knowledge acquisition through the internet,[15] e-learning is supported by learning technologies, instructional strategies and pedagogical models. Instructional strategies like collaboration, articulation, reflection, problem-solving and exploration are enabled by learning technologies such as communication tools, multimedia tools and management systems. Digital learning also intersects with open education practices and access to networks.[16]

– Learning diversity and flexibility: Digital education environments aim to augment individuals and organisations. The use of IoT can enrich the learning environment. Learning can be activist, reflector, theorist, or pragmatist, aligning with Kolb's learning cycle.[17] Distance learning has evolved from paper-based media to self-paced, individualised instruction using technology.[18] These concepts draw from behaviourism, cognitivism and humanism, personalising knowledge through interactive synchronous packages and virtual face-to-face environments.[19]

– Benefits and evolution: The evolution of these definitions is ongoing due to technological advancements, increasing accessibility and the reduction of time, physical distance and spatial restrictions. Benefits include equity, information availability, learning speed, material accessibility, independent work and digital communication with educators. This evolution emphasises self-determined learning and heutagogy.[20]

– Virtual environments: The "technologies momentum"[21] drives the evolution of virtual environments from 2D to 3D and immersive experiences, incorporating augmented reality.[22] VR environments offer immersion, interaction and visualisation,[23] allowing for controlled manipulation of variables to enhance understanding of police actions and counteractions.[24]

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[12] MOREIRA et al. 2020.

[13] MOREIRA et al. 2020.

[14] GRABINGER–DUNLAP 1995; GODWIN-JONES 2012; LEVY 1997; ISMAIL 2001; LEE–LEE 2008; LEE et al. 2005; LUDVIGSEN–MØRCH 2010; McAULEY et al. 2010; MØRCH 2013; ROSENBERG 2001; ROVAI 2004; ZINN 2000.

[15] SUN et al. 2008.

[16] RENNIE–SMYTH 2019.

[17] MINIANO–RUI 2020.

[18] TOMEI 2008; CASAROTTI et al. 2002.

[19] SEQUEIRA–MORGADO 2022.

[20] RENNIE–SMYTH 2019.

[21] ZHANG et al. 2006.

[22] SEQUEIRA–MORGADO 2022.

[23] PETRI et al. 2018.

[24] FAURE et al. 2020.

Sprint 3: Emerging trends and AI integration

Recent developments in artificial intelligence (AI) have profound implications for police education, particularly in training environments. Case studies presented at the Annual Conference of the Association of European Police Colleges illustrate how AI can revolutionise police training.

- *AI applications:* Barnucz (2024) emphasised the openness of students to adopting new digital tools, often in combination with traditional methods.[25] Augmented reality (AR) technology, for example, allows students to interact with digitally created crime scenes, enhancing the learning experience.[26] Zrihen (2024) reflected on AI's potential to enhance police training by creating hypothetical crime scenarios, aiding in decision-making training, and identifying weaknesses in training programs.[27] Niehaus and Schneider (2024) presented an AI-assisted system that simulates child interviews for training criminal investigators, using large language models (LLMs) to generate virtual child victims and provide an interactive and realistic environment for interview practice.[28]
- *Challenges and considerations:* Matiushkova (2024) noted that AI-generated images of suspects based on witness descriptions sometimes failed to present accurate results, especially for female suspects, highlighting the need for ongoing improvement of the technology.[29] Wittfoth (2024) presented warnings about tools such as DeepFaceLab, DALL·E 3, WormGPT and FraudGPT, which can be misused in cybercrime.[30]

Ongoing development: Towards proactive policing and the role of platforms like the European Training Platform on Domestic Violence

To address the evolving challenges of the criminal eco-environment, there is a growing recognition that technology must be embedded in the learning process to enhance the proactiveness of policing.[31] This includes leveraging technologies like IoT to create richer learning environments and virtual scenarios that simulate real-world situations, as well as utilising platforms like the European Training Platform on Domestic Violence to provide accessible and up-to-date training on specific issues such as domestic violence. These platforms can serve as key tools in the ongoing development of police education, enabling continuous learning, collaboration and the dissemination of best practices.

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[25] Barnucz 2024.
[26] Barnucz 2024.
[27] Zrihen 2024.
[28] Niehaus–Schneider 2024.
[29] Matiushkova 2024.
[30] Wittfoth 2024.
[31] Morgado et al. 2024.

This iterative approach, inspired by SCRUM, allows for a structured and adaptable exploration of the theoretical landscape, incorporating new developments and addressing emerging challenges in digital education for police training.

Method

This research employed a multiple-methods approach, combining a case study analysis with a scoping review.

The primary focus of this study is a case study of the European Training Platform on Domestic Violence (https://training.vimprodo.eu/). This platform was selected due to its relevance to the growing emphasis on digital education in police training and its specific application to a critical area of police work: domestic violence intervention. The case study involved a detailed examination of the platform's training and teaching modules designed for police personnel. Specifically, the analysis focused on the platform's architecture, including its user interface, navigation and accessibility features. The module content was reviewed by analysing their learning objectives, pedagogical approaches and the range of topics covered (e.g. forms and dynamics of domestic violence, risk assessment, legal frameworks). An examination of the platform's interactive tools, multimedia elements (videos, exercises), and assessment methods were used to enhance engagement and knowledge retention. The analysis focused on how the platform incorporates constructivist principles (active learning, knowledge construction) and the SCRUM framework (iterative progress, collaboration) to facilitate learning.

To provide a broader context for the case study and to explore the theoretical underpinnings of digital education in police training, a scoping review was conducted. This review aimed to map the existing literature on e-learning, distance learning and virtual environments in the context of police education. The review involved a systematic search of scientific databases, including Google Scholar, EBSCO, Scopus, B-on and Latin Index. The search strategy used relevant keywords such as "e-learning", "digital education", "police training", "virtual reality", "distance learning" and "web-based learning". The inclusion criteria focused on studies that explored the application of digital technologies in police education and training. The extracted data included key concepts, theoretical frameworks (e.g. constructivism, digital ecosystems), and emerging trends in the field (e.g. AI in police training, hybrid learning models). The synthesis involved a thematic analysis of the literature to identify common themes and research gaps.

This multiple-methods approach allows for a comprehensive examination of digital education in police training. The case study provides a detailed look at a specific platform and its features, while the scoping review offers a broader understanding of the theoretical and empirical landscape.

Case study: European Training Platform on Domestic Violence

The European Training Platform on Domestic Violence (DV)[32] is a valuable resource for police officers tackling DV. It offers comprehensive training and resources through a user-friendly interface, diverse modules and interactive features. The platform equips officers with the knowledge, skills and competencies necessary to effectively respond to DV incidents and contribute to creating safer communities.

Available in multiple languages, including German, English, Spanish, Finnish, Austrian, Hungarian, Portuguese and French, the platform caters to a diverse audience. Its user-friendly interface facilitates easy navigation and access to information, ensuring that officers can quickly find the resources they need. The modular design allows for flexibility in training, enabling officers to tailor their learning to their specific needs and areas of focus. The platform also incorporates multimedia elements, such as videos and interactive exercises, to enhance engagement and knowledge retention, reflecting a commitment to contemporary pedagogical principles.

The platform offers a range of modules (ten) covering various aspects of DV:
- Module 1: Forms and dynamics of domestic violence: This module provides a foundational understanding of DV, including its various forms, underlying causes and impact on victims.
- Module 2: Indicators of domestic violence: This module focuses on recognising the signs and indicators of DV, enabling early identification and intervention.
- Module 3: Communication in cases of domestic violence: This module explores effective communication strategies for interacting with victims and perpetrators of DV, with an emphasis on de-escalation techniques.
- Module 4: Police investigation and legal proceedings: This module addresses specific aspects relevant to the police's role in responding to DV, including investigation procedures and legal frameworks.
- Module 5: Risk assessment and safety planning: This module guides professionals in assessing and managing risks associated with DV cases, developing safety plans to protect victims.
- Module 6: International standards and legal frameworks in Europe: This module provides an overview of the international and European legal frameworks relevant to DV, ensuring that professionals are aware of their obligations and responsibilities.
- Module 7: Principles of inter-organisational cooperation in cases of domestic violence: This module emphasises the importance of collaboration and coordination among different sectors in responding to DV.
- Module 8: Stereotypes and unconscious bias: This module addresses the issue of stereotypes and unconscious bias, promoting awareness and strategies for mitigating their impact on DV cases.

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[32]   European Training Platform on Domestic Violence s. a.

- Module 9: Self-care: This module focuses on the importance of self-care for professionals working with DV cases, providing strategies for managing stress and promoting well-being.
- Module 10: Line managers in cases of domestic violence: This module explores the role of line managers in supporting staff dealing with DV cases and creating a safe and supportive workplace.

Each module includes downloadable fact sheets that summarise key information and provide quick reference guides for professionals. These fact sheets serve as valuable resources for ongoing learning and support in daily practice.

While the exact number of quizzes and knowledge assessments within each module is not specified, the platform does incorporate these elements to reinforce learning and assess understanding of the module content. These interactive features provide immediate feedback and contribute to a more engaging and effective learning experience.

The platform's multifaceted approach, combining comprehensive modules, interactive features and a user-friendly interface, empowers officers with the knowledge and skills necessary to effectively respond to DV incidents and contribute to creating safer communities. The integration of hybrid learning models, blending online and face-to-face education, has been particularly effective in retaining students and enhancing engagement.

Results and discussion

This section aims to present a clear and detailed analysis of the European Training Platform on Domestic Violence, aligning it with the study's objectives and the reviewer's concerns.

The European Training Platform on Domestic Violence is a valuable resource for police officers and other professionals engaged in addressing domestic violence. It provides comprehensive training and resources through a user-friendly interface, a range of modules and interactive features. The platform is designed to equip users with the knowledge, skills and competencies necessary to effectively respond to domestic violence incidents and contribute to creating safer communities.

The platform's accessibility is enhanced by its availability in multiple languages, including German, English, Spanish, Finnish, Austrian, Hungarian, Portuguese and French. Its user-friendly interface ensures ease of navigation and access to information. The platform's modular design allows for flexibility in training, enabling users to tailor their learning to specific needs and areas of focus. The incorporation of multimedia elements, such as videos and interactive exercises, enhances engagement and knowledge retention. The platform offers ten modules covering various aspects of domestic violence: Forms and dynamics of domestic violence; Indicators of domestic violence; Communication in cases of domestic violence; Police investigation and legal proceedings; Risk assessment and safety planning; International standards and legal frameworks in Europe; Principles of interorganisational cooperation in cases of domestic violence; Stereotypes and unconscious bias; Self-care and line managers in cases of domestic violence.

Each module includes downloadable fact sheets that summarise key information and provide quick reference guides. While the exact number of quizzes and knowledge assessments varies, the platform incorporates these elements to reinforce learning and assess understanding.

The platform's multifaceted approach, combining comprehensive modules, interactive features and a user-friendly interface, empowers users with the knowledge and skills to effectively respond to domestic violence incidents. The integration of hybrid learning models has been effective in retaining students and enhancing engagement.

The findings highlight the transformative potential of digital education in enhancing police training outcomes. As Morgado et al. (2024) assert, "technology has come to stay",[33] emphasising the need for a paradigm shift in education. Overcoming resistance, lack of coordination and standardisation is crucial to embrace this challenge and adapt educational forms accordingly.

The European Training Platform on Domestic Violence exemplifies the provision of both theoretical and practical resources to enhance the knowledge and skills of police personnel. Establishing a pedagogical dynamic to overcome cultural inertia among different target groups is desirable. In this context, the use of micro-credentials emerges as an appropriate solution, particularly for frontline responders dealing with domestic violence.

The platform facilitates knowledge sharing and fosters collaboration across sectors, enhancing the capacity of professionals to address domestic violence cohesively. By leveraging Europe's socio-cultural diversity, it can inspire and motivate the promotion of best practices adaptable to varying local contexts, while adhering to universal principles of human rights and victim protection.

The micro-credential format offers flexible, accessible, immersive, interactive and targeted learning opportunities, empowering frontline responders to stay updated with evolving challenges and methodologies in domestic violence intervention. This can lead to improved cross-border cooperation and the development of standardised yet adaptable response frameworks that prioritise victim safety and well-being.

Conclusion

This study examined the European Training Platform on Domestic Violence, demonstrating its transformative potential in police training and domestic violence intervention. A key strength of the platform lies in its ability to foster collaboration and knowledge sharing among professionals from different sectors. The platform's design facilitates the creation of communities of practice and networks of observation, promoting proactive intervention and enhancing the effectiveness and consistency of responses to domestic violence across various regions and contexts. Furthermore, the use of micro-credentials and virtual learning environments increases accessibility and enables large-scale capacity building, ultimately leading to improved protection and support for victims of domestic violence.

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[33] Morgado et al. 2024: 398.

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Innovative Tools and Methods for Education and Research on Modern Terrorism Studies

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The complex phenomenon of modern terrorism is constantly evolving, posing challenges not only to counterterrorism units and first response forces, but also researchers in the field and teachers of terrorism studies and counterterrorism.

This paper will review the historical development of modern terrorism, global and regional trends, and the strategies and tactics of terrorist groups and individuals, counterterrorism strategies and responses to those changes. After a review of theoretical and historical background, we will focus on the challenges and opportunities in teaching theoretical knowledge about terrorism and counterterrorism methods. The presentation of the subject in higher education may differ in many respects from classical teaching methods and tools, and therefore case studies and best practices from home and abroad will be presented. Methods that promote interactive, experiential, cooperative and collaborative learning will be presented. The theoretical basis for this is the pedagogical school of problem-based learning and teaching.

In addition to education, there is a clear need to provide an overview on the research of terrorism and its methodological issues and possibilities on that field, for example regarding innovative research tools, including big data analysis, network analysis and artificial intelligence, which allow for better understanding and potentially even the forecasting of terrorist activities.

The aim of the study is to provide a comprehensive overview of the current state of terrorism in modern times and to present innovative approaches that can contribute to a better understanding of the phenomenon of terrorism.

Keywords: terrorism, history of terrorism, problem-based education, innovative research tools

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Introduction

The complex phenomenon of modern terrorism is constantly evolving and has many facets. These changes are challenging counterterrorism and first responder units all around the globe, as well as researchers and, last but not least, the educators and trainers of terrorism studies and counterterrorism in higher education.

This paper will review the historical development of modern terrorism to show the birth of modern counterterrorism pillars and reflect the needs that must be addressed in education. After that bird's-eye view, we will focus on the challenges and opportunities in teaching theoretical knowledge about terrorism and counterterrorism methods.

In recent decades, the methods and tools of higher education have evolved considerably, with the emergence of modern tools and methods. Methods that promote interactive, experiential, cooperative and collaborative learning will be presented. The Covid–19 pandemic had a significant impact on higher education. After the era of online education and exams, the development of large language models (LLM) and various forms of artificial intelligence (AI) represent new challenges and opportunities. How is university education evolving in response to these trends?

After reviewing the situation, challenges and opportunities for higher education, we need to consider how the presentation of terrorism studies in higher education differs from other fields. The first step is to show that there is a place for terrorism-related studies and materials in higher education. Of course, there is. The 20th and 21st centuries have seen significant changes in the dynamics of global terrorism and radicalisation, with increasingly sophisticated methods being adopted by terrorist groups and lone actors. These changes have posed new challenges for counterterror agencies, the intelligence community and regular police units worldwide. As such, the education and training of future professionals and experts in counterterrorism have become crucial not only for national security but also for international peace and stability.

We will show its connection to other disciplines and scientific areas. Along these lines, we need to examine whether terrorism studies should be bound, connected and presented alongside other areas or taught independently. Lastly, we need to consider whether traditional tools and methods are still effective or if we need something different. One of the fundamental questions is: in teaching a topic that reflects one of the most serious security challenges of modern times, can we incorporate new methods, or should we stick to traditional, frontal teaching methods? If so, how can we use, for example, the achievements of constructivist, behaviourist, or even humanist schools of pedagogy in terrorism studies education?

Counterterrorism education serves the dual purpose of equipping students with theoretical knowledge of the causes, methods and impacts of terrorism, while also providing analytical skills. How much of the curriculum should be dedicated to practical knowledge in higher education programs? Where is the balance between theory and practice? Furthermore, what should be the depth and nature of this practical knowledge? The aim of these studies is to provide a comprehensive overview of the current state of terrorism and to present innovative approaches that can contribute to a better understanding of the

phenomenon of terrorism. So, where is the line between academic training and university education?

The concept of competence will help us answer this question. Competence is often defined as an individual's ability to appropriately apply their knowledge, skills and attitudes to solve various situations. Ehlers (2013) describes competence as "the combination of knowledge, skills, attitudes, and other personal attributes that enable an individual to effectively solve specific problems or tasks". Mulder (2017:8) further refines the concept of competence in education and the workplace by stating that competencies are complex abilities that encompass both theoretical knowledge and practical application, together forming the basis for successful activities. Competency-based higher education has become dominant in recent years, but what are the most important competencies in the education of terrorism and counterterrorism studies?

The rise of digital platforms, the use of artificial intelligence (AI), and the increased reliance on data analytics have transformed the ways in which terrorism is countered and predicted. These technological advancements have also impacted the methodologies used in terrorism and counterterrorism education, as students are now trained to use tools for data analysis, intelligence, or knowledge related to cyberspace. The use of real-time data, interactive simulations and virtual reality in educational programs has greatly enhanced the ability of students to experience and respond to crisis situations in controlled environments. As Selwyn (2016) points out, digital tools used in higher education, such as e-learning platforms, data visualisation tools and digital libraries, allow learners to access learning materials faster, engage in more interactive learning experiences and personalise their learning. At the same time, he points out that these tools present new challenges for higher education institutions and educators. Overall, it is worth analysing in detail the use of digital and modern tools.

In addition to education, there is a clear need to provide an overview of terrorism research and its methodological issues and possibilities, for example, innovative research tools, including big data analysis, data visualisation, network analysis and artificial intelligence, which allow for better understanding and possibly even forecasting of terrorist activities.

In summary, this paper explores the methodologies used in teaching counterterrorism, focusing on the integration of technology, the balance between theoretical and practical knowledge, and the use of different teaching methods to prepare students to become experts. In addition, the paper will examine the current challenges faced by teachers in terrorism studies and discuss the future direction of terrorism and counterterrorism education.

The evolution of modern terrorism and its impact on scientific research and education

The phenomenon of terrorism has evolved dramatically in the modern era, shaping not only the global security landscape but also the ways in which terrorism is studied and taught in academic institutions.

There is no uniformly accepted approach to the origins of modern-day terrorism. David C. Rapoport's four-wave model is one of the best-known analytical frameworks for the development of modern terrorism, distinguishing four distinct periods based on the main characteristics and goals of terrorist movements. Rapoport discusses these waves in his work, *The Four Waves of Modern Terrorism,*[2] each of which is associated with different ideologies, goals and tactics.

The first wave, known as the *Anarchist Wave,* emerged in the late 19th century, primarily in Europe and Russia. Anarchist groups used terrorism as a tool to challenge state power, with the primary goal of overthrowing governments. Political assassinations were a hallmark of this wave, including the killings of Tsar Alexander II of Russia and U.S. President William McKinley.

The second wave was driven by *anti-colonial movements,* which sought to end foreign rule and gain independence for colonised nations. This wave emerged in the aftermath of World War I and gained momentum after World War II. Groups like the Irish Republican Army (IRA), the Basque Euskadi ta Askatasuna (ETA), the Algerian National Liberation Front (FLN) and the Palestinian Liberation Organization (PLO) used guerrilla tactics and terrorism to pressure colonial powers into granting independence. Kidnappings, bombings and attacks on colonial forces were common methods used during this period.

The third wave, also known as the *New Left Wave,* was closely tied to the political and ideological movements of the 1960s and 1970s, including Marxism, anti-imperialism and opposition to the Vietnam War. Terrorist groups such as the Red Army Faction (RAF) in Germany, the Red Brigades in Italy and Palestinian factions like Black September engaged in high-profile hijackings, bombings and kidnappings. This wave introduced transnational terrorism, where attacks were often carried out across borders to draw attention to political causes.

The *fourth wave* is defined by religiously motivated terrorism. Groups such as al-Qaeda and ISIS represent the most prominent examples of this wave, using terrorism as part of a global religious struggle. The *Religious Wave* is characterised by suicide bombings, the targeting of civilians and the extensive use of modern technology, including social media, to recruit and spread propaganda.

Although Rapoport's wave model is one of the most well-known and widely applied theories, the historical development of terrorism has already surpassed it in some respects, and Rapoport himself discusses the questions surrounding the *fifth wave.* Additionally, Rapoport's approach, based on the American perspective of terrorism, categorises its main trends, but the waves do not necessarily occur at the same time, with the same intensity, or with identical elements in every region. However, these deficiencies do not mean that we should discard Rapoport's wave theory; rather, we need to adapt it in relation to the historical events of the region we wish to examine. In other words, the breaking points, turning points, or the "curls" of the waves will be different if we focus on Europe, the Middle East, or Southeast Asia. The beauty of applying a historical approach lies precisely in this diverse layering.

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[2]   RAPOPORT 2004.

It is important to point out that – in my opinion – the equipment of terror used by the state, as well as state terrorism and even the state financed terrorism are a completely different phenomenon, and therefore not the focus of this paper.

Almost all researchers agree that change is permanent in the history of modern terrorism. For example, in his article *Postmodern Terrorism,* Laqueur examines the changing nature of terrorism in the modern and postmodern eras. The author concludes that the motivations, strategies and tools of terrorism have changed significantly over time. The nature of terrorist acts has also shifted: rather than targeted attacks, there is an increasing emphasis on indiscriminate killing.[3]

Changes in research of modern terrorism

Rapoport and other authors have opened up new perspectives on the study of terrorism by providing a clear historical framework for analysing the evolution of terrorist ideologies and tactics. This model emphasises that terrorism is not a static phenomenon but one that evolves in response to global political, social and technological changes. Each wave has introduced new challenges for counterterrorism efforts and necessitated shifts. It is a top priority for modern researchers to understand the ideological motivations behind terrorism and the changing nature of terrorist tactics.

In the past, terrorism studies were largely confined to political science and history, focusing on the ideological and strategic motivations of terrorist groups. However, as terrorism has become more complex and technologically advanced, new interdisciplinary research approaches have emerged. These approaches draw from political science, sociology, law and technology studies to better understand contemporary threats.

One major area of development is the use of data analytics and data visualisation in terrorism research.[4] Another significant trend is the application of network analysis to understand the structure and dynamics of terrorist organisations. By mapping the relationships between individuals, cells and larger networks, researchers can gain insights into how terrorist groups operate, communicate and transfer resources.[5] We could also mention the rise of cyberterrorism, which has also led to the development of new research methodologies focused on cybersecurity and the protection of critical infrastructure.[6]

Changes in the education of modern terrorism

Terrorism studies in higher education has undergone significant transformations from the 20th century to the 21st century, driven by the changing nature of terrorism itself. Traditional courses on terrorism often focused on the history, ideology and political

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[3]   Laqueur 1996.
[4]   Brynielsson et al. 2012.
[5]   Pedahzur 2012; Barabási 2013.
[6]   Chen et al. 2014.

motivations of terrorist groups. Initially, the study of terrorism was a niche area within political science and security studies.

In the mid-20th century, the study of terrorism was primarily confined to courses in political science and international relations, focusing on state violence, insurgency movements and revolutionary activities. The Cold War era, with its proxy wars and anti-colonial struggles, was marked by a growing interest in the political motivations behind terrorism. Scholars in this period analysed how political ideologies, such as Marxism and nationalism, drove movements and terror organisations. During this time, the education on terrorism was largely theoretical, examining the historical causes of terrorism and the geopolitical struggles that shaped the global landscape. Institutions like the RAND Corporation, which had ties to military and intelligence agencies, were among the first to study terrorist tactics and counterinsurgency strategies in a systematic way.[7]

One major shift in the study of terrorism is the increasing emphasis on *experiential learning* (ELT) and *problem-based learning* (PBL). Simulations, war games exercises and case studies have become integral components of counterterrorism programs, allowing students to engage with real-world scenarios in a controlled environment. These methods help students develop critical thinking, decision-making and crisis management skills, which are essential for professionals in the field of counterterrorism.[8]

Experiential learning, based on David Kolb's 1984 model, is a method where students learn by doing. Kolb's theory emphasises four key stages: 1. Concrete experience (learning by doing); 2. Reflective observation (thinking about the experience); 3. Abstract conceptualisation (drawing conclusions from the experience); and 4. Active experimentation (applying what was learned). This cycle encourages students to engage with real-world scenarios, allowing them to deepen their understanding through direct experience. The benefits of experiential learning include greater engagement, improved teamwork and practical knowledge application. Activities such as field trips, experiments and role-playing allow students to apply lessons immediately, making learning more relevant and effective.[9] This approach helps students retain knowledge better by encouraging active participation and reflection. The problem-based learning engages students in fascinating, real and relevant intellectual inquiry, allowing them to learn from certain life situations. Through the problem-based learning (PBL) method, students acquire new skills and new methods.[10] Williams and colleagues found that students appreciate active participation in the PBL learning process. This enhances their personal development and increases their self-confidence and learning responsibility.[11] Furthermore, the integration of technology into terrorism studies and education on counterterrorism has transformed the learning process. For example, interactive data visualisation tools allow students to analyse complex information, such as terrorist network structures or the movement of extremist cells.[12]

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[7]   Hoffman 2006: 23.
[8]   Pedahzur 2012.
[9]   Kolb 1984.
[10] Barell 2006; Harland 2002.
[11] Williams et al. 2003.
[12] Rémai–Hegedűs 2024.

Following the events of 9/11, terrorism studies became multidisciplinary integrating insights from a range of academic disciplines, including sociology, psychology, law, technology and counterterrorism strategies.[13] The attacks highlighted the global reach of terrorism, particularly the rise of transnational groups like al-Qaeda, and demonstrated the need for a more sophisticated understanding of decentralised, non-state actors. Universities and think tanks worldwide quickly responded by expanding their terrorism studies programs. The focus of education shifted from state-based, revolutionary terrorism to the study of terrorist network and later the lone actor's radicalisation process.[14]

Overall, by the early 21st century the education on terrorism had become highly interdisciplinary and reflected the growing complexity of modern terrorism, where understanding social dynamics,[15] psychological processes of radicalisation,[16] legal frameworks for counterterrorism[17] and technology[18] were just as important as military strategy.

One of the ongoing challenges in the education on terrorism is the rise of lone actors and the use of the online world and social media for radicalisation. These developments require universities to focus not only on traditional terrorist networks but also on the individual-level drivers of terrorism.[19] It is difficult to determine what the future of terrorism studies should focus on, but it is perhaps not an exaggeration to say that it should not focus solely on specifics. Instead, it should adopt an interdisciplinary and holistic approach that helps to better understand the complex phenomenon of terrorism.

In summary, terrorism research and education have undergone substantial transformations to adapt to the evolving nature of terrorist threats. What began as a niche field rooted in political science has grown into an interdisciplinary area of study, incorporating insights from sociology, psychology, law and technology. The integration of *experiential learning* and *problem-based learning* has allowed students to engage with real-world scenarios, fostering critical thinking and decision-making skills essential for counterterrorism professionals. As terrorism continues to shift, education must remain flexible, emphasising an interdisciplinary, holistic approach.

International methods and trends

When reviewing the international environment of terrorism studies and education on counterterrorism, we can generally observe that in larger countries, especially those highly exposed to the threat of terrorism, knowledge related to terrorism studies and counterterrorism is supported by dedicated educational programs. In the United Kingdom alone, we found 47 state-sponsored and an additional seven civilian specialised training courses, as well as undergraduate or master's programs, that either focus on terrorism itself or closely

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[13]   Moghaddam 2005.
[14]   Laqueur 2003.
[15]   Sageman 2004.
[16]   Moghaddam 2005.
[17]   Chen et al. 2014.
[18]   Chen et al. 2014.
[19]   Brynielsson et al. 2012.

related security challenges. In a 2022 internal survey, in addition to the mentioned U.K. courses, training programs from 33 other countries were reviewed, ranging from Wellington, Ottawa, Oslo, Riyadh and Abu Dhabi to Beijing. Generally, it can be said that the courses are highly diverse in terms of both the training formats and the number of hours and courses.

Typically, these programs adopt a holistic security approach: the courses aim to provide a comprehensive view of the challenges, risks and threats posed by terrorism, from societal perspectives to various subsystems, and in many cases, they place special focus on addressing threats affecting the private sector. The programs generally follow a modern, modular and flexible format, where counterterrorism issues are embedded within a broader field, such as security studies. In many publicly available curricula, new types of challenges appear, such as the role of healthcare, eco-terrorism, the issue of drones, cyberterrorism, new forms of attack (e.g. ramming – terror attacks carried out with vehicles), expected changes in radicalisation, and measures to defend against and combat these threats. Additionally, border areas such as data security or the ethics of counterterrorism are also addressed.[20]

Key competencies in higher education of terrorism studies

The shift in higher education from traditional lecture-based instruction to more dynamic, student-centred learning environments has led to a new focus on the competencies that institutions seek to cultivate in students. Competencies are broadly defined as the combination of knowledge, skills, attitudes and values that enable individuals to perform tasks and solve problems effectively (EU Science Hub). Competencies in higher education typically encompass a broad range of abilities, from cognitive skills such as critical thinking and problem-solving to interpersonal skills like communication and teamwork. According to Ehlers (2013), a competency is not simply about acquiring knowledge but about being able to apply that knowledge in real-world situations.

In response to the demands of the 21st century job market and societal changes, higher education institutions have identified several key competencies that are essential for student success. These competencies are recognised by global frameworks, such as the European Qualifications Framework (EQF), which aim to standardise educational outcomes across different countries. In our case, we are referring to EQF6 (bachelor), EQF7 (master), EQF8 (PhD) levels which distinguish the following three dimensions:

The European Qualifications Framework (EQF) is designed to harmonise and standardise qualifications across European Union countries, facilitating the recognition of qualifications. It defines eight levels that describe the knowledge, skills and competencies individuals are expected to achieve at each stage of education and training. In the context of higher education, levels 6 (bachelor's), 7 (master's) and 8 (doctoral) are most relevant. For example, in *knowledge* category at level EQF7 "the focus is on advanced knowledge of the latest developments in a subject area, often extending into interdisciplinary fields".

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[20]   Dobák–Rémai 2025.

In relation to *skills* at level EQF7, the students "should develop innovative solutions, manage complex situations, and apply new techniques in practice while critically analyzing existing theories". They also have competence at level 7 to "manage complex technical or professional tasks, take responsibility for decision-making, and oversee processes within an organization". The EQF integrates knowledge, skills and competencies to define what individuals should know and be able to do at each qualification level, particularly in higher education.

To provide the knowledge, skills and competences needed at each level, a number of elements are essential. For example, *critical thinking*[21] and *problem-solving*[22] are considered two of the most important competencies in modern education. Furthermore, as digital technologies become integral to nearly every profession, digital literacy has emerged as a key competency in higher education. Effective *communication* is a fundamental competency that transcends all fields of study. In higher education, communication skills encompass the ability to convey ideas clearly and persuasively, both in writing and orally. This includes academic writing, public speaking, and the ability to engage in productive discussions and debates. Collaboration, or the ability to work effectively with others, is equally important.[23]

Digital literacy refers to the ability to use information and communication technologies (ICT) effectively to access, analyse and communicate information. The Covid–19 pandemic has underscored the importance of digital literacy, as many educational institutions shifted to online learning platforms. Additionally, the use of artificial intelligence (AI) and *machine learning* is becoming more prominent in global counterterrorism strategies. AI tools are being developed to analyse vast datasets, detect patterns in terrorist communications and predict potential attacks before they occur.[24] It is important to understand that the students need to keep learning throughout their careers, because knowledge changes and expands rapidly, therefore they need the competence of *adaptability and lifelong learning (LLL).*

Competency-based education (CBE) is an educational model that focuses on the development and assessment of competencies rather than the completion of specific courses or the accumulation of credit hours. This model is particularly well-suited to adult learners and working professionals, as it allows for flexible, personalised learning paths.[25] In modern higher education, the focus on competencies represents a shift from traditional content-driven models of education to outcomes-based approaches that emphasise the practical application of knowledge. Critical thinking, digital literacy, communication, ethical reasoning and adaptability are among the core competencies that students must acquire to succeed in today's rapidly changing world. By aligning curricula with these competencies, higher education institutions can better prepare students for the everyday challenges and opportunities. This is also true of the educational fields of terrorism studies.

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[21]   Paul–Elder 2019.
[22]   Mulder 2017.
[23]   Mulder 2017.
[24]   Coaffee 2013.
[25]   Ehlers 2013.

Some education methods as best practices in higher education of terrorism studies and counterterrorism

In our country, we have been talking about counterterrorism knowledge in higher-education since the mid-2010s, while abroad, especially in the countries of the West, there is a more serious tradition of this, which is essentially linked to the 9/11 attacks.

Theoretical frameworks in counterterrorism education

A theoretical understanding of terrorism is a foundational aspect of the education on counterterrorism. Scholars like Bruce Hoffman and Martha Crenshaw have developed widely recognised definitions and frameworks for studying terrorism. Hoffman (2006) emphasises the role of political violence, while Crenshaw (2011) focuses on the psychological and organisational aspects of terrorist groups. Theoretical models provide a psychological basis for understanding the process of radicalisation, which is essential for identifying terrorist activities. Modern education on counterterrorism integrates various academic disciplines to provide a comprehensive understanding of terrorism.

It is important to have external expert lecturers alongside the permanent teachers, as well as a method of working through professional case studies that can help to deepen the practical experience. One of the reasons for this is that terrorism studies require non-traditional teaching methods. Because of the special nature of the field, it is important that, in addition to the quasi-academic teaching of basic knowledge and new findings, there are lectures by experts who are active in the field and can raise the level of students' knowledge by providing relevant examples. Guest lecturers can provide specific expertise and information, helping significantly to maintain the uniqueness of the course, but this form of teaching makes it much more difficult to use the traditional university bibliography and note-taking apparatus, with students having to rely much more on class materials and their own notes. For example, an educational method is used to demonstrate the role of civil research centres in counterterrorism and to illustrate the usefulness of cooperation between professional bodies and social organisations through international examples. We have also incorporated an independent practice exercise, where students work in groups to map out the network of international research centres and identify the validated and reliable information they could collect on a given topic.

PBL and case studies

In addition to theoretical learning, practical experience plays a crucial role in the education on counterterrorism. C*ase studies* and *problem-based learning* (PBL) methods have proven highly effective. Case studies provide real-world examples that students can analyse to develop a deeper understanding of counterterrorism tactics.[26]

The literature on the education on counterterrorism emphasises the importance of a multidisciplinary approach that incorporates both theoretical knowledge and practical

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[26]   Pedahzur 2012; Spalek 2012.

skills. As terrorism continues to evolve, educators must adapt their methods to ensure that students are prepared to face both conventional and emerging threats. By integrating case studies, technological tools and innovative teaching methods, higher education institutions can provide students with the comprehensive training necessary to excel in the complex field of counterterrorism.

Problem-based learning allows students to engage with realistic scenarios, encouraging critical thinking and teamwork. Williams and colleagues (2003) found that students appreciate active participation in the learning process, which fosters personal development, confidence and accountability. Based on that theory, the Ludovika University of Public Service (LUPS), Faculty of Law Enforcement, Department of Counterterrorism with the support of the LUPS Proof of Concept project has developed a simulation platform that allows students to practice problem-solving in both individual and group formats. These simulations mimic real-world crises, enabling students to apply classroom knowledge to practical situations, thereby bridging the gap between theory and practice.[27] The aim of the development was to create a platform envisioned by the Department of Counterterrorism, enabling the creation of simulations that facilitate problem-based task-solving in both individual and group formats. The framework is centred around the simulation space, where "players" engage in solving pre-constructed scenarios and follow paths built on pre-programmed logical decisions based on their choices. In addition to tasks reminiscent of "wizard books", a knowledge area and a quiz area, designed to prepare for exams, also assist in the transfer of knowledge. The spaces within the application jointly develop creative learning, education and problem-solving. The application can be used within university settings, focusing on security dimensions, but it can also be suitable for outlining and practicing simulations in primary schools, high schools and specialised training environments. It is capable of transmitting not only skills but also knowledge and ways of thinking. Within the pilot project, the framework has been programmed. The expansion of the application and further development opportunities depend on the capacity and willingness of the aforementioned educational spaces, as well as on the openness of similar institutions towards new, innovative education.[28] The application is currently in the implementation phase, but we hope that in the coming years it will become one of the flagship tools in our educational resources, which we can use in many of our courses and share with a wide audience for broader application.

Data-driven education

The integration of *data visualisation* tools is particularly important in analysing complex information. These tools help students map terrorist networks, simulate crisis scenarios and enhance decision-making skills.

In almost every profession *data-driven decision-making* is becoming an integral part of everyday work, where the rapid and accurate analysis of data is crucial. One prerequisite for this is that students – regardless of their field of study in higher education – must

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[27]   NKE PPI 2019.
[28]   Project 3S 2023.

acquire the related mindset, learn to use data-driven tools and interpret the results. This also presents challenges for educators, as they must lead by example, represent high quality in the content and visual presentation of their teaching materials and lectures, while also sparking students' interest in data, data visualisation and data-driven approaches. The ability to analyse data quickly and accurately is crucial in modern security operations. Data visualisation – one of the key methods for making complex data, datasets and databases more understandable and communicating them more effectively – can play an especially important role in enhancing students' skills and increasing the amount of knowledge acquired in any training program.[29]

Data visualisation tools, such as heat maps and real-time incident tracking, enable students to engage with complex datasets more effectively and improve their critical thinking skills.[30] The use of interactive data visualisation tools significantly enhances the students' ability to process and analyse complex information. These tools help to foster critical thinking and problem-solving skills. For instance, the use of heat maps and real-time incident tracking software allows students to simulate crisis management situations, thereby improving decision-making under pressure.

The use of technology has also transformed the learning process by facilitating *blended learning environments,* which combine traditional classroom instruction with digital platforms, allowing for flexibility and up-to-date curricula. This approach allows for flexibility in teaching and learning, providing students with the opportunity to engage with material asynchronously while still participating in live discussions and simulations. These hybrid models of learning are especially effective in counterterrorism education, where constant updates to the curriculum are necessary to reflect the latest developments in security threats. Software (e.g. Miro Board) and technical tools (e.g. interactive whiteboards) that support collaborative learning processes will be introduced on an experimental basis in the near future.[31]

Scenario based learning

Terrorism and counterterrorism education must not only provide theoretical knowledge but also emphasise practical skills development. There is a huge importance of practice-oriented learning in security education, noting that interactive simulations and real-time analysis help bridge the gap between classroom theory and field application. This methodology enables students to apply their knowledge in controlled environments that mimic real-world scenarios. For example, scenario-based simulations allow students to work through response strategies and improve their situational awareness and work in pairs or group to develop their communications skills and collaborative competences.

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[29]   RÉMAI–HEGEDŰS 2024.
[30]   RÉMAI 2024.
[31]   PÁSZTOR-KOVÁCS 2015.

Future challenges in the education of terrorism studies

As the landscape of global terrorism continues to evolve, the education of terrorism studies must keep pace with emerging technologies and the complex nature of contemporary threats. The future of the education of terrorism studies faces several key challenges, driven primarily by technological advancements, ethical considerations and the need for interdisciplinary approaches.

One of the most profound changes impacting education of this field is the rise of *artificial intelligence* (AI) and *machine learning* (ML). AI's ability to process vast amounts of data in real-time offers unprecedented opportunities for education, but it also brings new challenges. The integration of AI in terrorism studies is inevitable. Rather than avoiding its use, educators must embrace AI as a learning tool while teaching students the importance of mastering critical skills.

Another significant challenge is finding the balance between specialised knowledge and a broad understanding of global security threats. The interdisciplinary nature of terrorism studies means that students must also have a comprehensive understanding of political, social and economic contexts. As terrorism becomes more sophisticated, driven by both physical and digital threats, educators must ensure that students are prepared to tackle issues in diverse environments.

The rise of AI and digital intelligence tools raises numerous *ethical concerns.* Teachers face the difficult task of incorporating discussions around privacy, human rights and the legality of pre-emptive actions, such as drone strikes and data collection.[32]

The rapid evolution of terrorism necessitates constant updates to educational curricula. Institutions must innovate by integrating real-time data analysis, dynamic learning platforms and global cooperation to ensure that students are prepared for the multifaceted nature of modern terrorism.

In conclusion, the future of the education of terrorism and counterterrorism studies will be shaped by the ability to integrate *cutting-edge technologies* such as AI and machine learning into the curriculum while maintaining a strong ethical foundation. Educators must strike a delicate balance between specialisation and broader knowledge, ensuring that students are equipped to navigate the rapidly changing world of global terrorism.

Conclusion

The future of the education of terrorism studies will be shaped by its ability to adapt to the rapidly changing landscape of terrorism and the advancements in technology. As we have seen throughout this discussion, the shift from traditional theory-based education to a multidisciplinary and technology-driven approach is crucial. The integration of tools such as artificial intelligence, machine learning, data visualisation and simulations has enhanced both the learning process and practical skill development, enabling students to engage with real-world scenarios and complex security issues.

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[32]   Coaffee 2013.

However, challenges remain. One of the primary issues is balancing specialised knowledge with a broader understanding of the global security landscape. While students need to become experts in particular areas, they must also understand the broader political, social and economic contexts in which terrorism evolves. Additionally ethical concerns will continue to be an essential component of educational curricula, ensuring that students are equipped to make informed, ethical decisions in their professional roles.

The ongoing development of problem-based learning (PBL), experiential learning (ELT) and the use of case studies in educational programs will remain critical in bridging the gap between theory and practice. These methods help students develop critical thinking, decision-making and crisis management skills, communications and cooperation skills which are vital. Because of the development of the digital technology, institutions must stay ahead of the curve by regularly updating their educational approaches. In conclusion, the future of the education of terrorism studies will rely heavily on its adaptability to new threats and its integration of cutting-edge technologies.

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The Professional and Managerial Concept for the Operation of the LUPS Faculty of Law Enforcement, Future Objectives and Plans

Gábor KOVÁCS[1]

Introduction

As the Dean of the Faculty of Law Enforcement at the Ludovika University of Public Service (hereinafter: LUPS or University), my main goals are to ensure that the Faculty of Law Enforcement remains the University's leading and most important faculty of education, research and training, to further develop it, and to strengthen the implementation of the "Institutional Development Plan" of LUPS through all activities.

I regard the senior position of Dean as a service, where we carry out our responsible tasks with integrity, and conscientiously, together with the entire staff of the Faculty, in the interest of law enforcement officer training, the interest of the Ministry of the Interior and the University.

My Dean's credo and my main objectives have not changed. We have achieved significant results so far, but further progress at individual and organisational levels is required in the future. Behind the familiar words, there are, of course, deeper and more complex meanings:

- expertise (which expresses the professional knowledge of the whole system of activities, based on the knowledge of social and natural sciences, the need for professionalism that must be the basis of all activities)
- efficiency (ensuring maximum effectiveness in the performance of tasks in a cost-effective manner, in proportion to the investment made)
- quality (reflecting excellence and high standards in all activities)
- community (the FoLE staff, including teachers, trainers, other employees and students, should form a diverse but cohesive community where all participants recognise their place and role in the system, are able to perform their tasks to the

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full, are willing to make sacrifices for the community, and feel a sense of owner-
ship of the organisation's need to succeed through their joint work)

My managerial and professional motivations

I would like to continue my work in compliance with Act CXXXII of 2011 on the
National University of Public Service and Higher Education in Public Administration,
Law Enforcement and Military Education, the University's Organisational and Opera-
tional Rules, the Institutional Development Plan of LUPS and the regulations in force,
in the spirit of cooperation. In my judgement and based on the feedback of my former
managers and the supportive opinions of my colleagues, I feel that all the tasks set out
in the Dean's portfolio will be achieved under my leadership, through well-organised,
coordinated and conscientious work carried out together.

My working and leadership style is based on clear and unambiguous tasks based on
precise planning, assisting in their implementation where necessary, and then monitoring,
improving and clarifying them. As Dean, my main focus is always on helping the most
important faculty-level tasks at any given time. My aim is to maintain a professional,
efficient and inspiring working environment, and to work with the community in a way
of high quality and high standards – I expect this from myself, my colleagues and all my
staff. As Dean, I count on a high degree of proactivity and autonomy from faculty lead-
ers. The Vice Deans, the Heads of Departments (including the Heads of the Institute for
Disaster Management and the Department of Foreign Languages for Specific Purposes)
and the Heads of the functional bodies are all committed colleagues with considerable
experience, on whom I will continue to count as Dean.

For me, it is important to have a clear definition of competences and responsibilities
and to take responsibility for them. I also aim to create and develop an effective commu-
nity of staff (and students) from across the FoLE who can work in teams and indepen-
dently to deliver high quality teaching, research, knowledge transfer and absorption – in
the common interest of all. As a faculty leader, I judge each member of my staff solely on
the work they do, looking at how their work contributes to the achievement of university
and faculty goals.

My aim is to continue to operate a modern, transparent, simple, economical and
efficient organisation for the tasks within the Dean's portfolio. I would like to further
develop the Faculty organisation so that it operates even more efficiently and the new
organisations work for the benefit of the Faculty and the community. My aim is to ensure
that the current organisational structure of the Faculty is adapted to the challenges of law
enforcement.

The relevant laws and other legislation, as well as the Ministry of the Interior, which
is responsible for the training, have set the University tasks that can only be achieved
through persevering, focused work over a long period of time. Development is already
underway, but it can only be achieved with a common will and under the guidance of
the Rector.

Current situation of the FoLE

The Ludovika University of Public Service was established by Act CXXXII of 2011, with the creation of three university faculties on 1 January 2012, and in the 12 years since then the entire university education portfolio has undergone a significant transformation.

Organisational structure of the Faculty

The Faculty of Law Enforcement, as an organisational unit, is governed by Annex 6 to the University's Organisational and operational rules. The Faculty is not an independent legal entity and is legally supervised by the Senate and the Rector. The activities of the Faculty are carried out in accordance with the provisions of the basic legislation governing it. The Faculty consists of the educational, specialised educational, scientific and research units, the faculty departments, the Institute for Disaster Management and the Department of Foreign Languages for Specific Purposes, as well as St. George College and the Disaster Management College, which directly support the teaching and research activities of the Faculty.

Within the Faculty there is a Doctoral School of Law Enforcement Sciences (hereinafter: DSLES), which is operated by the Dean and led by the Head of the Doctoral School.

The Dean is assisted by Vice Deans: the Vice Dean for General Affairs and Institutional Development, the Vice Dean for Education and the Vice Dean for Science and International Affairs. The Heads of Departments carry out their duties under the direct authority and guidance of the Dean and under the professional supervision of the Associate Deans, who are responsible for the areas within their remit.

The Faculty has 24 departments in addition to the Department of Foreign Languages for Specific Purposes.

Programs offered by the Faculty

Bachelor's programs and specialisations

The educational programs at LUPS–FoLE have developed significantly over the last decade. The educational documents of the Bachelor's programs have been renewed, and the curricula of all the specialisations preparing for a career in law enforcement (professional staff), which have been in force since 2013, include a module on basic knowledge of home affairs. The curricula for the police, the penitentiary system and disaster management are typically uniform, but the professional preparation is of course different. In case of the specialisations preparing for the position of tax and customs administrator at the National Tax and Customs Administration, the curriculum is modified in line with different rules for the organisation, but most of the content is the same.

Most of the basic law enforcement practical and theoretical knowledge – general service knowledge, legal knowledge, law enforcement training, public order protection,

police physical education and self-defence – is taught in the Basic Training module in the framework of a 5-week (intensive) training course for a total of 236 hours, while the other subjects of the module are taught in the first semester.

In case of the specialisations that prepare students for disaster management, finance and police professions, the curriculum includes an officer candidate examination. For the police specialisations, the curriculum also covers the performance of guard and patrol duties.

By concentrating the subjects in this way, the University has ensured that LUPS police officer candidates, after completing the first semester and passing the officer candidate examination, can be employed in a traineeship or other legally defined position as police officers on patrol, and if they fail, they can continue to be employed as warrant officers in the law enforcement service.

As a result of the development of the educational document in 2023 and 2024, we will be working on the basis of the renewed educational structure in September 2024. Training courses previously operating as specialisations within other disciplines will be launched as stand-alone programs.

Particular attention will be paid to the specific needs of other commissioned professions other than the police.

Master's programs

The FoLE offers five Master's degrees: Master of Law Enforcement Leadership, Master of Criminology (civil and law enforcement), Master of Emergency Management, Master of Civil National Security and Master of Security Management.

The Doctoral School of Law Enforcement Sciences

The Doctoral School of Law Enforcement Sciences prepares doctoral students for the award of a doctoral degree in three research areas.

The doctoral program is the highest level of the multicycle educational system. The aim of the program is to research issues within social sciences, covering all sub-fields and interdisciplinary aspects of police sciences, and to prepare doctoral students who carry out scientific research in the fields of the law enforcement sciences for the award of a doctorate (PhD).

Teaching staff of the Faculty

The Faculty employs 257 people, of whom 140 are employed in the professional, 107 in the civil service and 10 in other positions. The Faculty employs 104 senior professional/deployed lecturers, 56 of whom, 53.84%, hold an academic degree. Of these, 3 are Professors and 21 are Associate Professors. The number of habilitated lecturers is 11, with no habilitation procedure currently in progress. The number of Master Teachers is 26. The Faculty has one commissioned researcher.

The total number of civil servant teachers is 56, of whom 32, 57.14%, hold a scientific degree. This category includes 7 Professors and 12 Associate Professors. The number of

Master Teachers is 14. The number of habilitated civil servant lecturers is 14. The FoLE is supported by six Professors Emeritus.

Students of the Faculty

The Faculty currently has a total of 2,010 students and 39 doctoral students. There are 709 full-time undergraduate students. 781 students are enrolled in part-time Bachelor's programmes, 238 in Master's programmes and 282 in specialised further education.

In the Doctoral School of Law Enforcement Sciences, 6 students are enrolled full-time and 33 students are enrolled part-time. Total number of students: 39 (data as of 5 September 2024).

Strategic objectives for the operation of the FoLE

In the coming period, I consider it an important challenge to continue to renew the various operational action plans derived from the University Strategy, based on the requirements. To this end, I consider it necessary to define the following strategic objectives for the Faculty, with the involvement of my colleagues.

Work environment

The aim of the Dean's leadership is to continue to ensure a regulated and relaxed working environment and conditions that provide optimal opportunities for the further development of the staff.

Promotion of priority scientific research at the faculty

A further objective is to promote faculty research and innovation, bringing the joint activities of the faculty, and hence those commissioning the educational programs (and market players), closer together. Scientific research should become a strategic priority for the faculty and departmental communities in the coming years.

Tasks of the FOLE image and branding

The main objective is to further increase the visibility and recognition of the organisation in both the professional and civil society environments. It is important to maintain close links with the law enforcement agencies.

Continuation of the system of performance testing

As a training institution, it is important to constantly monitor the quality of law enforcement training. This feedback is essential for defining future development objectives. The Ministry of the Interior and the Education Office have previously carried out a performance test of former students who graduated 5 and 10 and 15 years ago. The results were reassuring and we intend to continue in this direction in the training of officer candidates.

Ensuring student supply

Ensuring the number of first place applicants to the Faculty's programs is a further task, through well thought-out organisational measures, and it is appropriate to make use of the network of partner schools, roadshows and the system of professional and open days.

Tasks of student talent management

The quality of applicants to the Faculty's programs now ensures that truly talented students are selected and given special attention, and are included in the University's student excellence programmes. The system of the "Gold and Silver Wreath" student excellence awards, established 2 years ago, has been consolidated.

Teacher and employee excellence

To teach excellent students, we need excellent teachers. Excellence needs to be recognised and acknowledged, and the performance appraisal system, which works well in principle, needs to be revised to reflect the specificities of the faculty. A priority is to improve the ratio of PhDs to professors at the Faculty, and an important objective is to strengthen and mentor qualified teaching staff, to encourage habilitation procedures, to introduce innovative teaching methods and to further improve the quality of the programs.

Continuous updating of educational programs, processing and incorporating experience from abroad

The development of educational documents for Bachelor's and Master's degree programs was completed in spring 2024. A similar development of the continuing specialised educational programs is planned for the near future. For this, it is essential to learn from international experiences and to adopt and adapt good practices to local specificities and then to integrate them into the training programs. This will be helped by the fact that our Erasmus for Teachers mobility programmes have been running since 2023, with an annual participation of 10 teachers per year.

Future plans, tasks and objectives of the Faculty

Objectives and tasks related to the operation of the Faculty

In addition to the existing management forums, I plan to organise regular faculty meetings and staff meetings (usually at the beginning of the academic year or as required) to keep abreast of current developments and occasionally invite the heads of police forces to these forums.

The departments have undergone significant renewal in the past year. The current organisational structure will continue to ensure effective work and the successful implementation of the wide range of tasks.

I attach great importance to the constant updating of the faculty website and the continuous communication on the faculty Facebook page.

Plans for the professional preparation and education of students

The aim of the programs is to prepare the officer candidates for the political, sociological, criminological, psychological, legal and ethical aspects of the use of legitimate force in a democratic society.

The University and the Faculty management are committed to renewing the whole system of teaching and learning in the framework of the "Creative Learning Programme". The University has reformed its teaching according to 21st century methods and student needs (small group teaching, reform of seminar courses, use of digital tools, introduction of new teaching methodologies, etc.).

Quality teaching remains a priority. I believe that the best students should be taught by the best teachers, with the best curricula, using the most modern, 21st century methodologies.

Efforts will continue to be made to include robotics, advanced forensic technology tools, use of artificial intelligence, field training, droning, situational marksmanship, tactics of action, digital forensics in the student/officer candidate programs, in the form of workshops and through volunteer participation.

Foreign language training is an important element of preparation for a career in public service. Developing foreign language competences is very important. The ratio between general language and specialised language teaching should gradually be shifted towards specialised language training, which will be implemented progressively from autumn this year, and the number of foreign language courses has been increased. In addition to the priority given to English, the teaching of German, Russian and Chinese is also necessary. As a development objective, I plan to further increase the effectiveness of foreign language law enforcement programs for students.

Developing staff performance, career planning and support

The continuous measurement of staff performance remains a priority. I am convinced that what can be measured should be measured, and that this in itself is an incentive and a performance-enhancing factor for teachers. Each employee is subject to an annual

career development plan (personal development plan), which sets out the tasks for the next period.

The legal, accreditation and professional compliance of the educational activities of the Faculty, the organisation and continuous improvement of the quality of education

The introduction of digital technology is inevitable in the modernisation of university education, as the digital world, "smart technologies" and artificial intelligence are already present in everyday life. Technology must serve people, new technical achievements must be used, and the interests of students and teachers must be taken into account, while respecting data protection rules. A pilot "hybrid or blended" mode of teaching could be envisaged in part-time educational programs.

The Faculty encourages the development of multimedia packages to illustrate the curriculum and to cover the whole range of subjects, including the development of tutorials (tutorial packages) for self-study on the Internet (intranet). I will give priority to the use of digital textbooks.

I will further promote and develop teaching in a foreign language (English) in the near future. The promotion of courses in foreign languages, other than those offered to Erasmus students, should be further developed. The aim is to enable native Hungarian-speaking students to take certain courses in a foreign language.

In order to maintain the right balance between theoretical and practical education, I pay particular attention to the planning, organisation, management and monitoring of student placements and training, professional days and weeks, in consultation with the relevant bodies.

In recent years, we have organised central training for young teachers arriving at FoLE to enable them to integrate effectively into the teaching profession, and we will continue this practice.

As Dean, I encourage and support participation in scientific research and teaching projects and tenders.

Improving professional institutional relations and the quality of professional practice

An important prerequisite for the success of the FoLE is active contact and ongoing dialogue with the bodies that commission the educational programs, at both management and teacher levels. I want to maintain close links with the executive and academic organisations in the fields of innovation, research, development and market cooperation.

Successful faculty participation and involvement in the University Joint Public Service Exercises is the responsibility of the Dean, and may be expanded in the future with some law enforcement innovations. I am convinced that with the support of the University's management and the active contribution of the faculties, we will be able to conduct

successful police exercises in the future, inviting partner institutions from abroad as partners and participating in similar exercises there (e.g. Serbian Police Academy).

Student internships are an integral part of the educational process, an important area of public service cooperation and a tool for students' career management. Active "mentoring" should further strengthen students' commitment to law enforcement careers based on their internship experiences and provide maximum support for career planning based on internships. The system of internships and their content is an essential pillar of student preparation.

It is important to implement student internship programmes (examples include the fields of criminal justice and cybersecurity), where the best volunteer candidates are assigned to professional tasks in the field for a longer period (6 weeks) in a controlled environment.

Together with the police, I will continue to pay particular attention to the organisation of the annual training of teachers. Each year, I provide a coherent work experience for the teachers and one (documented) training day per month.

I will promote the involvement of professionals with significant managerial and practical experience in the specific and managerial education of students.

Supporting and implementing effective recruitment policies

The recruitment campaign run by the central organisation of LUPS has a well-established system. The number of first place applicants to the Faculty's programs is now adequate, thanks to open days, faculty presence, internet and Facebook materials, short films and publications on students' lives. I intend to increase the recruitment campaign by continuing the officer/student roadshows. A well-prepared second-year student returning to his/her alma mater can give applicants a credible picture of FoLE's undergraduate courses and student/official candidate life.

For Master's programs, we can expect an oversubscription rate of around double.

Scientific objectives

Progress in this area is unstoppable, as the environment is changing and new circumstances need adaptation.

Directions for law enforcement research

LUPS is the only research centre in the field of law enforcement in Hungary. Following the developments that have been initiated, the strategic areas are: criminology (criminal technology, criminal tactics and methodology); forensic sciences; criminal psychology; measurement of law enforcement skills; sociology of public safety; private security; law enforcement leadership and organisation theory; application of artificial intelligence in law enforcement; cybersecurity; predictive software development; anti-corruption

research; law enforcement aspects of migration; experiences of international external ser-
vice missions; law enforcement activities for classified periods.

The "Encyclopaedia of Law Enforcement Science", published in 2019, is a significant
milestone in the domestic cultivation of the discipline. The five years since its publication
may justify the revision of some of the glossaries, which is one of the tasks of the next
Dean's term, and the necessary resources should be allocated for this purpose. In 2023, the
new, updated editions of the "Handbook for New Police Officers" and the book "Serve
with Integrity" were successfully published.

Improving the Faculty's indicators of educational and scientific quality

According to the "Institutional Development Plan 2020–2025", the University/Faculty
"will strive to achieve high quality in all aspects of its operations". The task is to prepare
an Institutional Development Plan for the next 5 years, the preparation of which has
already started.

With regard to the improvement of educational quality, particular attention will be
paid to the following indicators: increase in the number of BA/MA first place applicants
(measured in relation to the number of admissions); increase in the number of foreign
students; increase in the number of foreign language courses; increase in the number of
foreign language teaching (single, joint, double) programmes; improvement in the student
(education) satisfaction index.

An important goal of mine is the development of *Magyar Rendészet* [Hungarian Law
Enforcement] (which is the professional scientific journal of FoLE, therefore, its support
is a priority faculty interest) by increasing the international visibility of the periodical.

In order to increase the scientific public activity, I support the increase of the number
of high-quality scientific conferences, mostly in the form of attendance.

Another strategic objective is to continuously improve the scientific quality of the
teaching and research staff.

A strategic task is to further support the existing Research Workshop on Crimi-
nal Psychology, to establish new ones if there is a professional need, and to create a Law
Enforcement Research Institute (working title), which will include research topics on the
law enforcement application of Cybersecurity and Artificial Intelligence.

The Doctoral School of Law Enforcement Sciences is one of the main venues of the
Faculty's academic life. Together with the members of the Faculty Doctoral Council,
we give priority to increasing the participation of uniformed law enforcement personnel
in the education, and I support the introduction of new incentives in the relationship
between doctoral students and supervisors.

Future research tasks of the Faculty's staff, projects to be implemented

The implementation of this task is led by the Vice Dean for General Affairs and Institutional Development under the direction of the Dean. The staff of the Development Department will also play a significant role.

Promotion of projects in support of educational development

A priority for law enforcement higher education is to ensure that graduates have up-to-date knowledge and are open to and prepared for the application of future technologies. In addition to theoretical knowledge and the development of appropriate professional attitudes, it is equally important to acquire practical skills and practice-oriented training.

Developing the network of economic partners

The changes in the national and international funding landscape clearly show that in the future, higher education institutions that have a stable and viable network of relationships with economically prominent large companies and micro, small and medium-sized enterprises will be able to attract more significant funding.

Encouraging development and innovation

A key strategic objective for the future of FoLE is to take effective steps towards applied research and innovation, in addition to theoretical development and knowledge transfer. To this end, support should be given to project applications and research activities of teachers, researchers and students that lead to the introduction of new technologies and processes, to the registration of patents and to their real economic exploitation.

The integration of IT developments and artificial intelligence in law enforcement is a challenge of our time and will be one of the most important research directions of the future – the departments of the FoLE should be at the forefront in this field.

Tasks of the Institute for Law Enforcement Training and Education

The most important thing is to educate students, but of course there are also some priorities.

To carry out the basic tasks of the institute, it is necessary to create a digital IT environment (meal ordering, stock records, management of gold and silver wreath applications).

In order to improve the quality of tactical measures and training, the development of equipment is underway (equipping tactical measures rooms with cameras, recording the execution of tasks during sessions), and the expansion of the supporting professional background (bringing the tactical measures audiovisual and simulation environment to life).

Cultivating and expanding the Faculty's professional relations in Hungary and abroad

Building on the successes of the past period, I would like to continue to strengthen and expand our professional contacts at home and abroad. In addition to my faculty colleagues, I myself have an extensive network of international contacts, as one of the Vice Presidents of the Association of European Police Colleges (AEPC), and as a result of my participation in projects and international organisations abroad and my involvement in international conferences.

The European Union Agency for Law Enforcement Training (CEPOL) is involved in the training and activities of the FoLE, and we have a good relationship with its director, who has lectured at the faculty on several occasions. LUPS (FoLE) has applied and re-contracted with CEPOL for the period from 2025 onwards, which allows us to contribute to the organisation of CEPOL courses.

I attach particular importance to bilateral cooperation between institutions. A priority is to build relations with neighbouring countries, and a cooperation agreement is currently being signed with the Croatian Police Academy, and the possibility of such an agreement with the Slovak Police Academy has also been raised. An agreement with the Romanian Police Academy is in the process of being renewed, and an intense relationship is also being maintained with Serbia in this respect.

There are further opportunities in the Erasmus programme for faculty, staff and students: Erasmus+ (student and staff, European and extra-European), CEEPUS (visiting professor, conference, Summer University). In addition to this, CEPOL training, AEPC courses and the Ludovika Scholars Programme are also important. Their use should be reinforced and supported at all management levels.

I want to establish a tradition by organising a major annual international conference on law enforcement (Law Enforcement Research and Science Symposium – LILERS) for the 3rd time, which could, among other things, lay the foundations for the establishment of the International Law Enforcement Free University.

In the last week of August each year, we organise an International Law Enforcement Professional Cup, where teams from partner law enforcement higher education institutions meet in a complex competition.

Tasks of cooperation

I seek to develop close links with the senior management of the organisations that commission the educational programs, I regularly invite them to the institution and, as Dean, I also participate in the main management forums of the organisations when invited. I also extend these contacts to law enforcement organisations in the country.

I also organise regular briefings for staff on current issues in order to learn from practical experience.

Relations with the student council

Working with the student council on campus is a key part of my leadership programme. Students study with us to become prepared for their chosen profession, but also to experience the fulfilling life of a student. As Dean, I will continue to take students' needs very much into account, to represent their interests and to count on their help, whatever the activities (student events, student shows, performances, internships, equal opportunities work, student scholarships, running of different committees, etc.).

Active community life and the mission of fostering traditions, charity

The Ludovika Campus can be an excellent venue for community events. I want to seize every opportunity to build communities and share leisure activities with other faculties, whether it is a community-building cultural programme, supporting community self-activity, individual volunteering or building community through sport.

I plan to organise the operation of the Alumni system according to the already renewed policies, I intend to broaden the membership of the FoLE Alumni community and I count on the active participation of the members. I will assist in the implementation of centrally organised and autonomous programmes (e.g. professional excursions), and I will organise the anniversary graduation ceremony on Alumni Day in August.

I will further develop traditions (Faculty Memorial Tree Watering, Dean's Luncheon for graduates, Faculty Day events, Sausage Stuffing Contest, Ugly Sweaters Day, etc.) that are related to making the years spent here as memorable as possible for students and thus developing the Faculty into a cohesive, excellent community. I will organise a voluntary, self-financed summer camp for students on the Baja campus, if required.

Without knowledge of the past, there is no present, which is why I consider the preservation of the values of law enforcement traditions a priority, as it contributes to the professional education of students. For the Faculty Day 2024, we will create an "Exhibition on the History of Higher Education in Law Enforcement", paying tribute to the achievements of the past.

An important educational task is to serve the community, to be charitable, to give donations and to support the needy. From time to time, we organise charity events for those in need (e.g. Ukrainian refugees, patients at the Heim Pál Children's Hospital). Our students also volunteer as part of their elective subject.

Short, medium and long–term tasks, plans and ideas related to the operation of the Faculty

Short–term (within 1 year) tasks

- preparation of the Institutional Development Plan for the next 5 years
- establishment of the Department of Cybersecurity, promotion of technical improvements, significant increase in the quality of training
- internationalisation, development of international relations, exploitation of opportunities
- further analysis and modernisation of the subject structure and the curricular network for the specialised educational programs and Erasmus programs (revision of the specialised educational programs in law enforcement, removal of certain specialisations from the curriculum which are not "marketable")
- continuous preparation for accreditation tasks and annual monitoring of activities, enforcement of quality assurance tasks
- continuous development of the criteria for the performance evaluation of teachers and staff
- continuous monitoring of individual academic and teaching performance.
- consideration of the launch of a Master's degree in Fire Protection Engineering, based on demand and cost–benefit analysis
- launching of a post-graduate course in Fire Safety Engineering Manager and Technical Inspector
- career guidance – developing links with educational and training institutions providing law enforcement education
- review of the possibility of "hybrid, blended" learning in part-time education
- introduction of virtual reality and artificial intelligence technologies in education
- exploiting educational synergies in law enforcement management and different agencies, sharing educational resources, further improving practical training
- establishing an International Law Enforcement Open University and organise the CEEPUS Summer University
- pedagogy, communication skills development and personal development, leadership skills and competences for students
- further expansion of international relations (USA – Denver, Canada, China); activation of INTERPA and AEPC memberships

Medium–term (within 2–3 years) plans

- launch of a Master's program of Law Enforcement in English at the Faculty
- rejuvenate the teaching staff and prepare for a generational change
- building on existing technical equipment, launch a specialised educational program in combating cybercrime
- revise the existing specialisation in Law Enforcement Economics

- promote the acquisition of Hungarian Academy of Sciences doctorates
- successful faculty participation and results in R&D projects
- broaden the range of programs to be delivered in English
- ensure the updating of faculty-level regulations and cooperation agreements
- increase the effectiveness of student recruitment
- renewal of the Law Enforcement Encyclopaedia
- establish new laboratories in the Centre for Specialised Training in Disaster Management and organise the due relocation

Longer-term visions

- FoLE should become a very stable centre of higher education in law enforcement, recognised at European and international levels for education, research and development, which will contribute effectively to the achievement of the development goals of LUPS.
- To work effectively in international law enforcement organisations, to provide a model and transfer knowledge to neighbouring countries.
- To promote recognition of domestic law enforcement research abroad.

Summary

I want to provide all the staff of the Faculty with the necessary conditions for effective work, professional development, scientific and research work.

In my management activities, I count on the professional guidelines and advice of the heads of law enforcement organisations. In the course of my work, I strive to build close partnerships with other faculties of the University and with cooperating national and international organisations.

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