The Evolution of Anticipatory Policing in the United Arab Emirates: Proactive Crime Prevention & Technology

Ehab Alrousan[1] & Raed S. A. Faqir[2]

Abstract

The present study explores anticipatory policing in the United Arab Emirates (UAE), focusing on proactive crime prevention using legal and technological means. It emphasizes the shift from reactive to proactive law enforcement, addressing challenges in balancing security, civil liberties, resource constraints, legal boundaries, and technology. Preserving community trust is highlighted as crucial. The research examines preemptive investigations against terrorism and organized crime, scrutinizes various anticipatory investigation models, and reviews UAE-specific practices like undercover operations, surveillance, and technology integration. Methodologically, it employs a doctrinal approach, evaluating policing strategies for anticipatory criminal investigation, especially for cybercrime, terrorism, and human trafficking. The study concludes with informed recommendations to tackle the complexities of anticipatory policing in the UAE.

Keywords: Anticipatory Policing, UAE, Proactive Crime Prevention, Challenges, Security, Civil Liberties, Technology, Preemptive Investigations, Crimes.

Introduction

In the domain of law enforcement within the United Arab Emirates (UAE), the traditional role of judicial police officers primarily revolves around their responsiveness to reported criminal incidents, with a significant emphasis placed on conducting investigations after the occurrence of these incidents. In contrast, administrative police officers in the UAE are primarily dedicated to the pursuit of preventative measures aimed at averting criminal activities.

It is noteworthy to highlight a substantial transformation that has recently taken place regarding preliminary investigations, which have now assumed a pivotal role within the framework of criminal proceedings in the UAE. These initial

---

[1]The author is an Associate Professor in Criminal Law & the Program Director for the Master in Criminal Sciences at the College of Law, American University in the Emirates, United Arab Emirates. He can be reached at ehab.alrousan@aue.ae

[2] The author is an Associate Professor in Criminal Law, the College of Law, American University in the Emirates, United Arab Emirates. Previously, served as an associate professor of law and held the position of deputy dean at Al-Balqa Applied University in Jordan. He can be reached at raed.faqir@aue.ae and r.faqir@bau.edu.jo , His ORCID ID: https://orcid.org/0000-0002-6102-0983

investigations involve gathering evidence and pursuing suspects, leading to changes in UAE legislation and jurisprudence.

In the UAE, "anticipatory criminal investigation" is an effective approach to combating terrorism and organized crime. It involves proactive efforts using legal and technological tools to uncover and prevent future criminal actions. This strategy is employed in various UAE jurisdictions to identify potential criminals before they act.

Research Problem

Anticipatory criminal investigations encounter the inherent challenge of reconciling security imperatives with the preservation of civil liberties. This delicate equilibrium necessitates careful consideration, as the use of intrusive methods intended for the prevention of crimes can potentially encroach upon individuals' privacy and fundamental rights, all while being subject to constraints imposed by available resources, legal constraints, and technological limitations.

Moreover, these methods can erode community trust when seen as invasive or biased, leading to reduced cooperation with law enforcement. Therefore, the ongoing challenge is to balance proactive crime prevention with protecting individual rights and community trust, requiring ongoing effort and careful consideration.

Research Methodology

This study uses a doctrinal methodology to analyze anticipative criminal investigation methods, emphasizing policing approaches for detecting serious crimes like cybercrime, terrorism, human trafficking, money laundering, and drug trafficking. The present investigation scrutinizes the influence of conventional and contemporary policing paradigms and technological advancements within these regions. This research draws upon secondary resources, including but not limited to literary publications, official reports, legislative provisions, scholarly periodicals, and online inquiries, for the purpose of data acquisition.

Literature Review

Preventing serious crimes is crucial for societal safety, given their far-reaching impacts. Social and criminal dynamics are influenced by past, present, and future factors (Wortley & Townsley, 2017, pp. 98–99). Prioritizing proactive prevention and intervention strategies is essential for a safer future. Understanding this future requires considering the past and present as they shape it. Analyzing current events enables informed predictions about the future (Arendt, 1961, pp. 5, 6, and 10).

Future justice in law enforcement and security services aims to prevent high-harm crimes using technology-driven methods (Al-Hindawi et al., 2017; Kilani, 1986). Security institutions predict the uncertain future using historical patterns (Al-Hindawi et al., 2017; Kilani, 1986). Effective serious crime prevention necessitates proactive security forecasts that adapt to technology (Hindawi et al., 2017). Reevaluating the concept of serious crime is essential in light of evolving technology.

Preparing for future crime involves proactive adaptation (Nafei, 2017, p. 14). Today's decisions impact future security (Jameel, 1988, p. 90). Analyzing past, present, and future trends aids in combating organized crime (Nafei, 2017, p. 5, 6). To stay ahead, agencies must anticipate crime trends and use scenario analysis (Ballard, 2016). Predicting serious crimes involves data collection, respecting privacy, and using two approaches: extrapolation and normative analysis (Zahir, 2004, p. 53). Decision-makers should analyze environmental factors, strengths, and weaknesses, using law enforcement data to shape strategies.

Results and Discussions
A) Definition of the Anticipative Criminal Investigation

Governments worldwide prioritize proactive investigations to enhance security and prevent technology-driven crimes, as seen in the Netherlands, USA, and UAE (Bowling, 2012, pp. 107–109; Al-Malih, 2015). Anticipative investigation, as noted by Ivanovic (Ivanovic & Munizaba, 2016, p. 8), employs proactive, intelligence-led methods to prevent crimes, especially in areas like terrorism, organized crime, or cybercrime. These models prioritize community safety by addressing serious offenses through intelligence work, surveillance, undercover operations, and sting operations to prevent crimes before they occur (LeCates, 2018; Ballin, 2012, p. 4; Docobo, 2005).

Anticipative criminal investigation, present in various legal systems, aims to prevent crimes before they happen, with the Latin system emphasizing "preventive criminal investigation" and the Anglo system focusing on "proactive" or "intelligence-led policing" (Al-Shahawi, 1999, p. 39; Tahfah, 2021, p. 2). The German system employs 'Vorfeldermittlung,' and the UAE uses 'altahqiqat Ahluwalia,' both involving preliminary investigations during evidence gathering (Ballin, 2012, pp. 3–4; Al-Malih, 2015, p. 23).

Proactive investigations use predictive intelligence to prevent serious crimes, including terrorism, human trafficking, money laundering, and cybercrimes (Alharbi et al., 2011, p. 87; Melih, 2018, pp. 229–230; Al-Jayyar, 2014, p. 907-908; Lum et al., 2020, p. 286). They prioritize prevention through crime analysis, impact prediction, identifying potential perpetrators and at-risk victims, resource

allocation, addressing operational issues, and monitoring the criminal environment for safety and security (Ivanovic and Munizaba, 2016, p. 80; Lum et al., 2020).

B) The Shift from Reactive to Proactive Law Enforcement

The shift to proactive law enforcement enhances public safety through community policing, predictive policing, and undercover operations for intelligence, prioritizing prevention over reaction (Mahmoud, 2015; Mangai, 2023; Al-Balushi, 2020; Braga, 2016; Abdul Matlub, 2010; Carleton et al., 2020; Al-Babli, 2020; Uchida, 2014; Mosbah, 2021; Greenaway, 2020; Elhais, 2023). This approach emphasizes prevention's efficiency and cost-effectiveness (Al-Malih, 2015) to enhance public safety and reduce crime.

In the UAE, the Directorate of Investigations counters electronic crimes by tracking techniques and using preventive measures allowed by Federal Decree-Law No. 38 of 2022 on the Criminal Procedure Law, including mail confiscation, electronic device inspection, expert enlistment, and monitored conversations with the Attorney General's approval (Art. 73). The Law on Combating Rumors and Electronic Crimes allows electronic evidence in legal proceedings (Article 65 of Federal Decree-Law No. 34 of 2021). The Federal Decree Law No. 5 of 2013 regulates the ownership and use of weapons, aiming to prevent their misuse. Article 84 designates personnel from the Office of Weapons and Military Equipment as judicial officers, granting them the authority to enter weapon-related establishments, ensure compliance with regulations, and conduct investigations, enabling proactive inquiries. Money laundering and terrorism financing legislation regulates illicit activities and empowers law enforcement to use covert identities for evidence gathering (Art. 1 of Federal Decree-Law No. 26 of 2021). Lastly, the Terrorism Crimes Law prohibits and penalizes terrorism-related actions (Federal Law No. 7 of 2014). Article 54 grants access to financial data; Article 55 permits fund freezing during investigations; and Article 56 allows the Central Bank Governor to freeze funds, subject to the Attorney General's approval for extension or removal.

Models & Patterns of Anticipative Criminal Investigation
A) Models & Approaches of ACI
Anticipative criminal investigation models aim to proactively prevent crime by identifying potential criminal activity early and intervening before crimes occur.
- **A problem-oriented or Proactive Approaches**
In 1979, the USA introduced Problem-Oriented Policing (POP) by Herman Goldstein, aiming to address procedural legitimacy issues and shift from individual incident response (Weisburd et al., 2008, p. 5). POP encourages

innovative solutions to recurring problems in criminal justice, involving management-level activities beyond call response. It emphasizes proactive measures to address root causes (Braga, 2008, p. 10).

A problem-oriented approach is proactive law enforcement that identifies public concerns, research problems, explores solutions, and systematically chooses the best option (Goldstein et al., 1981, p. 20). It aims to address the root causes of crime, not just incidents (National Research Council, 2004, p. 9). Proactive criminal investigations use techniques like covert operations, surveillance, and intelligence gathering to prevent crimes (Sousa, 2020). Problem-oriented policing involves 10 key elements by Herman Goldstein, emphasizing problem-focused strategies, community involvement, proactive methods, assessment, strategy adaptation, collaboration, technology use, and continuous learning (Scott, 2003, p. 50; Goldstein, 2001, p. 1).

- **SARA Model of Problem-Oriented Police**

The four steps of SARA are scanning, analysis, reaction, and assessment. It was created in the 1980s by John Eck and William Spelman (Burton & McGregor, 2018, p. 2). These phases enhance community safety by methodically addressing crime issues (Scott, 2003). The SARA model, which combines investigation, adaptation, and research, is used by police to solve problems. In order to solve issues, assessment and analysis are essential (Burton & McGregor, 2018).

- **Problem Analysis Triangle (PAT) Model**

The Problem Analysis Triangle, used by law enforcement to address recurring crimes, identifies crime as a result of offenders targeting vulnerable locations and times, involving controllers overseeing offenders, guards protecting targets, and managers controlling locations to reveal weaknesses and guide prevention based on Routine Activity Theory, and it applies to various contexts, including organized crime and cybercrime (Rossmo & Summers, 2015, pp. 19–20; Miro, 2014, p. 1; Mui & Mailley, 2015, p. 47; Azumah et al., 2020, p.99).

This holistic security model considers motives, offender backgrounds, crime circumstances, and victim characteristics to enhance public safety through problem-oriented policing. Various individuals, including property owners, friends, police, and security personnel, can act as protectors by overseeing the three key elements of a crime: the offender, the opportunity, and the target. Supervisors can be anyone capable of controlling offender behavior (College of Policing, 2019, p. 11; Heinonen, 2013; Lum et al., 2020).

- **Intelligence-Led Policing Model**

Intelligence-led policing, originating in the late 1980s and early 1990s, addresses rising crime rates by proactively monitoring offenders, gathering data, integrating criminology analysis into police operations, and sharing information among agencies for early prevention and security enhancement. It employs a four-step process to improve efficiency (Ratcliffe, 2003, p. 1; Reiner, 1992, p. 435; Gill & Phythian, 2012, pp. 162-165; Burcher & Whelan, 2018, p. 139; Carter & Carter, J. G., 2008, pp. 308–19; Carter, 2008, p. 2; Champagne, 2009, p. 4; Mashiloane, 2015; Ivanovic and Munizaba, 2016, p. 86).

In the UK, intelligence-led policing collaborates with government entities like the Internal Security Agency and the Ministry of Defense to address national security and counterterrorism, while in the US, it partners with agencies such as the National Security Agency and the Department of Defense to enhance national security and combat terrorism (Gill & Phythian, 2012).

- **Criminal Strategy Approach**

The 'Kriminalstrategie,' developed in 1970s and 1980s Germany, is a comprehensive proactive approach used by police to combat organized crime, terrorism, and serious offenses (Gleißner, 1981, pp. 44–46; Braga, 2007). It combines regulatory and operational actions, employing tactics like information collection, surveillance, analysis, coordination, and cooperation to prevent, investigate, and resolve crimes (Braga, 2007, pp. 565–68). Adapted from military and business strategies, this approach enhances cooperation and joint operations among law enforcement agencies to combat and suppress criminal activities (Ivanovic and Munizaba, 2016, p. 87).

Different "criminal strategies" focus on specific crimes through police-community cooperation, involving incentivizing compliance, setting targets, planning actions, making decisions like increasing police presence, and assessing effectiveness through data analysis. Strategies vary by country, with the UK emphasizing community policing and police-community relations, while the US emphasizes advanced techniques and strict drug and terrorism laws (Welsh & Farrington, 2010), and Germany focuses on prevention, deterrence, community cooperation, and offender rehabilitation (SHOC, 2017).

- **Community Policing Model**

Community policing, born in the late 20th century in the US to overcome traditional policing limitations, prioritizes community engagement,

problem-solving, and prevention (Mahmoud, 2015, pp. 27–28). It fosters trust, reduces crime, and empowers locals through strategies like neighborhood watch programs and community meetings (Mangai, 2023, p. 2).

This approach builds cooperation between law enforcement and communities, emphasizing proactive problem-solving and forming partnerships to prevent crime and enhance neighborhood life (Mahmoud, 2015, pp. 30–31). Officers engage with communities, fostering trust, crime prevention, and improved public safety through collaboration (Abdul Matlub, 2010). Community policing raises awareness about organized and cybercrime risks, encourages reporting and cooperation, and facilitates cooperation among stakeholders in crafting preventive strategies and collecting intelligence related to potential criminal activities (Alrousan & Faqir, 2023, p. 2822).

Globally adopted, this approach emphasizes community engagement and prevention (Manhali, 2022, p. 239). Community policing, practiced in several countries, including the UAE, enhances community engagement, safety, and police-resident relationships, aiming to create safer environments and prevent organized crimes and cybercrimes through trust-building, collaboration, and intelligence gathering (Al-Balushi, 2020, p. 18; Abdul Matlub, 2010, p. 211).

- **Hot spot policing Model**

The Hot Spot Model is a policing strategy targeting high-crime areas to enhance community safety (Braga et al., 2019, p. 2). It's been successful in the US, UK, Canada, Australia, and Europe, with effectiveness influenced by local factors and law enforcement commitment (He et al., 2022). While it shows promise in reducing crime, it should be customized to fit each location's unique needs and challenges (Lindberg, 2013, p. 8).

The use of technology has greatly influenced hot spot policing (Engelbrecht et al., 2019, pp. 5-7). Some scholars apply frameworks like optimal foraging theory to understand police behavior in high-crime areas (Lazzati & Menichini, 2016, p. 893; Halford, 2022). The Hot Spot Model concentrates law enforcement efforts on high-crime areas, allocating resources, emphasizing data analysis, community engagement, prevention, deterrence, adaptability, and ongoing evaluation (Weisburd & Telep, 2014, p. 205). It draws from criminological theories explaining the concentration of crime incidents in specific places (Kochel & Nouri, 2016).

- **Predictive Policing Model**

Predictive policing uses data analysis and machine learning to forecast various crimes (Carleton et al., 2020, p. 3), guiding resource allocation and officer deployment based on data-driven predictions (Al-Babli, 2020, p. 28). It identifies high-risk areas and individuals using tools like crime mapping, predictive analytics, data integration, risk assessment, and real-time centers (Uchida, 2014). Ongoing algorithmic advances in digital forensics could revolutionize crime prevention by analyzing historical patterns and predicting some crimes proactively, potentially making investigators more effective (Mosbah, 2021, p. 249).

Crime mapping software, using algorithms and data integration (Ogeto, 2018, p. 11; Mosbah, 2021, p. 250), predicts future crime hotspots, enhances understanding of criminal behavior, and assesses reoffending likelihood. Real-time crime centers provide current data for faster response (Al-Babli, 2020, p. 28). AI algorithms predict crimes, identify potential offenders, assess high-risk individuals, and prioritize high-risk areas (Mosbah, 2021, p. 250).

b). UAE Patterns of the ACI's Practices

In the UAE, law enforcement proactively investigates and prevents crime, using specialized units like the Criminal Investigation Department (CID) and employing various techniques for this purpose, including:

- **The Problem Analysis Triangle (PAT) Model:** In criminology and law enforcement, this model analyzes factors contributing to criminal activities by examining offenders, victims, and environments, aiding in understanding motivations, vulnerabilities, and security enhancements in the UAE, including cybersecurity (Alrousan & Faqir, 2023).

- **Undercover Operations:** Undercover police operations in the United Arab Emirates involve officers assuming covert identities to gather intelligence, combat various crimes, and protect public safety (Greenaway, 2020, p. 68). These operations aim to gather information on criminal activities, infiltrate criminal networks, prevent crimes, collect evidence, and safeguard society (Elhais, 2023). Law enforcement officers may pose as criminals to gather information about criminal activities.

- **Surveillance:** Traffic records, crime history, evidence, and financial and medical data are analyzed to identify potential suspects and assess risks, including back-checking for analyzing historical data (Zine El Abidine & Al-Mulhani, 2013, p. 292). Back-checking examines past activities of organized groups, communications, financial transactions, funding sources,

and movement patterns (Khalil, 2018, p. 28). (Kaliph and Saeed, 2015, pp. 198–199).

- **Intelligence gathering:** Intelligence work involves collecting, analyzing, and interpreting information to detect organized crime (Al-Sharif, 2021, 344). This process includes data analysis, verification, investigation, and cooperation with relevant stakeholders (Wells, 2007, p. 18) (Burcher and Whelan, 2018, pp. 145–148). In the UAE, intelligence-led police work with government agencies using advanced technology to combat terrorism, organized crime, digital crime, and threats to economic security and vital infrastructure in accordance with local laws and regulations (Al-Malih, 2018).

- **Sting Operations:** Sting operations apprehend criminals by luring them into committing a crime, while behavioral analysis identifies organized crime through unusual behaviors and pattern changes, examining activities, communication records, and financial transactions (Farouk, 2012; Hussain, 2012, 657). In the UAE, undercover agents conduct sting operations to combat a wide range of illegal activities, from online fraud to security threats, upholding legal and ethical standards for public safety.

- **Predictive Approach:** Big data analysis, utilizing machine learning and AI, aids authorities in fighting crimes (Mohammed, 2022, p. 101). It includes statistical modeling, geographic and network analysis (Ali, 2018, p. 422), and combating activities like drug trafficking and terrorism (Babylon, 2019, pp. 82–87). It uncovers hidden crime-related information and suspect behaviors, revealing links between suspects, detecting suspicious transactions, and predicting crimes (Genphosi, 2012, p. 95). In the UAE, predictive policing uses data-driven methods for cybersecurity, traffic management, emergency response, tourist safety, and labor exploitation prevention, relying on historical crime data analysis, real-time surveillance, and predictive models (Al Boom & Bin Thani, 2022, p. 8).

- **Hot spot Approach:** Digital cartography and Geographic Information Systems (GIS) help identify high crime-rate areas, aiding resource allocation (Arusan, 2022). Geographical analysis uses data from various sources to detect organized crime, enabling targeted security efforts, prevention strategies (Nassissa, 2018, p. 243), and government-community collaboration in combating organized crime (Faqir and Alrousan, 2023, p. 107). In tourist districts like Dubai and Abu Dhabi, proactive law enforcement relies on hot spot policing, tech expert collaboration, tailored

security measures, adapting to regional dynamics, community trust, and respecting local customs (Al-Doub, 2021, p. 237–238).

- **Behavioral Approach:** Behavioral analysis is employed to detect atypical conduct and irregular patterns, facilitating the evaluation of potential risks and the anticipation of future criminal activities (Farouk, 2012). It can identify organized crime through a detailed analysis of suspicious behavior, communication records, and financial transactions (Mutawa, 2018; Hussain, 2012). This analysis uncovers unusual financial patterns and routines associated with organized crime (Babylon, 2019).

- **Community Approach**: This approach enhances community engagement, public safety, and police-resident relationships (Al-Balushi, 2020, p. 18). Strategies like neighborhood watch programs and community meetings aim to create safer environments, prevent organized crime and cybercrime, and foster trust and collaboration. In the UAE, community policing employs diverse strategies, addressing car theft, cultural sensitivity, youth engagement, tourist safety, education on safety, domestic violence, and traffic safety to boost public safety and community ties (Abdul Matlub, 2010, p. 211; Alrousan & Faqir, 2023, p. 2822).

- **Strategic Approach:** The UAE combats crime with a strong approach, emphasizing prevention, education, and rehabilitation. It employs proactive methods like surveillance, informants, data analysis, undercover operations, sting operations, community policing, and intelligence gathering to disrupt criminal activities, particularly organized crime and cybercrime, target key figures, and prevent criminal operations. (Al-Malih, 2018).

- **Modern Technological Approach:** In the UAE, advanced technologies like AI, facial recognition, and cloud computing prevent crimes (Shamsi, 2022, p. 101–103). They enable data analysis, machine learning, and AI for detecting suspicious activity and securing data. Smartphone apps aid in reporting crimes. This aligns with global practices in the UK, China, and the USA (Babylon, 2019, p. 121).

The Role of Policing Approaches in Anticipative Criminal Investigation

Numerous methodologies play crucial roles in anticipatory criminal investigations in the UAE. Covert operations acquire vital intelligence and infiltrate clandestine networks (Greenaway, 2020, p. 68). Surveillance, data analysis, and financial scrutiny detect patterns and identify connections and suspects (Zine El Abidine, 2013, p. 292; Khalil, 2018, p. 28; Caliph and Saeed, 2015, pp. 198–199).

Intelligence gathering involves data analysis and collaboration, tracking organized crime (Al-Sharif, 2021, p. 344; Aidan, 2007, p. 18; Burcher and Whelan, 2018). Sting operations and behavioral analysis identify criminal endeavors (Farouk, 2012; Al Mutawa, 2018, p. 45; Hussain, 2012, 657). Predictive approaches, using big data, AI, and geography, uncover concealed crime information, predict occurrences, and identify suspects (Mohammed, 2022, p. 101; Ali, 2018, p. 422; Babylon, 2019, p. 76; Genphussi, 2012, p. 95). Moreover, the application of the hot spot approach, which relies on digital mapping and Geographic Information System (GIS) techniques (Arasan, 2022; Faqir and Alrousan, 2023, p. 107), greatly facilitates the efficient allocation of resources and the formulation of tailored prevention strategies (Nassa, 2018, p. 243; El Dub, 2021, p. 237–238).

The community approach fosters engagement and trust while gathering vital intelligence; the UAE's strategic approach emphasizes strict penalties, proactive investigation, prevention, education, and rehabilitation; and modern technological methods use AI and cloud computing for large-scale data analysis and encryption to prevent organized crime, all essential to anticipatory investigations in the UAE (Al-Malih, 2018; Al-Shamsi, 2022, p. 101–103). Weaknesses in various crime-fighting approaches include potential oversimplification (PAT Model), entrapment and ethical concerns (Undercover Operations), privacy issues and resource-intensiveness (Surveillance), information accuracy and overload (Intelligence Gathering), ethical and legal concerns (Sting Operations), predictive model fallibility (Predictive Approach), resource imbalance (Hot Spot Approach), limited applicability (Behavioral Approach), reliance on community cooperation (Community Approach), resource requirements and factors (Strategic Approach), and cost and susceptibility to misuse (Modern Technological Approach) (Al-Balushi, 2020, p. 18; Abdul Matlub, 2010, p. 211).

Conclusion

In criminal investigations, diverse techniques are used to combat crime. This analysis assesses these methods, including undercover operations, surveillance, intelligence gathering, sting operations, behavioral analysis, predictive approaches, and the hot spot approach.

Undercover operations are effective but resource-intensive and risky; surveillance techniques aid in pattern recognition but raise privacy concerns; intelligence gathering offers a comprehensive view but is time-consuming; and sting operations and behavioral analysis excel in detection but may lead to false positives, all with their own unique challenges.

Predictive approaches allow for proactive intervention through advanced technologies, but their accuracy hinges on data precision, and concerns about

profiling and bias persist. Resource intensity is also a notable challenge. The hot spot approach optimizes resource allocation by targeting areas with higher crime rates, aiding in the development of targeted prevention strategies. However, it may not address the root causes of crime and could potentially result in over policing if not carefully managed.

In summary, successful criminal investigations require careful technique selection based on goals and circumstances, often using a mix of methods to tackle complex crimes. Policymakers and law enforcement should use this information to make informed choices in their investigations. To address the imbalances in proactive investigation methodologies, the study recommends the following:

- Provide regular and thorough training to law enforcement personnel and investigators, covering behavior, technology usage, and skills to enhance their efficiency.
- Foster collaboration among various agencies involved in investigations, facilitating better information sharing and expertise exchange.
- Prioritize the safety of clients and investigators by implementing necessary security measures while ensuring compliance with privacy laws and individual rights when using surveillance techniques.
- Employ contemporary technological innovations to mitigate resource expenditures and augment precision in investigations, encompassing the application of artificial intelligence for enhanced analytical capabilities and decision-making processes.
- Collaborate with government agencies and non-governmental organizations to tackle the social and economic factors contributing to criminal behavior.
- Utilize a combination of investigative strategies to address various aspects of criminal activities effectively.
- Review and adjust local and national regulations to align with the specific needs of investigative operations while safeguarding individual and community rights.

References

Abdallah, A. K. (2018). Big Data and Analysis: Concept, Characteristics, and Applications. *Faculty of Arts Journal*, 49(2), 411-444.

Abdul Matlub, M. (2010). Police and Community Reform Efforts: The Concept of Problem Solving in Neighborhood Policing - A Study of the British Police. *Journal of Security Research and Studies*, General Directorate of Abu Dhabi Police, 1(2).

Ahmed, M. A. S. (2022). Big Data, Its Essence, Significance, and Elements. *Arab International Journal of Knowledge Management*, 1(2), 99-148.

Al-Babli, A. Y. M. (2020). Utilizing Artificial Intelligence Techniques in Security Work: An Applied Study - Predictive Policing during the Chinese Wuhan Coronavirus Crisis. Security and Law Journal, 28(1), 3-86.

Al-Balushi, F. A. M. I. (2020). Study on the Role of Community Policing in Crime Reduction. Al-Hikmah Journal of Social Studies, 4, 4-28.

Al Boom, Amna Ali and Bin Thani, Shaikha Khalid. (2022). Predictive Policing. Thesis. Rochester Institute of Technology.

Al-Doub, A. T. (2021). Using Time Series Analysis Models to Predict the Total Crime Rate in Kuwait. *Gulf and Arabian Peninsula Studies Journal*, 47(181), 235-248.

Alharbi, S., Weber-Jahnke J. and Traore I. (2011). The Proactive and Reactive Digital Forensics Investigation Process: A Systematic Literature Review. *International Journal of Security and Its Applications*, 5 (4), 87–100.

Al-Hindawi, A. D., Al-Hamouri, S. S., & Al-Muayyad, R. N. (2017). Foresight and Pre-Strategic Planning... Intelligent Preparedness. Dubai: Qandeel Printing and Publishing.

Al-Jayyar, T. S. A. H. (2014). Police Inquiries between Legality and Judicial Control. *Journal of Legal and Economic Research*, No. 55, April 2014, p. 841-1038.

Al-Kilani, I. G. (1986). History and Future Industry. *Nation Journal*, 6(69), 32-35.

Al-Malih, A. M. A. (2015). The Validity & Impact of Criminal Proceedings in Countering of Crime. Master's Dissertation, Dubai Police Academy, The United Arab Emirates, 1-230.

Al-Malih, A. M. A. (2018). Initiative to Develop Methods of Investigating and Dealing with Criminal Phenomena to Upgrade Investigators 2014-2016. Sharjah Police: Management of Police Research Center, Sharjah, 1-380.

Alrousan, E. M. A., & Faqir, R. S. A. (2023). Security Forecasting for Detecting Organized Crimes: New Strategies and Trends. Journal of Namibian Studies, 33(Special Issue 3), 2820-2841.

Al-Shahawi, Q. A. (1999). The Areas of 'Intelligence' Investigations. *Al-Fikr Al-Shuruti*, 8 (2), 37-55.

Al-Sharif, M. S. A. (2021). Legal Nature of AI Crime Prediction and Legitimacy. *Arab Journal of Forensic and Forensic Sciences*, 3(2), 341-359.

Arendt, H. (1961). Between Past and Future: Six Exercises of Political Thought. New York: The Viking Press, The Macmillan Company of Canada Limited.

Arusan, A. (2002). Geography and Its Importance on the Security Map. *Security and Life Journal*, 21(239), 42-55.

Azumah, F. D., Machinal, J. O., Krampah, S. and Ayim P. N. (2020). Determinants of Target Victim Selection: A Case Study of Criminals from Gambaga Prisons. *Journal of Victimology and Victim Justice*, 3 (1), 93-112.

Ballard, D. R. (2016). Strategic Planning. National Shield Magazine, Directorate of Moral Guidance in the General Command of the Armed Forces, United Arab Emirates.

Ballin, M. H. (2012). Anticipative criminal investigation: Theory and Counter-Terrorism in Netherlands and the United States. PhD Thesis, University of Utrecht, Netherlands, 1-683.

Bowling, B. (2012). Transnational Policing on the Ground: Reactive and Proactive Investigation. In Policing the Caribbean: Transnational Security Cooperation in Practice, Clarendon Studies in Criminology, Oxford Academic, 103–138.

Braga, A. A. (2007). Criminal Strategy: A Conceptual Framework for Understanding and Preventing Crime. *Journal of Criminology & Public Policy*, 6(3), 563-572.

Braga, A. A. (2008). Problem-Oriented Policing and Crime Prevention, 2nd Edition, Criminal Justice Press, Monsey, New York, U.S.A., 1-53.

Braga, A. A. (2016). Better Policing Can Improve Legitimacy and Reduce Mass Incarceration. Harvard Law Review, 129, 233-244.

Braga, A. A., & Weisburd, D. L. (2010). The Empirical Evidence for Hot Spots Policing. In Policing Problem Places: Crime Hot Spots and Effective Prevention (Studies in Crime and Public Policy). Oxford Academic, 99-150.

Braga, A. A., Turchan, B., Papachristos, A. V., & Hureau, D. M. (2019). Hot spots policing of small geographic areas: Effects on crime. Campbell Systematic Reviews, 15(3), 1-88.

Burcher, M., & Whelan, C. (2018). Intelligence-Led Policing in Practice: Reflections from Intelligence Analysts. *Police Quarterly*, 1-21.

Burcher, M., and Whelan, C. (2018). Intelligence-Led Policing in Practice: Reflections from Intelligence Analysts. *Police Quarterly*, 22 (2), 139-160.

Burton, S. and McGregor M. (2018). Enhancing SARA: a new approach in an increasingly complex world. *Crime Science*, 7(1), 1-5.

Carleton, B., Cunningham, B., & Thorkildsen, Z. (2020). The Use of Predictive Analytics in Policing. Arlington, VA: CNA, 1-26. Retrieved from https://apps.dtic.mil/sti/trecms/pdf/AD1145696.pdf

Carter, D. L. (2008). The Concept and Development of Intelligence-Led Policing (ILP). Michigan: Michigan State University.

Carter, D. L., & Carter, J. G. (2009). Intelligence-Led Policing Conceptual and Functional Considerations for Public Policy. *Criminal Justice Policy Review*, 20(3), 310-325.

Champagne, B. (2009). The United Nations and Intelligence. A Thesis Presented in partial completion of the requirements of The Certificate-of-Training in United Nations.

College of Policing. (2019). Problem solving: learning and development interim practice advice (Version 1.0). College of Policing Limited, 1-32.

Docobo, J. M. (2005). Community Policing as the Primary Prevention Strategy for Homeland Security at the Local Law Enforcement Level. Master of Arts in Security Studies (Homeland Security and Defense), Naval Postgraduate School, March 2005, 1-83.

Elhais, H. (2023). Security Initiatives in the UAE: Impact on Crime Reduction. Retrieved from https://www.jdsupra.com/legalnews/security-initiatives-in-the-uae-impact-9743722

Engelbrecht, H., Lukosch, S. G., & Datcu, D. (2019). Evaluating the Impact of Technology Assisted Hotspot Policing on Situational Awareness and Task-Load. Proceedings of the ACM on Interactive, Mobile, Wearable and Ubiquitous Technologies, 3(1), 1-18.

Faqir, R. S A., & Alrousan, E. (2023). Chaos Theory and the Geography of Crime. In P. K. Singh (Ed.), Perspective in Laws (Vol. 6, pp. 101-129). AkiNik Publications, New Delhi.

Faqir, Raed S A & Alrousan, Ehab. (2023). Reimagining Criminology: The Transformative Power of the Postmodern Paradigm, *Pakistan Journal of Criminology*, 15 (3), 151-170.

Farouk, S. (2012). Behavioral Analysis Reveals the Nationalities of Criminals. UAE newspaper Al Bayan. Retrieved from https://www.albayan.ae/across-the-uae/accidents/2012-04-04-1.1624184

Fernando Miro (2014). Routine Activity Theory. The Encyclopedia of Theoretical Criminology, First Edition, Blackwell Publishing Ltd, 1-7.

Genphosi, A. (2012). Mechanisms Developed by INTERPOL to Address Organized International Crime. *Journal of Police Thought*, 21(83), 75-110.

Gill, M., & Phythian, M. (2012). Intelligence-led policing: A comparative analysis of policing models. In Crime, Risk and Justice, Palgrave Macmillan, London, 161-180.

Gilling, D. (2007). Multi-Agency Crime Prevention in Britain: The Problem of Combining Situation and Social Strategies. *European Journal on Criminal Policy and Research*, 13(4), 231-248.

Gleißner, W. (1981). The Concept of Kriminalstrategie in the FRG. *Police Science: The International Journal of Police Strategies & Management*, 8(1), 43-53.

Goldstein H. (2001). Problem-Oriented Policing in a Nutshell. Document submitted to the Problem-Oriented International Policing Conference, San Diego, December 7, 2001, 1-195.

Goldstein H. and Susmilch C. E. (1981). "The Problem-Oriented Approach to Improving Police Service: A Description Project and An Elaboration of the Concept." Development of Problem-Oriented Policing Series, Volume I, the National Institute of Justice of the United States Department of Justice, 1-56.

Greenaway, K. (2020). How Emirati Law Enforcement Allows Kleptocrats and Organized Crime to Thrive. In M. T. Page & J. Vittori (Eds.), Dubai's Role in Facilitating Corruption and Global Illicit Financial Flows. Carnegie Endowment for International Peace, Washington, 1-148.

Halford, E. (2022). A Practitioners Perspective of the Implementation Effectiveness of the Optimal Forager Theory Methodology within the United Kingdom. Preprints. Retrieved from https://doi.org/10.20944/preprints202203.0163.v1

He, Z., Lai, R., Wang, Z., Liu, H., & Deng, M. (2022). Comparative Study of Approaches for Detecting Crime Hotspots with Considering Concentration and Shape Characteristics. International Journal of Environmental Research and Public Health, 19(21), 14350.

Heinonen, J. A. (2013). Problem Analysis Triangle. In Encyclopedia of Community Policing and Problem Solving. SAGE Publications, Ltd. Retrieved from https://sk.sagepub.com/reference/encyclopedia-of-community-policing-and-problem-solving/i3007.xml

Hussain, K., Zakir, M., Durairaj, M., & Farzana, G. R. L. (2012). Criminal Behavior Analysis by Using Data Mining Techniques. Paper presented at the IEEE-International Conference on Advances in Engineering, Science and Management (ICAESM -2012), March 30-31, 2012, 656-658.

Ivanovic, A. R. and Munizaba, B. (2016). Proactive Criminalistic Investigation as an Effective Means of Combating Severe Forms of Crime. In International yearbook - Criminalistic education, situation and perspectives - 20 years

after Vodinelic, Faculty of security, Saint Cyril and Methodius of Skopje, 79-90.

Jameel, F. (1988). Obstacles to Administrative Development in Lebanon (1st Edition). Beirut: Dar Al-Jeel.

Khalifa, B. K., & Saeed, A. L. I. (2015). Protecting National Security, Information and Communication Security, and the Internet Against Terrorism, Organized Crime, Intrusion, Espionage, and Surveillance: From a Legal and Strategic Security Perspective. *Kuwait International College of Law Journal*, 3(10), 163-280.

Khalil, A. M. A. (2018). Discover Distorted Fingerprints Using Neural Networks (Master's Thesis). Nilin University, Khartoum.

Kochel, T., & Nouri, S. (2016). Hot Spots Policing. In Criminology. obo in Criminology. doi: 10.1093/obo/9780195396607-0178

Lazzati, N., & Menichini, A. A. (2016). Hot Spot Policing: A Study of Place-Based Strategies for Crime Prevention. Southern Economic Journal, 82(3), 893–913.

LeCates, R. (2018). Intelligence-led Policing: Changing the Face of Crime Prevention. Police Chief Magazine, October 17, 2018. Retrieved from https://www.policechiefmagazine.org/changing-the-face-crime-prevention/?ref=4f1d967f817ac811b21c97eea171a4d4 (Accessed on September 15, 2023).

Lindberg, D. (2013). Implementing Hotspot Policing: A Review of the Literature. Criminology and Criminal Justice Senior Capstone Project, 4, 1-11. Retrieved from https://pdxscholar.library.pdx.edu/ccj_capstone/4

Lum, C., Koper, C. S., Wu, X., Johnson W., and Stoltz M. (2020). Examining the Empirical Realities of Proactive Policing Through Systematic Observations and Computer-Aided Dispatch Data. *Police Quarterly*, 23 (3), 283-310.

Madensen, T. D. (2010). Eck, John E.: Places and the Crime Triangle. In F. T. Cullen & P. Wilcox (Eds.), Encyclopedia of Criminological Theory. SAGE Publications, Inc., 1-9.

Mahmoud, M. M. A. (2015). Mechanisms for Implementing Community Policing. *Police Thought*, 24(92), 21-65.

Mangai, M. S., Pillay, A. C., Masiya, T., & Lubinga, S. (2023). The Police and Citizens as Co-Producers of Crime Prevention in Johannesburg. Administrative Sciences, 13(6), 1-19.

Manhali, A. H., Al Kaabi, F., & Al Hanaee, M. (2022). We Are All Police—Abu Dhabi Police Community Engagement Initiative. Policing: A Journal of Policy and Practice, 16(2), 236-248.

Mashiloane, N.P. (2015). The use of intelligence led policing in crime prevention by the South African Police. Master's thesis, University of South Africa, Pretoria, 1-340.

Mosbah, Omar Abdulmajid. (2021). Utilizing Predictive Justice Algorithms in the Criminal Justice System: Perspectives and Challenges. International Journal of Law, 10(1), 233-266.

Mui, G. and Mailley, J. (2015). A tale of two triangles: comparing the Fraud Triangle with criminology's Crime Triangle. *Accounting Research Journal*, 28(1), 45-58.

Mutawa, N. A. (2018). Integrating Behavioral Analysis within the Digital Forensics Investigation Process (Ph.D. Thesis). University of Central Lancashire, 1-236.

Nafei, S. A. (2017). Strategic Foresight for the Future. *Arab Journal of Educational and Social Studies*, Issue 11, 5-28.

Nassissa, F. Z., & Zaaiter, F. (2018). Organized Crime in the Current Changes Context. *Journal of Historical and Social Studies*, 34, 237-245.

Ogeto, F. (2018). Crime Mapping as a Tool in Crime Analysis for Crime Management. International Journal of Phytoremediation, 1–12.

Ratcliffe, J. H. (2003). Intelligence-led Policing. Trends & Issues No. 248. Australian Institute of Criminology, 1-7. Retrieved from https://www.publicsafety.gc.ca/lbrr/archives/cnmcs-plcng/cn35747-eng.pdf (Accessed on June 13, 2023).

Reiner, R. (1992). Police Research in the United Kingdom: A Critical Review. Crime and Justice, The University of Chicago Press, 15, 435-508.

Rossmo, D. K. & Summers L. (2015). Routine Activity Theory in Crime Investigation. Chapter in Book. In: Andresen, M.A., Farrell, G. (eds) The Criminal Act. Palgrave Macmillan, London, 19–32.

Scott, M. S. (2003). "Getting Police to Take Problem-oriented Policing Seriously. *Crime Prevention Studies*, 15, 49-77.

Shamsi, J. S. (2022). Modern Technologies and Smart Programs and Their Role in Combating Crime and Drugs. *Journal of Legal and Economic Research*, 55, 87-146.

Sousa, W. H. (2020). There Is No Substitute for Proactive Policing." Retrieved from https://www.city-journal.org/community-based-proactive-policing-works (Accessed on December 12, 2022).

Tahfah, F. A. M. (2021). Levels of Seriousness in Criminal Investigations and Their Validity Criteria: A Comparative Study between Egyptian and Emirati Judiciary. *National Criminal Journal*, 64 (1), 1-70.

The Strategic Hub for Organized Crime Research (SHOC) (2017). Preventing Organized Crime: European Approaches and Responses in Practice and Policy, Annual conference of the (SHOC). Retrieved from https://static.rusi.org/201712_rusi_preventingorgansisedcrime_shoc_web.pdf (Accessed on May 13, 2023).

Uchida, C. D. (2014). Predictive Policing. In G. Bruinsma & D. Weisburd (Eds.), Encyclopedia of Criminology and Criminal Justice. Springer. Retrieved from https://doi.org/10.1007/978-1-4614-5690-2_260

Weisburd, D., & Telep, C. W. (2014). Hot Spots Policing: What We Know and What We Need to Know. Journal of Contemporary Criminal Justice, 30(2), 200–220.

Weisburd, D., Telep, C. W., Hinkle, J. C., & Eck, J. E. (2008). The effects of problem-oriented policing on crime and disorder." A report submitted to the U.S. Department of Justice. Retrieved from https://www.ojp.gov/pdffiles1/nij/grants/224990.pdf (Accessed on May 21, 2023).

Wells A. (2007). Understanding Intelligence Supervision: Guide (Translation of Mahmoud Sayed). Geneva Centre for Democratic Control of the Armed Forces. Retrieved from https://www.dcaf.ch/sites/default/files/publications/documents/Intelligence_Oversight.pdf

Welsh, B. C., & Farrington, D. P. (2010). Future of Crime Prevention: Developmental and Situational Strategies. Cambridge University, National Institute of Justice, 1-23.

Wortley R. & Townsley M., Environmental Criminology and Crime Analysis, 2nd ed., New York, NY: Routledge, 2017, Pp. 98 – 115.

Zahir, Z. (2004). Introduction to Future Studies: Concepts, Methods, Applications. Arab Center for Education and Development, Cairo: Book Publishing Center.

Zain al-Abidin, J. & Al-Mulhani, B. H. S. (2013). Recognizing the Fixed Face Using the Backpropagation Neural Network Algorithm. Journal of Graduate Studies, 2, 279-294.

Zuhair, A. Y. M. (2019). The Role of AI Systems in Predicting Crime. Journal of Police Thought, 28(110), 59-133.