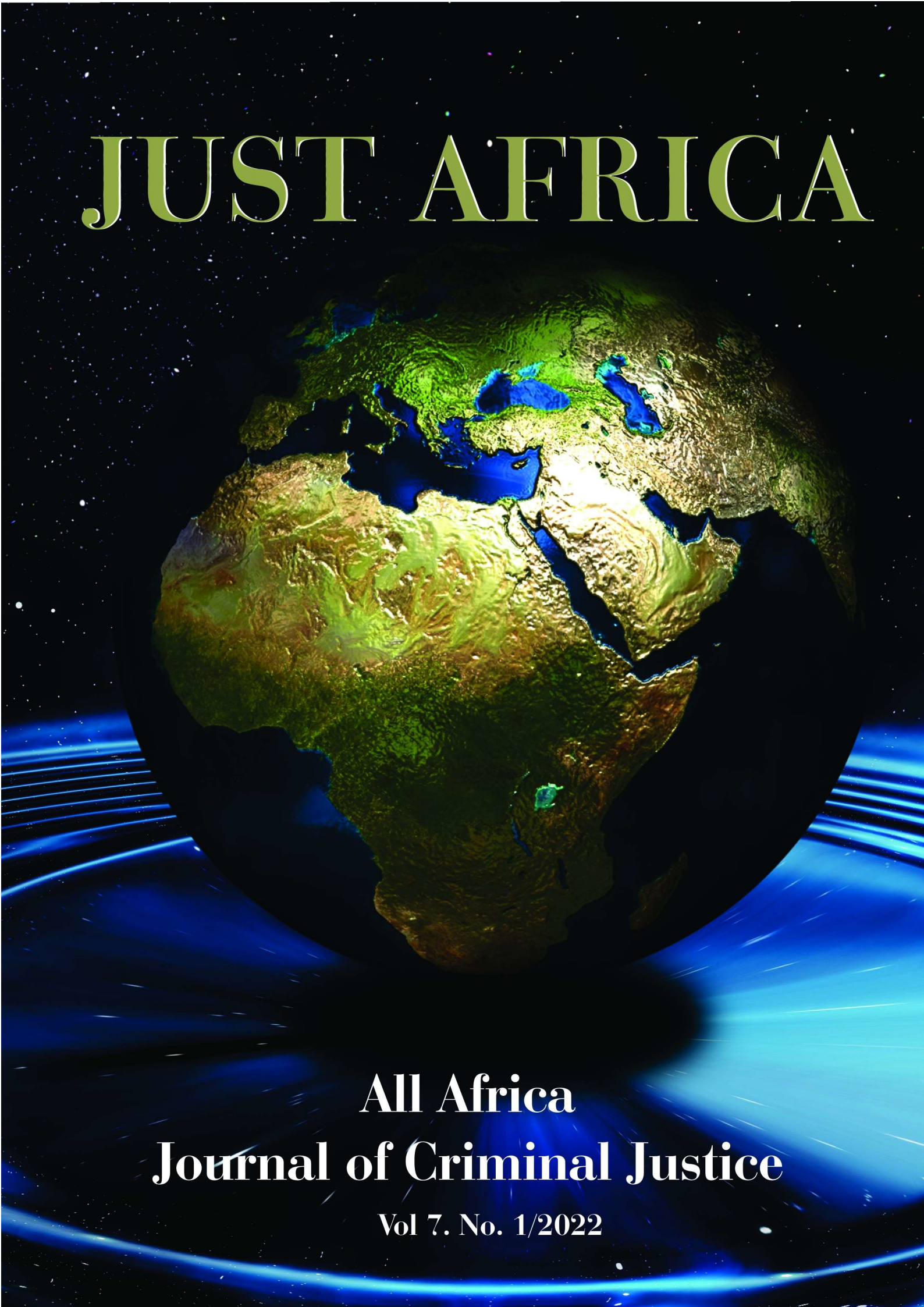
JUST AFRICA



All Africa Journal of Criminal Justice

Vol 7. No. 1/2022

JUST AFRICA

All - Africa Journal of Criminal Justice

Vol 7
No 1/2022

JUST AFRICA is a peer-reviewed academic journal that promotes academic and professional discourse and the publishing of research results on the subject of crime and criminal justice and other crime-related phenomena in the broad Criminological Sciences and applied field of criminal justice.

JUST AFRICA was previously published by the ALL AFRICA CRIMINAL JUSTICE SOCIETY (ACJUS) (first published in 2013).

STADIO (formerly Southern Business School (SBS)) and SARP Publishers, the publishers of Servamus Community-based Safety and Security Magazine, were recently granted permission to continue with the publication of **JUST AFRICA** and have joined forces to do so, combining their respective academic and publishing experience.

ISSN: 978-0-620-61064-3

The **JUST AFRICA** Journal can be accessed at:
http://www.servamus.co.za/index.php/journal
or https://journals.co.za/content/journal/ajcj

STADIO | FORMERLY SBS

Servamus Community-based Safety & Security Magazine

CONTENTS

FOREWORD

On the importance of Criminal Justice Research at the Crossroads of Populism, the Rule of Law and Human Rights

Dr Stefan Schulz, Deputy Director (Academic)
Department of Social Sciences
University of Science and Technology
sschulz@nust.na

"For to be free is not merely to cast off one's chains, but to live in a way that respects and enhances the freedom of others." - Nelson Mandela.

When reading the articles for this issue of **JUST AFRICA**, it struck me that in various ways all articles are predicated upon the notion of human rights. The first article makes the case for evidence-based policing (EBP) as a means to professionalise the South African Police Service (SAPS) and thus render their operations more effective and efficient. At face value, the link to human rights may appear weak. However, evidence-based governance, including policing, may be regarded as a necessity in democratic societies. In general, a more efficient and effective public sector requires - at least theoretically - less operating capital, and translates into a smaller tax burden for all. Besides, if we stay with EBP as an example, the benefits for the community must be enormous. Criminal justice systems often suffer from compartmentalisation and a lack of integration of the different components of the criminal justice chain. In South Africa and Namibia, for instance (Schulz & Bruyns, 2021), this results in lengthy pre-trial detention, i.e. the unnecessary deprivation of liberty. It also means delays in the finalisation of cases and with that, closure for victims, especially those of violent crimes such as murder, rape, robbery, domestic violence and gender-based violence. The lack of coordination and collaboration with other sectors such as health, education and social development, essential to ensuring the integration of responses to crime and violence, also means that the concept of community policing remains under-optimised.

The second article is an international contribution to this edition of **JUST AFRICA**. It deals with issues around the presumption of innocence involving Bulgaria as a member of the Council of Europe and a signatory of the European Convention on Human Rights. The article highlights the threat to rights (other than the temporary loss of liberty), whenever the presumption of innocence is ignored in the context of public reference to guilt.

Two other articles deal more directly with the impact of policing on citizens' rights. Addressing questions of the utility of the uptake of the Fourth Industrial Revolution (4IR) and artificial intelligence (AI) for policing, they discuss benefits and bias, as well as risks of 4IR and AI to fundamental human rights and public interest.

Highlighting the human rights infusion of this edition may seem superfluous because "there is in fact hardly any other legal area in which human rights have become so influential in recent decades as the criminal justice system" (Van Kempen, 2014). However, over the last two decades, and this makes it more than a pure coincidence, the rule of law and human rights have come under attack, implicitly and explicitly, from various corners. Paradoxically, even though recently the international community, with reference to the International Human Rights Bill, has achieved important milestones, e.g. the unanimous adoption of the United Nations Standard Minimum Rules for the Treatment of Prisoners (the Nelson Mandela Rules) by the United Nations General Assembly on 17 December 2015, the rule of law and human rights have been challenged at domestic levels across the world (refer to Lacey, 2019; Roth, 2017). The threat to the normative validity of these rights cannot be underestimated, because the weaker those rights positions become, the more we will see individuals entangled in their respective criminal justice systems becoming pawns in the pursuit of abstract criminal justice objectives. Populist attacks on the rule of law and human rights hinge on the rejection of the

universality assumption undergirding any human rights framework as much as misgivings about the actualisation of human rights via judicial review, which is seen as counter-majoritarian (Shapiro, 2019).

Interestingly, research evidence which should be able to hold populist ideologies at bay, demonstrating that irrespective of specific cultural backgrounds, humans aspire to individual autonomy, albeit not in an absolute sense, but rather within the opportunity structures of their respective realities (Ryan & Deci, 2006), seems not to matter much. This may be so because the rejection of the universality assumption occurs in parallel with a certain discourse about knowledge and politics. This in turn analyses how in parts of the world theses of relativism and social constructivism undermine the received image of science as a truth-pursuing endeavour, with the acceptance of "original knowledge and the authority of science as the legitimate source of knowledge for public decision-making" (Viale, 2001).

It is a daunting task for the scientific enterprise to retain societal relevance at a time when the politics of the day not only lead to the erosion of the rule of law and checks and balances (Lacey, 2019), but also the denigration of science and scientific expertise (Weymann, Santer & Manski, 2020). In this situation, it is important for scholars who remain convinced of the relevance of science for the optimisation of public policy, to uphold their scientific ethos, the norms of the scientific community, the scientific method and attitude. I am content that the authors of the articles in this edition of JUST AFRICA in all honesty followed commensurate scholarly wisdom. Yet, a special mention of the first article about EBP is in order because, although the authors eclipse the complex discourse about knowledge and politics, they implicitly retain the claim that scientific evidence provides a stock of knowledge, which is useful for social and economic ends.

List of references

Lacey, N. (2019). Populism and the rule of law. *Annual Review of Law and Social Science,* 15: 79-96.

Roth, K. (2017). The dangerous rise of populism: global attacks on human rights values. *Journal of International Affairs,* Special 70th Anniversary Issue: 79-84.

Ryan, R.M. & Deci, E.L. (2006). Self-regulation and the problem of human autonomy: does psychology need choice, self-determination, and will? *Journal of Personality,* 74(6): 1557-1586.

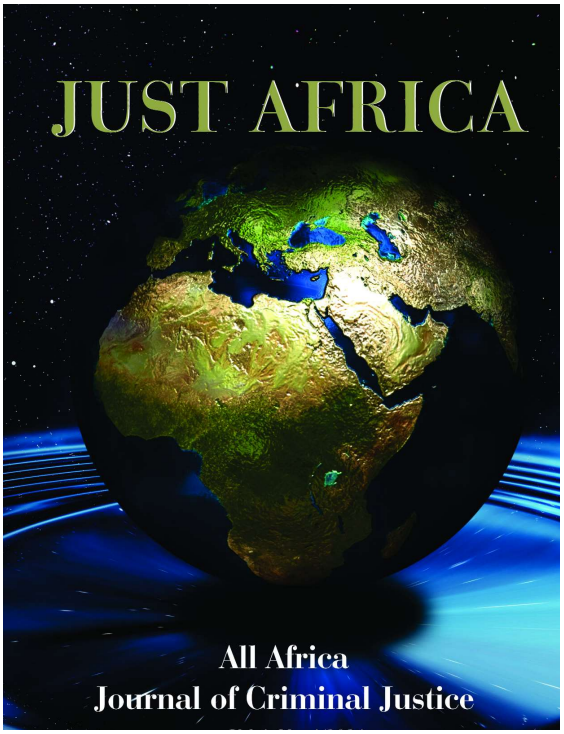
Schulz, S. & Bruyns, H. (2021). Rethinking pre-trial detention in Namibia. *Just Africa,* 6(2): 22-33.

Shapiro, M.M. (2019). Judicial power and democracy. In C. Landfried (Ed.) *Judicial power: how constitutional courts affect political transformation.* Cambridge: Cambridge University Press.

Van Kempen, P.H. (2014). Introduction. In P.H. van Kempen (Ed.) *Criminal Law and Human Rights.* Burlington (USA): Ashgate Publishing.

Viale, R. (2001). *Knowledge and Politics.* New York: Springer.

Weymann, R.J., Santer, B. & Manski, C.F. (2020). Science and scientific expertise are more important than ever. *Scientific American.* Available from: https://www.scientific-american.com/article/science-and-scientific-expertise-are-more-important-than-ever/



LEGAL TALK

Case Law

Dr. (Brig.) Marga van Rooyen
Legal Services, South African Police Service

In *AK v Minister of Police* [2022] ZACC 14, the Constitutional Court had to determine whether the manner in which police officials conducted a search operation for a missing person and the subsequent investigation was reasonable, especially within the context of gender-based violence and the duty of the South African Police Service (SAPS) to protect women from harm.

The facts of the case were as follows: a woman ("the complainant") was attacked and robbed one afternoon in Gqeberha (formerly Port Elizabeth). During the ordeal, which lasted approximately 15 hours, she was held in captivity in the bushes and sand dunes next to a beach and repeatedly raped by unknown attackers.

In the meantime, her family reported her as missing. The police discovered her vehicle at the beach around midnight. The vehicle had been broken into and items had been taken from it. Upon this discovery, police officials requested the assistance of the K9 Unit in the search operation. A dog handler with a police dog arrived at the scene about an hour later.

A search was conducted with a police vehicle along the shoreline. The blue light and siren of the police vehicle were activated to make the presence of the police known. A search on foot with the police dog was also conducted up to the harbour wall, but not beyond it. During the search, three homeless persons who were living on the beach ("bush dwellers") were spotted and questioned by the dog handler. They informed the dog handler that they were not aware of any incident involving the missing person. Neither the search with the patrol vehicle nor with the police dog was successful and the foot search was cancelled.

A police helicopter was dispatched around 02:00 to assist. The helicopter searched the area with a spotlight. The helicopter was restricted in its search since the search area was adjacent to a no-fly zone next to the harbour. The helicopter search was called off after about 20 minutes because of an incoming aircraft that was scheduled to land at the nearby airport.

Despite these efforts, the search operation was unsuccessful. The complainant only managed to escape later that morning and reported her ordeal to the police. It appeared that she had been kept in an area about 20 to 30 metres further away from the area that had been searched by the police during the night.

The case was investigated by the police. However, despite being aware of the CCTV surveillance of the parking area of the beach, no immediate steps were taken to obtain the footage. An identity kit of the suspect was compiled with the description of the complainant and she attended an identity parade. The complainant was unable to identify any person in the parade, including a suspect who had been arrested in connection with the possession of personal items that she had left in her vehicle. Five days after the incident, an informal identification parade was also held on the beach with a large number of bush dwellers. However, the complainant was unable to identify any as potential suspects in her attack. No positive link could be made between DNA samples taken from the complainant and any of the suspects.

In a split decision, the majority of the Constitutional Court judges held that the conduct of the police officials in the search operation and investigation was unreasonable and that the Minister of Police is vicariously liable for the negligent action of police officials.

The court underlined the responsibility of the State (including the SAPS) to respect, protect, promote and fulfil the rights contained in the Bill of Rights as set out in the Constitution of the Republic of South Africa, 1996. In evaluating the conduct of police officials, the court explained that the SAPS has to take reasonable measures to protect and fulfil the rights of women specifically, including the right to dignity and to be free from violence.

The court held that the police officials failed to conduct the search and investigation in a manner that is expected of reasonable police officials. This included negligence in respect of the following actions:

- The police officials who first discovered the vehicle of the complainant failed to conduct a basic foot patrol to look for

the complainant in the vicinity of the beach and dunes. The court explained that, if police officials fail to act promptly and with determination, the obligation to protect the public and ensure the safety and security of vulnerable persons becomes meaningless.

- The dog handler terminated the search just short of the area where the complainant had been kept. The court explained that the official had to be sure that there was no area beyond the harbour wall to search (where the complainant might have been kept). If the official had done so, the complainant would probably have been found earlier and would have been spared the further trauma that she had subsequently suffered due to the failure. The dog handler was familiar with the area and knew of the boundary wall and sand dunes, but failed to search the whole area. There were no barriers that would have prevented him or the police dog from searching the extended area. The omission of this police official was amplified by the fact that he was aware that an area had not been searched, and yet, he failed to instruct the helicopter to focus on searching that specific area. The court pointed out that a diligent and reasonable police official with expertise in searching (such as the dog handler) would have extended the search area or instructed the helicopter to search the area.
- The helicopter failed to fly over the whole dune area and to hover close enough to the harbour wall to direct the spotlight towards the bushes in the no-fly zone. The court also held that the helicopter search was terminated prematurely and could have resumed after the incoming aircraft had landed. Due to inadequate communication between the helicopter crew and the dog handler, the area where the complainant was detained remained unsearched.
- After the complainant had been found, the focus of the police should immediately have been to apprehend the perpetrators. The complainant was able to provide information on where she had been kept. This information should have been the starting point of the investigation. However, no effort was made to interview any of the bush dwellers, not even to obtain their names and contact details should the information be needed later.
- No urgent steps were taken to obtain and view the CCTV footage of the parking area for possible leads. This information could have assisted the police to view events that took place in the parking area and possibly, the modus operandi of the perpetrators. This was an opportunity to identify a suspect and to follow up on leads. The court pointed out that reasonable leads must be followed up in the course of a proper investigation. The court, furthermore, explained that an investigation cannot be conducted merely on the question of whether or not the perpetrator appears on the footage. Footage may also offer other valuable evidence. As a result, the police are required to investigate all reasonable leads. The failure to view the CCTV footage straightaway caused the decreased value of leads over time.

The court explained that police officials are not required to guarantee a successful search (by finding the complainant) or investigation (by securing a conviction of the perpetrator). Instead, the police are required to conduct a search and investigation in an adequate manner with the means available. The focus is therefore on how the available resources are used to conduct the search and rescue mission.

While the court acknowledged it was commendable that the SAPS was able to deploy the K9 Unit and a helicopter, the manner in which these resources were utilised was of critical importance. The court held that police officials are required to utilise the deployed resources with the necessary diligence, care and skill reasonably expected of police officials in the circumstances.

In consideration of international standards, the court explained that an effective investigation must be able to determine the circumstances in which the incident took place and must lead to the identification of the perpetrator (and ultimately, secure the punishment of the perpetrator).

Police officials are required to act quickly and with urgency and must take all reasonable measures available in the circumstances, including the diligent and effective mobilisation of resources such as the gathering of evidence using CCTV footage, interviews with witnesses and forensic evidence to assist with the investigation. The court further warned that police officials must never act carelessly or display a lack of interest or concern for the plight of women in similar circumstances as that of the complainant. The conduct of the police officials during the search operation prolonged the trauma suffered by the complainant.

The court emphasised that survivors of gender-based violence must be treated with empathy. They must be confident that the police will regard their cases as serious and take steps to secure the arrest of the perpetrators. The State is required to protect women against all forms of gender-based violence that infringe upon their fundamental rights. The SAPS is responsible to protect the public, in particular women and children, against violent attacks.

The Constitutional Court has set the standard against which future search operations and investigations by the police will be measured. The conduct of police officials and how available resources are used by the police will determine whether the SAPS will be held accountable for civil action in cases of this nature in future.

LEGAL TALK

Legislative Developments

Dr. (Brig.) Marga van Rooyen
Legal Services, South African Police Service

Two of the so-called "GBV Acts" recently came into operation. These Gender-Based Violence Acts or "GBV Acts" refer to three separate Acts, namely the Criminal and Related Matters Amendment Act 12 of 2021, the Criminal Law (Sexual Offences and Related Matters) Amendment Act Amendment Act 13 of 2021 and the Domestic Violence Amendment Act 14 of 2021.

The GBV Acts are legislative attempts to address the scourge of gender-based violence in South Africa and aim to protect vulnerable groups more effectively, specifically within the criminal justice system. The legislation gives effect to the government's commitment, as set out by the President of South Africa, Mr Cyril Ramaphosa, during his State of the Nation Address of 2022, to intensify the fight against gender-based violence and femicide by strengthening the criminal justice system, to promote accountability across the state and to support survivors. It is envisaged that the legislation will enhance the successful prosecution of perpetrators, protect survivors more effectively and combat the prevalence of gender-based violence in society.

The Criminal Law (Sexual Offences and Related Matters) Amendment Act Amendment Act 13 of 2021 ("the SORMA Amendment Act") came into operation on 31 July 2022. One of the primary purposes of the SORMA Amendment Act is to strengthen the criminal law by creating several new sexual offences.

The SORMA Amendment Act inserts section 14A which provides for a new offence, namely *sexual intimidation*. The offence is committed when a perpetrator unlawfully and intentionally utters or conveys a threat to a complainant that inspires a reasonable belief of imminent harm in the complainant that a sexual offence will be committed against the complainant, a family member of the complainant or any other person who is in a close relationship with the complainant. The offence will, for example, be committed when robbers threaten the husband during a house robbery that his wife and daughter will be raped. Due to the insertion of this offence, section 5(2) of the Criminal Law (Sexual Offences and Related Matters) Amendment Act 32 of 2007 was repealed. Section 5(2) previously extended sexual assault to circumstances where the perpetrator unlawfully and intentionally inspired the belief in a complainant that he or she would be sexually violated. The offence of sexual intimidation is wider (not limited to a threat against the complainant only) and includes a threat of imminent harm that any sexual offence (not limited to a sexual violation) may be committed by the perpetrator.

The SORMA Amendment Act also broadens the definition of the offence of *incest*. Previously, section 12 prohibited the unlawful and intentional engagement in an act of consensual sexual penetration between persons who may not lawfully marry each other on account of consanguinity, affinity or an adoptive relationship. The offence has now been broadened to include the unlawful and intentional engagement in an act of sexual violation between persons who may not lawfully marry each other on account of consanguinity, affinity or an adoptive relationship if one of the persons is a child and the nature of the act was reprehensible for the adult person to have acted in that manner under the circumstances. The term "reprehensible" is not defined and will be guided by the dictionary meaning of the term, namely, behaviour that evokes severe criticism, is unacceptable or despicable. The challenge is, however, that the term must be interpreted objectively, and not according to the subjective view of the complainant. The objectivity test means that the test of the reasonable person will be applied to determine whether or not the particular conduct of the perpetrator can be regarded as reprehensible. In other words, a court will consider what the reasonable person (or average member of society) will consider as reprehensible (unacceptable or despicable) before the accused may be convicted. It may be difficult for a police official to determine such behaviour. It is, therefore, advisable that police officials involved in the investigation of such allegations consult the public prosecutor in advance to obtain guidance on whether specific conduct should be viewed as "reprehensible". The SORMA Amendment Act further includes section 56(4) to provide that a perpetrator cannot be convicted of incest if he or she was younger than 18 years at the time when the sexual act was first committed and the other person exercised power or authority over the perpetrator or there was a relationship of trust between the parties.

Section 54 previously placed a legal duty on persons to report knowledge or reasonable suspicion that a sexual offence has been committed against a child or mentally disabled person. This meant that if a person (such as a parent, teacher or neighbour) knew that a child was the victim of a sexual offence, the person was compelled to report such information to a police official. Failure to do so constituted an offence and the person could be sentenced to incarceration for a period not exceeding five years upon conviction of the offence.

The SORMA Amendment Act has expanded the legal duty on any person to report knowledge, reasonable belief or suspicion to a police official that a sexual offence has been committed against a

vulnerable person. If the person fails to do so, he or she will be guilty of an offence, and liable to the same penalty as before. The expansion of the legal duty is evidence that the legislature recognises that certain groups of persons are particularly vulnerable to becoming victims of sexual offences and therefore deserving of special protection.

"A person who is vulnerable" is defined in the SORMA Amendment Act as follows:

(a) child or a person who is mentally disabled;

(b) female under the age of 25 years who -

(i) receives tuition at a higher education college, higher education institution or university college as defined in section 1 of the Higher Education Act 101 of 1997;

(ii) receives vocational training at any training institute, other than the institutions referred to in subparagraph (i), or as part of their employment; or

(iii) lives in a building, structure or facility used primarily as a residence for any of the persons referred to in subparagraphs (i) and (ii);

(c) person who is being cared for or sheltered in a facility that provides services to victims of crime;

(d) person with a physical, intellectual or sensory disability and who -

(i) receives community-based care and support services, other than from a family member for;

(ii) lives in a building, structure or facility used primarily as a residence for; or

(iii) is cared for in a facility providing 24-hour care to persons with physical, intellectual or sensory disabilities; or

(e) person who is 60 years of age or older and who -

(i) receives community-based care and support services, other than from a family member for;

(ii) lives in a building, structure or facility used primarily as a residence for; or

(iii) is cared for in a facility providing 24-hour care to, such persons."

The SORMA Amendment Act furthermore provides that a person who reports such reasonable belief or suspicion in good faith cannot be held liable in civil or criminal proceedings for the report that he or she has made. This means that if a person, for example, in good faith reports to the police that he or she suspects that a sexual offence has been committed against a particular child, but it is later discovered that no sexual offence was committed against the child, the person cannot be held liable by the alleged perpetrator in civil proceedings.

The ambit of the National Register of Sex Offenders (which is administered by the Department of Justice and Constitutional Development) has also been addressed by the SORMA Amendment Act. Previously, only the particulars of persons who have been convicted of a sexual offence against a child or disabled person were included in the National Register of Sex Offenders.

The National Register will now include the particulars of any person who has been convicted after the commencement of the SORMA Amendment Act, of any sexual offence (irrespective of the age of the victim) or offences in terms of the Prevention and Combating of Trafficking in Persons Act 7 of 2013, if the offence was committed for sexual purposes and offences which relate to child pornography (such as the possession, creation and distribution thereof) in terms of the Films and Publications Act 65 of 1996. The Cybercrimes Act 19 of 2020 inserts offences relating to child pornography into the Criminal Law (Sexual Offences and Related Matters) Amendment Act 32 of 2007. The decision to include such offences in the sexual offences legislation has removed any previous doubt about whether or not offences relating to child pornography are sexual offences.

The Criminal and Related Matters Amendment Act 12 of 2021 ("the Act") came into operation on 5 August 2022. Unlike the SORMA Amendment Act and the Domestic Violence Amendment Act which focus in particular on matters relating to domestic violence and sexual offences, the implications of Act 12 of 2021 are more general and wider. This Act amends other legislation, including the Criminal Procedure Act 51 of 1977 (“the CPA”) and the Criminal Law Amendment Act 105 of 1997 (which requires that minimum sentences be imposed upon conviction of certain serious offences) to strengthen the efforts to assist victims of gender-based violence.

The implications of the Act relate to the following aspects:

Intermediaries

The Act authorises the use of intermediaries to enable vulnerable witnesses, such as children, older persons or persons who suffer from a physical, physiological or emotional condition, to testify in court through an intermediary in proceedings other than criminal proceedings. In the past, many vulnerable witnesses felt intimidated and overwhelmed when they had to testify in court. This resulted in witnesses feeling that their voices were not heard during court proceedings or that they had been treated unfairly. This has deterred witnesses and undermined public confidence in the legal system. The effect of the amendment is that these witnesses will not have to be physically present in court to testify, but may do so with the help of an intermediary from another informal venue. The witness will be more comfortable and does not have to face any person whose presence may upset him or her.

Expansion of "assault when a dangerous wound is inflicted"

In terms of section 40(1)(b) of the CPA, a peace officer may arrest any person whom he or she reasonably suspects of having committed an offence referred to in Schedule 1 of the CPA. Schedule 1 includes a reference to "assault when a dangerous wound is inflicted". This terminology has created confusion since there is no such crime recognised in our law. While assault with the intention to cause grievous bodily harm may involve the infliction of a dangerous wound, this is not always the case. Assault with the intention to cause grievous bodily harm may also be committed without the victim having to suffer the infliction of a dangerous wound, for example, if the jaw of a person has been broken.

Therefore, if an arrest has been made and the peace officer relies on section 40(1)(b) of the CPA, the arrest statement must be clear on the justification of the arrest, namely that a dangerous wound was inflicted. The arresting officer has to explain the circumstances

(namely that a dangerous wound was inflicted with a clear description of the nature of the wound) to justify the lawfulness of the arrest. A mere reference to the crime of assault with the intention to cause grievous bodily harm as the reason for the arrest means that the arrest is *prima facie* unlawful since that crime is not included in Schedule 1.

The Act has expanded the ambit of "assault when a dangerous wound is inflicted" in Schedule 1 to also include assault -

- involving the infliction of grievous bodily harm;
- where a person is threatened with grievous bodily harm; or
- with a firearm or dangerous weapon (namely, any object, other than a firearm, capable of causing death or inflicting serious bodily harm if used for an unlawful purpose as defined in the Dangerous Weapons Act 15 of 2013).

The expanded definition now affords wider powers to a peace officer to arrest a person without a warrant in terms of section 40(1)(b) of the CPA. However, it is still important that the reason for the arrest be clearly stated in the arrest statement to justify the arrest.

Bail

The Act imposes more stringent requirements to consider bail applications if the case involves an offence relating to domestic violence or relates to the contravention of an order or protection order (albeit in terms of the Domestic Violence Act 116 of 1998 or the Protection from Harassment Act 17 of 2011 or any other law) that criminalises the contravention of a court order to protect a person from the accused. These are:

- No police bail or prosecutorial bail may be considered in respect of offences of this nature. For example, a husband has allegedly slapped his wife and is subsequently arrested by the police. Previously, the accused could be released on police bail, since the case involved assault, a crime for which the accused could be released on police bail. The Act no longer authorises a police official to consider bail in respect of any crime in circumstances where the victim and accused are in a domestic relationship or if the crime involves the contravention of any protection order or other order issued to protect a person from the accused. The consequences of the amendment are that an accused will have to remain in police custody until his or her first appearance in court, during which he or she may apply to be released from custody.
- Emphasis is placed on the interests of the victim before a decision is taken to release an accused on bail. A court must consider the view on the safety of any victim against whom the alleged offence has been committed. The court also has to consider whether the accused has made threats of violence against the victim or any other person and the disposition of the accused to commit offences in a domestic relationship before determining whether the interests of justice permit the release of the accused.
- If a court authorises the release of an accused on bail in cases where the victim has not previously obtained a protection order against the accused, the court must hold an enquiry to consider the issuing of a protection order against the accused, as if the complainant has applied for such an order.
- A prosecutor has to provide reasons if a bail application is not opposed in certain cases involving domestic violence. This means that a bail application of the accused should, in principle, be opposed, unless the prosecutor is able to motivate the failure to do so.
- The onus is placed on the accused to present evidence to satisfy the court that the interests of justice permit his or her release if the case involves a crime committed in a domestic relationship or involves any crime relating to the contravention of any protection order or other order issued to protect a person from the accused. In order words, the onus placed on an accused to justify his or her release in respect of offences referred to in Schedule 5 and 6 of the Criminal Procedure Act 51 of 1977, has now been extended to crimes involving domestic violence and the contravention of court orders to also protect a person from the accused.
- In the past, the accused was obliged to disclose certain information, such as his or her previous convictions and pending cases, to the court during a bail application. The Act expands the obligation by requiring that the accused must also inform the court of any protection order or similar a court issued against him or her to protect the person against whom the offence in question was allegedly committed and whether that order is still in force. If the accused fails or refuses to disclose the information, he or she is guilty of an offence.
- Additional grounds for the cancellation of bail have been inserted. These include the contravention of a protection order or if the accused is threatening the safety of the victim of the alleged crime while he or she has been released on bail.
- The victim is also afforded a platform to participate in proceedings to consider whether the perpetrator should be released on parole and correctional supervision. The Act places a high premium on the participation of the victim during various stages of the criminal justice system. This is a valuable means to empower victims to participate in matters that affect their safety and well-being.

Minimum sentences

The Act provides for severe minimum sentences to be imposed if an accused is convicted of murder or attempted murder where the victim is or was in a domestic relationship with the accused. The same applies in the case of rape, where the victim was a child (a person younger than 18 years), an older person, a person with a disability, or is or was in a domestic relationship with the accused. The imposition of minimum sentences aims to protect vulnerable groups against violent crimes.

There are many reported instances where the criminal justice system has failed to protect victims of gender-based violence. In some tragic incidents, victims continued to suffer horrific ordeals or even paid with their lives after they had requested assistance from the police and courts. Both Acts promote the commitment of the government to prevent the re-occurrence of these incidents. It conveys the message that gender-based violence will not be tolerated and perpetrators will be dealt with decisively to ensure that victims are afforded the protection that they deserve.

ARTICLE

The intersection of Workplace Learning, Evidence-Based Policing and Culture and its potential for Police Reform

Dr. Kobus Schwartz
Researcher in the South African Police Service
E-mail: gj.kobusschwartz@gmail.com

Dr. Lindie Smit
Researcher in the South African Police Service
E-mail: lindiesmit73@gmail.com

Simphiwe Mahamba
Researcher in the South African Police Service
E-mail: mahambasr@gmail.com

Mariaan Schwartz
Freelance researcher and editor
E-mail:mariaanschwartz@gmail.com

Abstract

In light of the South African Police Service's inadequate preparedness during the COVID-19 pandemic and its slow and insufficient response to the July 2021 civil unrest, trust in the SAPS has reached a new low and has resulted in renewed calls for reform. Several stakeholders in academic -, research - and non-governmental organisations proposed that the concept of Evidence-based Policing (EBP) could be the vehicle to help turn the police's efforts into more successful operations. In this article, the authors explore the intersectionality of EBP, workplace learning and police culture in facilitating police reform. It is argued that while EBP could provide a valuable knowledge base to tap from, it should be supported by proper supervision and guidance, and buy-in from frontline officials to become practice and, eventually, embedded culture. That is, workplace learning could prove a valuable tool to establish EBP within the police service, which in turn could affect traditional police culture. Based on the findings of pilot studies conducted at five police stations, it is proposed that with effective supervision and monitoring, it would be possible to establish EBP principles in the workplace, reduce the influence of police culture and pave the way for police reform.

Keywords and phrases

evidence-based policing, workplace learning, police culture, agency, police reform.

Introduction

"Pressure from the public and political opposition is growing, but police reform in South Africa is unlikely to happen anytime soon" (Burger, 2021). A statement such as this one highlights the apparent inability of the South African Police Service (SAPS) to reform and become more effective in policing the country. These sentiments are often raised in reports and bulletins published by the Institute of Security Studies (ISS), even serving as conference and article themes. Reform in this context not only refers to the institution or its structure but also the make-up of its officials who fail to reduce crime (Bruce, 2021). Such publications and conferences are justified and warranted given the high crime rate in South Africa as presented by the SAPS (SAPS, 2022). The crime statistics for the last quarter of the 2021/2022 financial year, as released by the Minister of Police, Mr Bheki Cele, highlight the need for reform of the organisation unequivocally (SAPS, 2022). These statistics paint a "violent, brutal and unsafe" picture for many South Africans (Charles, 2022). Recent events exposed the police as underprepared for public protests such as what happened during the July 2021 civil unrest (Bruce, 2022). The police were taken by surprise (Felix, 2022), heavy-handed (Bruce, 2020), slow to react and overwhelmed (Ferreira, 2021a). The trust in the SAPS has subsequently dropped to a new low. The situation is exacerbated by instability in the police leadership (Afrobarometer, 2021).

A panel discussion at the 6th Annual American Society of Evidence-based Policing (ASEBP) Conference pointed out that the recent unrest in the United States of America led to calls for defunding of the police if it could not ensure the safety of the citizenry (ASEBP Notes, 2022). Such calls have not yet been made by South Africans, but calls have been made for increased efficiency amid budget cuts for policing. There is thus no alternative for the SAPS than to reform and regain the trust of the community (Burger, 2021).

Several stakeholders in academic -, research - and non-governmental organisations have noted that the concept of evidence-based policing (EBP) could be the vehicle to help turn the police's efforts into more successful operations (Western Cape Evidence Advisory Committee, 2022; SAPS, 2019b). While EBP could provide a valuable knowledge base to tap from, it still needs to be introduced to the SAPS and rolled out systematically to gradually build a knowledge base relevant to the South African context (Sherman, 2022).

A major step in police reform is to find and embrace common ground with the community it serves since the SAPS's administratively justified standards, institutionalised through official directives and Standing Orders, may not be aligned with what the community expect and how they want it to be executed (Heiberger, 2022). This view poses important questions to police leadership about policy and practice, and the police's official development to reduce the use of force, bias and crime. It has been argued that EBP could potentially drive the change in policing practices and facilitate the reform of policies based on evidence of what works, but which had to be tested in pilot studies.

This article draws from the EBP pilot studies conducted at five police stations and the learnings of the 6th ASEBP Conference held in Washington DC during 2022, to explore how the intersection of EBP, workplace learning (WPL) and police culture can advance police reform in South Africa.

Theoretical framework

Learning in the work environment is multimodal and complex when the social-cultural nature and boundaries which influence learning are considered (Billett & Choy, 2013:264). To this end, Jacobs and Park (2009:134) explain that WPL has three interacting variables relating to the location of the learning, the extent of planning that goes into developing and delivering the learning experience and the role of the trainer in the learning process. These authors define WPL as "… the process used by individuals when engaged in training program(me)s, education and development courses, or some type of experiential learning activity for the purpose of acquiring the competence necessary to meet current and future work requirements" (Jacobs & Park, 2009:134). While individuals' thinking and acting at work are influenced by practices in the workplace, most learning consists of informal learning experiences. These experiences generally occur during learners' interaction with others in the workplace, a social setting that typically has its own culture and language (Billett, 2004:119). Because learning is situated in the workplace, this study falls within the constructivist and socio-cultural perspectives of learning. In this view, police officials will construct new knowledge when they apply what they are taught in their day-to-day tasks.

EBP refers to the practice of using available evidence to inform policy development and challenge existing policies, practices and decisions. It does not provide absolute answers, but rather assists police officials to reflect on their practices, consider how to apply the best available evidence in their day-to-day work and learning from the outcomes, in terms of both successes and failures. EBP thus encourages asking questions and challenging accepted practices to improve such practices (College of Policing, 2022).

In this article, we align with the definition of police culture proposed by Reiner (2000:87) as a "developed pattern of understandings and behaviour that help officers cope with and adjust to the pressures and tensions confronting the police". Police officials need to develop new skills or apply police approaches to improve their practices while being influenced by their organisational culture which is not monolithic or unchanging, according to Reiner (2000:106). Johnson and Scholes (1999) assert that there is no "best" or "worst" organisational culture, but that some organisational cultures match and support organisational products or services better than others. Organisational strategies should, therefore, endeavour to match the organisational culture with the service it provides. The police culture should thus enable experimenting with policing methods as required in EBP in real-world situations because that is when WPL is most effective.

LITERATURE REVIEW

Community dissatisfaction and the call for reform

With growing dissatisfaction with the SAPS's lack of progress in successfully addressing crime, it comes as no surprise that communities want the police to account for their failure to secure safety in the country and to reform. While academics tend to develop

their own definitions for "police reform", there is no single definition or shared concept that prevails (Call, 2003:2). Dias (2021) explicates that real police reform refers to more officials, more training hours, adequate equipment, support to injured police officials, financial security and being realistic about what officials can and cannot change. In this article, police reform is conceptualised as a process that requires new thought paths. That is, police reform requires rethinking how the organisation operates and improving it by redesigning its structure, policies, make-up, values and culture, and ultimately its services while respecting the rule of law.

The demand for police reform is certainly not a recent one. It has been the subject of concern for many authors and has seen several recommendations on the type of police needed in South Africa. Bruce and Neild (2005) wrote a comprehensive handbook for oversight of the police to help shape police professionalism. Dugmore (2017:1) proposes a new policing reform agenda that centres on the protection of human rights and demilitarisation (with particular focuses on public order policing), the independence and operational autonomy of policing institutions and oversight bodies, police responsiveness, efficiency and professionalism.

Despite such academic guidance and the overwhelming need for police reform, the SAPS is slow to adopt these recommendations and reforms. To this end, Ivkovic´, Sauerman, Faull, Meyer and Newham (2020:320) assert that effective police reform and professional, legitimate policing are dependent on the willingness and ability of the top leadership to transform the SAPS. The SAPS is, however, experiencing a leadership crisis, visible through continued instability in the police, which impacts negatively on both the morale and performance of frontline police officials, making reform a futile task (Faull, 2022).

Several incidents of alleged police brutality continue to surface despite the recommendations made by the Farlam Commission of Inquiry (2012) and the Panel of Experts appointed after the Farlam Commission of Inquiry had published its findings (Panel of Experts, 2018:54-393). Heavy-handed policing tactics were reported in the media when police officials enforced the national state of disaster regulations during the COVID-19 pandemic (Izobo & Abiodun, 2020; Gumede, 2020; Lamb, 2020; Chabalala, 2020).

Soon after the initial, tougher than needed, response by the SAPS officials and South African National Defence Force (SANDF) soldiers, a more acceptable approach to policing was adopted. The softer policing methods were mainly the result of inclusive and consultative Provincial Joint Operational Centres in which security forces, government departments at the provincial and local level, as well as non-governmental organisations that represent the community, worked collaboratively. Several lessons were learnt from the collaboration between the police and the community (Schwartz, Burger, Smit, Botha, Snyman, Moult, Kriegler, Van der Spuy, Redpath, Gopal & Bhoola, 2021:61-65). The most critical lessons included:

- The criminal justice system's capacity to involve all role-players provided space for inter-sectoral coordination, cross-cutting "integrated" efforts and "whole of society" approaches to fight the pandemic.
- Strategies to augment capacity such as the deployment of office-bound officials, drawing on specialised capabilities and the utilisation of commissioned officers to oversee and assist with policing on the streets worked well. In addition, the cross-training of staff to fulfil multiple roles emerged as an important precondition for the successful redeployment of office workers.
- The study confirmed the need for the organisation to engage the well-being of its members in a much more concerted manner.
- Police officials should also be kept properly informed about their policing objectives during detailed briefings and debriefings at station-level parades during shift changes. This practice had a positive impact on police officials and their respect for human rights.
- The trying conditions under which police officials had to continue functioning during the COVID-19 pandemic prompted station commanders and their members to find innovative ways of performing their duties. This required the use of discretion which under normal situations may have been frowned upon. However, discretion in the hands of inadequately trained police officials could be risky for the safety of society.
- Systems and capacity for data integration between the police, courts and correctional centres still fell short of being effectively integrated. This reaffirmed the need for modernising communication systems within SAPS, synchronising communication and data management systems across government departments and the importance of a digital capacity to integrate security in the 21st century.
- Questions about the preparedness of SAPS solicited responses among SAPS respondents about the absence of personal protective equipment (PPE), pointing to a lack of proper preparedness for sudden large-scale occurrences.
- The first few sets of regulations issued in terms of the Disaster Management Act 57 of 2002 (DMA) prescribing the lockdown levels and their restrictions were heavily criticised as being vague and unclear. This caused uncertainty and often resulted in conflicting interpretations and inconsistent application thereof by the police and other enforcement officials.
- With the enforcement of the regulations primarily by the SAPS, police officials became the target of frustration in some communities resulting in physical attacks. This points to a dire need for the development of an understanding of and respect for the SAPS and its mandate.

The deployment of police officials to the civil unrest in KwaZulu-Natal and Gauteng during mid-2021 followed shortly after the deployment of SAPS Head Office personnel to strengthen policing during the COVID-19 pandemic (Ferreira, 2021b). Not only was the Police Service criticised by the community for its late and inadequate response (Singh, 2021), but it was emphasised by the Human Rights Commission that the police failed to respond in time due to the absence of intelligence about the scale of the unrest and the unpreparedness of the police to protect citizens' lives and property (Monama, 2021; Ferreira, 2021b). Regarding several of the lessons learnt during the COVID-19 pandemic deployments, it is clear that the SAPS did not take cognisance of the warning signs related to slow responses, under-preparedness and uninformed

frontline police officials about their objectives when they are redeployed to civil unrest situations. The SAPS forgot the lessons learnt about the late distribution of PPE to frontline officials during the COVID-19 pandemic operations and suffered the same criticism, although in a different context, during the July 2021 unrest in the two most affected provinces in the country, namely KwaZulu-Natal and Gauteng. Again, collaboration with ordinary citizens to solve problems in the community was ignored. Instead, the police relied on its intelligence to prepare for anticipated anger about the looming arrest of the former President of South Africa, Mr Jacob Zuma. This step proved to be fatal for many victims of rioting and looting (Monama, 2021).

The policing of hate crimes and xenophobia also proves challenging for SAPS (SAHRC, 2010). This could be because police officials prevent "crime" and not "hate" and could overlook signs of resentment for non-nationals, friction and potential xenophobic conflict. Frontline police officials also need to respond to service delivery protests of communities even though the SAPS is not necessarily the cause of their dissatisfaction. Von Holdt, Langa, Molapo, Mogapi, Ngubeni, Dlamini and Kirsten (2011:2) explain how easily public service delivery protests escalate into xenophobia:

> "… a new wave of conflict swept across the country, with the epicentre - as in the xenophobic violence - in Gauteng. The community protests against poor service delivery, corruption and the lack of consultation with communities by government often flared into violence between protesters and police, and not infrequently involved episodes of xenophobic violence as well."

While xenophobia-related incidents were reported to a lesser extent in other provinces, police responses to xenophobia-related violence in Gauteng and KwaZulu-Natal were met with criticism and accusations of bias, echoed by calls for reform (Misago, 2021). The SAPS were found to over-police non-nationals during such events in contrast to the normal under-policing when non-nationals report crime (Edwards & Freeman, 2021:11-21).

Not surprisingly, these events and continuing high crime rates in the country contributed to the replacement of the National Commissioner of SAPS, General Khehla Sitole, at the end of March 2022, before the termination of his contract. However, substituting the National Commissioner per se will surely not change police policies, performance or culture. Feelings of safety are not dependent on policy reform, but on action which exposes the citizenry to less force. For this, the police service needs to review its operational policies as its perceived justified administrative standards stipulated in its policies, national instructions and other directives to frontline police officials might not meet the approval of the people they police. As an example, Edwards and Freeman (2021:5) explain the following:

> "… accessing services as a victim of crime, the SAPS Victim Support Policy promotes the provision of professional, accessible and sensitive services by SAPS officers. Although the SAPS Service Charter for Victims of Crime and its implementing framework, the Minimum Standards of Service for Victims of Crime, do not deal directly with the treatment of victims who are non-nationals …"

Several police strategies such as the Rural Safety Strategy are criticised for not being supported with the necessary resources to give effect to these strategies (Pijoos, 2020). Police officials are further often criticised for being ill-equipped to deal with sensitive incidents such as gender-based violence (GBV) and offences of a sexual nature (Human Rights Watch, 2021).

Given this background, it is clear that much of the police's performance relies on their training and practices on the frontline (Faull, Kelly & Dissel, 2021:14). While acknowledging such criticism, policy reform does not mean everything must change, only that which needs to be fixed or aligned to more acceptable ways of policing. The police must know what prompted previous changes to policy and assess whether such changes are still relevant. Policy reviews may thus have to occur more frequently (ASEBP Notes, 2022).

Learning in policing contexts

Suggestions are often made that police officials must learn to respond appropriately to community needs, assuming that police officials are all well-literate and educated, but this is not necessarily the case. Shockingly, it was revealed in 2002 that 25% of police officials in Mpumalanga could not read or write properly and did not have a matric qualification, which created challenges in recording and investigating crime (News24, 2002). Years later, the situation appeared as bleak. In 2018, a SAPS delegation conceded to Parliament that a low level of literacy skills among officials still exists (Maqhina, 2018). Moreover, police officials who can read and write are often functionally illiterate and pose a challenge to implementing the National Commissioner's Turnaround Vision (Magubane, 2018). The Turnaround Vision referred to "a crime-free country that is conducive to socio-economic stability, in support of a better life for all". The vision would focus on stabilising crime hotspots, preventing and combating gangsterism, serious crimes, crimes against women and children, unlawful possession and dealing in drugs, and most importantly, on enhanced police visibility and targeted crime prevention operations to make people feel and be safe (SAPS, 2018:13).

To improve functional literacy levels, the SAPS explained that the organisation has trained 98.87% of 77 843 police officials successfully in 2018, declaring them competent in learning programmes such as public order policing, dealing with crimes committed against women and children, crime investigation and forensic science investigation training (SAPS, 2018:13). By 2021, the SAPS had trained 655 police officials in crime prevention, 1427 officials were trained to deal with crimes committed against women and children, while 1635 officials were trained in crime investigations and 177 officials completed forensic science-related courses. A further 459 police officials were trained in public order policing (SAPS, 2021a:81).

However, the question needs to be asked whether this type of formal training is enough to change police behaviour and embedded old police practices? Even well-established police forces struggle to deliver good service to members of the public when those civilians cannot read and write English (Public Safety Canada, N.d.). It not only poses challenges to service delivery but the functioning

of the whole criminal justice system. This has led to the roll-out of specific development for police officials to utilise other senses too, for example, also read body language. Such development does not take the form of formal training, but rather on-the-job training. More than formal functional training is needed to reform police practice such as completing case dockets, taking statements and capturing crime data on computer systems. Lave and Wenger (1991:93) state that participation in a social practice such as the workplace points to employees' level of engagement to specific activities of that workplace and to their fellow employees. Such employees become learners when they develop skills through their participation in work activities with others in the workplace. Police officials will, in this context, develop new skills when they are involved in police activities within the police environment among police officials and clients. Their thinking patterns and conceptualisation of crime need to be reprogrammed to cope with changing policing demands in the field. Police officials need to be able to account for their actions which means that they have to record their actions in detail and keep such records safe for later referral. This is, however, not the case as concluded by Bruce (2020:2) in his study on police brutality. This author points out that the SAPS is unable to account for how police officials generally use force and that police officials lack the culture of accounting for their use of force.

What happens to the volumes of incident reports at the end of operations and are they not read and analysed? The answer to this question could lie in the way that recording, reporting and accountability are taught, understood and applied. In a similar vein, one could also ask what happens to the volumes of research reports, inspection reports and internal audit reports generated by police officials in the SAPS. Finally, one needs to pose the question: *How can new learning promote police reform if the sources for learning remain hidden in filing cabinets and archives?*

Fifteen years ago, Schwartz, Schurink and Stanz (2007:245) asserted that frontline police officials' trust in their commanders was low, their commitment lacking and that they experienced difficulty in associating with the SAPS as organisation. Commanders on the other hand were perceived to lack managerial skills. At the time of the study in the East Rand Police Service Area (ERPS), Schwartz et al. (2007:46) pointed out that, if not careful, the SAPS could find it very difficult to reform due to a looming pathological culture. One finding reads as follows:

> "A culture in which employees do not support each other, cheat each other through false reporting, and fear for safety due to inadequate resources are prevailing in the ERPS. This is [a] further indication that the prevailing culture is leaning dangerously towards a pathological state."

The finding sounds outdated, but it is very familiar to the morale survey of the SAPS conducted in 2021, which clearly shows that police officials do not trust their colleagues because of their perceived lack of integrity (SAPS, 2021b). Given the amount of training provided to police officials to improve their functional literacy, little is done to strengthen an ethical police culture that would improve safety in the country. The police's strategy for developing professional police officials is not working.

Poor performance may also be indicative of poor supervision on the frontline. Schwartz and Schwartz (2020:17) explored the Police Service's attempt to reconstruct the professional identity of employees by drawing from four case studies. The authors concluded that the cases -

> "… presented with examples of how police officers resist change, deviate from police directives and develop alternative ways to get their work done if not closely supervised. Police officers find themselves confronted by what the organisation requires of them and what they experience in the workplace. While developing professional identity within the police, the individual has to navigate between organisational prescripts and own discretion in the field".

In other words, frontline police officials learn in the field about what works for them and what does not when they are confronted with particular problems. Schwartz and Schwartz (2020:22) further argue that supervisors and suitable role-models play an integral role in guiding frontline police officials to develop the desired police officials' identity, emphasising discipline and compliance with organisational directives. This is achieved by observing, mentoring and modelling, and supported by encouragement, skills development, regular appraisals and fair reward.

Without exposure to real situations, trial and error, learning from discretion and reflecting on what worked and why it worked, police officials will not understand why they need to change their tactics and conduct. Supervisors have to facilitate the learning process by analysing police officials' production sheets and shift reports. To this end, Mofokeng (2012:70) concludes that in the SAPS, specifically in the detective environment, both supervision and mentoring have been neglected for many years. In the same year, Grobler and Prinsloo (2012:52) highlighted the fact that many supervisors were ignoring misbehaviour while others believed that dealing with misbehaviour was not their responsibility. Yet, a case study conducted by SAPS researchers at a police station in the Western Cape in 2019 revealed how much influence supervisors and junior officers have on the effective implementation of organisational directives and the continuance of acceptable service levels by frontline officials (SAPS, 2019a). The study revealed that without supervisors and junior officers, it is highly unlikely that frontline police officials will execute their duties according to prescripts and their performance will generally be lower than expected. Issuing policies and national directives are not sufficient to ensure effective policing, let alone reforming police behaviour as Schwartz and Schwartz (2020:20) have argued, because policies and directives must be implemented for it to become practice.

Workplace learning

Usher and Edwards (2007:2) assert that learning is a socio-culturally embedded set of practices in which learning is neither invariant nor unchanging. Regardless of the andragogy or alternative adult learning theories applied, employee training is starting to take a backseat to WPL (Estep & Biech, 2008:9). These contributions echo the argument by Billett (2004:119) that while individuals' thinking and acting at work is influenced by practices in the workplace, most of the learning in the workplace consists of informal learning experiences. It is thus worthwhile unpacking relevant

conceptualisations of WPL as several key factors that impact learning in the workplace are not far removed from what Schwartz (2019) pointed out as critical for shaping and reshaping police culture and identity in the SAPS. Factors that are key to effective WPL within police organisations such as the SAPS include the following:

- Products of informal, unintentional learning remain more prominent than intended outcomes of experiential or formal learning interventions in the workplace.
- Organisational readiness to support WPL plays a significant role.
- Unsupported police officials develop coping mechanisms in response to the introduction of new work philosophies or practices and construct unintentional and sometimes unwanted practices.
- Reflecting on workplace experience features prominently in WPL (also supported by Boud, Keogh & Walker, 1985:19).
- Active participation of targeted officials is needed for learning to take place.
- Learning is more effective in the workplace when police officials become part of communities of practice.
- When the culture of a particular community is perceived to be too different from that of newcomers, or when perceived as uninviting, the latter will find it hard to enter such communities of practice.
- The pervasive strong police culture and identity still cause obstructions to learning in the workplace.
- Deliberate actions are needed to support the integration of learning into practice (Schwartz, 2016; Schwartz, 2019:477-500).

To this end, police organisations should reconsider the importance of learning in the workplace, especially due to the prominence of informal learning as it goes unnoticed and unrecognised (Jacobs & Park, 2009:141). Informal learning, like more controlled forms of WPL, is constructed through work and at work. Schwartz (2016:275) found that very few senior police officers had the emotional intelligence to deal with the unsympathetic workplace where they were supposed to develop new skills. The demand to meet targets of fighting crime was superseding their learning and development by far. As a result, they developed coping mechanisms by cheating and taking shortcuts in their work. Supervision and guidance are thus critical for the development of new ways of working and the improvement of work practices. However, as Billett and Choy (2013:268) point out, even when learners are afforded opportunities to learn from experienced employees, their WPL depended on their level of interest, motivation and ability to learn. This implies that police officials will learn when they choose to, even if they are allowed to learn new practices. A remedy could be found in what Billett and Choy (2013:272) suggest as they argue that learners need to be prepared for circumstances that relate to previous unpleasant or confrontational encounters for them to deal better with such situations.

Warhurst (2006:115) asserts that adult learners who felt part of a group or organisation demonstrated their belongingness to the group and place in their work output. It is, therefore, also important for police officials, in their capacity as learners, to reflect on their affiliation to the organisation and their contribution to the performance of the police as an organisation (Boud et al.,1985:19). Frontline officials, in particular, need to read directives and protocols and compare their actions, think and reason about things to gain a better contextual awareness to solve problems appropriately. In particular, they need to reflect on their work. Knipfer, Kump, Wessel and Cress (2013:30) argue that organisational learning is constructed from individual and team learning at work. While reflection drives organisational learning, it is the act of cumulating the outcomes of everyone's reflection that stimulates the integration of individual and team learning to become organisational best practices.

As indicated earlier, the organisation's readiness to support the development of new and desired ways of practice is a key factor that impacts on employee practices. More creativity in problem-solving, underpinned by healthy discretion, is needed for instance, but creativity is deemed to obstruct police culture. Creative thinking that would support new policing concepts could involve:

- Rejecting standardised problem-solving formats and exploring widely in the field of the problem;
- considering multiple perspectives and viewing the world relatively and contextually;
- applying trial and error experiments using alternative approaches while having a future orientation; and
- embracing change, testing own judgment and building self-confidence (Brookfield, 1987:115-116.).

Divergence in the workplace results in the opposite. As Schwartz (2016:343) argues, when police officials experience different organisational cultures, policing philosophies and alternating levels of support for adopting new strategies and approaches to policing in their workplace, they question the validity of supervisor guidance and often opt not to follow any directive. In such instances, individual learning is mostly to survive, to cope with pressure. For Schwartz (2016:417) the police culture impacts heavily on WPL, but it is merely a contributor to the conditions for learning as the police officials engage with learning opportunities regarding their existing abilities, personal agency, knowledge of the organisational culture and willingness to participate in learning opportunities at work.

Schwartz (2016:343) found that the strategy of getting police officials to do several concurrent tasks or activities did not sit well with the older generation police officials as they struggled to cope with the amount of work, the complexity thereof and the pace at which they had to develop new skills. All they learnt was how to manage time and how to survive the demands of the workplace. There is no guarantee that workers will learn what they have to learn, argues Billett (2011:13) as this author further explains that learners construct knowledge from what they know (cognitive experience) and what they experience (pre-mediate experience) which may result in being unpredictable.

Exploring evidence-based policing

In an evidence-based approach to policing, experience and intuition are crucial, but research, analysis and evaluation must also be part of the process (ISS, 2020). As South Africa faces significant

public safety challenges, many South Africans do not feel safe. The SAPS has an ethical obligation to work effectively and efficiently to promote safety and prevent crime (Faull, 2013) which can be achieved through an EBP approach in policing (ISS, 2020).

EBP is based on existing information about what works and does not work in policing (Potts, 2017:21; Kriegler, 2021). It is a shift in how we think about policing and safety. As the police continue to evolve, it is imperative that we understand our origins and how we can address our most pressing challenges. Very few studies exist in South Africa in which the impact of police actions has been measured that point to the police operationalising strategies without having an idea whether or not such tactics work (Kriegler, 2021). To comprehend the basic premise of EBP, one has to ask pertinent questions such as: How effective is our policing? What works to reduce crime and build trust in the police? And how do we know? It may also prompt the question about who is asking the question, because the indicators for success may differ depending on who answers these questions.

Questions like these proposed by Potts (2020) are also applied in other contexts such as in the general sense of police oversight as explained by Bruce and Neild (2005:8-9). They highlight that several countries moved to measure police performance and reform differently from focusing on statistics only. Instead; they define the characteristics or key aspects of police reform and then monitor and evaluate the police according to these aspects. In contrast, police agencies tend to use statistics to show improvement in addressing crime while civilians may measure success in respect of how safe they feel in their community. Phillips (2011:57) for instance argues that police officials' memories of the past could also serve as a reference to measure their success in policing. Unfortunately, despite the volumes of work done by academics, the SAPS still finds itself in its infancy. Police officials, therefore, need to be exposed and introduced to EBP methodologies in a step-by-step approach.

There is also a perception that police officials do apply elements of EBP in their everyday policing functions. This may be true, but will this response hold when the police's practices are scrutinised? For police actions to constitute EBP, there has to be evidence that their actions have resulted in an improvement of the solution of a crime or problem in the workplace. There has to be a proper record and account of what worked. SAPS needs to incorporate the best evidence available into their work, to determine what works and what does not. It fosters an organisational culture that supports scepticism, openness and critical thinking. Emotionally intelligent frontline police officials will know when to arrest and when to educate. This argument ties in with a discussion on day two of the ASEBP Conference (2022) about the de-escalation of potentially violent confrontations or citizen behaviour. Police officials need to be trained in methods to reduce the possibility or potential for the use of force. EBP provides police officials with the fundamental skills needed to test, evaluate and constantly learn from their work. According to Sherman (2013), EBP does not have to be complex as it can work in three basic steps namely *target, test* and *track*. This means those police efforts should be *targeted* at solving specific problems and places, based on research and experience. Policing ideas and tactics should be *tested* and learnt from to build knowledge about what works and what are more effective than using methods that we think will work or that make sense. What works should be *tracked* by recording, sharing, learning and changing how we work based on what we know. An example of a successful EBP strategy is found in hotspot policing which focuses limited resources on small geographic areas or places, mainly in urban settings where there is a concentration of crime. Hotspot policing is rated "effective" for reducing overall crime. Moreover, it is rated as "promising" for reducing crimes related to violence, property, public order and drug and alcohol offences (NIJ, 2013).

By incorporating this logic into the daily work of the police, officials can be confident that their actions and conduct are based on the latest research on what reduces crime and improves public confidence in the police (ISS, 2020). Successful police reform often relies on policing communities in ways unique and acceptable to that community as opposed to a nationally directed method (Heiberger, 2022). For that reason, it is important to empower communities with the basic knowledge of EBP; by understanding EBP they can support the police and hold them accountable for their activities (ISS, 2020). Drawing from the ASEBP Conference (2022) discussions, finding common ground between the police and the community is the key to successful police reform as policing will become more acceptable for the community, which in turn builds trust in the police. Linked to police reform is the acknowledgement that "police common knowledge" is not necessarily "community common knowledge" and vice versa. The relationship between community expectations and police administrative standards (contained in police national instructions and standard operating procedures) should be reviewed to identify gaps in community expectations and standard police practice. The gaps must be addressed by consulting with the community within the boundaries of the police's legal mandate (Saferworld, 2006). Expectations that do not fall within the scope of the police's mandate, are unreasonable or not rational and would require community enlightenment through awareness programmes to educate the community in this regard.

Bueermann (2012:13) explains that EBP -

> "… offers a practical solution to the need to balance public safety, community service needs, available funds and taxpayer expectations. It blends the science of controlling crime and disorder with the principles of community policing and problem-solving. It helps communities focus on meaningful, achievable public safety outcomes without breaking their budgets. Evidence-based policing can be implemented without adding law enforcement officials, disrupting police organisations or offending community members. It can also help police departments strengthen their legitimacy with the diverse communities they serve".

The view of Bueermann (2012:13) implies that EBP does not require additional resources and should not only involve police officials as EBP, in its very nature, is still community policing. The evidence of what works, uncovered by researchers and police officials in the field, can contribute to the development of more

effective policing strategies if the disconnect between the evidence and the police approaches can be mended. However, this view of Bueermann (2012:13) needs to be broadened to include the pervasive police culture where line managers make decisions based on their seniority and not on what evidence tells them. New practices have to be evaluated to determine their impact on crime and their overall outcome. If they do not, they should be refined and lessons learnt documented to ensure that mistakes are not repeated (ISS, 2020).

The Southern Utah University (SUU) suggests five steps of EBP which map out the process. These steps are:

- asking a question about the problem or situation;
- collecting the evidence and research results;
- evaluating the evidence;
- implementing the findings in the context of the problem or situation; and
- assessing the outcome (SUU, 2020).

Without evaluation, there will be very little argument to convince policymakers of the need for review of organisational directives and strategies. May, Hunter and Hough (2017) drew from previous research conducted by the Alliance for Useful Evidence in 2016 to define an initial list of categories of mechanisms that could advance evidence-use practices:

- Building awareness, understanding and support towards using evidence.
- Building agreement on the relevant questions to seek answers to.
- Access and communication - providing communication of, and access to, evidence.
- Promote interaction between decision-makers and researchers.
- Support skills development.
- Promote a culture of experimentation among senior police managers.

EBP needs support from within the organisation if it is to be accepted, embraced and inculcated into practice.

Research design and methodology

The research was conducted following a qualitative research method within a Participatory Action Research (PAR) approach. The research approach was an exploratory pilot study to explore the understanding and practice of EBP and its intersection with WPL and organisational culture to determine its potential for police reform.

Description of location of the study

The study was conducted in the Eden Cluster in the Garden Route District Municipality in the Western Cape (Garden Route District Municipality, 2022:66). The Eden policing district consists of two clusters namely the Eden Cluster and Da Gamaskop Cluster (Western Cape Government, 2022:9). The district consists of farm homesteads, small towns and industrial and commercial outlets, but 80% of the population live in urban areas (Garden Route District Municipality, 2022:66). The Eden district polices communities with distinct income inequalities and unemployment and has to deal with crimes such as murder, attempted murder, assault and robbery.

Methods of data collection

Data was collected in a PAR project over two years. The EBP pilot project was initiated by the SAPS's Cluster Commander in the Western Cape and conducted collaboratively with the Institute for Security Studies (ISS) in South Africa at five police stations. These were the Conville, George, Oudtshoorn, Thembalethu and Knysna Police Stations. The stations decided on the objectives of their respective stations (SAPS, 2019b) which were to:

- Develop improved conflict management and leadership capability of frontline managers for improved crime combating.
- Improve motivation levels of personnel as a means to reduce absenteeism levels.
- Reduce burglaries at residential and business premises.
- Improve cooperation between the SAPS and the National Prosecuting Authority (NPA) to increase conviction rates.
- Reduce youth and children's involvement in crime.
- Improve reporting of domestic violence-related assault incidents.
- Reduce the level of assault committed in the vicinity of taverns, liquor outlets and shebeens.

The researchers conducted a series of seven focus group interviews during planning sessions, briefing and debriefing meetings. The focus groups had between six to eleven participants per station depending on their personnel availability as it differed each time. Results and feedback were interpreted and supplemented by a review of literature about crime, EBP and organisational directives. Focus group interviews were followed up by in-depth one-on-one interviews with experienced police officials representing each targeted environment: crime intelligence, detectives and uniformed frontline police officials. When requested by participants, interviews were conducted electronically, by responding to questions that were sent via e-mail to them. Data was also collected through participant observation in the field and at police meetings and meetings with the community where police officials reached out to the community.

The research strategy was to brief the relevant role-players in the cluster to, as a focus group, explore the specific outcomes to be achieved during the study. The participants were involved in setting these goals to increase their buy-in and to provide the focus for each step in the action research cycle. The research team, consisting of researchers and station participants, identified crimes or phenomena that they wished to address and developed action plans to resolve those issues. Crime intelligence products and crime rates were used as a baseline for future measurement in respect of crime reduction. The SAPS Head Office researchers provided instruments (discussion guides) to the stations to facilitate more debate and reflection at EBP research team meetings. In-depth interviews were then conducted one-on-one with role-players during debriefing sessions in the different policing environments to determine their views on the development, utilisation and effectiveness of research instruments applied to work towards their operational goals. Finally, the research team reflected on the research process, achievement of goals and lessons learnt in the process. The data was then qualitatively analysed. The research cycle was conducted over two years. The participating police stations were allowed to apply their learning and experience at

their own discretion for the researchers to determine to what extent police officials were buying into the concept of EBP.
On conclusion of the EBP studies, the researchers wanted to establish the potential of EBP, considering WPL and police culture to reform the police when they intersect. To establish such, it was important to study how EBP is interpreted and applied, and how EBP is evaluated and modified to address crime. Furthermore, it was important to gauge the impact of specific EBP approaches on the prevention, combating and investigation of crime and to identify good practices for further piloting in other police precincts.

Sampling and study population

The population of the study compromised police officials working in crime intelligence, the detective service and the uniformed frontline officials at five stations in the Eden Cluster. Purposive sampling was applied in respect of senior commanders at the stations. Convenience sampling was applied with regard to sensitising and roll-out of the pilot study to allow for as many police officials as possible to join in the research project. No specific sampling size was set for the stations.

Methods of data analysis

The qualitative data analysis procedure was followed. It involved reading and studying minutes of station meetings, operational planning sessions, debriefing records and field notes to gain a thorough understanding of the data. Data was then consolidated, coded and categorised to enable the development of themes. Data analysis was performed during and after data collection.

Methods to ensure trustworthiness

Following methods of qualitative research, data interpretation was validated for accuracy against participant views and understanding.

Ethical clearance

Ethical clearance was obtained from the SAPS Research Advisory Committee which utilised the SAPS Ethics Guidelines to consider approval for the study. Access to stations was granted by the National Commissioner, Provincial Commissioner, District Commissioner and Station Commanders.

Study findings

Several important themes emerged from the data that reflect on both the police officials' grasp and application of the EBP concept, and on learning in the workplace. The five most prominent themes are discussed.

Theme 1: Insufficient effort to grasp and apply EBP principles in everyday practice

Although time was spent on sensitising police managers and conducting several EBP induction sessions, the educational efforts seemed to have stopped at those meetings. The Triple-T principle of EBP which emphasises the *targeting* of problems, *testing* of methods and *tracking* of outcomes was a necessary preparatory step to introduce the concept and to relate it to existing knowledge and practice of police officials' daily work. The induction sessions yielded some positive outcomes when police stations applied aspects of EBP, but the principles of EBP have not yet permeated into everyday practice.

The most prominent explanation for the stations' challenges with EBP was that police managers did not take full ownership of developing an EBP mindset at their stations. Some station commanders initially showed more enthusiasm than others for the pilot studies when all station commanders were together in a big hall, but since participation was voluntary, later withdrew from participating. Two of the five stations experienced changes in their station management. These changes resulted in friction in the management and a halt in the EBP pilot projects. It took months to sensitise the new commanders and convince the station management to consider new objectives for the EBP pilot. The pilot projects struggled to get off the ground due to the inconsistency of managers in respect of their support for EBP.

The reason for an insufficient grasp of EBP could also be linked to stations' inclination to manage projects and operations. It was approached by police stations as once-off events or projects that end at some stage, usually when they see that their actions bring them closer to achieving their objectives. A station for instance decided to conclude an initiative that would require continuous attention to report GBV and domestic violence without considering the long-term effects of the initiative.

Another reason was that the communication with frontline officials was inadequate to develop a good understanding of the EBP concept and how it relates to their work. Some communication reached the frontline officials as they could refer to some buzz words, but could not explain what they meant when using such words and what is required of them in their daily activities. Frontline officials generally lacked conceptualisation of EBP.

Theme 2: EBP actions are neither recorded nor evaluated

During the first phase, the research team was clear on the application of EBP as a process and not just an event in policing. Yet, observations during the second phase revealed that changes in management at some police stations and changes in EBP research teams brought about perceptions that the EBP concept was a project that must be completed, passed and forgotten. Newcomers' inadequate understanding of EBP and the managements' lack of sharing information about EBP contributed to these perceptions. There were at least two police stations that adopted the concept of EBP and tested it during their special operations and interventions before phasing it into their daily duties. Stations, however, lacked measuring tools for the intended outcomes of their interventions and they did not develop a new instrument that could serve as a performance indicator. Although stations were given an instrument that could guide them throughout the planning, briefing, execution and debriefing processes of police activities during operations, it was seldom used. Stations did not develop new instruments but merely referred back to their data and statistics on reported crimes. Even though it was observed that in most interventions there was progress and that some objectives were accomplished, stations still could not present evidence of processes followed to accomplish those objectives.

Theme 3: EBP approaches do improve combating and investigating crime

During phase two, some police stations applied the Triple-T approach as introduced by Sherman (2013) to tackle crimes such as burglaries and robberies. Through this approach, the stations were not only successful in reducing these crimes but also built sustainable relationships with other government departments and non-governmental organisations. Evidence was found that EBP-specific approaches can have an impact on the investigation of crime, but very little data indicate any impact resulting from crime prevention activities. This finding may have to do with the inadequate communication, development and monitoring of EBP principles in crime prevention duties executed by uniformed members.

Theme 4: Early signs of role-player collaboration as possible EBP good practices emerged

While there were signs of good practices, these practices still needed to be evaluated through a further assessment over time before any conclusion can be reached that these early "good practices" are indeed evidence of good practices. The majority of the stations have built and strengthened relationships with other role-players. Where partnerships were already established, participants were encouraged to strengthen those relationships. The practice of EBP thus emphasised initiating and building partnerships/relationships with relevant role-players such as the NPA at courts or employees of the Department of Social Development, depending on the station's needs. This stakeholder analysis in the research instrument that guided stations has thus enabled police stations to identify gaps in their partnerships with other relevant role-players when addressing problems that overlap with the scope or mandate of such a role-player. Building and establishing communication networks were also easy or were picked up again as these activities were existing practices at stations. Reverting to old practices seemed to be "quick wins" for stations rather than exploring and adapting own police routine practices. Officials therefore mainly referred back to what they knew instead of trying out new ideas.

Theme 5: EBP strengthens police strategies, not necessarily reducing crime

Stations indicated that EBP can contribute to reducing crime, but there are still concerns regarding the sustainability of adopting EBP in the daily duties of the police. This is because it was expressed that the application of EBP is time-consuming and takes away resources from the day-to-day police duties and operations. This was a surprise finding as EBP will rather prompt police officials to allocate their resources to where it will have the greatest impact on crime, utilising resources more efficiently. Further analysis indicated that the stations' concern over the sustainability of EBP practices at the station was rather a reflection of the additional work brought about through thorough reporting of activities before, during and after operations. Basic performance data were recorded on police systems but detailed notes regarding the operations and the lessons learnt were neglected. The poor recording of actions and activities relates to guiding questions on the study's instruments that prompted clear monitoring and measuring of actions and subsequent outcomes which were perceived as administration heavy and time-consuming.

Discussion

It was clear that the principles of EBP need to be fully embraced and incorporated into everyday business. Emanating from the themes uncovered during the EBP pilot study, new themes relating to both EBP and WPL within the police culture emerged and its potential to influence standard practice towards reform is discussed.

Theme 1: Project-based approach

Essentially, EBP requires the improved recording of actions and the reasons for such actions, to reflect on those actions and record the outcomes and shortcomings. These steps are also critical for learning in the workplace because that is how learners, in this case police officials, construct knowledge. They learn from what they know and what they experience, their cognitive and pre-mediated experiences (Billett, 2011:13). Police officials were encouraged to record their actions during the EBP pilot projects for other police environments to learn from and improve policing practices in their respective precincts. The research team motivated thorough recording as a necessary step to improve the style of policing. However, the EBP pilot projects were perceived as a project with start and end dates rather than pilot studies. One station had identified a specific objective to improve reporting of GBV and domestic violence. This initiative would require continuous attention but was soon "concluded" without considering the continuation of the initiative to regain trust in the police. The station's initiatives could provide valuable learning and perhaps evidence of what works to improve the reporting of GBV, or the development of critical skills to serve victims of GBV, something that the police are being criticised for, according to Human Rights Watch (2021). The stations were thus not embracing learning opportunities or recognising the potential of the learning experience. This falling back onto project-based management during the EBP pilot studies illustrates Billett's view that individuals' thinking and acting at work are influenced by practices in the workplace, which in this case is the stations' project-based management approach to policing (Billett, 2004:119).

Theme 2: Management's (un)willingness to test a new concept

Active participation of targeted officials is critical for an EBP approach to policing, but the stations shared the information about what EBP entails sparingly. Once the EBP pilot project team was formed, the concept seemed to be controlled by the senior officer present in the room. This illustrates the typical police culture where the most senior person commands and delegates responsibility. Without empowering the frontline, the EBP pilots were destined to fail, almost as if the new initiative was deliberately restricted. In some instances, commanders withdrew from the pilot study at the station, in others, the whole station withdrew when the station commander changed his mind about participating in the study. This could be the result of fear of the unknown, but it could also be fear of failure, something that adult learners experience when they are expected to develop new skills. Adults need to be prepared and sensitised before new concepts are introduced, requiring organisational readiness to support workplace learning (Schwartz, 2019:477-500). Yet, regardless of the EBP study or lack of organisational readiness, the station commanders' decisions to withdraw do not seem rational as police

officials are faced with new challenges daily, each requiring new methods and approaches to policing. These situations create a learning opportunity for police officials as argued by Usher and Edwards (2007:2) who assert that learning is a socio-culturally embedded set of practices in which learning varies and changes. The assertion of Ivkovic´ et al. (2020:320) that police reform and professional policing depends on the willingness and ability of the top leadership of SAPS to transform the organisation, should extend to senior management at the local level as that is where the impact in practice is made and experienced. The withdrawal of commanders and members of the EBP pilot teams reflects the instability in the police leadership on the local level where management volatility impacts negatively on the performance of frontline police officials as pointed out by Faull (2022).

Theme 3: Taking ownership

Successful inculcation of the EBP concept requires each police official at a station to take ownership of the station's crime and safety problems and to be susceptible to new ideas that could address their problems. Being open to new ideas refers to using creative measures and discretion to solve problems in practice and to learn from them. Police officials' participation in policing suggests their relation to crime prevention activities and commitment to their own communities where they work (Lave & Wenger, 1991:29). Frontline officials may thus have a stronger affiliation to the community than managers who have less interaction with community members. Their desire to learn new ways may subsequently also be stronger. To this end, it appears that it would be beneficial to rather explain the philosophy and explore the feelings and perceptions of frontline personnel about EBP rather than selling the idea to station management. More understanding of EBP, especially what evidence refers to and how research can assist police stations to reduce levels of crime, is critical for successful implementation. Unclear directives cause uncertainty and could even result in conflict as was clear during the COVID-19 pandemic (Schwartz et al., 2021:65). The fact that there was limited evidence to show the impact of EBP on crime rates could be indicative of frontline officials not being focused on the stations' objectives or of poor supervision on the frontline (Schwartz & Schwartz, 2020:20). Where supervisors were informed about the station's EBP objectives, the police strategies for addressing crime challenges were executed, but there was little evidence that suggests a crime reduction. It is still unclear whether better execution of strategies does result in more arrests or a crime reduction.

Police frontline supervisors and junior officers play an important role to ensure that the organisation's directives are followed (Schwartz & Schwartz, 2020:20). Their influence on frontline officials' service delivery level is vital (SAPS, 2019b), especially if new policing practices are to be established. However, they must be informed of their goals by their station management and senior officers. Supervisors' deliberate actions are needed to support the integration of learning into practice. If not, the pervasive strong police culture may obstruct the development of EBP practices in the workplace (Schwartz, 2016:239; Schwartz, 2019:477-500). Sound supervision is, therefore, critical for shaping police officials' understanding and practice of EBP as they also learn informally how to do the work correctly when they have positive role-models. Such practice could help to transform the police's often heavy-handed policing tactics mentioned in the media (Izobo & Abiodun, 2020; Gumede, 2020; Lamb, 2020; Chabalala, 2020) into methods that are respected and welcomed by the public.

Theme 4: Lost learning opportunities

Although some station commanders and their management may have bought into the concept, its implementation in the workplace was limited. At these stations, the station commanders had good intentions to support and drive the EBP pilot study, but there were simply too many other tasks and expectations that "removed" them from the process. The pilot study was left to the station management teams to identify and roll out initiatives that would address the stations' EBP objectives. Communities of practice started developing for a short while within the station research team, but police officials lost interest and group forming dwindled. In addition, the station's management team excluded frontline officials who have a better grasp of the operational context. The exclusion of frontline officials in the planning process for operations or initiatives left the frontline uninformed and not focused on the stations' "new" objectives, resulting in their creativity and suggestions for new ideas being lost. The top-down sharing of information with juniors without consulting or testing their opinions rather strengthened the police culture than creating the potential for EBP to grow on police officials. The shift and crime prevention officials thus continued to work as they used to without contributing to the EBP pilot. The effect of their exclusion deprived them of the opportunity to test new ideas as proposed by Brookfield (1987) and to exercise discretion regarding when to arrest and when to educate. It thus confirmed the view of Faull et al. (2021:14) that the police's performance rests largely on the training and practices on the frontline. When EBP is not inclusive of all role-players it risks lacking conceptualisation and support for the actualisation of the concept. But police officials' development of new skills required by EBP is not guaranteed as their WPL depended on their level of interest, motivation and ability to learn (Billett & Choy, 2013:268).

Theme 5: Administration-intensive EBP

Initial good practices centred on establishing and reinforcing stakeholder relations, but when analysed, rather pointed to the stations reverting to what they were doing in the past. Good working relationships with different departments and local authorities have been confirmed to strengthen policing partnerships with other role-players (Schwartz et al., 2021:44). The most critical lesson for policing during both the COVID-19 pandemic and the EBP pilot study is that the criminal justice system can involve all role-players for inter-sectoral coordination and integrated efforts to fight threats at station level (Schwartz et al., 2021:44). Building and establishing communication networks were easily formalised or picked up again. Meetings with other role-players usually had minutes of discussions as is the generally accepted practice, but station planning meetings and debriefings where the outcomes of station operations were reflected on, were poorly documented. Basic performance data was recorded on a police system, but detailed notes regarding the operations and the lessons learnt were neglected. This lack of proper and detailed recording of events attests to the assertion by Bruce (2020:2) that police

officials do not record their actions in detail or keep such records for later referrals to account for their actions. The recording of actions and activities using EBP monitoring and measuring instruments was perceived as administration heavy and time-consuming. Yet, the recording of policing experiments and reflecting on actions are key factors for WPL to be successful (Knipfer et al., 2013:30). Officials instead referred back to what they know, their old ways, instead of trying out new ideas as very little detailed feedback was requested at the end of shifts. The resistance to change prevented police officials from experimenting with new ideas as is practiced in EBP. The poor recordkeeping ultimately resulted in missed learning opportunities for both stations and the bigger SAPS as there is no organisational learning (Knipfer et al., 2013:30). Ultimately, without a senior officer's instruction to improve debriefing and recordkeeping of crime prevention efforts, police officials will observe the culture and not take the initiative.

Conclusion

EBP was understood by fewer police officials than anticipated and subsequently also not convincingly applied. Not enough time was spent reflecting on operations, methods and outcomes which coincided with the insufficient recording of what worked and what did not work. It was therefore difficult to gauge the impact of specific EBP approaches on the prevention, combating and investigation of crime. However, the re-establishing of collaborative partnerships to address alcohol-related crime and assault incidents does indicate that EBP can be applied successfully if there is support and willingness to target and test crime prevention methods. Clear evidence of the positive impact on crime prevention efforts on crime still needs to be generated. Regardless of its limited impact on crime or inadequate embracing of EBP, several lessons have been learnt by the researchers of what SAPS can do to improve the quality and effectiveness of EBP. By giving effect to the steps identified by May et al. (2017), one would also be able to address the practical challenges to develop an understanding of EBP, especially to prepare the workplace for EBP approaches and to ensure that everyone in the workplace is informed about the concept. This step will pave the way for WPL to be effective when applying the target-test-track method and adopting new methodologies to reduce crime. Reflecting on progress and lessons learnt will, if adequately communicated to policymakers, prompt police review and the roll-out of amended standard operational practices. Police decision-makers will be in a much better position to implement EBP successfully when they plan its roll-out in the field when they consider the principles that are critical for WPL as these overlap to a large extent. Improvement in policing methods, and ultimately policing reform, is possible when practitioners recognise those factors found in the intersection of both EBP and WPL and create the environment in which it can be practiced.

List of References

Afrobarometer. (2021). South Africans' trust in their police drops to new low amid instability in leadership, Afrobarometer survey finds, 8 October. Available from: https://www.afrobarometer.org/articles/south-africans-trust-police-drops-new-low-afrobarometer-survey-finds. Accessed on: 15 June 2022.

American Society for Evidenced-based Policing (ASEBP) Notes. (2022). Notes taken by one of the authors during the 6th annual American Society for Evidenced-based Policing Conference held on 23 and 24 May 2022. USA: Washington DC.

Billett, S. & Choy, S. (2013). Learning through work: Emerging perspectives and new challenges. *Journal of Workplace Learning,* 25(4): 264-276.

Billett, S. (2004). Learning through work: Workplace participatory practices (109-125). In H. Rainbird, A. Fuller and A. Munro (eds.). *Workplace learning in context.* London: Routledge.

Billett, S. (2011). *Curriculum and pedagogic bases for effectively integrating practice-based experiences.* Sydney: Australian Learning and Teaching Council.

Boud, D., Keogh, R. & Walker, D. (1985). *Reflection: Turning experience into learning.* London: Routledge.

Brookfield, S.D. (1987). *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting.* San Francisco: Jossey-Bass.

Bruce, D. (2020). Crime hub. How to reduce police brutality in South Africa. Institute for Security Studies. 7 October. Available from: https://issafrica.org/research/southern-africa-report/how-to-reduce-police-brutality-in-south-africa. Accessed on: 15 June 2022.

Bruce, D. (2021). South Africa's police: A rigid bureaucracy struggling to reform. *ISS Today.* 16 November. Available from: https://issafrica.org/iss-today/south-africas-police-a-rigid-bureaucracy-struggling-to-reform. Accessed on: 15 June 2022.

Bruce, D. (2022). Thousands of new SA police recruits may yield little benefit. *ISS Today.* 22 February. Available from: https://issafrica.org/crime-hub/iss-today/thousands-of-new-sa-police-recruits-may-yield-little-benefit. Accessed on: 15 June 2022.

Bruce, D. & Neild, R. (2005). *The police we want. A handbook for oversight of police in South Africa.* Johannesburg: Centre for the Study of Violence and Reconciliation.

Bueermann, J. (2012). Being smart on crime with evidence-based policing. *National Institute of Justice Journal,* 269 (March): 12-15.

Burger, J. (2021). South Africa's police need urgent and fundamental reform. *ISS Today.* 28 June. Available from: https://issafrica.org/iss-today/south-africas-police-need-urgent-and-fundamental-reform. Accessed on: 15 June 2022.

Call, C.T. (2003). Challenges in police reform: Promoting effectiveness and accountability. IPA Policy Report. New York: International Peace Academy. Available from: https://www.ipinst.org/wp-content/uploads/publications/challenges_in_police.pdf. Accessed on: 6 July 2022.

Chabalala, J. (2020). Police brutality under lockdown: Public has no faith in cops. *News24.* 12 August. Available from: https://www.news24.com/news24/southafrica/news/police-brutality-under-lockdown-members-of-public-have-no-faith-in-cops-20200812. Accessed on: 12 August 2020.

Charles, M. (2022). SA's dismal crime stats reveal a "violent, brutal" start to 2022. *News24.* 3 June. Available from: https://www.news24.com/news24/southafrica/news/sas-dismal-crime-stats-reveal-a-violent-brutal-start-to-2022-20220603. Accessed on: 15 June 2022.

College of Policing. (2022). Evidence-based policing. Available from: https://www.college.police.uk/research/evidence-based-policing-EBP. Accessed on: 26 September 2022.

Dias, K. (2021). Policing the remote and rural, Apr 26. A letter to the American public: Here's what real police reform looks like. Police1. Available from: https://www.police1.com/patrol-issues/articles/a-letter-to-the-american-public-heres-what-real-police-reform-looks-like-7jbeurgdy0uyp8oe/. Accessed on: 6 July 2022.

Dugmore, M.L. (2017). Substantive areas of police reform: Developing a new policing reform agenda. *APCOF Policy Paper.* Accessed on: 6 July 2022.

Edwards, L. (2020). The inaction (and complicity) of South African police fuels xenophobic violence. *Daily Maverick.* 24 September. Available from: https://www.dailymaverick.co.za/opinionista/2020-09-24-the-inaction-and-complicity-of-south-african-police-fuels-xenophobic-violence/. Accessed on: 24 September 2022.

Edwards, L. & Freeman, L. (2021). *Policing and non-nationals: Analysis of police prevention, detection and investigation of xenophobic violence in South Africa.* Cape Town: African Policing Civilian Oversight Forum (APCOF).

Estep, T. & Biech, E. (eds). (2008). *ASTD handbook for workplace learning professionals.* Available from: www.bkconnection.com. Accessed on: 24 September 2022.

Farlam Commission of Inquiry. (2012). *Marikana commission of inquiry: Report on matters of public, national and international concern arising out of the tragic incidents at the Lonmin mine in Marikana, in the North West province*. Available from: https://www.sahrc.org.za/home/21/files/marikana-report-1.pdf. Accessed on: 13 May 2019.

Faull, A. (2013). Towards a "new professionalism" for the South African Police Service. *South African Review of Sociology,* 44(2): 18-35.

Faull, A. (2022). New SA crime trends are bleak, but at least we have the data. *ISS Today.* 13 June. Available from: https://issafrica.org/iss-today/new-sa-crime-trends-are-bleak-but-at-least-we-have-the-data. Accessed on: 15 June 2022.

Faull, A., Kelly, J. & Dissel, A. (2021). Lockdown lessons. Violence and policing in a pandemic. *Institute for Security Studies Southern Africa Report 44,* March. Available from: https://issafrica.org/research/southern-africa-report/lockdown-lessons-violence-and-policing-in-a-pandemic. Accessed on: 15 June 2022.

Felix, J. (2022). Police, intelligence failed to stop July unrest - but executive also to blame, report finds. *News24.* 7 February. Available from: https://www.news24.com/news24/southafrica/news/breaking-police-failed-to-stop-july-unrest-but-ramaphosas-executive-also-to-blame-scathing-report-finds-20220207. Accessed on: 15 June 2022.

Ferreira, E. (2021a). July unrest was designed to overwhelm police: Sitole. *Mail & Guardian.* 22 November. Available from: https://mg.co.za/news/2021-11-22-july-unrest-was-designed-to-overwhelm-police-sitole/. Accessed on: 15 June 2022.

Ferreira, E. (2021b). Police were left dangling during July unrest, KZN top cop tells SAHRC. *Mail & Guardian.* 30 November. Available from: https://mg.co.za/news/2021-11-30-kzn-violence-unrest-mkhwanazi-hrc/. Accessed on: 15 June 2022.

Garden Route District Municipality. (2022). 2022-2027 Draft Integrated Development Plan. Available from: http://www.gardenroute.gov.za/wp-content/uploads/2022/03/GRDM-2022-2027-IDP-29-March-2022-1.pdf. Accessed on: 20 September 2022.

Grobler, E. & Prinsloo, J. (2012). Risk factors contributing to police criminality. *Acta Criminologica,* 25(1): 41-58.

Gumede, W. (2020). Complaints against SANDF. *Wits News.* Available from: https://www.wits.ac.za/news/latest-news/general-news/2020/2020-04/complaints-against-sandf.html. Accessed on: 12 August 2020.

Heiberger, A. (2022). Understanding and improving officer performance regarding force usage. Presentation delivered at the 6th annual American Society for Evidenced-based Policing Conference on 23 and 24 May 2022. USA: Washington DC.

Human Rights Watch. (2021). South Africa: Broken promises to aid gender-based violence survivors. Available from: https://www.hrw.org/news/2021/11/24/south-africa-broken-promises-aid-gender-based-violence-survivors. Accessed on: 22 September 2022.

Institute for Security Studies (ISS). (2020). Evidence-based policing for South Africa - An introduction for police officers, researchers and communities. Available from: https://issafrica.org/crimehub/analysis/research/evidence-based-policing-for-south-africa-an-introduction-for-police-officers-researchers-and-communities. Accessed on: 4 July 2022.

Institute for Security Studies (ISS). (2022a). Conference. Police reform is about officers not just institutions. 3 May. Available from: https://issafrica.org/events/police-reform-is-about-officers-not-just-institutions. Accessed on: 15 June 2022.

Ivkovic´, S.K., Sauerman, A., Faull, A., Meyer, M.E. & Newham, G. (2020). *Police integrity in South Africa.* New York: Routledge.

Izobo, M. & Abiodun, S. (2020). Lockdown violence by law enforcement officials is a throwback to a brutal past. *Daily Maverick.* 8 May. Available from: https://www.dailymaverick.co.za/article/2020-05-08-lockdown-violence-by-law-enforcement-officials-is-a-throwback-to-a-brutal-past/. Accessed on: 12 August 2020.

Jacobs, R.L. & Park, Y. (2009). A proposed conceptual framework for workplace learning: Implications for theory development and research in human resource development. *Human Resource Development Review,* 8(2): 133-150.

Johnson, G. & Scholes, K. (1999). *Exploring corporate strategy.* 5th edition. London: Prentice Hall.

Knipfer, K., Kump, B., Wessel, D. & Cress, U. (2013). Reflection as a catalyst for organisational learning. *Studies in Continuing Education,* 35(1): 30-48.

Kriegler, A. (2021). What works in South African policing? *ISS Southern Africa Report,* 43: 1-24.

Lamb, G. (2020). Fear and policing in the time of Covid-19. *News24.* 3 April. Available from: https://www.news24.com/news24/columnists/guestcolumn/opinion-fear-and-policing-in-the-time-of-Covid-19-20200403. Accessed on: 11 August 2020.

Lave, J. & Wenger, E. (1991). *Situated learning, legitimate peripheral participation.* Cambridge: Cambridge University Press.

Magubane, K. 2018. Illiterate police "a hurdle" in turnaround plan. *Business Day.* 2 February. Available from: https://www.businesslive.co.za/bd/national/2018-02-02-illiterate-police-a-hurdle-in-turnaround-plan/. Accessed on: 15 June 2022.

Maqhina, M. (2018). MPs shocked at illiteracy in SAPS ranks. *IOL News.* 18 February. Available from: https://www.iol.co.za/news/politics/mps-shocked-at-illiteracy-in-saps-ranks-13062389. Accessed on: 15 June 2022.

May, T., Hunter, H. & Hough, M. (2017). The long and winding road: Embedding evidence-based policing principles. In J. Knutsson & L. Thompson (eds). *Advances in Evidence-Based Policing.* London: Routledge. Available from: https://core.ac.uk/download/78074671.pdf. Accessed on: 4 July 2022.

Misago, J.P. (2021). Preventing xenophobic attacks in South Africa is possible: Look no further than the state response to the July unrest. *Daily Maverick.* 5 September. Available from: https://www.dailymaverick.co.za/opinionista/2021-09-05-preventing-xenophobic-attacks-in-south-africa-is-possible-look-no-further-than-the-state-response-to-the-july-unrest/. Accessed on: 23 September 2022.

Mofokeng, J.T. (2012). Perspectives on supervision and mentorship within the South African Police Detective Service. *Acta Criminologica. CRIMSA 2011 Conference Special Edition,* 1*:* 71.

Monama, T. (2021). July unrest: Police were overstretched, admits Khehla Sitole. *News24.* 22 November. Available from: https://www.news24.com/news24/southafrica/news/july-unrest-police-were-overstretched-admits-khehla-sitole-20211122. Accessed on: 15 June 2022.

National Institute of Justice (NIJ). (2013). Practice profile: Hot spots policing. Crime solutions. Available from: https://crime-solutions.ojp.gov/ratedpractices/8. Accessed on: 26 September 2022.

News24. (2002). Shock report on illiterate cops. 10 December. Available from: https://www.news24.com/news24/shock-report-on-illiterate-cops-20021210. Accessed on: 15 June 2022.

Panel of Experts. (2018). *Panel of Experts report on policing and crowd management.* Available from: https://www.saps.gov.za/resource_centre/publications/pannel_of_experts_2021.pdf. Accessed on: 15 June 2022.

Phillips, N. (2011). Challenges to police reform in post-apartheid South Africa. *On Politics. Journal of the University of Victoria Undergraduates of Political Science,* 5(1): 53-68. Available from: https://journals.uvic.ca/index.php/onpolitics/article/view/11966. Accessed on: 6 July 2022.

Pijoos, I. (2020). Police promise more resources and a rural safety strategy for farm communities. *Times Live*. 5 October. Available from: https://www.timeslive.co.za/news/south-africa/2020-10-05-police-promise-more-resources-and-a-rural-safety-strategy-for-farm-communities/. Accessed on: 1 September 2022.

Potts, J. (2017). The benefits, challenges and lessons of Evidence-based Policing. *The Journal of California Law Enforcement,* 51(2): 21-28. Available from: https://www.researchgate.net/publication/323358169_The_Benefits_Challenges_and_Lessons_of_Evidence-Based_Policing. Accessed on: 10 June 2022.

Potts, J. (2020). How do we know it works? Conducting a rapid research police experiment to test the effectiveness of flashing police lights on auto crime. National Institute of Justice. *Perspectives on Research and Evidence-based Policing,* August: 4. Available from: https://www.researchgate.net/publication/323358169_The_Benefits_Challenges_and_Lessons_of_Evidence-Based_Policing. Accessed on: 6 July 2022.

Public Safety Canada. (N.d.). *Police stories: Working with people with low literacy.* Available from: https://www.publicsafety.gc.ca/lbrr/archives/cnmcs-plcng/cn31369-eng.pdf. Accessed on: 15 June 2022.

Reiner, R. (2000). *The politics of the police.* 3rd edition. Oxford: Oxford University Press.

Saferworld. (2006). Handout: Ten principles of CBP. Available from: https://www.saferworld.org.uk/downloads/pubdocs/CBP_Training_Sample_Handout_Ten_Principles_of_CBP.pdf. Accessed on: 26 September 2022.

Schwartz, G.J. (2016). Workplace learning in the South African Police Service (SAPS): Themes and perspectives in teaching research methodology module. Thesis. Pretoria: UNISA.

Schwartz, G.J. (2019). An examination of key factors that influence employee learning in the workplace (pp. 477-500). In V.H. Kenon and S.V. Palsole (eds). *The Wiley global handbook for workplace learning.* Hoboken: John Wiley & Sons.

Schwartz, G.J., Burger, J., Smit, J., Botha, C., Snyman, R., Moult, K., Kriegler, A., Van der Spuy, E., Redpath, J., Gopal, N. & Bhoola, S. (2021). Review of the impact of the South African Police Service (SAPS) as frontline law enforcer on policing during the COVID-19 pandemic. SAPS, DPME, GTAC and NRF. Available from: https://www.gtac.gov.za/wp-content/uploads/2021/04/Review-of-the-impact-of-the-South-African-Police-Service-SAPS-as-frontline-law-enforcer-on-policing-during-the-COVID-19-pandemic.pdf. Accessed on: 15 June 2022.

Schwartz, G.J., Schurink, W.J. & Stanz, K.J. (2007). Frontline police employees' social construction of client service. *SA Journal of Human Resource Management,* 5(3): 38-47.

Schwartz, G.J. & Schwartz, M. (2020). Police supervisors' role in constructing and reconstruction organisational identity: Lessons from SA. *Just Africa,* 5(1): 14-24.

Sherman, L.W. (2013). The use of evidence-based policing: Targeting, testing, tracking. *Crime and Justice,* 32(1): 377-341.

Sherman, L.W. (2022). *Evidence-based policing. Version 2.0.* Keynote address at the American Society of Evidence-Based Policing's 6th Annual Conference, 25 May 2022. USA: Washington DC.

Singh, K. (2021). WATCH | #ZumaUnrest: A bird's eye view of a city on fire as eThekwini looters run rampant. *News24.* 12 July. Available from: https://www.news24.com/news24/video/southafrica/news/watch-zumaunrest-a-birds-eye-view-of-a-city-on-fire-as-ethekwini-looters-run-rampant-20210712. Accessed on: 15 June 2022.

South African Human Rights Commission (SAHRC). (2010). *Report on the SAHRC investigation into issues of rule of law, justice and impunity arising out of the 2008 public violence against non-nationals.* Available from: https://www.sahrc.org.za/home/21/files/Non%20Nationals%20Attacks%20Report_1-50_2008.pdf. Accessed on: 16 November 2020.

South African Police Service. (2018). *SAPS Annual Report 2017/2018.* Pretoria: Government Printing Works.

South African Police Service. (2019a). *A case study. Performance improvement through management intervention at Worcester police station: Phase 2.* Pretoria: SAPS.

South African Police Service. (2019b). *Information note Ref. no 3/1/12 to: National Commissioner: Service delivery through evidence-based policing in the South African Police Service.* Pretoria: SAPS.

South African Police Service. (2021a). SAPS Annual Report 2020/2021. Pretoria: Government Printing Works.

South African Police Service. (2021b). *Organisational Climate Survey. SAPS member's morale.* Pretoria: SAPS.

South African Police Service. (2022). Police recorded Crime Statistics. Republic of South Africa. Fourth quarter of 2021/2022 financial year (January to March 2022). Available from: http://www.saps.gov.za/services/downloads/fourth_quarter_presentation_2021_2022.pdf. Accessed on: 15 June 2022.

Southern Utah University. (2020). What are the 5 steps of evidence-based practice for nurses? Available from: https://online.suu.edu/degrees/nursing/rn-to-bsn/steps-of-evidence-based-practice/. Accessed on: 26 September 2022.

Usher, R. & Edwards, R. (2007). *Lifelong learning - signs, discourses, practices.* Dordrecht: Springer.

Von Holdt, K., Langa, M., Molapo, S., Mogapi, N., Ngubeni, K., Dlamini, J. & Kirsten, A. (2011). The smoke that calls: Insurgent citizenship, collective violence and the struggle for a place in the new South Africa. Centre for the Study of Violence and Reconciliation & Wits Society, Work and Development Institute. Available from: https://www.csvr.org.za/docs/thesmokethatcalls.pdf. Accessed on: 14 June 2022.

Warhurst, R.P. (2006). "We really felt part of something": Participatory learning among peers within a university teaching-development community of practice. *International Journal for Academic Development,* 11(2): 111-122.

Western Cape Evidence Advisory Committee. (2022). Minutes of Evidence Advisory Committee meeting held on 4 April 2022. Cape Town.

Western Cape Government. (2022). Garden Route District Municipality Safety Plan. Available from: http://www.gardenroute.gov.za/wp-content/uploads/2022/07/Revised-Garden-Route-District-Safety-Plan-2022.pdf. Accessed on: 20 September 2022.

ARTICLE

Presumption of Innocence: Cases of Infringement Implications from Bulgaria

Prof. Dobrinka Chankova
Faculty of Law and History
South-West University - Bulgaria
chankova@law.swu.bg

Abstract

This study explores some dimensions of the presumption of innocence as a fundamental principle of the contemporary penal procedure law in many jurisdictions around the world. The focus is on the potential and realised infringements of this essential criminal justice instrument. Special attention is paid to the latest European regulation on this aspect, namely EU Directive 2016/343, strengthening certain aspects of the presumption of innocence and the right to be presented in criminal proceedings. The subject of the review is the case law of the European Court of Human Rights concerning some cases against Bulgaria. Notice is taken of other Acts within the framework of the Council of Europe. The research method includes a normative analysis and investigation of several typical case studies. Recommendations for improving legislation and practice to prevent future infringements have been generated and are offered to the reader. This critical review aims to assist European and other countries and authorities when tackling the presumption of innocence.

Keywords and phrases

presumption of innocence, infringements, EU Directive 2016/343, European Court of Human Rights, case law, Bulgaria

Introduction

The subject studied in this article is the classical issue of the presumption of innocence. Although firmly fixed in international and national legislation and well-explored and explained in the doctrine (Stumer, 2010:1-258; Van Sliedregt, 2009:247-267; Ferguson, 2016:131-158) as an incontestable condition for a fair trial, the presumption of innocence is sometimes under threat or even violated. Based on the normative analysis and case studies of some current practices of open or veiled infringements of the presumption of innocence, particularly in Bulgaria, some new legislative and practical solutions will be proposed to preclude potential violations of this essential element for all rule of law state institutions. Although based on European and, in particular, Bulgarian experiences, the article tackles global issues and values.

General observations about the presumption of innocence

The presumption of innocence is a fundamental guiding principle, core right and guarantee of contemporary criminal procedure and human rights laws. Its roots are found in the ancient Roman law of evidence, whereafter it became a central component of the European legal tradition and part of understanding the concept of a fair trial. In recent times it has been enshrined in the International Covenant on Civil and Political Rights (Art. 14), the Universal Declaration of Human Rights (Art. 11), the Council of Europe Convention for the Protection of Human Rights and Fundamental Freedoms (European Convention of Human Rights, ECHR) (Art. 6, § 2), the Charter of Fundamental Rights of the European Union (Art. 47 and 48), EU Directive 2016/343 on the strengthening of certain aspects of the presumption of innocence and of the right to be presented in criminal proceedings, etc.

Despite varied narratives, the presumption of innocence is usually described as a rule of utmost importance requiring that suspects and accused persons are presumed innocent until proven guilty, according to the law. The presumption is also reflected in the Court of Justice of the European Union and the European Court of Human Rights (ECtHR, the Court) case law. On national levels, it is an intrinsic part of all modern Penal Procedure Codes and Constitutions of many states.

The presumption of innocence is an indisputable achievement of the legal doctrine. However, the practical implementation varies enabling it to be undermined in countless ways. This was established a long time ago (Ashworth, 2006:241-278), and even at present, with the social development, technological progress and the broad dissemination of information, if the last mentioned is not correctly implemented, the opportunities for affecting the presumption increase. Simultaneously, enhanced cooperation in criminal matters, especially in the European Union (EU), requires mutual trust. The individuals must have faith that their criminal justice systems impose sanctions only in accordance with the law, and the close observance of the presumption at multiple levels is essential. All cases of its infringement are legally intolerable. Human rights must be protected at any stage of criminal procedure.

Moreover, Ferguson (2016:137) contends that -

> "A distinction can be drawn between 'factual guilt' (the accused did, as a matter of fact, perform the criminal act with the requisite *mens rea*), and 'legal guilt' (the prosecution was able to establish beyond a reasonable doubt and in conformity with due process that the accused performed the criminal act)".

This distinction recognises that even one who is "factually guilty" may not necessarily be convicted - there are many ways in which a prosecution may fail. That is why the presumptions of fact and of law should be interpreted very carefully (Council of Europe/ECtHR, 2022:74-75).

The factors that might potentially affect the presumption of innocence are numerous - the attitude of criminal justice professionals, public reference to defendants' guilt alongside defendants' physical presentation before or during a trial, rules on the burden of proof, some aspects related to the right to remain silent and not to incriminate oneself, etc. These factors are well-known; the national legislation, judicial and other practices have envisaged several guarantees that should prevent potential violations of the presumption. The mentioned international instruments, namely the EU Directive 2016/343 on the strengthening of certain aspects of the presumption of innocence and of the right to be presented in criminal proceedings (Directive 2016/343, the Directive) and the case law of the ECtHR, pay particular attention to them. That is because the fundamental objective is for all European citizens to receive the same level of protection as in their own countries (Nacheva, 2015:84).

Recital 16 of the Directive stipulates that public authorities should not refer to a defendant as guilty or reflect such an opinion as long as that person has not been proven guilty according to the law. A recent report by the European Union Agency for Fundamental Rights (FRA) shows that, in principle -

> "... criminal justice authorities are careful in their official statements and avoid using language that depicts someone as guilty. However, when conducting investigations, certain assumptions about alleged perpetrators may influence authorities' work on a given case, which in turn may lead to one-sided investigations" (FRA, 2021:9).

This view is shared by many practitioners (FRA, 2021:48-50) in the nine EU countries explored in the report (Austria, Belgium, Bulgaria, Cyprus, Germany, Italy, Lithuania, Poland and Portugal) and by the author of this article.

Other factors that could undermine the presumption of innocence, presented in the article (FRA, 2021:9 et seq.), include personal prejudices and biases of judicial authorities, lay judges and juries when they perceive certain persons as more likely to commit crimes; past convictions; ethnic background or nationality of the defendants, their gender, economic and social environment; particularly media coverage of cases. In summary, it is widely recognised that the equal application of the presumption of innocence remains a problem. Thus, the opinion expressed by FRA as quoted below could be fully supported:

> "To reduce potential prejudice and bias, Member States should encourage and promote diversity among judges, prosecutors and criminal justice officials so that they are representatives of all cultural, social and ethnic backgrounds in a given society, including with respect to gender" (FRA, 2021:9).

Concerning public reference to guilt, Art. 4 of Directive 2016/343, addresses public statements suggesting or implying a defendant's guilt before the final judgment. The obligation does not refer to the accused as being guilty and extends not only to actors directly involved in a given case but also to other public authorities, e.g. politicians, who may also publicly comment on ongoing criminal proceedings, which can influence the presumption of innocence among the general public. In addition, acknowledging and emphasising the importance of freedom of the press and other media, Recital 19 of the Directive specifies that the Member States should ensure that public authorities when informing the media about the ongoing case, "do not refer to suspects or accused person[s] as being guilty as long as they have not been proven guilty according to the law".

Another essential circumstance that should be considered so that the presumption is observed is the physical presence of the suspect and accused persons. Art. 5 of Directive 2016/343 obliges the Member States to ensure that the suspects and charged are not presented as being guilty, in court or public, through the use of physical restraints such as handcuffs, glass boxes, cages and leg irons (Recital 20) or inmate clothing (overalls) creating the impression that they are guilty. While security concerns could arise, the restraints should be proportionate after individual risk assessments have been carried out. Although such measures hardly influence professional judges, they can affect public opinion, lay judges and juries. A severe infringement of the presumption of innocence is when the burden of proof is shifted from the prosecutor to the

defence and when the right to remain silent and not incriminate oneself (Art. 7 of Directive 2016/343) is not respected.

It is necessary to underline that in its case law, the ECtHR usually associates the application of the presumption of innocence with the existence of a criminal charge (Council of Europe/ECtHR, 2022:68). The EU Directive 2016/343 goes beyond that, extending the temporal scope of application from a more advanced stage of criminal proceedings to earlier stages of the investigation, even to the first moment of suspicion that a person has committed a criminal offence. This gives more time and opportunities for infringements of the presumption from more persons related to the case.

There is a vision, expressed that the presumption has two aspects, namely internal and external.

> "The internal aspect relates to how the actors directly engaged in the criminal proceedings, such as judges, prosecutors, police officers and lawyers, perceive the defendant and how this affects their daily work. The external aspect deals with the public image of the defendant, which to a large extent, the media shape, including social media. However, the distinction between these two aspects can, at times, be blurred, as media coverage can also affect those engaged in the proceedings" (FRA, 2021:26).

This vision could be shared. This differentiation is essential not only from the theoretical point of view, but also for practical reasons related to the presumption's potential effect.

Many other opportunities affecting this universal instrument and principle are explored in-depth in theory (Ashworth, 2006:241 et seq.; Stumer, 2010:57 et seq.). An example is the deferred prosecution agreement - a discretionary tool to provide a way of responding to alleged criminal conduct. The prosecutor may invite a company charged with a criminal offence to enter into negotiations to agree to a deferred prosecution agreement as an alternative to prosecution (Serious Fraud Office, 2013:3). Some authors (Shiner & Ho, 2018:708) claim that the deferred prosecution agreement that has in the last decade become the tool of choice for the United States Department of Justice in the quest to control behaviour by corporations that violate the criminal law, does not affect the presumption of innocence. Others find this a violation of the rule of law (Arlen, 2016:231) or a presumption of innocence (Husak, 2014:353-369). Although these studies concern corporate criminal liability, they are indicative of a trend and deserve special attention.

The Bulgarian landscape

In Bulgaria, the presumption of innocence has always been stipulated in all Penal Procedure Codes throughout modern history. Currently, it is fixed in Art. 31 of the Constitution and Art. 16 of the operative Penal Procedure Code. In Bulgarian theory and practice, understanding and applying the presumption of innocence does not show any peculiarities. The same could be claimed about the potential infringements. However, it is a well-known fact that Bulgarian criminal justice, regrettably, operates far from the established fundamental European standards. Hence, the numerous critical reports from various EU institutions, through the Monitoring and Verification Mechanism[1], and the multiple judgments of the ECtHR (concerning violations of Art. 3 of the ECHR - Prohibition of torture, Art. 5 - Right to liberty and security, Art. 6 - Right to a fair trial, etc.[2]). This article intends to present some typical cases of proven infringements of the presumption of innocence and present ideas and recommendations to prevent further violations.

Case study 1

Abstract and brief comments on the case of *Gutsanovi v. Bulgaria* (Application No. 34529/10, Judgment from 15 October 2013)[3]

This is one of the first and perhaps most representative cases the ECtHR has paid particular attention to. It was considered by a court consisting of seven sitting judges. The case is exceptionally large and concerns many violations of the Council of Europe Convention for the Protection of Human Rights and Fundamental Freedoms, committed in one of a series of police operations conducted by the Bulgarian Ministry of Interior in the period December 2009 to April 2010, with the meaningful names "The Insolent", "Octopus", "Jellyfish" etc., aimed at breaking up various criminal groups. During these operations, the police detained many people, including politicians, widely covered in the media and arousing great public interest. Some of the ministry's intervention teams were accompanied by camera operators and photographers at the time of detention of people suspected of belonging to these groups. Several photos of the detainees were published in newspapers and on websites. Many politicians, including the Prime Minister and Interior Minister, and various prosecutors and police chiefs, were regularly sought by the media to comment on the arrests and subsequent prosecutions.

In the present case, the applicant was a Member of the National Assembly from the Bulgarian Socialist Party list, and during the relevant period, chairperson of the Varna Municipal Council. He complained that the actions of the police in their home during the early morning search, seizure and his detention in connection with a prosecution for abuse of office and public funds on 31 March 2010, caused his family psychological trauma considered as humiliating treatment. In addition, the inviolability of their home was breached; the initial detention was not ordered in accordance with domestic law; the retention period was too long; they did not have an effective means at their disposal to challenge the lawfulness of detention and there was unjustified encroachment on their personal life and reputation, etc. In this article, the attention is focused on the statements and, respectively the court's decision on the infringement of the presumption of innocence (Art. 6 § 2 of the Convention).

The applicant alleged that specific statements by the Prime Minister, the Minister of the Interior, the Varna District Prosecutor and the motives in the Varna District Court ruling of 18 May 2010 had violated his presumption of innocence. The ECtHR, after careful examination, found an infringement only in the second and fourth hypotheses but took a detailed look at his other allegations, as well as on the Government's position on the admissibility and merits of the appeal. This further developed the theory of presumption of innocence. In its position on the case, the Government stated that the domestic remedies had not been exhausted. In the criminal proceedings, the applicant had the

opportunity to effectively refute the accusations made by the prosecution and prove his innocence. If convicted at first instance, the applicant could appeal and argue that the court had been wrongfully influenced and biased. If he is finally acquitted, he can seek compensation for the damage he suffered due to an unjust accusation, the Government argued.

The ECtHR strongly opposed the Government's thesis that the applicant should make an effort to prove his innocence and wait for a favourable outcome in order to receive monetary compensation (para. 176 of the judgment). This contradicts the very purpose of the norm, which requires respect for the presumption of innocence. The Court also rejected the Government's assertion that by attributing a crime to a person, considered by Bulgarian law to be a defamation crime, the person concerned could file a lawsuit (para. 177). It is noted that given Art. 132 of the Constitution, the exercise of this remedy seems to be excluded in principle, as magistrates enjoy functional immunity and cannot be prosecuted in private criminal proceedings for their official actions unless the offence is an intentional crime of a general nature. Indeed, Bulgarian law does not provide criminal and civil immunity to members of the Government which means that they could be prosecuted. However, following the case law of the Supreme Court of Cassation and other courts in the country in specific cases, the ECtHR concluded that it was inconsistent with the burden of proving defamatory allegations (para. 73, 179). In several instances, the jurisprudence has held that the complainant is the one who has to prove that he or she has not committed the crime attributed to him or her. As the Government merely cited the provisions of the Penal Code sanctioning defamation without indicating consistent case law, the Court did not consider it sufficiently established that in conditions of legal uncertainty as to the distribution of the burden of proof and without evidence, it is an effective means under Bulgarian law to remedy the alleged infringement of the presumption of innocence and rejected this objection of the Government.

It deserves to be mentioned that the relationship between the reverse burden of proof and the presumption of innocence is an important issue but contested terrain in the criminal procedure literature. It is seriously reflected in numerous research reports. Many scholars and even jurisdictions (Canada, England and Wales) consider the prohibition for the reverse burden strictly but on different, sometimes relatively small differentiating preconditions (Picinali, 2017:681-703; Roberts, 1995:783-798 & 2002:17-37). Separate researchers make different interpretations of how the reversed burden can be compatible with the presumption of innocence (Tadros & Tierney, 2004:402-434; Hamer, 2007:142-171).

Indeed, it is more than surprising, even *prima facie*, that the Bulgarian Government claims in the case above all mentioned arguments, moreover, as will be seen below, in other cases too. The explanation that government agents are not qualified enough is difficult to share, at least because Bulgaria has been involved in many cases for almost three decades. It seems obvious that instead of furthering the cause of human rights, specific interests have been defended and short-term political dividends have been pursued, which is, of course, highly unacceptable.

On the merits of the case, the Government claims that the statements made by the politicians were aimed at informing the public about the progress of the criminal proceedings in this critical, public case concerning the spending of public funds and does not see any violations. However, the ECtHR assessment is different. It explicitly states that the presumption is violated when an official statement concerning an accused person reflects the feeling that he is guilty before his guilt is legally established (para. 201). Even in the absence of an official finding, it is sufficient to give reasons to believe that the magistrate finds the person guilty. In this context, the choice of words used by the state representatives is of particular importance, as the presumption may be infringed by other public bodies - members of Parliament, police officials and others. This, as already mentioned, is a fundamental component of Directive 2016/343 too, which remained non-observed.

The applicant complained in particular about the words of the Minister of the Interior published in the *Black Sea* newspaper dated 1 April 2010. In this connection, the Court notes that the Minister disclosed specific information gathered in the course of the investigation concerning the modus operandi of the group of suspects: "… what they have done is a scheme developed over the years because there are three contracts worth 2 million euros for second-hand buses." The Court found that the words went beyond the mere communication of information, leaving the public with the impression that the applicant was one of the "brains" of the criminal group that embezzled large amounts of public money. Although it did not find intent, the Court found that the presumption had been infringed (para. 198-200).

The other case in which the ECtHR finds an infringement is the motives mentioned in the ruling, which aims to determine whether the continuation of the remand measure is justified and necessary. The judge had to make sure that there were still reasonable suspicions that the applicant had committed a crime. To answer this question, the magistrate used the sentence: "First of all, the court continues to consider that a crime has been committed and that the accused is involved in it …" The Court treats it as a declaration of guilt before deciding the case on its merits. Therefore, with additional arguments too, it accepts that there is an infringement of Art. 6 § 2 of the Convention and awards just satisfaction.

The judgment in this particular case marks the development of the jurisprudence of the ECtHR. It has been referred to many times in some subsequent Bulgarian (and other) cases before the ECtHR (Application No. 30336/10 *Petrov v. Bulgaria,* Application No. 39651/11 Popovi v. Bulgaria, etc.) regrettably testifying to the recurrence of violations.

Case study 2

Abstract and brief comments on the case of *Alexey Petrov v. Bulgaria* (Application No. 30336/10, Judgment from 31 March 2016)[4]

The applicant alleged that he had been subjected to inhumane and degrading treatment during a police operation held at his home on 10 February 2010, that statements by various magistrates and high-ranking politicians had violated the presumption of innocence and that his right to respect for his privacy was disrupted due to the

recording of his arrest by the police and the broadcast of the recording in the media.

In the 1980s, the applicant began his professional career in the Ministry of the Interior. Until 1989, he was a member of the ministry's counter-terrorism task force. In 1990, he received an officer's degree and a diploma in higher economic education. In 1992, he left office. Subsequently, in the 1990s, he engaged in various business ventures, sports, higher education and public life as an entrepreneur, university lecturer and an active member of the Association of Entrepreneurs. In 2001, he was appointed to the National Security Service as an undercover agent and later an expert. In 2009, he finally left the Bulgarian state security services.

In the early hours of 10 February 2010, as part of the police operation "Octopus" to detain members of organised crime groups suspected of forming and running an extensive network of prostitution and involvement in various cases of extortion, embezzlement and racketeering, tax fraud and money laundering, he was arrested. His arrest was filmed with a camera and the recording was made available to the media. Television channels and news sites widely used this recording. A series of statements by politicians and magistrates concerning the two criminal proceedings against the applicant followed in several dailies.

The applicant criticised the content of these statements in which he was named as the leader of a powerful mafia-type organisation, although no court had convicted him, thus violating the presumption of innocence. The Government again disputed this, but the ECtHR acknowledged that Art. 6 § 2 of the ECHR does not, in the sense of Art. 10 of the Convention, prevent the authorities from informing the public about ongoing criminal proceedings but requires them to do so with all the discretion and restraint and to observe the presumption of innocence. In particular, the Court found that the statements of the Minister of Interior namely: "He is a respectable figure in strengthening this hierarchical organised criminal group and played a key role in everything," as well as "The fact that Alexey Petrov was an undercover agent is just dust in the eyes. We can say without a doubt that the mafia has introduced one of its people into the country ..." go beyond the simple provision of information on the development of criminal proceedings or the description of a state of suspicion. These statements unequivocally indicate that the applicant had set up and led a large-scale organised criminal group. Because of the brief period between the arrest of the applicant and the lively interest shown by the media and the public in this criminal case, the Court considers that these words of the Minister were able to give the public the impression that the person was guilty of the crimes of which he was accused.

Similarly, the ECtHR found that the words of the Sofia City Prosecutor when speaking about the evidence gathered and in particular the testimony of some new witnesses: "When a leader of a criminal group is under constant detention, the witnesses gain more courage" had in mind the applicant. The Court found that the prosecutor in question stated unequivocally that he was the head of a criminal organisation. The sentence in question, therefore, constitutes a confirmation of the applicant's guilt and is not merely an opinion that there is suspicion against him. Thus, the Court found that these statements were an infringement of Art. 6 § 2 of the Convention and respectively awards just satisfaction (para. 72-74 of the judgment). There is no need to comment further on the firmly established consistent practice of the Court, which is also well-argued in the mentioned theoretical sources and many others (Duff, 2013a:170-192; Lippke, 2014:337-352; Ho, 2012:259-281).

In the case, the Court again took a stand on the objections of the Government, finding that the appeal was not premature and the applicant was not obliged to wait for the outcome of the criminal proceedings against him to seek protection against the statements. Again, the Court found that the effectiveness of a defamation suit in circumstances similar to those in the present case had not been established: there was a degree of uncertainty in domestic law as to the burden of proof in such cases, referring to his position in the case of *Gutsanovi v. Bulgaria.*

In addition, the Court was confronted by a series of complaints as a result of the said police actions (Applications No. 26966/10 *Maslarova v. Bulgaria,* No. 45773/10 *Petrov and Ivanova v. Bulgaria*, etc.). The decisions taken are practically identical as the violations are similar. As will be confirmed later, what is worrying is that the Bulgarian police, prosecutorial and judicial practice, as well as the new Government and the media, follow the same line, which is critical for the status of human rights.

Case study 3

Abstract and brief comments on the case of *Stefanov v. Bulgaria* Application No. 26198/13, Judgment from 2 February 2021)[5]

This is one of the newer cases from the last decade against Bulgaria. It represents a recurrent violation, already considered by the ECtHR, so the decision is taken by a committee comprising three judges. The case again concerns a complaint that a statement by the Bulgarian Minister of Interior at that time, commenting on offences allegedly committed by the applicant, at a time when the investigation of those offences is still pending, breached the applicant's right to be presumed innocent under Art. 6 § 2 of the ECHR. During the proceedings before the ECtHR, the applicant passed away, and his son Mr. Vladimir Stefanov expressed a wish to continue the application in his stead.

The reason for the application is again a statement of the Minister as a guest of a popular evening talk show on Bulgarian National Television, called *Panorama*, commenting on the work of the judiciary and, more precisely, the decision of the domestic court to place the applicant under house arrest. He said the following:

> "What is important for me is that institutions should work in the interests of society … I can give you many astonishing examples [such as that of] Vladimir Pelov; you know that a year and several months ago, he committed an armed robbery in Botevgrad. After that, he ran away unlawfully, took a car with a woman and a child in it. [H]e shot at police officers. When we saw his criminal record, it turned out that he had committed a similar robbery of a jewellery workshop, and after that, he had also committed a murder for which he had received a 20-year prison sentence. Ten years later, he was granted early release for good behaviour. One year

after that, less than a year, in fact, he committed this armed robbery in Botevgrad" (para. 9).

In the final judgment of 5 May 2016, the applicant was convicted of the robbery in 2011.

The applicant claimed that the Minister of the Interior had stated categorically and doubtlessly that his father committed criminal offences during the pending investigation. The statement could not be considered a critical political comment as it was broadcasted in the context of a popular show. The Government contended that the Minister made it spontaneously as an example of the judiciary's work.

The judgment reconfirmed that under the Court's case law it is firmly established that the presumption will be violated if a statement by a public official concerning a person charged with a criminal offence reflects an opinion that he is guilty before his guilt has been proven according to the law (para. 31-32). In this context, the choice of words is critically important, especially for a high-ranking public official. The Court found the statement went beyond a comment on relevant factual developments or an explanation that the person had been suspected of having committed criminal offences and could give the audience the impression that the applicant had undoubtedly committed the robbery. So, the Court again found an infringement of Art. 6 § 2 of the Convention.

The judgment of the ECtHR in the case *Banevi v. Bulgaria* - Application No. 25658/19 of 12 October 2021 falls in the same category as the above[6]. Although it concerns events that took place in the time long after the repeated rulings of the ECtHR, it indicates that the problem is persistently present in the Bulgarian reality. In the given case, the Court found that in their statements in connection with the applicants' investigation about involvement in an organised criminal group, the Chief of the then Special Prosecutor's Office and the Supervising Prosecutor had made very definite conclusions about the facts, suggesting that the applicants were perpetrators, and thus undermined the presumption of their innocence.

Additional considerations, analyses and recommendations

The considered cases show that criminal proceedings in Bulgaria are not systematically conducted in compliance with the principles of Bulgarian criminal procedure law and European and global standards, as established in the Penal Procedure Code, the ECHR and the jurisprudence of the ECtHR, Directive 2016/343 and other listed international instruments. A recent study shows that it is difficult to find the right balance between the principle of publicity, namely the right to a public trial and the presumption of innocence (Bogia, 2020:87-89). However, the theory is unanimous that exercising some rights, e.g. the right to information, should not be at the expense of other protected rights (Belova-Ganeva, 2013:58-61; Georgieva, 2019:256-264).

As noted, pre-trial investigations are frequently overexposed in the media, which are often invited in advance for important investigation actions and publishing numerous photos and other materials, contrary to the principle that publicity in this phase is limited. A statement from the Secretary-General of the Ministry of the Interior from 2010, published in the media, was cited in one of the cases examined: "Our short recordings (of the police operations 'The Insolents' and 'Octopus') are among the most-watched on *YouTube*. We surpass film companies" (Case *Alexey Petrov v. Bulgaria*, Application No. 30336/10, para. 20 of the judgment). This could hardly be considered professional conduct of a high-ranking official, as it is contrary to the already mentioned internal and supranational acts and the established practice in comparative terms.

Recommendation Rec (2003) 13 of the Committee of Ministers to Member States of the Council of Europe on the provision of information through the media concerning criminal proceedings in the year 2003, warns that opinions and information relating to ongoing criminal proceedings should only be communicated or disseminated through the media where this does not prejudice the presumption of innocence of the suspect or accused. In addition, Opinion No. 8 (2013) of the Consultative Council of European Prosecutors (Council of Europe, 2013), set up by the Committee of Ministers of the Council of Europe on relations between prosecutors and the media, was adopted. It provides for highly detailed communication regulations between them, including the requirement to present messages in a neutral form and eliminate the possibility of personalisation. Unfortunately, some recent statements made by Bulgarian prosecutors repeat old mistakes. This emphasises the need for appropriate training in the field of communications to properly present information through the media and achieve a difficult balance between the right of information to society and the individual rights of the accused to a fair trial. It is necessary to turn once again to Directive 2016/343, which, like the Bulgarian Penal Procedure Code (Art. 198), allows public dissemination of information and even evidence in criminal proceedings. However, the latter should be done with permission, under exceptional circumstances and very cautiously, due to essential circumstances such as revealing the objective truth, inviting the public to help identify the alleged perpetrator, for safety reasons - avoiding environmental pollution, preventing violations of public order, etc. The selective publication of evidence or fragments by the public prosecution that creates particular suggestions which are practised is very likely to violate the presumption of innocence. Therefore, it is justified to consider safeguards in this regard, such as an appeal in court by the persons concerned to the ruling of the supervising prosecutor authorising the disclosure of case materials.

In addition, in Bulgaria, a Unified Media Strategy of the Judiciary regulates the principles of the media policy of the judiciary and the methods of communication with the media. Although with a different focus, building and maintaining a positive public image of the bench and having a predominantly protective character for the system itself, the Strategy contains milestones for the work of magistrates with journalists, where the public interest is satisfied and the principles of the rule of law are observed. It is still not well-known by all judiciary members, which again raises the question about their training. It can be summarised that the state should take more care with the education of its bodies, including public authorities, especially when it comes to such sensitive human rights issues as the right of an accused person to be presumed innocent until proven guilty by a sentence, which is the focus of this article.

The interim conclusion that inevitably should be drawn is that Bulgaria has a systemic problem with the adherence to the presumption of innocence by politicians, professionals, and media. This has been confirmed by another recent survey (Markov & Ilcheva, 2020:69-73). There is a critical mass of repeated judgments of the ECtHR, but the problem persists. That is why it is indispensable for a pilot decision[7] of the Court to be pronounced so that finally, the judicial practice and the public authorities are obliged to follow it. It could be daring to say that it will be beneficial to the other European countries which have a similar problem. This issue has predominantly practical dimensions, rather than a theoretical and legislative nature. However, some minor changes in the operative Bulgarian legislation, including soft law, will be welcome in the country learning from the continental law system.

Moreover, a regress liability is justified to be introduced towards the civil servants, media, magistrates and everyone who violates the presumption. In this respect, the decisions adopted in the European Convention on the Compensation of Victims of Violent Crimes and the national legislation could be used as an example. It is fair and in compliance with the legal, ethical and budget principles, among others, those who have caused harm pay compensation. Such a decision will have a substantial disciplinary effect and help to realise the rule of law.

Conclusion

This article has inevitable limitations defined by its scope. There are many closely related hypotheses. A good example could be given with the advantages and disadvantages of moving from the presumption of consent to the presumption of a lack of consent in sexual offences cases and the hypothetical conflict with the presumption of innocence (Besedin & Stepanov, 2021:27). Some authors have already explored a few of these dimensions (Estrich, 1986:1087; Randall, 2010:397), but there is room for further research. The specific place and meaning of the presumption of innocence in restorative justice and corruption crimes are underexplored. Some new aspects of the correlation of presumption with pre-trial detention also need consideration (Duff, 2013b:115-132; Stevens, 2009:165-180).

The three investigated cases against Bulgaria before the ECtHR concerning violations of Art. 6 § 2 of the ECHR demonstrate a lack of respect by Bulgarian politicians and some professionals from the judiciary regarding the presumption of innocence as a fundamental element of the criminal procedural law. They also indicate that human rights are not closely observed, especially from the specific position of the suspect or accused, which is disturbing and needs an adequate response. Paying more attention to university education, additional training, disciplinary measures, etc. could improve the situation. It can be reasonably argued that the presumption of innocence is sacred to the fairness of the criminal process; it is the basis of the identity of European criminal justice. Its strict observance guarantees the protection of citizens involved in criminal proceedings. Difficulties and mistakes in its application sometimes related to developments in communication channels, technology and society, seem inevitable, not only in Bulgaria. In this article, a limited number of problems received attention. If the proposals offered are taken into account broadly, they will help to reduce or even eliminate the existing deficiencies in understanding and practicing the application of the presumption of innocence.

List of Court Cases

Case of Gutsanovi v. Bulgaria (Application No. 34529/10, Judgment from 15 October 2013).

Case of Alexey Petrov v. Bulgaria (Application No. 30336/10, Judgment from 31 March 2016).

Case of Stefanov v. Bulgaria (Application No. 26198/13, Judgment from 2 February 2021).

Case of Banevi v. Bulgaria (Application No. 25658/19, Judgment from 12 October 2021).

Case of Maslarova v. Bulgaria (Application No. 26966/10, Judgment from 31 January 2019).

Case of Petrov and Ivanova v. Bulgaria (Application No. 45773/10, Judgment from 31 March 2016).

Case of Popovi v. Bulgaria (Application No. 39651/11, Judgment from June 2016).

List of International Acts

Directive (EU) 2016/343 of the European Parliament and of the Council on the strengthening of certain aspects of the presumption of innocence and of the right to be presented in criminal proceedings. *Official Journal of the European Union*, L 65/1, 11.03.2016. Available from: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv%3AOJ.L_.2016.065.01.0001.01.ENG&toc=OJ%3AL%3A2016%3A065%3ATOC. Accessed on: 6 July 2022.

European Parliament Resolution of 8 October 2020 on the rule of law and fundamental rights in Bulgaria. Available from: https://www.europarl.europa.eu/doceo/document/TA-9-2020-0264_EN.html. Accessed on: 6 July 2022.

European Convention on the Compensation of Victims of Violent Crimes. Available from: https://rm.coe.int/1680079751. Accessed on: 6 July 2022.

Council of Europe. Recommendation Rec (2003) 13 of the Committee of Ministers to member states on the provision of information through the media in relation to criminal proceedings. Available from: https://search.coe.int/cm/Pages/result_details.aspx?ObjectId=09000016805df617. Accessed on: 16 October 2022.

List of National Acts

Constitution of the Republic of Bulgaria. *State Gazette* No. 56/1991 … last amended *State Gazette* No. 100/2015. Available from: https://lex.bg/laws/ldoc/521957377. Accessed on: 6 July 2022.

Penal Procedure Code. *State Gazette* No. 86/2005 … last amended *State Gazette* No. 62/2022. Available from: https://www.lex.bg/bg/laws/ldoc/2135512224. Accessed on: 16 October 2022.

List of References

Arlen, J. (2016). Prosecuting beyond the rule of law: Corporate mandates imposed through deferred prosecution agreements. *Journal of Legal Analysis,* 8: 191-234.

Ashworth, A. (2006). Four threats to the presumption of innocence. *International Journal of Evidence and Proof,* 10(4): 241-278.

Belova-Ganeva, G. (2013). *Current trends in the protection of human rights.* Sofia: Classic Design.

Besedin, G. & Stepanov, P. (2021). Presumption of consent or a lack thereof of the victim and the presumption of guilt (innocence) of the

accused in cases of sexual offences: Emphasise what is necessary, and cross out everything unnecessary. *Russian Law Journal,* 9(3): 4-35.

Bogia, H. (2020). Public references to guilt and presentation of suspects and accused persons (pp. 85-100). In G. Dimitrov & N.B. Vilela (eds.). *Enhancing the right to be present.* Lex Localis: Institute for Local Self-Government Maribor.

Commission staff working document. *2020 Rule of Law Report. Country Chapter on the rule of law situation in Bulgaria.* Available from: https://ec.europa.eu/info/sites/info/files/bg_rol_country_chapter.pdf. Accessed on: 6 July 2022.

Council of Europe. Opinion (2013) no. 8 of the Consultative Council of European prosecutors on relations between prosecutors and the media. Available from: https://rm.coe.int/1680747848. Accessed on: 16 October 2022.

Council of Europe/European Court of Human Rights (ECtHR) (2022). *Guide on Article 6 of the European Convention on Human Rights. Right to a fair trial (criminal limb).* Available from: https://www.echr.coe.int/documents/guide_art_6_criminal_eng.pdf. Accessed on: 16 October 2022.

Duff, A. (2013a). Who must presume who to be innocent of what? *Netherlands Journal of Legal Philosophy,* 42: 170-192.

Duff, A. (2013b). Pre-trial detention and the presumption of innocence (pp. 115-132). In A. Ashworth, L. Zedner & P. Tomlin (eds.). *Prevention and the limits of the criminal law.* Oxford: Oxford University Press.

Estrich, S. (1986). Rape. *Yale Law Journal,* 95(6): 1087-1184.

European Union Agency for Fundamental Rights (FRA) (2021). *Presumption of innocence and related rights. Professional perspectives.* Luxembourg: Publication Office of the European Union.

Ferguson, P. (2016). The presumption of innocence and its role in the criminal process. *Criminal Law Forum,* 27: 131-158.

Georgieva, G. (2019). *International cooperation in mass media.* Sofia: DioMira.

Hamer, D. (2007). The presumption of innocence and reverse burdens: A balancing act. *Cambridge Law Journal,* 66(1): 142-171.

Ho, H.L. (2012). The presumption of innocence as a human right (pp. 259-281). In P. Roberts & J. Hunter (eds.). *Criminal evidence and human rights.* Oxford: Hart Publishing.

Husak, D. (2014). Social engineering as an infringement of the presumption of innocence: The case of corporate criminality. *Criminal Law and Philosophy,* 8: 353-369.

Lippke, R. (2014). The prosecutor and the presumption of innocence. *Criminal Law and Philosophy,* 8: 337-352.

Markov, D. & Ilcheva, M. (2020). Presumption of innocence: Procedural rights in criminal proceedings. Social Fieldwork Research (FRANET). Available from: https://fra.europa.eu/sites/default/files/fra_uploads/bulgaria-2021-country-research-presumption-innocence_en.pdf. Accessed on: 16 October 2022.

Nacheva, S. (2015). Proposal for a Directive of the European Parliament and of the Council on the strengthening of certain aspects of the presumption of innocence and of the right of persons to be present at trial. *Norma,* 6: 84-95.

Picinali, F. (2017). The denial of procedural safeguards in trials for regulatory offences: A justification. *Criminal Law and Philosophy,* 11(4): 681-703.

Randall, M. (2010). Sexual assault law, credibility, and "ideal victims": Consent, resistance, and victim-blaming. *Canadian Journal of Women and Law,* 22(2): 397-433.

Roberts, P. (1995). Taking the burden of proof seriously. *Criminal Law Review,* 1: 783-798.

Roberts, P. (2002). Drug dealing and the presumption of innocence: The Human Rights Act (almost) bites. *The International Journal of Evidence & Proof,* 6(1): 17-37.

Serious Fraud Office (2013). Deferred Prosecution Agreements Code of Practice. Crime and Courts Act 2013. Available from: https://www.cps.gov.uk/publication/deferred-prosecution-agreements-code-practice. Accessed on: 16 October 2022.

Shiner, R. & Ho, H. (2018). Deferred prosecution agreements and the presumption of innocence. *Criminal Law and Philosophy,* 12: 707-723.

Stevens, L. (2009). Pre-trial detention: The presumption of innocence and article 5 of the European Convention on Human Rights cannot and do not limit its increasing use. *European Journal of Crime, Criminal Law and Criminal Justice,* 17: 165-180.

Stumer, A. (2010). *The presumption of innocence. Evidential and Human Rights Perspectives.* London: Bloomsbury Publishing.

Supreme Judicial Council. Unified Media Strategy of the Judiciary. Available from: http://www.vss.justice.bg/page/view/2147. Accessed on: 16 October 2022.

Tadros, V. & Tierney, S. (2004). The presumption of innocence and the Human Rights Act. *The Modern Law Review,* 67(3): 402-434.

Van Sliedregt, E. (2009). A contemporary reflection on the presumption of innocence. *Revue internationale de droit pénal,* 80(1-2): 247-267.

Footnotes

1. Commission staff working document. 2020 Rule of Law Report. Country Chapter on the rule of law situation in Bulgaria. Available from: https://ec.europa.eu/info/sites/info/files/bg_rol_country_chapter.pdf. Accessed on: 6 July 2022;
   European Parliament resolution of 8 October 2020 on the rule of law and fundamental rights in Bulgaria. Available at: https://www.europarl.europa.eu/doceo/document/TA-9-2020-0264_EN.html. Accessed on: 6 July 2022.
2. Refer to: https://hudoc.echr.coe.int/eng#{%22respondent%22:[%22BGR%22],%22documentcollectionid2%22:[%22GRANDCHAMBER%22,%22CHAMBER%22]}
3. Available from: https://hudoc.echr.coe.int/bul#{%22itemid%22:[%22001-127426%22]}. Accessed on: 16 October 2022.
4. Available from: https://hudoc.echr.coe.int/bul#{%22itemid%22:[%22001-161736%22]}. Accessed on: 6 July 2022.
5. Available from: https://hudoc.echr.coe.int/bul#{%22itemid%22:[%22001-207647%22]}. Accessed on: 6 July 2022.
6. Available from: https://hudoc.echr.coe.int/bul#{%22itemid%22:[%22001-212118%22]}. Accessed on: 6 July 2022.
7. Over the past few years, the Court has developed a new procedure to deal with mass complaints about similar issues, also known as "systemic issues" - i.e. those arising from non-conformity between national legislation and the ECHR. The procedure consists of examining one or more applications of this kind, while at the same time the examination of a series of similar cases is postponed. When it delivers its judgment in a pilot case, the Court called on the government concerned to bring the domestic legislation in line with the Convention and indicates the general measures to be taken. It will then proceed to dispose of the other similar cases.

ARTICLE

Crime prevention by the Metropolitan Police Service in Tembisa, South Africa

Modiegi Mabitsela[1]
E-mail: Modiegi.Mabitsela@netcare.co.za

Prof. Doraval Govender (corresponding author)
Department of Criminology and Security Science,
School of Criminal Justice, College of Law
University of South Africa
E-mail: doraval.gov@gmail.com

Abstract
Metropolitan policing in Tembisa, South Africa, is viewed as reactive because it does not enforce by-laws with crime prevention in mind. That is because the mandate of the Metro Police Service is expressed through traffic and by-law enforcement activities. This study evaluates the crime prevention activities performed by Metropolitan Police Services and identifies the challenges that prevent the metro police in Tembisa from implementing crime prevention optimally in that area. One-on-one semi-structured interviews were used to collect data from 30 participants operating and living in Tembisa. The participant sample reflected equal Metropolitan Police Service, South African Police Service and Tembisa community member representation. In addition, the principal author observed metro police activities in Tembisa. Qualitative data were collected and analysed thematically using the descriptive analysis process. It was found that the metro police performed traffic-related duties, which they considered to be related to crime prevention. It is recommended that the role, functions and responsibilities of the Metropolitan Police Service in crime prevention should be defined clearly and resourced adequately.

Keywords and phrases
community police forums, metropolitan policing, crime prevention, traffic law enforcement, policing.

Introduction
There are eight fully functional Metropolitan Police Services (hereafter referred to as the Metro Police Service [MPS]) in South Africa. These include services in the following metropolitan municipalities namely Buffalo City (East London), City of Cape Town, City of eThekwini (Durban), City of Johannesburg, Mangaung Municipality (Bloemfontein), Nelson Mandela Metropolitan Municipality (Port Elizabeth/Gqeberha), City of Tshwane (Pretoria) and Ekurhuleni Metropolitan Municipality (East Rand). These MPS are further divided into three regions, namely the northern, eastern and southern regions (South African Government, n.d.). The focus of this study was the Ekurhuleni Metropolitan Police Department (EMPD) operating specifically in Tembisa on the East Rand of Gauteng.

To better understand and evaluate crime prevention as executed by metropolitan police officials in the study area, relevant literature and legislation were considered. Themes that emerged were the *lack of guidelines* on the role of the MPS concerning crime prevention, the *lack of collaboration* between the South African Police Service (SAPS) and the MPS; the *training* of metro police officials; their current and potential *functions* and relevant *by-laws and legislation* governing MPS functions and engagement; *funding* and *corruption*.

The Constitution of the Republic of South Africa, 1996 (Republic of South Africa, 1996a), does not offer an explicit *description of the functions, responsibilities and duties of the MPS*. Section 221 of the Interim Constitution of the Republic of South Africa, 1993 (Republic of South Africa, 1993a) allowed for the establishment of metro police services to perform limited functions in terms of crime prevention and local government policing by-laws. However, when the final Constitution was drafted in 1996, that information was omitted. Section 206(7) of the Constitution merely stipulates that national legislation must provide a framework for the establishment, power, functions and control of metro police services, as such recognising the SAPS as the only legalised policing service in the country. That supports the current notion that the functions of metro police services fall under the SAPS as the official police service.

The above resulted in metro police officers not having assigned roles in terms of crime prevention, which poses a challenge for the MPS and impedes the optimal functioning of the organisation. Section 64E of the South African Police Service Act 68 of 1995 (Republic of South Africa, 1995) describes three MPS functions but does not elaborate on what each function entails. The legislation does not provide adequate information on the meaning of crime prevention and the directives that underpin it. It also does not detail a realistic set of expectations for the MPS on crime prevention.

Furthermore, while both the MPS and the SAPS have a responsibility concerning the safety and security of communities, the apparent *lack of collaboration* between the two entities has been highlighted as a serious challenge by Newham and Masuku (cf 2004:1-39). That results primarily because the MPS prioritises traffic policing activities over crime prevention initiatives. Newham and Masuku (cf 2004:1-39) identify South Africa's inadequate legislation to guide the main functions of the MPS as a key challenge affecting partnership efforts between the two services negatively.

Another theme identified was that of *training*. Adequate training is essential for metro police officials to execute crime prevention activities efficiently. Individuals wishing to join the MPS undergo training for 64 weeks. During this training a road law enforcement qualification and law enforcement skills development programme must be completed. The completion of these two qualifications certifies an individual as a metro police official. Additional training is also offered under law enforcement skills development programmes (cf Van Biljon, 2014:1-331). However, Naudé (cf 2000:1-11) argues that the crime prevention training offered does not meet the required standards at both national and local levels.

In exploring the capability of metro police officials in Tembisa, the training offered by the EMPD was evaluated in detail. It was found that this MPS takes the experience and training of its officials seriously because it improves and sustains crime prevention. In that regard, the EMPD pointed out that its officials undergo training in crime prevention at the University of the Witwatersrand with good results. In addition to that qualification, participants receive firearm training and are taught to document statements. The EMPD also allocated funding for officials to undergo advanced driving training and accident investigation classes.

On the theme of current and potential *functions* and relevant *by-laws and legislation* governing MPS functions and engagement, it was found that the latter is mainly prescribed in municipal by-laws. Section 10(1) of the Local Government Transition Act 209 of 1993 (Republic of South Africa, 1993b) authorises local municipalities to institute by-laws in their respective areas and establishes the processes that inform by-law enactment. By-laws are divided into five sections and are enforced by metro police services to maintain order in communities. Consequently, a person who commits an offence in terms of or transgresses a by-law is punished accordingly. Since by-laws are framed against the Criminal Procedure Amendment Act 65 of 2008 (Republic of South Africa, 2008), the Act functions as a tool for the MPS to enforce by-laws as it allows them to report lawbreakers, where necessary. By-laws can also be enforced by a court of law to duly punish transgressors. These laws are furthermore used to encourage good standards of conduct in communities by enforcing practices of safety, health and welfare among people. During this study, the authors found that the EMPD had drafted a set of by-laws of its own that describes the activities to be carried out by its officials.

Rauch (cf 2002:9-26) points out that, since traffic policing is a primary function of the MPS, metro police officials dedicate most of their time to that task. Shaw (cf 1998:1-8) describes traffic law enforcement as a "crime prevention function provided that it is done correctly". A key reason for this is that when traffic police officers maintain a visible presence as legal guardians of society, possible incidences of crime are reduced or prevented. Furthermore, traffic law enforcement results in fewer road crashes happening, which leads to lower road fatality rates. Faull (cf 2008:1-28) feels strongly that metro police officials should be actively involved in traffic policing because that would enable them to promote traffic enforcement activities. Such activities include educating the community about traffic safety, supervising evacuations and assisting the SAPS at road crash scenes.

Apart from by-laws, some Acts of Parliament also provide guidelines concerning MPS activities. The National Road Traffic Act 93 of 1996 (Republic of South Africa, 1996b) lists the requirements a traffic officer must meet when enforcing traffic laws. Section 44 of the Act allows a member of a metro police service (a traffic officer) who is in uniform to inspect vehicle licences while on duty. Such an officer is also authorised to determine whether the functionality and equipment of the vehicle concerned comply with the provisions of the Act. The Act permits metro police officials to drive any vehicle if required in the execution of their duties. The MPS also has the authority to determine the size and load permission of a vehicle. A mass meter is used to determine these. If findings indicate that the load or mass of a vehicle exceeds stipulated levels, the official involved must prohibit the vehicle from operating on public roads.

Taking into consideration the National Road Traffic Act 93 of 1996, traffic control remains the primary function of metro police services. However, it is worth noting that the effective enforcement of some by-laws could contribute to crime prevention by metro police officials. The correct enforcement of by-laws that prevents socially deviant behaviour would, therefore, enable effective crime

prevention. Conversely, ineffective by-law enforcement of applicable by-laws could cause unlawful behaviour, such as alcohol-related misdemeanours. For example, failure to regulate alcohol sales in communities has been proven to result in heightened levels of violence and crime in such communities. During the performance of traffic policing, metro police officials could also be on the lookout for persons wanted on arrest warrants, stolen vehicles, illegal firearms, drugs and stolen property. This was done by including foot, vehicle and motorcycle patrols and establishing a rapid response unit to attend to crimes in progress, the latter in support of the SAPS as mandated by legislation (Newham, Masuku & Gomomo, cf 2002:1-33). The responsibilities, functions and powers of the MPS, as described in the South African Police Service Act and amended by the South African Police Service Amendment Act 83 of 1998 (Republic of South Africa, 1995 and 1998), furthermore empower the MPS to assist the SAPS in crime prevention. Van Biljon (2014:41) affirms that a metro police service acts as an agency supporting the SAPS.

Other legislation guiding the conduct of the MPS includes section 64H of Act 83 of 1998. This Act addresses the actions metro police officials are obliged to carry out after making an arrest. It stipulates that, following an arrest by a metro police official, the individual so arrested must be handed over to the nearest police station. Thus, an individual arrested by a metro police official must, ultimately, be attended to by the SAPS which will then continue with the investigation. Section 64I(1) of Act 83 of 1998 covers legal proceedings against members of an MPS. This section specifically states that MPS members will face suspension from work if any criminal charges are laid against them.

Section 64C(2)(f) of Act 83 of 1998 authorises members of the MPS to participate in community police forums in their respective areas. In addition, the White Paper on Safety and Security (Department of Safety and Security, 1998) acknowledges that the MPS, as an arm of local government, needs to promote and engage in programmes such as school-based public education programmes. Moreover, the MPS could disseminate information on crime prevention via the media and pay close attention to road safety programmes.

Various programmes of other national departments further extend the activities of the MPS. For example, the Department of Basic Education has developed a national strategy to collaborate with other institutions to address issues of crime. The aim is to work closely with the SAPS and the MPS in addressing matters such as road traffic management; school safety plans; access control measures for visitors and parents; prohibiting the possession of illegal substances; and ensuring a functional school committee (Department of Basic Education, 2016). Relevant programmes may include drug testing in schools, safety as a social issue and bullying in schools.

On the issue of *funding*, Shaw (cf 1998:1-8) highlights a lack of funding as one of the challenges experienced by the MPS. Some crime prevention initiatives are not allocated sufficient funds to ensure implementation, which often leads to weak programme management and a decline in financial accountability. Furthermore, it adds to existing constraints in terms of resources such as uniforms, vehicles, fuel availability, communication devices and other essential items required to fulfil duties.

As a final theme, the literature revealed *corruption* as a major hurdle in the prevention of crime. South Africa experiences worrying challenges with service delivery. These challenges are often rooted in corruption. Failure to bring offenders to justice affects crime prevention rates and contributes to the depletion of state resources. Bruce (cf 2014:49-62) concludes that, because corruption has become the norm in South Africa, it is being committed everywhere. As a result, the credibility of the state system and any aspirations towards advancing the rule of law are undermined. Although the existence of corruption is acknowledged, the scale of the damage it causes is still gravely underestimated. Among other things, corruption limits the capabilities designed to sustain crime prevention because offenders bribe their way out of being prosecuted for the offences they commit. Faull (cf 2008:1-28) describes corruption as a serious matter in the MPS and the EMPD has, consequently, established a committee to investigate bribery and corruption in the department. The EMPD has also drafted a disciplinary code aligned with that of the SAPS. The code aims to make it justifiably harder for metro police officials who are found guilty to retain their positions in the workplace.

Criminological theories impacting crime prevention

Three criminological theories underpin this study. These are the broken window theory, the routine activities theory and crime prevention through environmental design theory. These theories are relevant for this study because they draw on the role of the broader society in crime and the reasons why certain individuals are more susceptible to committing acts of crime than others.

Broken window theory

In 1982, Wilson and Kelling introduced the broken window theory (cf Bezuidenhout, 2011:129-135). The theory identifies three factors to consider in crime prevention, namely controlling petty crimes, lowering anti-social behaviour and ensuring that community members participate in crime prevention (Davis & Snyman, 2007:48). It argues that if someone in a community breaks a window, it should be fixed as soon as possible. Failure to do that immediately could result in more individuals breaking windows in the community. In essence, such failure implies that no one cares that the window had been broken, which encourages others to continue with the same misconduct. Thus, if not prevented at the onset, more occurrences of a crime are likely (cf Bezuidenhout, 2011:129-135). The functions of the MPS are traffic law enforcement, municipal by-law enforcement and crime prevention (Newham, 2006:1). Based on this theory's understanding of how crime is perpetuated, the MPS should, therefore, deal with petty crimes such as theft, trespassing and shoplifting incidences as they occur.

Similarly, when considering traffic law enforcement, it could be argued that when the MPS neglects proper enforcement of traffic laws, citizens would more likely take advantage and disobey the rules of the road. If acts such as not fastening one's safety belt

while driving or exceeding the speed limit are not taken seriously, citizens are likely to also engage in more serious traffic offences. It could therefore be concluded that, if carried out effectively, traffic policing plays an important role in preventing crime.

Concerning the enforcement of by-laws, this theory is also valuable in the context of the MPS. By-laws are established to ensure behavioural order in a specific area; that is, to lower anti-social behaviour. That suggests that metro police officials can enforce by-laws as a mechanism to curb anti-social behaviour. However, by-laws must be enforced as strictly as possible to prevent serious crimes from occurring. It must nonetheless be noted that, while some anti-social behaviours could lead to serious crimes if not dealt with effectively, the theory also states that not all such behaviours constitute a crime (Harcourt, 2001:1-304).

Based on this theory, it could lastly be asserted that it is important for the MPS to involve communities in its efforts to prevent crime. The broken window theory argues that crime prevention is everyone's responsibility. As such, the MPS would benefit from promoting social cohesion and individual responsibility. The theory further suggests that the best approach for crime prevention is a multi-disciplinary approach as crime prevention cannot be achieved by a single organisation (cf Bezuidenhout, 2011: 129-135).

Routine activities theory

Cohen and Felson developed the routine activities theory in the seventies. The theory involves the identification of criminal activities and patterns by examining changes in crime rate trends (Newburn, 2007). Cohen and Felson observed the paradox of improved socio-economic conditions in communities, but an increase in the crime rate in the 1960s. They concluded that crime rates are influenced by structural routine activity patterns and trends and formulated their theory based on, among other things, the view that routine activities, daily schedules and everyday life structures could make people vulnerable to criminal acts. That means that, for a crime to occur, there must be a motivated offender who meets suitable targets in the absence of capable guardians. An example of this is that individuals are at work during daytime, leaving their houses unoccupied. Criminals are motivated to commit criminal acts because unoccupied houses are suitable targets for a criminal act to occur. However, the theory further maintains that victims could choose whether to expose themselves to crime by considering the situations in which such actions could be committed against them. For example, a change in routine could alter the likelihood of them finding themselves at the wrong place at the wrong time. Simply put, less attractive targets with capable and present guardians are unlikely to attract individuals who wish to carry out criminal activities. These elements should therefore be considered when planning crime prevention operations and metro police should always be alert to such situations and patrol crime-risk areas effectively.

The theory argues that the convergence in time and space of a suitable target and the absence of a guardian could lead to a significant increase in crime rates. Therefore, a decrease in routine activities could result in illegal predatory activities following suit, thus preventing the successful occurrence of direct-contact predatory crime. An increase in the presence of any of the conditions does, however, not necessarily motivate individuals to engage in crime.

Centred on the theory's emphasis on a situational crime prevention approach, it would therefore be critical for the MPS to eliminate conditions that are likely to tempt a person to commit a crime and for the EMPD to include such an approach in its strategies.

Crime prevention through environmental design theory

The crime prevention through environmental design (CPTED) theory proposes that there is a clear relationship between crime and the physical environment. In addition, it suggests that when environments are appropriately designed, crime prevention efforts are likely to yield better results. This is viewed as a form of situational crime prevention. In this regard, Rauch (2002:9-26) observes that crime prevention includes controlling the amount of vacant land or open spaces and maintaining well-lit public spaces and parks for safe pedestrian roads and trading centres. When referring to the concept of CPTED, Crowe (2000:3) supports the theory by saying that "crime results partly from the opportunities presented by the physical environment". Essentially, CPTED is concerned with environmental conditions that prevent crime from taking place. Therefore, it could be useful for the EMPD to assist in altering certain physical environments to enhance crime prevention efforts in Tembisa.

Several municipalities in South Africa have acknowledged that the environment impacts on behavioural patterns and perceptions of safety. That view is also recognised in various policies, primarily because the environment plays a visible role in creating conditions that could enable crime. Rauch (2002:11) affirms that this view is one of the four pillars of the National Crime Prevention Strategy (NCPS). It is also covered in the White Paper on Safety and Security (Department of Safety and Security, 1998) by the inclusion of the following five principles encapsulated in the CPTED namely surveillance; visibility; territoriality; access and escape route images; and target hardening.

In applying the CPTED, the MPS would enhance efforts towards crime prevention. Relevant by-laws should be enforced and surveillance operations should be conducted routinely, for example concerning street traders, public drinking, informal settlements and other elements that could present an unsafe environment. Among other things, surveillance enhancements such as CCTV could assist in capturing criminal events in real-time.

Methodology

The study aimed to evaluate the crime prevention activities and challenges of the MPS in Tembisa, South Africa, by focusing on the following objectives:

- To determine the crime prevention activities of the metro police in Tembisa; and
- to identify the challenges that impede optimal crime prevention in Tembisa.

A qualitative research design was used. Semi-structured interviews and observation were used to collect data. Because of financial,

time and other constraints, the non-probability purposive sampling method was used. Ten metro police officials, ten SAPS members and ten community police forum members who do street policing in Tembisa were chosen as the unit of analysis for the study. The SAPS and community members were included to validate the responses of the EMPD participants. The one-on-one interviews were conducted in 2018. The principal author conducted observations of day-to-day street policing in Tembisa. A scientifically structured interview guide was used for the interviews and an observation checklist was used to conduct the observations. The interview and observation data were recorded in a field journal.

The sample frame of the study comprised 30 participants as described above. The interview and observation data were transcribed and analysed thematically using the data analysis spiral (Creswell, 2007:150). Ethical clearance to conduct this research was obtained from the University of South Africa.

Findings

This section presents the study findings and discusses the qualitative data collected from the participants during interviews and observations.

Understanding of the concept "crime prevention"

A significant number of the participants were able to provide their understanding of the crime prevention concept. Even though they attached different meanings to it, they mostly illustrated a clear understanding of the concept. Only a few participants said that they would not be able to explain it clearly and, consequently, preferred not to attempt it.

Understanding of the concept “traffic laws”

Most of the participants understood traffic laws to be municipal laws that control traffic. A few participants stated that traffic laws were formal rules passed by the government to regulate the behaviour of people using the roads. Several participants referred to traffic laws as a set of laws among many others that are enforced by the MPS. They understood such laws as including the stopping and searching of vehicles; ensuring that drivers adhere to speed limits; ensuring that drivers wear seat belts; and inspecting driving licences and licence discs. Some participants indicated that even if not continually done, the MPS did enforce traffic laws as much as possible. However, some stated that traffic laws were only enforced sometimes, namely over weekends and at month's end.

During the observation of EMPD by-law enforcement, activities such as parking control, traffic control and control of street trading in the Tembisa area were studied. It was found that traffic laws were mostly enforced at roadblocks when vehicles were stopped to inspect driving licences, licence discs, front and brake lights, triangles, the use of seat belts and, where applicable, to issue traffic fines.

Crime rate in Tembisa

About half of the participants pointed out that the crime rate in Tembisa was unacceptably high. They raised concerns about safety in the area, particularly at night. They further indicated that people were losing their lives through crimes such as murder, housebreaking, bank robberies, cash-in-transit heists and car hijackings. Moreover, it was stated that these crimes were unbearable. About a quarter of the participants suggested that crime was high but not severe and stated that the law enforcers were doing their best to control it and to ensure people's safety in the area. A few participants indicated that crime in the area was moderate in comparison with previous years. They pointed out that there were existing, sizeable differences in occurrences of criminal activities, but that the SAPS and the EMPD were doing a lot to ensure people's safety.

Metro police involvement in crime prevention

Almost half of the participants mentioned that the MPS assisted in crime prevention. When asked to elaborate on relevant activities, participants mentioned school visits to prevent crime, because during such visits the learners at the school could be taught not to commit crimes. In terms of by-law enforcement, several participants continued to state that daily by-law enforcement was very useful in preventing people from committing serious crimes. Participants singled out traffic policing as a primary function of metro police officials in preventing crime through vehicle searches, checking for valid driving licences, inspecting vehicle licence discs and ensuring that people adhered to speed limits. All the activities mentioned were regarded as central in assisting in crime prevention.

Responses also suggested that, although not all officials were part of it, there was some involvement in social crime prevention activities. The social crime prevention division engaged in programmes such as searching and visiting schools, drug abuse campaigns and youth support to assist in addressing the social ills associated with the youth.

The principal researcher did not observe the EMPD performing general social crime prevention activities. However, on one occasion the researcher saw metro police vehicles at a school.

Foot patrols

Most of the participants stated that the metro police officials were not involved in foot patrols. Only about a quarter of the participants indicated that metro police officials could sometimes be seen involved in foot patrolling. The remaining participants responded by stating that they did foot patrols when there was a need for it (for example, in areas that had been identified as high-risk areas).

Most participants indicated that the EMPD was not involved in street policing (gambling, drugs, prostitution etc.) in Tembisa. A few participants stated that traffic wardens (individuals employed by the EMPD to assist in traffic policing in the community) or community police forum (CPF) members conducted street policing in Tembisa, with the metro police only helping where needed. The principal researcher did not find metro police officials involved in street policing. Foot patrols were seen to be conducted by traffic wardens.

Vehicle patrols

Most of the participants responded positively to the involvement of the MPS in vehicle patrols, pointing out that this made it easier for them to always engage in physical surveillance. They further stated that vehicle patrols would be assigned especially to areas experiencing an increase in housebreaking during the day. That was observed by the principal researcher who noticed that the patrol car would be occupied by two EMPD members during such patrols, but that they remained stationed at the same location most of the time.

Surveillance

Only a quarter of the participants indicated that the MPS were involved in physical surveillance if there was a need to do so (not as part of their daily duties). The remainder of the participants disagreed that metro police officials performed physical surveillance for crime prevention. Many of them stated that they used traffic wardens to perform that duty. The principal researcher noted inadequate MPS participation in physical surveillance.

Most participants indicated that the MPS was not involved in electronic surveillance, only performing the task occasionally. Participants highlighted challenges such as limited electronic surveillance equipment in that regard. They added that the advanced equipment that was available was simply not enough for everyone and that only supervisors had access to such tools. Some did, however, believe that the MPS was always involved in electronic surveillance. Those participants mentioned that electronic tools such as dashboard cameras were used in some EMPD vehicles. Metro police officials were also equipped with body cameras and other devices such as automatic number plate recognition and speed detectors, which aided in the recovery of stolen vehicles. The participants further mentioned that, if needed, they worked mostly with businesses to use their cameras, particularly in malls and complexes where CCTV is available.

The principal researcher observed electronic surveillance activities during roadblocks where metro police officials used numberplate scanners. Further types of electronic surveillance involved dashboard cameras in some metro police vehicles and a few speed cameras installed in the area to capture speeding offences.

Arrests

While responses to questions on arrests were equally divided between positive (yes) and negative (no), participants mostly said the metro police officials were not involved in arrests concerning serious crimes. They indicated that the MPS participated in arresting perpetrators for minor crimes, particularly during traffic law enforcement policing, for example, arrests for drunk driving, driving without a valid driving licence and road by-law infringements. Some participants mentioned that some metro police officials arrested criminals involved in community complaints.

The principal researcher found that metro police officials did not make arrests as often as warranted. The principal researcher only observed four arrests being made. The first arrest was during a protest in one of the surrounding areas, two additional arrests were made at roadblocks and the last one was the arrest of a shop owner.

Stop-and-searches

Most participants indicated that the MPS participated in regular stop-and-search operations. They mentioned regular vehicle searches during roadblocks involving the stopping of suspicious vehicles and searches for items such as illegal objects (knives and guns), drugs, alcohol and stolen goods. Some participants mentioned regular searches at schools to ensure the safety of learners and some referred to regular searches conducted during either foot or vehicle patrols to look out for suspicious-looking individuals walking around in the area. A few participants disagreed and stated that the MPS did not conduct regular searches.

During observation, the principal researcher noted that the MPS did search some vehicles during roadblocks and a search was also conducted in a shop in a nearby area. Some perpetrators were also searched before being arrested and locked up in police vans.

Roadblocks

All participants indicated that the EMPD conducted roadblocks in the Tembisa area daily as part of its traffic policing responsibility. Some of the roadblocks were conducted in cooperation with the SAPS as joint crime prevention operations. A few participants indicated that, in some circumstances, metro police officials conducted roadblocks based on information received by their department. Roadblocks were conducted more frequently towards the end of the month rather than during off-peak periods. The following roadblock activities were mentioned: verification of personal documentation; identification of un-roadworthy vehicles; searches for stolen vehicles; identification of intoxicated drivers and mass loading; looking out for cellular phone use while driving and non-adherence to road rules. All these activities support the prevention of crime.

During observation in this regard, the principal researcher found that not one day went by without metro police officials being involved in a roadblock. Such roadblocks were mostly conducted on the main roads, with more taking place between Fridays and Sundays. The researcher observed more than one roadblock. It was noted that older vehicles were most often targeted during such activities.

Involvement in community policing

Most participants indicated that the EMPD was not involved in community policing, saying that the Tembisa CPF conducted community policing jointly with the SAPS. One of the metro police participants even claimed that the "CPF are the SAPS's babies; they report to them, not us [the EMPD]".

A small number of participants agreed that they do conduct community policing infrequently (sometimes), more specifically when joint operations between the three parties (EMPD, CPF and SAPS) were required as in the case of policing necessitated after the identification of a specific flash point as a high-risk area.

The principal researcher's observation in that regard included an EMPD escort of a crèche school bus during a funeral and the management of roads during protests. During such events, the task was to ensure public order.

Challenges experienced by the metro police in crime prevention

Participants noted that the most challenging factors affecting their capacity to prevent crime were a lack of resources such as vehicles, radios, stationery, cameras and phones. Another factor highlighted was a staff shortage, which made it difficult for metro police officials to cover geographical areas successfully when patrolling, conducting roadblocks and monitoring traders. Therefore, financial constraints experienced within the EMPD contributed to their inability to complete their crime prevention projects. Participants also underlined corruption as a challenge. They mentioned that there were elevated levels of dishonesty among metro police officials. One community participant even stated that "all the metro police care about is taking bribe[s] from drivers and not preventing crime". Participants agreed that, while technology had advanced globally, the EMPD has experienced little in that regard. Furthermore, crime prevention is about collaboration between the community and the police. However, the MPS was faced with the challenge of uncooperative community members. One community participant described the attitude of metro police officials as follows: "If crime does not concern them, they don't care about others."

A final challenge noted was a lack of initiatives targeting the development of the youth in the Tembisa area where many young people are involved in the use of drugs and alcohol abuse, which results in them engaging in criminal activities to meet their needs.

Several community participants indicated that the community believed traffic policing to be the primary function of the MPS. They voiced an expectation for greater SAPS visibility, especially as far as roadblocks were concerned, and mentioned a need for investigations to proceed soon after arrests had been made to prevent offenders from returning to the community. A final expectation raised was that EMPD needed to operate like the SAPS.

Recommendations

Memorandum of understanding

It is recommended that formal agreements be entered into because that would create a healthier working relationship between the SAPS and the MPS. A memorandum of understanding (MoU) is bound to support improved working relations because the rules pertaining to the MoU and the roles and responsibilities of each organisation would be explained clearly (cf Newham & Masuku, 2004:1-39). Communication and evaluative processes would improve collaborative efforts and senior managers and supervisors should oversee tasks allocated to the SAPS and the MPS.

Joint operations

Both the SAPS and the MPS should institute joint operational committees to deal with crime prevention projects because both parties would be represented on the community policing boards. Participation in provincial police coordination committees would be an added benefit for the SAPS and the MPS. Furthermore, since the two organisations must work together to enable effective crime prevention (cf Newham, 2006:1-5), a legal framework that details the responsibilities of both entities should be developed. That would prevent situations that could fuel hierarchical working relationships.

The MPS and the SAPS should plan more joint operations involving crime prevention activities. The SAPS and the MPS are to have joint training sessions to encourage collaboration. That type of collaboration has the potential to foster improved relationship dynamics that could improve effective crime prevention between the two organisations.

Sharing information

The SAPS must take the lead in crime prevention because of its constitutional mandate. Based on that, the MPS and the SAPS in Tembisa should collaborate and share valuable information across reporting lines. Information sharing could also include sharing technology and resources to improve the overall productivity of officers (cf Newham & Masuku, 2004:1-39).

Technological advancement

Technology continues to shape the world we live in and how we engage with the world at large. Criminals make use of technological advancements to carry out illegal acts. That implies that technological development also influences how criminals operate. Fatih and Bekir (cf 2015:286-296) acknowledge technology as an important tool for police when attempting to combat high levels of crime.

Technological tools include breathalysers, the results of which are submitted in courts as part of the evidence against offenders. Furthermore, mobile cameras are used during vehicle patrols and to scan licence plates to alert officials about suspected stolen vehicles. The system is useful because it can be accessed from any location, while the cameras capture a thousand cars per minute. Officials also use social media reports from various people across the country to obtain information on criminal activity in real-time. In addition, the South African Department of Communications and Digital Technologies appoints social media analysts to keep track of events occurring on social media, which could be used advantageously by police services. CCTV has also been installed around shopping malls and shopping centres, filling stations, highways and other public gathering areas. CCTV can potentially prevent crime because evidence directly linked to crimes being committed is captured.

Conclusion

The findings indicate that the nature and extent of EMPD crime prevention activities in Tembisa are not clearly defined or adequately resourced by the executive. If this is done appropriately, the challenges identified could be overcome. The participants did not share a common vision of the functioning of the EMPD in crime prevention. The activities of the MPS appears to be carried out and enforced selectively.

It can be concluded from the observation that the members of the EMPD are involved in crime prevention activities to a limited extent. Observation also revealed that traffic policing is the primary focus of the EMPD. It is therefore essential that the EMPD should come up with innovations and strategies to improve its crime prevention activities.

List of References

Bezuidenhout, P.C. (2011). Reducing crime in South Africa by enforcing traffic laws - a 'broken windscreen' approach. *Journal of the South African Institution of Civil Engineering,* 53(1): 33-38.

Bruce, D. (2014). Control, discipline and punish? Addressing corruption in South Africa. *South African Crime Quarterly*, 48(1): 49-62. Available from: http://dx.doi.org/10.4314/sacq.v48i1.5. Accessed on: 19 October 2022.

Creswell, J.W. (2007). *Qualitative enquiry and research design: Choosing among five approaches. (*2nd ed.). California: Sage.

Crowe, T.D. (2000). *Crime prevention through environmental design: Applications of architectural design and space management concepts.* (2nd ed.). Boston: Butterworth-Heinemann.

Davis, L. & Snyman, R. (2007). *Victimology in South Africa: Theory, policy and practice.* Pretoria: Van Schaik.

Department of Basic Education. (2016). The national school safety framework. Available from: http://www.education.gov.za/. Accessed on: 19 October 2022.

Department of Safety and Security. (1998). White Paper on Safety and Security. Available from: http://www.policesecretariat.gov.za/downloads/white_paper_security.pdf. Accessed on: 19 October 2022.

Fatih, T. & Bekir, C. (2015). Police use of technology to fight against crime. *European Scientific Journal,* 11(10): 286-296. Available from: https://eujournal.org/index.php/esj/article/view/5426. Accessed on: 20 October 2022.

Faull, A. (2008). City blues: Corruption and corruption management in South Africa's metropolitan police departments. *Institute for Security Studies Papers 2008 (170).* Available from: https://hdl.handle.net/10520/EJC48832. Accessed on: 19 October 2022.

Harcourt, B. (2001). *Illusion of order: The false promise of the broken windows policing.* Cambridge, MA: Harvard University Press.

Naude, B. (2000). The national crime prevention strategy: A critique. *Acta Criminologica: African Journal of Criminology & Victimology,* 13(2): 1-11.

Newburn, T. (2007). *Criminology*. Cullompton: Willan Publishing.

Newham, G. (2006). Getting into the city beat: Challenges facing our metro police. *South African Crime Quarterly,* 15. Available from: https://issafrica.s3.amazonaws.com/site/uploads/CQNEWHAM.PDF. Accessed on: 20 October 2022.

Newham, G. & Masuku, T. (2004). Towards improving collaboration between the South African Police Service and the Metropolitan Police Services. Available from: https://csvr.org.za/docs/policing/towardsimprovingcollaboration.pdf. Accessed on: 19 October 2022.

Newham, G., Masuku, T. & Gomomo, L. (2002). Metropolitan police services in South Africa, 2002. A report written for the Centre for the Study of Violence and Reconciliation. Available from: https://www.csvr.org.za/docs/policing/metropolcieservices.pdf. Accessed on: 19 October 2022.

Rauch, J. (2002). Changing step: Crime prevention policy in South Africa (pp. 9-26). In E. Pelser (Ed.). *Crime prevention partnership: lessons from practice.* Pretoria, South Africa.

Republic of South Africa. (1993a). Interim Constitution of the Republic of South Africa 200. Pretoria: Government Printing Works.

Republic of South Africa. (1993b). Local Government Transition Act 209. Pretoria: Government Printing Works.

Republic of South Africa. (1995). South African Police Service Act 68. Pretoria: Government Printing Works.

Republic of South Africa. (1996a). Constitution of the Republic of South Africa Act 108. Pretoria: Government Printing Works.

Republic of South Africa. (1996b). National Road Traffic Act 93. Pretoria: Government Printing Works.

Republic of South Africa. (1998). South African Police Service Amendment Act 83. Pretoria: Government Printing Works.

Republic of South Africa. (2008). Criminal Procedure Amendment Act 65. Pretoria: Government Printing Works.

South African Government. (n.d.). Local Government. Available from: http://www.gov.za/about-government/government-system/local-government. Accesed on: 20 October 2022.

Shaw, M. (1998). The role of local government in crime prevention in South Africa. Available from: https://www.africaportal.org/documents/4513/Paper33.pdf. Accessed on: 20 October 2022.

Van Biljon, E.H. (2014). Exploring the meaning of crime prevention within the Tshwane metropolitan police department. Pretoria: University of South Africa. Available from: https://uir.unisa.ac.za/handle/10500/14327. Accessed on: 20 October 2022.

Footnote

1. This article has been extracted from the unpublished master's dissertation and is the work of the principal author (M Mabitsela, 2021) while the second author was the supervisor.

ARTICLE

Policing by Design: Artificial Intelligence, Predictive Policing and Human Rights in South Africa

Prof. Divya Singh
Chief Academic Officer: STADIO
E-mail: DivyaS@stadio.co.za

Abstract

Innovative technologies, especially artificial intelligence and big data analytics, are increasingly attractive for policing given their ability to enhance effectiveness and efficiency. Predictive analytics has already made inroads into policing, making it one of the promising strategic technologies of the twenty-first century. However, amidst the acclaim is a growing body of research highlighting the risks of artificial intelligence (AI) deployment to fundamental human rights and public interest. This article explores the application of predictive analytics and specific-use cases deploying surveillance technologies as a function of policing. While situated in South Africa, the research draws on comparative practices and legal and policy standards as it highlights the need for the technology to strike a balance between the function of policing and competing human rights and public interest.

Keywords and Phrases

artificial intelligence; predictive policing; surveillance technologies; human rights; racial profiling; algorithm bias

Introduction

Innovation and pioneering practices do not typically take place in a vacuum but are most often a response to a particular set of conditions and an identified need. Policing is not exempt from the innovation discourse; however, policing is unique in that it has bespoke roles, functions and responsibilities that have inimitable and far-reaching impacts on individuals, communities and societies. In South Africa, these rules derive from the Constitution of the Republic of South Africa, 1996 (the Constitution) and national legislation, as well as international obligations such as the International Rules and Standards for Policing (ICRC), the Code of Conduct for Law Enforcement Officials (UN General Assembly Resolution 34/169, International Human Rights Standards for Law Enforcement (UN Centre for Human Rights) and INTERPOL Legal Frameworks.

Describing the fundamental role of the police and the duty owed to the public in South Africa, the Constitutional Court, in *AK v Minister of Police [2022] ZACC 14* at para 95 emphasised that:

> The police are under a duty to act promptly and expeditiously, and they must furthermore take all reasonable measures which are available to them in the circumstances. It is not sufficient that they mobilise the resources at hand; they must also deploy those resources diligently and effectively. They must act with haste, they must take appropriate steps to secure the available evidence, including eyewitness accounts, potential leads and suspects and they must subject relevant evidence to forensic analysis. They must never act in a cavalier manner or display indifference …

There is no gainsaying the potential for technology to be used by the police to fulfil their duties, but congruent with their public obligations, adoption must be balanced against the intrinsic risks that may arise. Babuta and Oswald (2019:5) point out that the question: Does the system work? is too simplistic for this purpose. Instead, the authors note that the issues of effectiveness and accuracy that serve as a critical lens assuring ethics and legality are more significant.

> [I]f it cannot be demonstrated that a particular tool or method is operating effectively and with a reasonable degree of accuracy, it may not be possible to justify the use of such a tool as necessary to fulfil a particular policing function (Babuta & Oswald, 2019:5).

In similar vein, Strom (2017:2-3) warns that:

> [L]aw enforcement technology adoption is often ad hoc and not based on longer-term planning. The tendency to purchase technology without a clear, strategic plan can result in limited integration within the agency and a failure to recognise the primary or secondary benefits of technology.

Today, public confidence in the effectiveness of the South African Police Service (SAPS) is under strain with declining trust and increasing fear. The media, social media and recent research reflect the impact of limited budgets, constrained resources, corruption, inadequate training and human rights abuses when discussing policing in South Africa (Burger, 2011:13). Enhancing efficiencies, performance and crime prevention capabilities by using technology is thus an attractive option. Albertus (2019:4) stresses that statistics indicate that if the South African government does not act swiftly to implement digital technology to transform all aspects of policing, the prospects of curbing crime and dealing with corruption look bleak. Notwithstanding the exhortation by Albertus, technology adoption is not an insular process - there is an additional onus on police leadership and management to ensure that strategic and operational decisions to introduce new systems and practices driven by technology will create overall value for both the police and the public.

Overview

While this article explores specific applications of technology in policing, it equally recognises that technology is not a silver bullet - the weight (or lack thereof) and value of the commitments being made at the national level must always be juxtaposed with the fundamental rights of the public. This article engages the following key topics: the use of artificial intelligence (AI) in policing and specific-use examples; the human rights implications of AI systems and policing; and comparative legal and regulatory frameworks for technology-led policing.

The discussion does not attempt to cover all technologies of use to the police but focuses on the use of AI and big data analytics by the police (predictive policing) and the specific deployment of surveillance technologies such as cameras and facial recognition systems. It is beyond the scope of this article to delve into the technical intricacies of the technologies being used; instead, as reflected throughout this article, the undergirding aim is to highlight the need for any technology deployed by the police to strike an appropriate balance between the role and function of policing on the one hand, and the various competing human rights and public interests - including the right to freedom and security of person, privacy and equality - on the other.

Discussion

Policing in South Africa is characterised by a dearth of technological resources, as reflected in the *Report of the Commission of Inquiry into Allegations of Police Inefficiency and a Breakdown in Relations between SAPS and the Community of Khayelitsha* (the Khayelitsha Report). As an example, the report (2014:260) documents the absence of any policy requiring every member of the SAPS to have an e-mail address and further records that 3G cards are only provided to branch commanders. Separately, the report (2014:239) highlights the limitations created by all senior officers sharing a single e-mail address, requiring all e-mails to be printed and manually distributed by the cluster commander. The (obvious) repercussions are e-mail correspondence being delayed, or even worse, going astray. While there have been improvements since the Khayelitsha Report, significant shortcomings remain. As such, although using emergent technologies by the SAPS should be supported, it is also imperative to ensure that all police across the country have at least a baseline level of technological ability.

Certain key terms used in this article should be defined. First, the term "artificial intelligence" is described by the European Parliament (2021b:1) as:

> … the ability of a machine to display human-like capabilities such as reasoning, learning, planning and creativity. AI enables technical systems to perceive their environment, deal with what they perceive, solve problems and act to achieve a specific goal. The computer receives data - already prepared or gathered through its own sensors such as a camera - processes it and responds. AI systems are capable of adapting their behaviour to a certain degree by analysing the effects of previous actions and working autonomously.

The key distinction between AI and other technologies is its ability to engage with a data set and synthesise that data using algorithms, thereby enabling conclusions to be drawn and a course of action to be determined based on its analysis of the data. Završnik (2020:570) explains that the police "are using AI tools to penetrate deeply into the preparatory phase of crime which is yet to be committed, as well as to scrutinise already-committed crimes". One instance presented by Strom (2017:2-11) is the use of computational methods of crime mapping using Geographic Information Systems (GIS) to map and analyse crime patterns over space and time, locating crime hotspots and concomitantly optimising resource allocations. Simply put, AI in policing may be used to build human behaviour into programs that explore the spatial environment autonomously while at the same time learning from experience (Mbani, Kenduiywo & Odera, 2017:1). Using such technologies makes it increasingly possible for the police to proactively plan the deployment of resources to establish a better safety presence.

The second term to be defined is "predictive policing", which is closely linked to the use of AI and crime mapping approaches. Predictive policing draws on personal and behavioural data to predict who has a high chance of being involved in future criminal activity (Heaven, 2020:2). Strom (2017:4-9) summarises it as "a strategy based on the logic that future crimes can be better anticipated, responded to, or prevented using intelligence collected and analysed from a variety of data sources". Joh (2018:1141) further explains that "[a] police agency might use predictive algorithms to forecast where crime is likely to occur in the future, or which persons might be at highest risk for crime victimisation or perpetration".

In comparison with predictive policing, the concept of "intelligence-led policing" is less clearly understood, notes the Organisation for Security and Cooperation in Europe (OSCE) (2017:18). On the one hand, intelligence-led policing has been limited to the practice of conducting risk assessments, while on the other the term is used to describe a more inclusive process of gathering data and information for purposes of policing. The OSCE (2017:18) adopts the more encompassing definition. Thus, all activities linked to predictive policing and proactive policing - two different concepts - are embodied in the intelligence-led policing framework. For the sake of completeness, proactive policing describes those policing strategies that prioritise prevention or moderation of crime, as opposed to "reactive policing", which focuses on investigating or uncovering crimes after they have been committed (Weisburd & Majmunder, 2018).

Relevant legal frameworks in South Africa

Constitution of the Republic of South Africa, 1996

The Constitution is the supreme law and the Constitutional Court is the apex court in South Africa. Any law or conduct that is inconsistent with the Constitution is invalid. According to section 8 of the Constitution, the Bill of Rights binds the legislature, executive, judiciary, all organs of state and natural or juristic persons. While the rights contained in the Bill of Rights are not absolute, section 36 of the Constitution provides that any limitation of a right in the Bill of Rights is only permissible if the limitation is reasonable and justifiable in an open and democratic society based on human dignity, equality and freedom.

As the use of technology and AI increases, so too does the concern about the human rights implications, specifically the right to equality (section 9), human dignity (section 10), freedom and security of person (section 12), privacy (section 14), freedom of association (section 18) and freedom of movement (section 21). In striking the appropriate balance, the new technological tools must be able to pair the empathy of human judgment with the data-processing ability of machines (Gelles, Mirkow & Mariani, 2019).

The SAPS policy imperatives for technology-led policing

Although not explicitly required by law, there are nonetheless several policy documents that recognise the importance of technology in policing. Chapter 12 of the National Development Plan (NDP) (National Planning Commission, 2013:385-406) deals with the aspirations and standards to make South Africa safer. One of the priorities identified in the NDP is the need to strengthen the criminal justice system by using technology to address inefficiencies in the prevention of crime and in the analysis of current and future threats to society. A second commitment is the need to professionalise the police into one that is modern and intelligence-led (National Planning Commission, 2013:388-389).

In support of the NDP, two national White Papers, namely the White Paper on Policing (2016a) and the White Paper on Safety and Security (2016b), were adopted by Cabinet, and both prioritise the need for smart technology solutions to strengthen the South African criminal justice system. The White Paper on Policing reflects on "tech-driven solutions to enhance the functioning of police services, specifically in crime detection and investigation, and informing the strategic deployment of resources" (Stone, 2020:8); while the White Paper on Safety and Security calls for the establishment of integrated data systems that collect information in real time on types, prevalence and location of crimes, with the aim of crime pattern and trend analyses (White Paper on Safety and Security, 2016b:13-16).

While these two White Papers are critical national guidelines, the provisions must still be managed within the parameters of other competing rights and interests. In considering the opportunities that are presented by technological solutions, equal regard must be given to the concomitant challenges and risks that arise. It is common cause that one of the primary roles of the police is to protect the community and its citizens from harm; however, this must be considered in the light of society's expectations of the police and specifically the understanding that the police should not act at any cost. Reflecting on the acceptance of technology and predictive policing, Rolland (2021:4) emphasises that "[t]he issue here is not so much the use of AI in predictive policing, but rather what law enforcement decides to do with the data generated to better prevent crime".

Protection of Personal Information Act 4 of 2013 (POPIA)

POPIA is the comprehensive data protection law in South Africa. Its purpose includes the need to give effect to the constitutional right to privacy by safeguarding personal information and regulating the way it may be processed. The term "processing" is given a wide definition in section 1 of POPIA and generally encompasses activities ranging from the collection of personal information to the deletion or destruction thereof. Disturbingly, however, the SAPS is not required to comply with POPIA. The Protection of Personal Information Manual of the South African Police Service (POPI Manual SAPS, 2021: para 7), is explicit that POPIA does not apply to records pertaining to the functions of the SAPS as set out in section 205(3) of the Constitution.

The exclusion is based on section 6(c) of POPIA, which excludes application of the legislation to the processing of personal information by or on behalf of a public body:

(i) where the processing involves national security, including activities that are aimed at assisting in the identification of the financing of terrorist and related activities, defence or public safety; or

(ii) where the purpose is the prevention and detection, including assistance in the identification of the proceeds of unlawful activities and the combating of money laundering activities, investigation or proof of offences, the prosecution of offenders or the execution of sentences or security measures.

Although these exclusions are limited in POPIA and may only be relied upon to the extent that adequate safeguards are established in legislation for the protection of such personal information - and it remains contentious whether the SAPS has such protection in place - for now, it is accepted that the SAPS is exempt from the provisions of POPIA when undertaking their policing functions.

Artificial intelligence, policing and human rights

AI and predictive policing

The function of policing is intensely data-driven and often demands the acquisition, sifting and analysis of large volumes of information. In many investigations, the amount of data is often simply too great for the investigating officers to effectively interrogate within the time limits, especially with their limited resources, which may result in evidence being overlooked. The technology presently available enables various efficiencies, allowing for large amounts of data to be screened, scrutinised and packaged in a fraction of the time it would take using manual methods (Fayyad & Uthurusamy, 2002).

The police are also often criticised for their dependence on subjective human behaviours and decision-making. Technology, on the other hand, apparently devoid of human emotion and with the (claimed) advantage of total objectivity, offers a resource that creates credibility and consistency in policing, so the argument goes (Christie, 2021). According to a report by Deloitte (2021:131), AI has helped to create and deliver innovative police services, connect police agencies to its citizens, build trust and strengthen associations with communities. In a subsequent report, Deloitte (2022:1) refers to a study that found that smart technologies such as AI could help cities reduce crime by 30 to 40 percent and reduce response times for emergency services by 20 to 35 percent. However, against this backdrop the research also provides cases demonstrating a darker side to the use of AI and big data analytics, not least in the form of algorithm bias. Growing numbers of studies show that rather than alleviating unfairness, the predictive tools based on AI models are in fact entrenching prejudice - especially against more vulnerable, marginalised and disadvantaged communities, to whom the police should, in fact, be affording even greater protection. AI, notes Guariglia (2022), represents the key problem of tech-washing, which is the process by which proponents of the outcome can defend those outcomes as unbiased because they were derived from "maths".

Dealing with the challenge of algorithm bias, Berk (2020:224) points out that it is "often less about the artificial intelligence system itself and more about the activities surrounding it". Nonetheless, the outcomes and effects of algorithm bias make it a critical factor in the adoption of any technology for policing. Supporting the statement by Berk, evidence shows that where predictive tools are based on algorithms, it is most often not the technology that is the issue but rather the data that is used to feed the algorithms. Acquiring reliable primary information for modelling is vital. So, where the data is skewed (biased) by, for instance, the programmers' sentiments, or is not representative of the population to which it is being applied, or is not programmed to take cognisance of the nuances and realities of the community, the integrity and correctness of outcomes will always be open to contestation. The tools are likely to be less accurate in places where they were not trained, as stated by Heaven (2020:5). In the USA a key concern with the predictive AI tools currently used by law enforcement is that many of the algorithms appear to have been trained on white populations outside the USA with significantly different racial and socio-economic profiles (Heaven, 2020:5).

Introducing a more disconcerting element to the discussion, Rolland (2021:2) emphasises that informing data is also easily subject to error, especially if drawn from an era when the police engaged in discriminatory practices against specific population groups and "unnecessarily or incorrectly classified certain areas as high risk". This establishes a classic feedback loop, where the "maths" continues to perpetuate historically rooted harmful outcomes (Guariglia, 2022). Reflecting on the growing number of reports suggesting that human prejudices and biased police reports have been integrated into the algorithms that are now being applied to predict crime and criminality, Heaven (2020:4) agrees that "[w]e took bad data in the first place, and then we used tools to make it worse". Thus, while predictive policing may offer opportunities to make policing more effective, including alerting the police to potential crime hotspots so they can adequately assist the community at risk, the negative outcome is that it may also result in the police being "more likely to stop or arrest people because of prejudice rather than need" (Heaven, 2020:5).

Further engaging with AI systems built on datasets collected by police, it is obvious that these systems can only predict crime based on data from neighbourhoods that police are already policing. Babuta and Oswald (2019:12) raise the concern that having greater access to public data may lead the police to misconstrue certain individuals as posing a higher risk. Similarly, Rolland (2021:3) notes that police data is often directed at street crimes associated with specific demographic groups and neighbourhoods, while white-collar crimes such as embezzlement and money laundering are given less attention by these systems. Additionally, crime data is notoriously inaccurate, resulting both in crime being missed in other neighbourhoods and in reinforcing the idea that the neighbourhoods that are already over-policed are exactly the neighbourhoods in which the police should direct patrols and undertake surveillance. This effectively opens members of already vulnerable populations to more police harassment, hinders trust between public safety measures and the community and ultimately creates more danger (Guariglia, 2020). Stone (2020:11) expresses similar disquiet about predictive policing and algorithm bias and the potential to reinforce forms of discrimination and the criminalisation of certain groups and certain areas. Heaven (2020:3) concludes "even without explicitly considering race, these tools are racist". For the individuals targeted because of the bias in the predictive algorithm, this is not just an isolated misfortune, as the criminal record that is established exists throughout their lifetime.

The use of predictive policing in the USA, as an example, continues to be fraught with controversy. On the one hand, there are several examples in the literature of how AI technology and analytics have benefitted the police. In the State of Virginia, the police were struggling to control the frequent, random gunfire that took place every New Year's Eve. Studying the information from previous years enabled the police to anticipate the time and location of incidents and strategically deploy their officials, resulting in a 47 percent decrease in random gunfire, a 24 percent increase in weapons seized and a saving for the police department of $15 000 in personnel costs (Pearsall, 2010). On the other hand, the use of predictive policing is rife with allegations of inherent racial bias, supplemented by the failure of the police and systems suppliers to disclose the databases used to program the system. One example is that in some states in the USA where the police identify persons at risk of becoming involved in gang-related crime, they pre-emptively warn them against such behaviours and "[i]f they were later arrested for any type of crime, prosecutors used the prior warning to seek higher charges" (Heaven, 2020:5). Allegations of racial bias and the police's refusal to disclose the databases used to program the system, exacerbate the impression of the use of a delinquent technology which has resulted in several major lawsuits against the police, most of which are still ongoing (Campbell, 2018:6). As a result, several cities in the USA have already banned the municipal use of predictive policing (Guariglia, 2022).

Another alarming application of predictive analytics by the police has been raised by Human Rights Watch in China. It reports that using predictive policing programs, the police aggregate data about people without their knowledge and then flag those considered potentially threatening for attention (Human Rights Watch, 2018:1). The system is programmed to highlight people who act in a manner deemed "unusual" (but not necessarily criminal) by the authorities. It also flags individuals who meet with others whom the police consider threatening. Identified individuals may be detained and sent to extra-legal "political education centres" where they are detained without charge or trial. "These people are then at the mercy of a judicial system … including torture, which presents defendants with only limited scope to contest the state's accusations" (Human Rights Watch, 2018:7). In a rights-based constitutional democracy, such a perverse application of predictive policing must raise serious constitutional concerns. The fact that simply living or spending time in a neighbourhood or with certain people can draw suspicion from police or cause them to treat people as potential perpetrators is a blatant erosion of the presumption of innocence, notes Guariglia (2020).

Taking cognisance of the threats posed by predictive analytics, the European Parliament Resolution of 6 October 2021 (European Parliament, 2021a: para 24) held that while AI and predictive policing can analyse the given datasets for the identification of patterns and correlations, they cannot answer the question of causality and cannot make reliable predictions of individual behaviour and therefore should never constitute the sole basis for an intervention.

Camera surveillance, AI and policing

A form of hard technology coupled with AI and big data analytics used by law enforcement is cameras, including CCTV-closed circuit cameras historically and more recently the revolution of body-worn cameras and drone cameras. On the positive side, the use of cameras in law enforcement assists in identifying crimes and criminals, and in presenting key evidence in cases of alleged police brutality and violence. As highlighted by Strom (2017:4-13), body-worn cameras in use in the USA have been generally successful, bolstering police accountability and trust and increasing the arrest rate. Further explaining the use of AI and camera surveillance, Kwet (2019:4) points out that these days CCTV surveillance, powered by AI, can "… perform video analytics to recognise things in the video, such as objects or behaviours". With enough cameras, computers could intelligently "watch" the neighbourhood and notify private security officers in real time when the algorithm detects something it deems suspicious.

Acknowledging the potential for managing crime in the South African suburb of Khayelitsha, the Khayelitsha Report (2014: Recommendation 18: para 87) specifically recommended that:

> … the City, Metro Police and the station commanders and branch commanders of the three Khayelitsha police stations [should urgently convene] to discuss the best way of using the CCTV cameras placed in Khayelitsha. Consideration should also be given to relocating the cameras for maximum effect; replacing the cameras with ones that will not be disabled by cable theft; and increasing the number of cameras, particularly in transport hubs and near schools.

The positive benefit of surveillance technology is that it successfully empowers proactive policing rather than the customary reactive approach of only responding to incidents after they have occurred.

Kwet (2019:10) describes one example of surveillance technology where a camera is fixed to a specific spot and allowed to film for an extended period. Eventually, the software learns what to look for and then raises an alarm when identifying something abnormal "like loitering pedestrians or minivans". An alarm is then sent directly to a control room where human operators assess the risk. Their ongoing input into the system "trains the system to determine what is 'normal' for each camera". Kwet (2019:15) stresses that camera surveillance systems are completely neutral, flagging all unusual conduct irrespective of race. However, similar to the challenges identified above, problems arise when those training the system introduce their own bias when evaluating the evidence that is used to inform the system. The system then picks up the underlying assumptions introduced by the human intervention. Relating this to the use of camera surveillance technology in a particular South African suburb, Kwet (2019:15-18) actually identifies the application of race as an informer of "abnormal behaviour". Thus, when the control room functionaries continually identify black persons as suspicious, the system will replicate the bias. This, he explains, is why one report from the system flagged 14 incidents and 28 people, all black, for suspicious behaviour in a predominantly white suburb. Among the people identified were an electrician leaving work, five people walking together, an individual sitting on the roadside, the mail delivery men and

construction workers loading bricks. "The introduction of such bias should raise alarms," notes Joh (2018:1142), especially "when applied to a criminal justice system that has imposed disproportionate burdens on racial minorities and the poor". Focusing specifically on South Africa and the issues caused by the legacy of apartheid, Stone (2020:11) notes: "These issues are especially relevant to South Africa given its history of racism, sexism and classism as well as centuries of spatial and economic exclusion under both Apartheid and colonial systems of rule."

A survey of the literature confirms the concerns with algorithm bias arising from skewed training data. However, more seriously, Joh (2018:1142) also raises concerns about the potential for hidden bias in the algorithms and overall design of the system. Exacerbating the concern, case studies also reveal instances of the machines themselves introducing favouritism and prejudice "in a case of AI going rogue" (Singh & Singh, 2021:81-82).

In addition to system bias, another concern is the invasion of citizens' right to privacy. "The range of intrusiveness of these systems varies from passive (observation only) to active (seeking matches to faces and other crime scene clues in large databases)" (Campbell, 2018:3). As an example, Human Rights Watch (2018) reports that in Xinjiang, China police use facial recognition body-worn cameras embedded in glasses that enable them to know in real time whether they are looking at someone on a police blacklist (Campbell, 2018:3-4). Such conduct is often without the individuals' consent or knowledge of the intrusion. Human Rights Watch (2018:6) presented evidence of individuals being summarily arrested and imprisoned without trial, in total violation of the principle of innocent until proven guilty.

Facial recognition technology (FRT), AI and policing

Recognising the need for greater efficiency in policing, technological innovation has been linked to "dramatic changes in the organization of police, particularly at the turn of the last century" (Byrne & Marx, 2011:17). Facial recognition has always been part of police work, where witnesses and victims are used to identify perpetrators from line-ups or photographs. Acknowledging the potential for human error, AI algorithms for facial recognition offer exciting possibilities which are currently used at varying levels by law enforcement agencies around the world. According to Muñoz (2019), FRT is one of the most widespread and fast-growing applications of AI systems for policing and is integrally linked to the use of CCTV technology, as FRT software is usually applied to analyse live video feeds.

As a protagonist of FRT, Campbell (2018:2) reports that some FRT systems have presented error rates as low as one percent. That said, it is important to note that, first, while errors are mitigated they have not been eliminated. Second, White (perpetuallineup 2016:1) points out that "exact error values vary as a function of lighting, amount of the face exposed, motion and other factors", making the technology "inherently probabilistic: It does not produce a binary 'yes' or 'no' answer, but rather identifies more or less likely matches". Third, expanding on the need for caution, Babuta and Oswald (2019:7) point out that often when advocating for a system, emphasis is placed on the high accuracy rates. "[However,] high accuracy rates at the group level can often conceal very low accuracy rates for specific individuals or groups of individuals within that larger group."

Thus, while often presented as individual-level predictions, the accuracy rating should be more correctly understood as a group-level classification "describing the extent to which group members conform to a certain profile" (Babuta & Oswald, 2019:13). These warnings raise fundamental questions about the accuracy, fairness and ultimately the dependability of the data when applied to an individual case. This concern was reiterated by the UN Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression (28 May 2019: para 12):

> 12. Facial recognition technology seeks to capture and detect the facial characteristics of a person, potentially profiling individuals based on their ethnicity, race, national origin, gender and other characteristics, which are often the basis for unlawful discrimination.

Discussing the potential for abuse of the technology with concomitant human rights violations, the report continues:

> Perhaps no other environment demonstrates the comprehensive intrusiveness of these technologies better than China. Credible reporting suggests that the Government of China, using a combination of facial recognition technology and surveillance cameras throughout the country, looks exclusively for Uighurs based on their appearance and keeps records of their comings and goings for search and review (para 12).

Accepting that AI algorithms can support facial recognition and reduce errors, Gershgorn (2018:1) cautions care and deeper consideration before the police become too reliant on the technology. Quoting the CEO of Kairos, a facial recognition company, he agrees that "[The technology of facial recognition] is not yet ready for the burden of upholding the law". The fact is that the algorithms powering facial recognition have simply not been given enough data "especially of people of colour" to function properly. Repeating some of the concerns already identified, he notes that "[s]oftware is only as smart as the information it is fed. If that's predominantly images of, for example, African Americans that are 'suspect', it could quickly learn to simply classify the black man as a categorised threat" (Gershgorn, 2018:1).

This fear of big data FRT systems is exacerbated by the fact that the make-up of a training database can effectively influence the kinds of photo that an algorithm is most adept at examining. If it is skewed towards a specific race, "the algorithm may be better at identifying members of that group as compared to individuals of other races" (perpetuallineup, 2016:2). The case of Robert Williams in the USA, which resulted in a case of wrongful identification, highlights this point. Williams was arrested at his home after being identified as a shoplifter when an image of a shoplifting suspect caught on the security cameras was run through a FRT database of 49 million driving licence photographs. Following his arrest, Williams was interrogated, fingerprinted, photographed, had a DNA sample taken and locked up for 30 hours - only to be released with an apology when the state prosecutor acknowledged

that they had the wrong person. But Swart (2021:6) notes that Williams' criminal record remains in place and that if he wants to have it expunged, the onus is on him to go through all the formal processes prescribed by law.

Understanding that facial recognition is effectively the automated process of comparing two images to determine whether they represent the same individual (perpetuallineup, 2016:1), Swart (2021:4) describes one possible identification system as follows: "the unnamed suspect's photo is fed into a database of known persons and if there is a match, the police have the identity of their previously unknown person". A study by Gaines and Williams (N.d.) from Georgetown University's Centre on Privacy and Technology highlights that, using this technology, the American Federal Bureau of Investigation (FBI) could search driving licences and ID photos of 117 million people, effectively placing the adult US population in a massive virtual line-up. Swart (2021: 5-6) also mentions a second facial recognition system which drew its database from sources such as Facebook and Twitter. Emphasising the civil liberty and human rights violation of such practices, which allow the police to track someone from a distance without their consent, and even harass and bully anyone thought to be against the state, the Georgetown Law Report (2016) emphasises the main concern that "innocent people don't belong in criminal databases".

Recognising the legitimacy of the concerns highlighted, state and local legislatures in the USA have stopped short of an outright ban on the use of FRT, but have enacted legislation that imposes government oversight (Lively, 2021:5-9). At the federal level, two key pieces of legislation appeared before Congress in 2021, namely the Facial Recognition and Biometric Technology Moratorium Act of 2020, which currently pauses the use of FRT by the federal government until legislation is in place, and the Government Ownership and Oversight of Data in Artificial Intelligence Act, which seeks to ensure that federal contractors use any data collected through AI (including FRT) in a manner that does not compromise privacy (Lively, 2021:9). Both pieces of legislation acknowledge the risks of FRT, especially the challenges to fairness and justice and the inherent human rights abuses.

Specifically considering the use of FRT by the police, the UK Appeals Court held that its use by the South Wales police was unlawful on the grounds that first, the police had not properly assessed the software's potential for gender and racial bias and second, that no proper data protection impact assessment had been performed before the system was implemented (Rees, 2020:2). In similar vein, in 2021 the European Parliament voted to ban the use of FRT by law enforcement in public places and referred the matter to the European Commission to submit an informed legislative proposal on the use of AI by the police (Peets et al., 2021:1). The final report, entitled the *Report on artificial intelligence in criminal law and its use by the police and judicial authorities in criminal matters* (July 2021), published by the Civil Liberties, Justice and Home Affairs Committee of the European Parliament, takes account of the tangible advantages of FRT and balances them against the specific risks of "opaque decision-making, bias, intrusion into private lives, and challenges to the protection of personal data, human dignity and freedom of expression and information" (Peets et al., 2021:1; EP Report July, 2021: para O). In its conclusion, the report (EP Report July, 2021: para 27) calls for (among other things) FRT for law enforcement that has the function of identification to be banned "unless strictly used for the purpose of identification of victims of crime until the technical standards can be considered fully fundamental rights compliant [and] results derived are non-biased and non-discriminatory".

Notwithstanding the cautions raised internationally, Swart (2021:7-9) notes that South Africa appears to be proceeding in the opposite direction, excluding the SAPS from the provisions of POPIA and setting up systems with the national Department of Home Affairs for FRT to be deployed. The basis for the cooperation is section 15B(i) of the Criminal Law (Forensic Procedures) Amendment Act 6 of 2010, which provides that fingerprints and photographic images stored may, for the purposes of crime detection and crime investigation, be checked against the database of any department of state in the national sphere of government. While Home Affairs now shares the personal data of civilians with law enforcement, Swart (2021:13) confirms that the national draft Identity Management Policy acknowledges that the Department's Information System Security Policy is not aligned with the provisions of existing legislation, namely POPIA. Against this background, Swart (2021:2) cautions that in South Africa "people of colour are more likely to become targets".

The key concern with FRT is that there is often a lack of specific and robust regulation detailing the process and requirements to conduct a search through the system or establishing rules about which individuals' faces can be included in the databases, used and for how long (Muñoz, 2019; also see United Nations Special Rapporteur on Racial Discrimination, 2020: paras 6-62). Added to this, Muñoz (2019) notes that the potential for abuse is not limited to the arbitrary or discriminatory inclusion of databases in the system; there is also a real risk that these tools may be used by the police to spy on people for reasons that have nothing to do with public safety, as well as protestors in public spaces who seek to exercise their right to peaceful protest. *The UN Report on the Promotion and Protection of the Right to Freedom of Opinion and Expression* (28 May 2019: para 50) thus recommends that to prevent an unwarranted invasion of privacy through FRT (and other surveillance technology) it is key that countries intending to deploy such technologies (i) have an appropriate legal framework in place which (ii) specifically highlights the legal reality that surveillance will only be authorised in law for the most serious criminal offences. "[A]ny blanket application of AI for the purpose of mass surveillance would be disproportionate" (European Parliament 2021b: para H).

Conclusion

Interrogating the meaning of right of privacy, in *NM & Others v Smith and Others [2007] ZACC 7*, the Constitutional Court of South Africa, described the right to privacy as "the right to live his or her life as he or she pleases" (para 33). However, as "a person moves into communal relations and activity, such as business and social interaction, the scope of personal space shrinks accordingly" (*Bernstein and Others v Bester NO and Others [1996] ZACC 2*,

Constitutional Court of South Africa: para 67). Having said that, the Court in Bernstein went on to clarify that the right to privacy remains protected where a person has a subjective expectation of privacy that society considers to be objectively reasonable (para 75). So, although the right to privacy may be attenuated under specific circumstances, the Hyundai Motors judgment (Constitutional Court. 2000: para 16) held that "when people are in their offices, in their cars or on mobile telephones they still retain a right to be left alone by the state unless certain conditions are satisfied".

In South Africa, the use of surveillance in public spaces has, however, been approved by the courts especially if the circumstances indicate that the affected parties had "no reasonable expectation of privacy" (SAIIA, 2021:7). This aligns with the ruling of the UK Court of Appeal in the South Wales case which went against the police on two grounds but found that the use of surveillance technology was, in principle, proportionate interference with human rights "as the benefits outweigh the impact on the complainant" (Rees, 2020:1). Sharing this view, SAIIA (2021:8) states that public surveillance will be lawful because it is geared to protect the safety and security of the data subject and is "in the legitimate interest of those being observed". Kwet (2019:31-32), however, takes an opposing view, arguing that "public spaces belong to the citizens and the public at large. This kind of surveillance needs to be banned because so many human rights can be contravened in South Africa, taking us back to the days of apartheid."

Stone (2020:10) also urges legislative clarity for what Professor Jane Duncan describes as "locational privacy". Locational privacy is:

> The right of people to move about freely without having their movements tracked, given the amount of personal information it contains ... [Locational privacy thus] bridges the conceptual divide between the right to privacy and the right to freedom of movement …

The European Court in *PG and Another v United Kingdom*, considering the right to privacy as contained in article 8 of the European Convention on Human Rights, explained the position as follows:

> There are a number of elements relevant to a consideration of whether a person's private life is concerned by measures effected outside a person's home or private premises. … A person who walks down the street will, inevitably, be visible to any member of the public who is also present. Monitoring by technological means of the same public scene (for example, a security officer viewing through closed-circuit television) is of a similar character. *Private-life considerations may arise, however, once any systematic or permanent record comes into existence of such material from the public domain.* It is for this reason that files gathered by security services on a particular individual fall within the scope of Article 8, even where the information has not been gathered by any intrusive or covert method (own emphasis) (para 57).

Thus, urges Stone (2020), what South Africa requires is a legal review that will align the following triad of factors:
(i) stronger alignment between criminal procedure and protection of information legislation;
(ii) a better understanding of privacy in public spaces; and
(iii) the adoption of measures and standard procedures to mitigate against the biased and unlawful use of these technologies.

Further, looking at the right to equality, it is acknowledged that the data used to create, train and operate AI systems often reflects historical, systemic, institutional and societal discrimination that results in racialised people, communities and geographic areas being over-policed and disproportionately surveilled, questioned, detained and imprisoned (Fair Trials, 2022). As explained by the United Nations Special Rapporteur on racial discrimination and emerging digital technologies (United Nations Human Rights Committee 2020: paras 7 & 8): "Datasets, as a product of human design, can be biased due to skews, gaps and faulty assumptions, which have the potential to lead to discrimination against certain segments of the population based on race, ethnicity or gender."

Police are using emerging technologies for predictive policing, in which AI systems draw from multiple sources of data such as criminal records, crime statistics and the demographics of neighbourhoods. Evidence confirms that many of these datasets reflect existing racial and ethnic biases, thus operating in ways that reinforce racial discrimination despite the presumed objectivity of these technologies and even their ostensible potential to mitigate the prejudice of the human actors they supplement or replace.

Emphasising the point with data drawn from the US Department of Justice, Heaven (2020:3) notes that a black person in America is five times more likely than a white person to be stopped without just cause, and black people are more than twice as likely as their white counterparts to be arrested. Notwithstanding that the law in the USA excludes the specific use of race as a factor when algorithms are designed, Heaven (2020:3) argues that the other variables of socio-economic background, education and zip code serve as effective proxies. Rolland (2021:3) illustrates this with the example of Brisha Borden, an 18-year-old black woman with no previous convictions, and Vernon Partner, a 41-year-old white man previously charged with armed robbery, and sent to prison. When both were subjected to the AI algorithm used by the police to assess risk, Borden was highlighted as a "high risk" of future conviction, while Partner was assigned a "low risk" status.

Reflecting on the issue of racial bias ingrained in AI systems, Skeem and Lowenkamp (2020:24 & 28) propose, somewhat controversially, that rather than excluding race as a predictor, the best balance from their various programming options was achieved when algorithms took race specifically into account but assigned black people a higher threshold than whites for being deemed high risk. Implementing the Skeem and Lowenkamp approach, however, must raise questions of data manipulation and system credibility. Heaven (2020:7) points out that "The idea of holding members of different groups to different standards goes against many people's sense of fairness, even if it's done in a way that's supposed to address historical injustice."

In the current milieu, and especially with the realities of AI uncertainties and bias, accountability and transparency become even more material in any enquiry. Specific issues such as whether (i) the training data will be available to the police and public; and (ii) the algorithm using the training data will be available to the police and public, must be confirmed in the affirmative. However, companies responsible for the design and programming of AI tools argue strongly for the secrecy of the information used because sharing would compromise their trade secrets or the confidentiality of the information about the people used in the development of the system. The available research demands that before any AI system is introduced in support of policing, the benefits of the technology must be balanced against ensuring that police do uphold and are seen to be upholding fundamental human rights - anything else will have adverse reputational consequences, raising further issues of confidence in and the integrity of the entire police system. Joh (2018:1143) summarises the concerns succinctly: "[t]he harms of errors made by the police are not just abstract concepts like trust and legitimacy - AI errors will lead to wrongful stops, arrests, and unjustified force."

Analysing the current South African and comparative research on policing and artificial intelligence, the conclusion is that mass surveillance practices currently in place threaten fundamental human rights. It is, therefore, disconcerting to note that notwithstanding the evidence available -

> "South African cities are increasingly turning to technology-aided surveillance to police public spaces ... linking cameras to form wide area networks that increasingly use artificial intelligence (AI) to index, sort and interpret data pooled into centralised surveillance-based 'nerve centres'" (SAIIA, 2021:2).

Even more disquieting for South African human rights activists is the conclusion by SAIIA (2021:2) that "[w]hile these technologies are deployed in the name of fighting crime, they reinforce some of the very structural inequities that underlie that national crime problem". Notwithstanding the imperative for innovation, it is essential to recognise that while modernisation requires businesses to adapt to seize the opportunities presented, it is equally about "defending against disruptive change" (State of Data Innovation, 2021:3). Being aware of the limitations of AI does not mean throwing the baby out with the bathwater; the technology needs to be properly understood and proved before being implemented: "[i]t's not quite as simple as scraping social media to find people who did successive searches for 'crowbar' or 'balaclava'," notes Venter (2021:2).

Although some may argue that the genie is already out of the bottle in South Africa, issues such as algorithm bias, opaque datasets, the potential for invasion of privacy and violation of human rights are all serious concerns that cannot be ignored. Strategic and operational decision-makers must be forced to address these challenges before AI is adopted and deployed into the structures of policing and law enforcement. To do otherwise would show blatant disregard for some of the most fundamental principles of democracy enshrined in South Africa's Constitution and the international human rights instruments. Furthermore, if there is consensus that effective policing is necessarily about building partnerships with the communities it serves, relationship-building relies on defending a set of shared values, key among which are trust and transparency that facilitate cooperation and sustained harmony. To effectively meet the transparency requirement, machines must be able to explain why a decision was made (PEGA, 2019:7). A lack of transparency inevitably leads to suspicion and raises questions about the credibility of the system. If the police cannot explain the system, how then do they account for the credibility of the outcomes of the algorithms?

From a legal and regulatory perspective, one truth about the avalanche of technology is that it has outpaced the law. The new realities and opportunities posed by technology are often not covered by legal provisions, and to apply existing laws to the new age of AI and technology can lead to unfair and unjust results. In South Africa, it is unfortunate that neither the NDP nor the policy directives in the form of the White Paper on Policing (2016a) and the White Paper on Safety and Security (2016b) refer to the right to privacy and the value of ensuring and protecting human rights. However, as indicated earlier, the White Paper on Policing (2016a:43) emphasises the need for the police service to identify relevant new technologies to enhance their effectiveness and efficiency, underpinned by an enabling legislative framework in place that will optimise their use across law enforcement. It would be both naïve and counterintuitive for the police leadership not to read into this the absolute requirement to ensure that such legislative framework is aligned with all other laws and citizens' rights, especially those entrenched in the Constitution. As Stone (2020:9) points out:

> … South Africa's Constitution not only requires limitations on the rights in Chapter 2 to be the least restrictive means necessary for achieving the security objectives of the State, but also for limitations to be conducted in a manner consistent with human dignity.

Smith (2018:1) argues strongly for "thoughtful government regulation", especially when the issues at stake "require the balancing of public safety with the essence of our democratic freedoms". Smith (2018:5) notes that it will not solve the problem to expect technology companies to develop acceptable standards, because even if some adopt the standards, problems will remain if others do not. Finally, discussing the use of predictive tools by police agencies and the link to racist behaviours, Roberts (n.d.) points out that what is currently emerging is not novel: "[r]acism has always been about predicting, about making certain racial groups seem as if they are predisposed to do bad things and therefore justify controlling them". Until AI systems are proved to fully safeguard fundamental rights in their design, development, deployment and use, with the non-discriminatory aspect of AI systems being clearly demonstrated, and decisions being both explicable and transparent, the SAPS would be well-advised to reconsider the use of predictive analytics and AI in policing. The findings of the United Nations Human Rights Committee, in considering South Africa's Initial State Report in March 2016 (United Nations Human Rights Committee, 2016: para 43) expressed a similar caution, noting that:

> "The State party should take all necessary measures to ensure that its surveillance activities conform to its obligations under the [ICCPR], including article 17, and that any *interference with the right to privacy complies with the principles of legality, necessity and proportionality*. The State party should refrain from engaging in mass surveillance of private communications without prior judicial authorisation and consider revoking or limiting the requirement for mandatory retention of data by third parties. … *The State party should increase the transparency of its surveillance policy and speedily establish independent oversight mechanisms to prevent abuses and ensure that individuals have access to effective remedies.*" (Authors' emphasis.)

A worthy consideration when engaging with technology for policing is to recognise that efficiencies do not necessarily lead to effectiveness. Before committing to the use of AI and predictive analytics or unproven surveillance systems, the SAPS - and all policing and law enforcement agencies, for that matter - should proceed with due diligence, strengthening internal capabilities and training programmes to ensure a proper understanding of the technologies being deployed. In the absence thereof, the challenges to the protection of privacy, freedom of movement and information, equality, the presumption of innocence, and risks for security and of state sanction discrimination pose a critical barrier to adoption.

List of References

AK v Minister of Police (CCT 94/20) [2022] ZACC 14; 2022 (11) BCLR 1307 (CC) (5 April 2022).

Albertus, R.W. (2019). Translating a digital strategy for South Africa's Police Services. Conference: International Conference on Information Resources Management 2019: 1-12. Available from: https://www.researchgate.net/publication/334366521_Translating_a_Digital_Strategy_for_South_Africa's_Police_Services. Accessed on: 9 May 2022.

Babuta, A. & Oswald, M. (2019). Data analytics and algorithmic bias in policing. RUSI. 16 September. Available from: https://rusi.org/explore-our-research/publications/briefing-papers/data-analytics-and-algorithmic-bias-policing. Accessed on: 6 March 2022.

Berk, R.A. (2020). Artificial intelligence, predictive policing, and risk assessment for law enforcement. *Annual Review of Criminology,* 4: 209-237. Available from: https://doi.org/10.1146. Accessed on: 28 April 2022.

Bernstein and Others v Bester NO and Others [1996] ZACC 2, Constitutional Court of South Africa.

Burger, J. (2011). To protect and serve: Restoring public confidence in the SAPS. *SA Crime Quarterly,* 36: 13-22. Available from: https://www.researchgate.net/publication/301275707_To_protect_and_serve_Restoring_public_confidence_in_the_SAPS. Accessed on: 28 April 2022.

Byrne, J. & Marx, G. (2011). Technological innovations in crime prevention and policing. A review of the research on implementation and impact. *Cahiers Politiestudies,* 3(20): 17-40.

Campbell, T. (2018). Opportunities and challenges from artificial intelligence for law enforcement. July 20. Available from: https://www.futuregrasp.com/opportunities-from-artificial-intelligence-for-law-enforcement. Accessed on: 27 November 2021.

Christie, L. (2021). AI in policing and security. UK Parliament. Available from: https://post.parliament.uk/ai-in-policing-and-security/ Accessed on: 10 May 2022.

Civilian Secretariat of Police. (2016a). *White Paper on Policing.* Available from: http://www.policesecretariat.gov.za/downloads/bills/2016_ White_Paper_on_Policing.pdf. Accessed on: 6 February 2022.

Civilian Secretariat of Police. (2016b). *White Paper on Safety and Security.* Available from: https://www.saferspaces.org.za/uploads/files/2016-WPSS.pdf. Accessed on: 6 February 2022.

Commission of Inquiry into Allegations of Police Inefficiency and a Breakdown in Relations between SAPS and the Community in Khayelitsha. (2014). *Report of the Commission of Inquiry into Allegations of Police Inefficiency and a Breakdown in Relations between SAPS and the Community of Khayalitsha.* Available from: https://www.westerncape.gov.za/police-ombudsman/files/atoms/files/khayelitsha_commission_report_0.pdf. Accessed on: 20 June 2022.

Deloitte. (2021). Urban futures with a purpose. Available from: https://www2.deloitte.com/content/dam/Deloitte/global/Documents/Public-Sector/deloitte-urban-future-with-a-purpose-study-set2021.pdf Accessed on: 18 June 2022.

Deloitte. (2022). Emerging tech that can make smart cities safer. Available from: https://www2.deloitte.com/ca/en/pages/public-sector/articles/emerging-tech-smart-cities-safer.html. Accessed on: 18 June 2022.

European Parliament. (2021a). European Parliament Resolution of 6 October on artificial intelligence in criminal law and its uses by the police and judicial authorities in criminal matters. Available from: https://www.europarl.europa.eu/doceo/document/TA-9-2021-0405_EN.html. Accessed on: 10 May 2021.

European Parliament. (2021b). What is artificial intelligence and how is it used? *News March,* 29. Available from: https://www.europarl.europa.eu/news/en/headlines/society/20200827STO85804/what-is-artificial-intelligence-and-how-is-it-used. Accessed on: 18 June 2022.

Fair Trials. (2022). AI Act: EU must ban predictive AI systems in policing and criminal justice. Available from: https://www.fairtrials.org/articles/news/ai-act-eu-must-ban-predictive-ai-systems-in-policing-and-criminal-justice/ Accessed on 10 May 2022.

Fayyad, U. & Uthurusamy, R. (2002). Evolving data mining into solutions for insights. *Communications of the ACM,* 45(8): 28-31. Available from: https://doi.org/10.1145/545151.545174.

Georgetown Law. (2016). Half of all American adults are in a police face recognition database, new report finds. 18 October. Georgetown University. Available from: https://www.law.georgetown.edu/news/half-of-all-american-adults-are-in-a-police-face-recognition-database-new-report-finds/ Accessed on: 6 March 2022.

Gelles, M., Mirkow, A. & Mariani, J. (2019). The future of law enforcement: Policing strategies to meet the challenges of evolving technology and a changing world. *Deloitte Insights.* Available from: https://www2.deloitte.com/us/en/insights/focus/defense-national-security/future-of-law-enforcement-ecosystem-of-policing.html Accessed on: 11 May 2022.

Gershgorn, D. (2018). CEO of a facial recognition company: the tech is too volatile to give to law enforcement. 27 June. Available from: https://www.route-fifty.com/tech-data/2018/06/facial-recognition-tech-law-enforcement/149345/ Accessed on: 9 April 2022.

Guariglia, M. (2020). Technology can't predict crime, it can only weaponize proximity to policing. *Electronic Frontier Foundation.* Available from: https://www.eff.org/deeplinks/2020/09/technology-cant-predict-crime-it-can-only-weaponize-proximity-policing. Accessed on: 28 April 2022.

Guariglia, M. (2022). Police use of artificial intelligence: 2021 in review. *Electronic Frontier Foundation.* Available from: https://www.eff.org/deeplinks/2021/12/police-use-artificial-intelligence-2021-review. Accessed on: 10 May 2022.

Heaven, W.D. (2020). Predictive policing algorithms are racist. They need to be dismantled. July. *MIT Technology Review,* 17: 1-16. Available from: https://www.technologyreview.com/2020/07/17/1005396/predictive-policing-algorithms-racist-dismantled-machine-learning-bias-criminal-justice/ Accessed on: 27 November 2021.

Human Rights Watch. (2018). China: Big data fuels crackdown in minority regions. 26 February. Available from: https://www.hrw.org/news/2018/02/26/china-big-data-fuels-crackdown-minority-region Accessed on: 4 January 2022.

Investigating Directorate: *Serious Economic Offences and Others v Hyundai Motor Distributors (Pty) Ltd and Others*; In re: *Hyundai Motor Distributors (Pty) Ltd and Other v Smit NO and Others [2000] ZACC 12*, Constitutional Court of South Africa.

Joh, E.E. (2018). Artificial intelligence and policing: First questions. *Seattle University Law Review,* 41: 1139-1144.

Kwet, M. (2019). Smart CCTV networks are driving an AI-powered apartheid in South Africa. 22 November. Available from: https://www.vice.com/en/article/pa7nek/smart-cctv-networks-are-driving-an-ai-powered-apartheid-in-south-africa. Accessed on: 27 November 2021.

Lively, T.K. (2021). Facial recognition in the United States: Privacy concerns and legal developments. 1 December. Available from: https://www.asisonline.org/security-management-magazine/monthly-issues/security-technology/archive/2021/december/facial-recognition-in-the-us-privacy-concerns-and-legal-developments/ Accessed on: 19 June 2022.

Mbani, B., Odera, P. & Kenduiywo, B. (2017). Crime mapping using artificial intelligent agents in Nairobi City County, Kenya. *Geoinformatics & Geostatistics: An overview.* 5: 1-27. DOI: 10.4172/2327-4581.1000171. Available from: https://www.researchgate.net/publication/321377272_Crime_mapping_using_Artificial_Intelligent_Agents_in_Nairobi_City_County_Kenya. Accessed on: 28 April 2022.

Munoz, L.F.G. (2019). AI policing of people, streets and speech. *Global Information Society Watch.* Available from: https://giswatch.org/node/6201. Accessed on: 10 May 2022.

National Planning Commission. (2013). *National Development Plan 2030 - Our future: Make it work.* Available from: https://www.gov.za/issues/national-development-plan-2030. Accessed on: 5 February 2022.

NM and Others v Smith and Others [2007] ZACC 7, Constitutional Court of South Africa.

OSCE. (2017). *Intelligence-led Policing.* TNTD/SPMU Publication Series. Vol 3. Austria: OSCE Publications.

Pearsall, B. (2010). Predictive policing: The future of law enforcement. *National Institute of Justice Journal,* 22. June. Available from: https://nij.ojp.gov/topics/articles/predictive-policing-future-law-enforcement. Accessed on: 9 April 2022.

Peets, L., Hansen, M., Choi, S.J., Drake, M. & Ong, J. (2021). European Parliament votes in favor of banning the use of facial recognition in law enforcement. *Inside Privacy,* 6. October. Available from: https://www.insideprivacy.com/artificial-intelligence/european-parliament-votes-in-favor-of-banning-the-use-of-facial-recognition-in-law-enforcement/ Accessed on: 17 June 2022.

PEGA. (2019). AI and empathy: Combining artificial intelligence with human ethics for better engagement. July. Available from: https://www.pega.com/insights/resources/ai-and-empathy-combining-artificial-intelligence-human-ethics-better-engagement. Accessed on: 27 November 2021.

Perpetuallineup. (2016). What is face recognition technology? Centre on Privacy and Technology. Available from: https://www.perpetuallineup.org/background#research. Accessed on: 9 January 2022.

PG and Another v United Kingdom, Application No. 44787/98, European Court of Human Rights: Third Section.

Rees, J. (2020). Facial recognition use by South Wales police ruled unlawful. 11 August. *BBC News.* Available from: https://www.bbc.com/news/uk-wales-53734716. Accessed on: 1 September 2022.

Republic of South Africa. (1996). The Constitution of the Republic of South Africa Act 108. Pretoria: Government Printers.

Republic of South Africa. (2010). Criminal Law (Forensic Procedures) Amendment Act 6. Pretoria: Government Printers.

Republic of South Africa. (2013). Protection of Personal Information Act 4. Pretoria: Government Printers.

Roberts, D. (2020). Policing without the police: Race, technology and the new Jim Code. Available from: https://www.youtube.com/watch?v=tf0nEQTLw04&t=1641s. Accessed on: 2 January 2022.

Rolland, A. (2021). Ethics, artificial intelligence and predictive policing. *Security Distillery,* 23. Available from: https://thesecuritydistillery.org/all-articles/ethics-artificial-intelligence-and-predictive-policing. Accessed on: 1 June 2022.

SAIIA. (2021). The city surveillance state: Inside Johannesburg's safe city initiative. 15 March. Available from: https://saiia.org.za/research/the-city-surveillance-state-inside-johannesburgs-safe-city-initiative/ Accessed on: 27 November 2021.

Singh, D. & Singh, A. (2022). Artificial intelligence (AI) in student recruitment and selection: AI and the need for authenticity and integrity. SAQA Bulletin. *The South African Qualifications Framework and the Fourth Industrial Revolution,* 20(1): 66-84.

Skeem, J. & Lowenkamp, C. (2020). Using algorithms to address trade-offs inherent in predicting recidivism. *Behavioural Sciences Journal,* 38(1). Available from: https://www.researchgate.net/publication/341166134_Using_algorithms_to_address_trade-offs_inherent_in_predicting_recidivism. Accessed on: 6 March 2022. DOI: 10.1002/bsl.2465.

Smith, B. (2018). Facial recognition technology: The need for public regulation and corporate responsibility. 13 July. Available from: https://blogs.microsoft.com/on-the-issues/2018/07/13/facial-recognition-technology-the-need-for-public-regulation-and-corporate-responsibility/ Accessed on: 3 January 2022.

South Africa Police Service. (2021). *Protection of Personal Information Manual of the South African Police Service.* Available from: https://www.saps.gov.za/resource_centre/paia/public_manual_popia_2021.pdf. Accessed on: 8 May 2022.

State of Data Innovation. (2021). SPLUNK. Available from: https://www.splunk.com/en_us/pdfs/resources/e-book/state-of-data-innovation-2021.pdf. Accessed on: 9 April 2022.

Stone, K. (2020). Responsible use of artificial intelligence for crime prevention in South Africa. March. Pretoria: Human Scientific Research

Council. Available from: https://policyaction.org.za/sites/default/files/PAN_TopicalGuide_AIData2_CrimePolicing_Elec.pdf. Accessed on: 5 February 2022.

Strom, K. (2017). Research on the impact of technology on policing strategy in the 21st century. May. National Institute of Justice (US). Available from: https://www.ojp.gov/pdffiles1/nij/grants/251140.pdf. Accessed on: 5 January 2022.

Swart, H. (2021). Face-off: South Africa's population register is on course to becoming a criminal database - with your mugshot. 3 March. *Daily Maverick.* Available from: https://www.dailymaverick.co.za/article/2021-03-03-face-off-south-africas-population-register-is-on-course-to-becoming-a-criminal-database-with-your-mugshot/ Accessed on: 27 November 2021.

United Nations Human Rights Committee. (2016). Concluding observations on the initial report of South Africa. 27 April. CCPR/C/ZAF/CO/1. Available from: https://digitallibrary.un.org/record/1317444?ln=en Accessed on: 11 May 2022.

United Nations Special Rapporteur on the Promotion and Protection of the Right to Freedom of Opinion and Expression. (2019). *Report to the Human Rights Council: Surveillance and human rights.* A/HRC/41/35. Available from: https://www.ohchr.org/Documents/Issues/Opinion/A_HRC_41_35_EN.docx. Accessed on: 11 May 2022.

United Nations Special Rapporteur on Contemporary Forms of Racism, Racial Discrimination, Xenophobia and Related Intolerance. (2020). *Report to the Human Rights Council: Racial discrimination and emerging digital technologies: A human rights analysis.* A/HRC/44/57. Available from: https://www.ohchr.org/EN/HRBodies/HRC/RegularSessions/Session44/Documents/A_HRC_44_57_AdvanceEditedVersion.docx. Accessed on: 11 May 2022.

Venter, I. (2021). AI could reduce SA crime as early as 2023 - Aura. *Engineering News.* 5 November. Available from: https://www.engineeringnews.co.za/article/ai-could-reduce-sa-crime-as-early-as-2023-aura-2021-11-05. Accessed on: 27 November 2021.

Weisburd, D. & Majmunder, M.K. (eds). (2018). *Proactive policing. Effects on crimes and communities.* Washington D.C.: The National Academic Press. Available from: http://nap.edu/24928 and https://doi.org/10.17226/24928.

Završnik, A. (2020). Criminal justice, artificial intelligence systems, and human rights. *ERA Forum,* 20. Available from: https://link.springer.com/article/10.1007/s12027-020-00602-0#citeas Accessed on: 28 April 2022.

COMMENTARY

Policing in the 4th Industrial Revolution (4IR): Balancing the benefits and bias

Prof. Divya Singh
Chief Academic Officer: STADIO
E-mail: DivyaS@stadio.co.za

Jeanette Smit
Head of the School of Policing and Law Enforcement: STADIO
E-mail: JeanetteS@stadio.ac.za

Annalise Kempen
Editor: Servamus Community-based Safety and Security Magazine
E-mail: annalise@servamus.co.za

Introduction

The World Economic Forum (2019:1) summarises the Fourth Industrial Revolution (4IR) as follows:

> "The Fourth Industrial Revolution represents a fundamental change in the way we live, work and relate to one another. It is a new chapter in human development, enabled by extraordinary technological advances commensurate with those of the first, second and third industrial revolutions. These advances are merging the physical, digital and biological worlds in ways that create both huge promise and potential peril. The speed, breadth and depth of this revolution are forcing us to rethink how countries develop, how organisations create value and even what it means to be human. The Fourth Industrial Revolution is about more than just technology-driven change; it is an opportunity to help everyone, including leaders, policy-makers and people from all income groups and nations, to harness converging technologies to create an inclusive, human-centred future. The real opportunity is to look beyond technology and find ways to give the greatest number of people the ability to positively impact their families, organisations and communities."

When it comes to policing, especially policing in developing countries and societies, the aspects of both the "promise" and "peril" of 4IR and its uptake, are evident. In South Africa, on the one hand, we are struggling to navigate very complex socio-economic and political forces, to which the unexpected realities as a result of the COVID-19 pandemic have to be added. On the other, we are aware of the tantalising potential and promise of 4IR which offers a platform from which to transition into a more just, equitable, stable and relevant future. Mediating these two ends of the spectrum is the Constitution of the Republic of South Africa, 1996 and the rights and responsibilities that it encompasses. This leads to the vital question of how we strike the right balance between the two.

The momentum towards the 4IR in South Africa received a boost with the work of the Presidential Commission on the Fourth Industrial Revolution (PC4IR) which gazetted its report in October 2020. The report envisages the 4IR as having "the potential to catalyse South Africa's path to attaining the goals of the National Development Plan (NDP)" (PC4IR, 2020:137). Two of the outcomes of the NDP that are directly relevant to the South African Police Service (SAPS) are Outcome 3: "All people in South Africa are and feel safe"; and Outcome 11: "Create a better South Africa, a better Africa and a better world" (NPC, 2012). Most would agree that feeling safe is a prerequisite for a better South Africa, which gives us some idea of how important it is to ensure that policing meets its objectives as efficiently and effectively as possible. This sentiment was confirmed by a survey conducted by the Centre for Risk Analysis (CRA) about the most serious problems in the country in 2021: the abuse of women and children ranked second at 42.8%, followed by corruption at 14.8%, while crime or safety and security was listed seventh at 10.3% (CRA, 2022).

Having contextualised 4IR, it is important to briefly explore four areas that are currently at the forefront of global policing efforts in their uptake and implementation of 4IR. This article will also briefly consider the extent to which South Africa has, or could, adopt such technology in the country's own policing efforts. In so doing, the article will attempt to balance the scales between innovations, and rights and responsibilities.

Area 1: Technological developments and innovation in the policing sector in reforming crime prevention and crime control

Technological innovations in criminal justice can be divided into two categories, namely soft technologies and hard technologies. Soft technologies may be defined as computer software and information systems, while hard technologies would, for example, include new materials and devices and equipment that could be used to either commit or prevent and control crime (Byrne & Marx, 2011:19-20).

The table below provides a simple indication of the differences between hard and soft technologies used in crime prevention and policing.

Table 1:
The application of hard and soft technology to crime prevention and policing (Byrne & Marx, 2011:20).

	HARD Technology	SOFT Technology
Crime prevention	■ Closed-circuit television (CCTV) ■ Street lighting ■ Citizen protection devices (e.g. mace, tasers) ■ Metal detectors ■ Ignition interlock systems (drunk drivers)	■ Threat assessment instruments ■ Risk assessment instruments ■ Bullying ID protocol ■ Sex offender registration ■ Risk assessment prior to involuntary civil commitment ■ Profiling potential offenders ■ Facial recognition software used in conjunction with CCTV
Police	■ Improved police protection devices (helmets, vests, cars, buildings) ■ Improved/new weapons ■ Less than lethal force (mobile/riot control) ■ Computers in squad cars ■ Hands-free patrol car control ■ Offender and citizen IDs via biometrics/ fingerprints ■ Mobile data centres ■ Video in patrol cars	■ Crime mapping (hot spots) ■ Crime analysis (e.g. COMPSTAT) ■ Criminal history data systems enhancement ■ Information-sharing within the Criminal Justice System (CJS) and private sector ■ New technologies to monitor communications (phone, mail, internet) to/from targeted individuals ■ Amber alerts ■ Creation of watch lists of potentially violent offenders ■ Gunshot location devices

The South African government has recently taken a step in the right direction in the application of soft technology, while simultaneously addressing a priority in fighting gender-based violence, specifically the abuse of women and children (CRA, 2022). This happened through the amendment of the Domestic Violence Act 116 of 1998, following the enactment of the Domestic Violence Amendment Act 12 of 2021 earlier in 2022. In terms of this amendment, section 4(1) of the principal Act now provides that any complainant may, on an ex parte basis, in the prescribed form and manner, apply to the court for a protection order either -

"(aa) with the clerk of the court; or (bb) electronically, by submitting the application to an electronic address, of the court having jurisdiction". Curran (2022) argues that this change in allowing for the electronic application for a domestic violence protection order will undoubtedly lessen the burden on such complainants who seek urgent protection.

Various online platforms (soft technologies) have also been made available to report corruption, which is another serious problem in South Africa. In 2019, the SAPS turned to technology in an attempt to turn the tide against crime when it launched its MySAPS mobile App - a first of its kind on the African continent. The app aims to provide South Africans with a new and easy way to access policing services and information (SAPS, 2019). The MySAPS App allows its users to submit tip-offs for various types of incidents, including corruption, fraud, human trafficking, sexual assault/abuse and murder. These tip-offs may be submitted anonymously, or users have the option to opt to communicate further with the police via the app, without them compromising their anonymity. The app allows reporters to upload an image, video or audio as well as additional descriptive details about the incident. Users do not have to complete their profile to submit tip-offs or use the other functions on the app, which means that they can stay anonymous when reporting crime. The information submitted via the MySAPS App is sent to the Crime Stop Call Centre for analysis and to determine whether it is sufficient to escalate it to the relevant investigating unit whereafter an enquiry will be opened. The person who has submitted the tip-off will receive a reference number whereafter feedback on the specific reference number can be requested from an agent at the Crime Stop Call Centre (SAPS, n.d.).

Area 2: Crime prevention

When it comes to crime prevention, hard technologies include the use of CCTV cameras in our cities and homes, luggage screening at our airports, bullet-proofing in banks and motor vehicles, metal detectors in schools and at functions and personal protection devices such as pepper spray, tasers and even the ability to use free emergency numbers of applications (apps) on our cellphones.

Even though the general objective of installing CCTV cameras is surveillance for public safety and security, policymakers and private security companies believe that CCTV surveillance goes a step further by not only detecting and deterring crime but also preventing crime (Basimanyane & Gandhi, 2019). This is one of the reasons why there was a major uptake already during the nineties by major cities around South Africa to use CCTV for crime prevention. In those years, this project was primarily driven by Business Against Crime South Africa (BACSA) (Safer Spaces, n.d.). As a crime prevention tool, CCTV creates awareness among members of the public, especially potential offenders, that they are under surveillance and that if a crime is committed, the authorities will have an increased chance of identifying them as the perpetrators with the help of CCTV footage. As a result, the presence of such surveillance cameras and the subsequent possibility of easier identification should, in theory at least, discourage criminals from committing a crime in areas where CCTV cameras have been installed (Safer Spaces, n.d.).

When it comes to policing, law enforcement agencies could include the latest state-of-the-art protective gear, tasers and other less-lethal technology, technology-enhanced patrol vehicles (including dashcams) and body-worn cameras that contribute towards regulating conduct and protecting police, but which are also used for gathering evidence to be used in court cases. Cowper-Johnson (2014:18-19) compares the evidential value of traditional evidence when a law enforcement officer makes a written record of an incident as soon as possible after that incident occurred versus a recording made by body-worn cameras in real-time. The latter he notes, is as precise as possible, only limited by the field of view and the audio range of the device. This results in much more accurate evidence, minimising any doubts as to the actions (verbal and physical) of both the law enforcement officer and the member of the public in question. So-called dashcams or in-vehicle systems have the limitation of usually recording only front-forward video material from the dash of the vehicle, along with the audio. Body-worn cameras, therefore, provide a bigger and more comprehensive picture of an incident, from beginning to end, with audio.

The Bureau of Justice Statistics published a report in November 2018, based on the use of body-worn cameras by law enforcement agencies in the United States of America (USA) in 2016. The main reasons why local police had acquired body-worn cameras were to improve the safety of their officials, increase the quality of evidence and reduce civilian complaints and agency liability. However, a comprehensive review of 70 studies on the use of these cameras showed no consistent or statistically significant effects on the use of force, assaults on law enforcers, officer-initiated calls for service, arrests, traffic stops and tickets, and field interviews (i.e. stop and frisk). In contrast, other body-worn camera programmes in the United Kingdom and elsewhere in the USA showed promising results where there had been positive changes in the use of force by the police. The conclusion is made that more research is required to determine the value of body-worn cameras (NIJ, 2022).

The use of body-worn cameras for law enforcement in South Africa is very topical with limited implementation. In March 2021, the Department of Transport issued a media statement in which it noted that South African traffic officers were to be issued with body-worn cameras as a useful tool in dealing with high levels of corruption incidents by providing a factual account of events. It further read: "The Road Traffic Management Corporation has taken a giant leap towards reinventing law enforcement by introducing a lasting solution to many law enforcement problems in the form of a body-worn camera to be used by officers" (BusinessTech, 2021). While in 2019, a spokesperson from the South African Police Service (SAPS) told BusinessTech (2019) that body-worn cameras were on top management's agenda but that no date for implementation was available, since the SAPS was awaiting funding. At the time the SAPS's spokesperson was quoted as having said:

> "Body cameras will be used as - but not limited to - a safety measure to protect our men and woman in blue during operations. They will also be used for data capturing as the world is moving in the direction of the 4th industrial revolution and to advance policing."

A valid question that the SAPS would have to add to the cost factor of the hardware relates to the storage of data (video footage recorded) of the cameras which would have to be kept for a predetermined period for evidential value. Research conducted by the Police Executive Research Forum concluded that security, reliability, cost and technical capacity were the primary factors cited by police executives from 40 different police departments in the USA for choosing a particular method for storing video files from body-worn cameras. Accordingly, all stored body-worn camera video footage was stored on either an in-house server (managed internally) or an online cloud database (managed by a third-party vendor). Consultation with legal experts was crucial to ensure that data storage policies and practices were complying with a country's legislative framework and that the evidentiary chain of custody was adequately preserved (Miller, Toliver & Police Executive Research Forum, 2014:15).

Perkins (2018:1-2) informs us that the use of body-worn cameras has been met with a mixed response by police agencies across the world. Some of these agencies regard this form of technology as a positive tipping point in the transparency and accountability offered to view the actions of police officials, hopefully encouraging behavioural changes from both the police and public. Despite the perception that the use of body-worn cameras are widely regarded as a way to positively improve the behaviour of law enforcement officers, a study conducted by the Center for Evidence-based Crime Policy at George Mason University found that behavioural changes were not consistent or significant. The research claimed that the use of these cameras should not be expected to single-handedly improve police accountability as those police departments that wanted to see significant improvements in police-community relations, should use such cameras as a step in their broader series of reforms to support accountability and transparency (Lum, Koper, Wilson, Stoltz, Goodier, Eggins, Higginson & Mazerolle, 2020). Perkins (2018:1-2) further cautions that some unintended consequences of the use of body-worn cameras in police investigations include that the demeanour of the aggressor might change upon the arrival of the police where the recorded version of events consequently shows a calmer situation. This can undermine the future credibility of the victim in court proceedings. The last factor that needs to be considered is the issue of privacy - the latter is also a factor with CCTV surveillance.

There is a variety of technology that can be used for crime prevention, including automatic licence plate recognition, drones, facial recognition software, robots, thermal imaging and various other forms of artificial recognition. The SAPS has access to some of this technology through partnerships with various private organisations as well as BACSA. The concern is that the data often remain in the hands of private organisations with which the SAPS has signed memoranda of understanding, but that the data are not transferred to the SAPS. With continuous budget cuts, it seems unlikely that the SAPS will soon be in a position to acquire the necessary newer technology to fight crime, and that private partnerships will have to continue to fill the gap to be the SAPS's extra "eyes and ears" with the help of technology. After Gen Fannie Masemola, the National Commissioner of the SAPS took office on 1 April 2022, he reiterated that it was important for the SAPS to find effective ways to enhance its crime prevention and combating capacity, as well as its investigative and detective capacity. This would include embracing "technology and gravitating towards a fully-digital, 4IR-compliant organisation that is technologically able to meet the policing demands of the 21st century," he said (SAPS, 2022a).

Drones are a relatively newer addition to the tools available to law enforcers, even though they are also used by criminals to commit crimes, such as to smuggle narcotics and other contraband (Geldenhuys, 2019b:16-17). Geldenhuys (2019a:10-15) discusses a variety of situations in which drones can be used in police work, including the following:

- Mapping highly frequented locations in cities, such as shopping malls and schools. In the event of an active shooter scenario, or even in disaster management, such maps can help the authorities to better understand the specific situation to familiarise themselves with the location, and help with more effective and timeous reaction, evacuation or rescue attempts.
- Drones can be used in hostage situations to keep an eye on the premises where the hostage is held, while drones with telepresence technology can be used to assist with the negotiation process limiting the physical risks hostage negotiators have to face when they are at the scene.
- Crowd monitoring is a regular occurrence in South Africa with protests often turning violent. When large crowds are monitored from the sky, it can result in faster, more targeted and efficient responses to potentially risky situations.
- In traffic law enforcement, drones can be used in various scenarios ranging from high-speed chases to providing information during major road crashes about the magnitude of such crashes and their impact on traffic flow allowing for more appropriate and effective response by emergency services. In the southwest of France authorities are using drones to catch motorists who violate traffic laws, such as illegally passing other motorists. A traffic officer will then intercept that offending motorist on the reception of the information relayed by the drone.
- Drones can provide crime scene investigators with a bird's eye view of a crime scene, optimising the possibility to collect more evidence that could have been missed from a ground-level perspective. This limits the amount of foot traffic at a crime scene which can jeopardise and destroy vital evidence required for forensic analysis to link suspects to a crime.

Drones can expand law enforcement's view to places and things that fixed CCTV cameras cannot see (Alderton, 2018).

In South Africa, drone use is strictly regulated by the South African Civil Aviation Authority in terms of remotely piloted aircraft systems. The current regulations cover the area where drones may fly and the distance between the drone and the requirements for different types of operators. Those who utilise drones for commercial and corporate purposes have to adhere to additional requirements, including that such drone operators must be duly qualified and licensed pilots (Geldenhuys, 2019a:14-15). In July 2022, the Minister of Police published the first part of draft regulations relating to the use of remotely piloted aircraft (drones) systems in the private security industry. According to De Wet (2022), the draft

regulations require anyone who uses a drone for private security work to register with the Private Security Industry Regulatory Authority (PSiRA), similar to what a company that offers armed response services would have to do. In addition, the drone operators would also have to complete standard, low-level training for security officers. Private security companies will have to use drone pilots who are commercially certified, explicitly banning the use of provisions that apply to private or recreational drone users. Labuschagne (2022) reports that the Minister of Police, Mr. Bheki Cele also announced in July 2022 that the SAPS was acquiring a fleet of more than 160 drones in three phases to be rolled out to more than 40 locations across the country. These drones would then be used by the police's provincial and district operational command centres and Safer City Projects, while specialised satellite drone units will serve several police stations. Rural safety committees at police stations will also use drones in their safety plans. During the Rural Safety Summit that was held in June 2022, it was reiterated that although the rural safety strategy was relevant, rural safety-specific resources were needed and that the use of technology for rural safety needed to be investigated (Civilian Secretariat for Police Service, 2022:5-6). The question should be asked whether additional resources for rural safety will be provided by the government, and from which department's budget, or whether it will be expected of organised agricultural organisations to contribute to the funding of technology. However, no official announcement has been made as to when these drones will be procured and the technology put to use for crime prevention.

There is a large body of research that indicates that these crime prevention measures - for example, CCTV cameras - are effective in reducing some forms of crime such as property theft. In this regard, Van der Haar, a cybersecurity expert at the University of Johannesburg was quoted as having said that -

> "… video surveillance has [been] shown to reduce crime and ensure safety in certain public areas, such as parks and metro train stations and is a deterrent to criminals. Using a video surveillance model also reduces costs for the other parties involved, especially the SAPS" (Okoye, 2019 in Geldenhuys, 2022a:19).

This, however, depends on the crime type as more serious and violent crimes, such as murder, are unlikely to be deterred due to the presence of CCTV cameras only. This begs the question as to whether the cost of such technology is justified when compared to its efficacy. Another issue to consider is whether the presence of CCTV cameras not simply displace crime from one focus area to another where there are no CCTV cameras, as Basimanyane and Gandhi (2019) rightly point out that CCTV is not the silver bullet as it works in some context and some categories of crime. Yet, there seems to be no stopping the momentum of the uptake, given popular beliefs regarding the preventative value of such 4IR technologies.

With the increased use of CCTV for facial recognition and other forms of societal control, we begin to enter murkier waters where the balance between citizens' rights to privacy and governments' need to manage or control their citizens more effectively, could be construed as "policing" law-abiding citizens. The use of CCTV footage must be balanced between actively searching for or identifying suspects and identifying body language or behaviour from individuals who are likely to perpetrate crime, to protect law-abiding citizens from such activities. Take as an example an individual who made a cash withdrawal at an ATM and the CCTV operator spots that such person is being followed by another person whose behaviour is indicative of an intended mugging or street robbery. In such a case, the CCTV operator can transmit a radio message to locally deployed police officials or security officers about the suspicious behaviour who can react to warn the individual about someone following them, thus preventing a crime.

One can also ask whether the police should be involved in the very controversial stop/search/interrogate measures in use in the United Kingdom for example, which are based on facial recognition and identification via CCTV, and which have already proven to be biased and deeply flawed. Burgess (2019) uses an example of what happened on a cold winter's day in the east of London at the end of January 2019, when a man, who had pulled his jacket over his face as he moved in the direction of the police, was pulled over to be questioned. This happened while the police, who had been surveying the street around the blue police van from which it was operating, was using facial recognition technology to look for matches on their police database. The man had apparently covered his face to avoid facial recognition technology resulting in the police taking his photo and issuing him with a £90 fine for disorderly behaviour. According to police officials at the scene, the man was stopped because he was "clearly masking" his face from the cameras which gives the police grounds to stop and verify. However, incidents such as these highlight the fact that police agencies around the world, most notoriously in China, are eager to use technology to identify individual faces within groups of people. Their reason is that it is more efficient and is aimed at keeping people safe. One can also question whether police agencies would regard the use of such technology as a method to deploy fewer police officials on the street.

The public, and more specifically human rights groups in the United Kingdom, have not taken kindly to the use of facial recognition by the police. Burgess (2019) also reports on a case against the police in South Wales, in which it was demanded that the technology should be banned. The case is argued around the breach of three laws, namely the European Convention on Human Rights, UK privacy laws and national equality laws. The human rights group Liberty argued in this case that the police's use of facial recognition has been indiscriminate, as the technology has primarily been used at large events or in areas with high footfalls and not to specifically help locate any individual suspects. It argued that there were no published criteria of who should be included in the system's watchlist of individuals as, at the time, the system was capturing thousands of faces with the hope of identifying some people in its dragnet (even though the data are not stored). The case was regarded as a defining moment in the United Kingdom's use of facial recognition, offering judges an opportunity to decide whether the current system was breaching privacy and equality laws. At the time of the court case, South Wales Police issued a statement saying that the analysis of the systems used was welcome and that a "significant" number of arrests had been made

during its trials. "The force has always been very cognisant of concerns surrounding privacy and understands that we, as the police, must be accountable and subject to the highest levels of scrutiny to ensure that we work within the law," their statement read. The police's legal case was also based on the premise that the use of facial recognition did not breach people's privacy rights as it was similar to the use of CCTV.

These are issues that will need to be addressed in depth as we move more deliberately into 4IR policing. How would we guard against, for example, the kind of citizen policing, which is practised in China? China's more than 1.4 billion people (Worldometer, 2022) are subject to facial recognition and identification to access schools, work, hospitals and other "normal" infrastructure and activities - even their own homes, which is also regarded as a convenience for not having to carry a key. However, having entire cities that are under constant surveillance simultaneously also serves a different purpose for the police as they can see who is coming and going into a building. By combining this technology with artificial intelligence (AI) with its huge national database of photos, it could identify individuals who might have slipped through the net. Four years ago, Denyer (2018) wrote that, at the time of his report, facial recognition was the new hot tech topic in China where banks, airports, hotels and even public toilets were trying to verify people's identities by analysing their faces. The pilot project, translated into "sharp eyes", intended to connect existing security cameras with private cameras and integrate these into one nationwide surveillance and data-sharing platform. For the police and security services, such a system will have the benefit of enabling them to further use facial recognition and AI to analyse and understand the mountain of incoming video evidence, track suspects, spot suspicious behaviour and even predict crime. In addition, it would assist in the coordination of emergency services and the movement of the country's citizens.

These examples make it clear that it is easy to blur the lines and balance between privacy and policing. Thus, while crime prevention is a most desirable end goal, the means to that end must be carefully considered and weighed in the contexts of policing responsibilities and citizens' rights. Educating the community through public awareness campaigns about how technology such as CCTV footage is gathered and the data are used, is of vital importance if a police agency wants the public's buy-in in the use of such technology.

It is imperative that the police look very carefully at how data is gathered, stored, utilised and managed. The Protection of Personal Information Act (POPIA) 4 of 2013, provides clear guidelines on how this needs to be done in various contexts and it is vital to ensure that we all have a very sound understanding of the Act and its applications as this new source of data is gathered and used. Jacobsberg, Schepers and Novazi (2020 in Geldenhuys, 2022b:22), explain that in terms of POPIA, "CCTV data would also fall within the scope of personal information if such a recording provides information relating to an identifiable, living, natural person and, where applicable, an identifiable juristic person". Concerning CCTV surveillance, every public or private body that collects personal information through this means must have a lawful basis for doing so. It is further important to note that -

> "POPIA permits a public body (such as the SAPS or metropolitan police department) to process personal information where it is necessary for the performance of its public law duty, and permits a private body (such as the occupier of premises or owner of property) to do so to pursue its legitimate interests. In this particular context, the CCTV data is to be used for the lawful purpose of detecting, investigating, prosecuting punishable offences, preventing crime and ensuring the safety and security of property ... When processing personal information, public and private bodies would have to justify the element of 'minimality' because surveillance measures should only be used if the purpose for which the personal information is processed could not reasonably be achieved by other means which are less intrusive to the fundamental rights and freedoms of any person. Furthermore, they should only monitor what is necessary and therefore they should not survey areas that fall outside the locations they are entitled or obliged to protect" (Jacobsberg et al., 2020).

Area 3: Predictive policing to "predict and prevent crime"

Soft and hard technologies are being used to control and prevent crime. On the soft technology side, one notes a very significant increase in the strategic use of information to prevent crime including in risk and threat assessments, fraud detection and prevention, to improve police performance of their duties through "predictive policing". Soft technologies include software programs, classification techniques and data sharing and integration to provide more holistic views on a variety of policing activities. A few examples include sex offender registers and locations, and the newer predictive software that can "predict" which offenders are likely to re-offend and when. Risk-assessment software can potentially save millions by identifying crime hotspots and criminals (individuals, syndicates or gangs) for targeted attention. Fraud-detection software is now used extensively as a detection and prevention tool in combating cybercrime.

The potential value of hotspot analysis was revealed by Edelstein, Arnott and Faull (2020:1-2) after these researchers had analysed the SAPS's point-level murder and aggravated robbery data from 2006 to 2018 for two station precincts in the Cape Town metropolitan area, by place and time, to reveal crime hotspots and time patterns. They found that accurate, point-level crime analysis and targeted hotspot policing can help to reduce murder and robbery in South African cities. Their findings also included that in the two police precincts, a large portion of murder and aggravated robbery crimes occurred in predictable places and times and that focused policing, guided by accurate crime data, could reduce harm where it is most common. These researchers suggest that police in these areas may be able to reduce crime by visiting hotspots for only 15 minutes per hour and that they may be able to reduce crime further by focusing on problems, people and behaviour in hotspots.

It is in the realm of soft technologies - software and AI - where predictive policing comes into its own. Based on various, but complementary notions about predictive policing in literature, Meijer

and Wessels (2019) developed the following definition:

> "Predictive policing is the collection and analysis of data about previous crimes for identification and statistical prediction of individuals or geospatial areas with an increased probability of criminal activity to help developing policing intervention and prevention strategies and tactics."

One example that comes to mind is criminal profiling. However, the moment one thinks about "human profiling" in any form, the issues of protection of privacy and the blurring of the boundaries between policing and civil rights, which could impair the relationship between citizens and government, become apposite.

There is evidence that predictive policing is being increasingly employed, but the jury is out on whether it is as effective as it claims. While empirical studies demonstrate some positive correlation, for example around the targeting of geographic areas and criminal and victim profiling, Meijer and Wessels (2019) warn that no significant results can be claimed. However, Edelstein, Arnott and Faull (2020:2) recommend that police should focus their attention and resources on where, when and with whom violent crimes, such as murder and robbery, are most predictable. This recommendation is based on the premise that in the case of South Africa, if the SAPS's crime data are accepted as accurate, there are hotspots, peak days and times, that careful, evidence-informed policing and violence prevention interventions, could disrupt. In its simplest form, police stations can use spreadsheets for data input to do analysis, but using specialised software designed for prediction would be a more accurate way of providing early warnings about crime. Such interventions should be followed by regular evaluations to generate new evidence of what works to tackle specific problems and crimes to improve future efficiency and the impact of targeting specific crime hotspots. It is clear that technology can be used as a policing tool to overlay data on geographical maps. Taking the provisions of POPIA into consideration, the question is whether it would be possible for different government departments to share real-time data containing personal information. An example that comes to mind is when hospitals or clinics treat individuals with gunshot or knife wounds who might have been involved in crime and who can assist the police in the investigation of violent crime.

Meijer and Wessels (2019) note that concerns surrounding predictive policing are mainly directed towards the lack of transparency of the predictive models which has consequences for both the effectiveness and accountability of these models. If police officials do not comprehend why the predictive algorithms derive certain outcomes, or how their patrol routes are configured, they might not be aware of how they should respond in certain situations or how to act, leading to the delegitimisation of actions, especially where behaviours are perceived to exacerbate bias and/or racial and social inequalities, such as what the British activists were arguing about the use of facial recognition technology in London in 2019 (refer to case example used on p58 explained in Area 2: Crime prevention) (Burgess, 2019).

Currently, there is neither the will nor the proven reason to stop the tsunami of technology. However, one of the most significant risks of the 4IR is for individuals to be drawn into the hype and excitement and, fearful of being left behind, inadvertently further propagating and entrenching stereotypes and current inequalities. Confirming this challenge, Alvero, Arthurs, Antonio, Domingue, Gebre-Medhin, Giebel and Stevens (2019:3) reiterate that AI is often described as having the ability to rapidly scale discrimination and exacerbate social inequality, which would be the case if AI systems were to be used to adjudicate or recommend admissions evaluations or decisions. One can, therefore, argue that human intervention may still be required to create the context in different scenarios.

As an example, we can mention Amazon's experimental recruitment engine, which was intended to mechanise the search for "top talent". Early in the process, the developers realised that the system displayed a distinct gender bias towards male applicants when it came to recruiting for specific technical positions. Upon further examination, it transpired that the computer models had been trained on resumés submitted to companies in the preceding ten years - a time when the industry was overwhelmingly male-dominated. Consequently, the machine learned to penalise resumés which included the word "woman". The Amazon experience was not an isolated instance of machine learning going rogue (Popenici & Kerr, 2017:2-3). In a different experiment, researchers at Carnegie Mellon University also noticed that men were more likely to be targeted for high-paying executive jobs. In another project, the system was explicitly trained to reject candidates with poor English language skills, and, over time, the algorithm taught itself to equate English-sounding names generally with acceptable qualifications for the job. Such examples demonstrate the need for absolute assurance that where the human factor is crucial, data that informs the algorithm must be both reliable and valid. This Amazon case confirms the importance of reviewing AI-driven practices especially when they are applied in settings or environments with a history of inequality. This view is supported and reiterated by Popenici and Kerr (2017) who warn in this regard that despite rapid advancements in AI, we should steer clear of solely relying on technology and that it is important to -

> "… maintain focus on the idea that humans should identify problems, critique, identify risks and ask important questions that can start from issues such as privacy, power structures and control to the requirement of nurturing creativity and leaving an open door to serendipity and unexpected paths in teaching and learning" (Popenici & Kerr, 2017).

When using AI is considered in a policing context, the research illuminates the need for policing entities to understand how and why the machine was trained and who prepared it. Before a system is adopted, one must understand the system and be able to clearly define its value and its synergy with the institutional mission and purpose. In this regard, Guariglia, a policy analyst working on issues of surveillance and policing at the local, state and federal level in the USA, warns that far too often, AI in policing is fed data collected by police, meaning that it can only predict crime based on data from neighbourhoods that police are already policing. He reminds us that crime data is not always accurate, which results in policing AI potentially missing crime that happens in other

neighbourhoods while reinforcing the idea that the neighbourhoods that are already over-policed are exactly the neighbourhoods that police are correct to direct patrols and surveillance to (Guariglia, 2022). To ensure that data from the majority of criminal incidences are considered, alternative reporting mechanisms could be developed especially for areas or neighbourhoods with a history of limited reporting to the police. In the South African context, community police forums or community safety forums that operate in specific neighbourhoods can even be used to drive the reporting of all crimes via a custom-developed crime reporting app.

In a country of acknowledged social, structural and economic inequality, the factors applied must not - intentionally or otherwise - reinforce discrimination. In South Africa with its multicultural, multilingual, multiracial and geographically dispersed population, predictive policing through the use of AI-driven software and programs will require highly sophisticated skills and capacities that are fully trained and familiar with the potential pitfalls and failures of biases.

Ultimately, we must acknowledge that we can have all the sophisticated technologies in place, but that 4IR is not the panacea to our ills. If it is not properly designed and coordinated, it will not be effective. We need to get systems synchronised to ensure optimal benefit. This might be a challenge since data generated by different government departments are not necessarily reliable or compatible. The question is whether one starts on a blank page, using only relatively new data by ignoring historical data, or considers ways to determine which historical data will be reliable to use. Another important question is about using technology in community policing: the benefits are well-known, but South Africa still lacks sufficient broadband and bandwidth to use the technology effectively, especially in rural and deep rural areas where Internet services are often not available at all. The other factor that needs to be considered is that network reliability is often questionable - which is evident by how often the public is greeted by the words "the system is off-line" when they walk into stores or government departments (Afr-IX telecom, 2019). We have many hurdles to overcome but we have to start somewhere.

Area 4: Global innovations and other matters

AI is undoubtedly a very complex and challenging matter, and yet, its massive potential for improving our policing, given its vast scope and application across so many areas of policing, cannot be denied.

Possibly one of the most pressing and obvious areas is administrative efficiencies. In recent years, it has not been uncommon to see images posted on social media showcasing administrative inefficiency, such as photos allegedly taken at the SAPS's Central Firearms Register in Pretoria, depicting the backlog in the processing of firearm licences where thousands of documents were piled on desks (Dolley, 2022). All of that could have been eliminated with an integrated system that enables application, appointment and registration in one system. Equally, it would be entirely possible to develop an integrated national system for online crime reporting that could cross-reference, pick up repeat offenders, identify crime hotspots and trace the movement of criminals (for starters). The Chicago Police Department in the USA offers the public the opportunity to report some types of crime on its online reporting platform - it should, however, be noted that these are non-emergency crimes (Chicago Police Department, n.d). In the South African set-up, the implementation of an online reporting system for some crimes risks criticism from those who do not have access to electronic devices with online connectivity (Internet access). Even though it is not regarded or promoted as a platform to report a crime, the SAPS's MySAPS App allows for online tip-offs of crime. It is not clear whether data derived from these tip-offs are being used or linked to the reporting of these crime incidents through the conventional reporting system. The app currently allows the reporting of tip-offs for crimes including corruption, fraud, human trafficking, sexual assault/abuse, theft, drugs and murder.

Various police departments and governments have also developed online reporting systems for cybercrime, such as the American Federal Bureau of Investigation's Internet Crime Complaints Centre (FBI, n.d.) or Action Fraud - Britain's national fraud and cybercrime reporting centre (Action Fraud, n.d.). There can be no doubt that AI could significantly improve the efficiency and effectiveness of the police service's administration - just for a start.

Conclusion

The advent of AI and other similar technologies has given rise to critical and problematic legal and ethical questions, including questions about safety, security, the prevention of harm and the mitigation of risks; human moral responsibility; governance, regulation, design, development, inspection, monitoring, testing and certification; democratic decision-making; and the accountability and transparency of AI and "autonomous" systems (European Group on Ethics in Science and New Technologies, 2018). To protect society against the abuse of AI and new technologies, the European Group in Science and New Technologies proposes nine ethical principles and democratic prerequisites when contemplating a new system namely: human dignity; autonomy; responsibility; justice, equality and solidarity; democracy; the rule of law and accountability; security, safety and bodily and mental integrity; data protection and privacy; and sustainability. These ethical considerations should constitute the yardstick for the design and implementation of any AI system, including when it is used in policing systems.

The latter is confirmed in the report of the Presidential Commission on the Fourth Industrial Revolution (PC4IR:26), where one of eight key lessons that South Africa should consider is a focus on regulation, ethics and cultural aspects of the internet. This is important not only to create an enabling policy environment to support private and non-governmental organisations as well as the state but to ensure the ethical and transparent use of these new technologies.

The ethical considerations proposed and highlighted by both the European Group mentioned above as well as the South African Presidential Commission are vital, but they are not the panacea that will ensure that criminals will not exploit any vulnerabilities in

4IR systems. This is especially important to take into consideration considering South Africa's recent history of State Capture as well as our high listing on the organised crime index, where we are placed fifth out of 54 African countries (ENACT, 2021). Another factor relevant to the successful uptake and implementation of technology in South Africa as a means to address policing in the modern era includes the willingness of the SAPS and metro police services as well as police officials on ground-level to identify and use relevant technology to fight crime. This is an important factor to consider as many police officials may be biased in favour of continuing to use tried, tested and conventional policing methods, even though these methods might no longer be highly relevant or effective, especially when dealing with criminals who use technology to commit a crime. This also relates to the SAPS's willingness to partner with the private sector through public-private partnerships to use technology especially given the reality that continuous budget constraints are likely to prevent the SAPS from acquiring the relevant technology directly. One can argue that the SAPS has no choice but to embrace the advantages of using 4IR in policing as many examples used in this article have revealed, but whether and when it will happen in the South African policing context are currently rhetorical questions.

List of References

Action Fraud. (N.d.). Reporting fraud and cyber crime. Available from: https://www.actionfraud.police.uk/reporting-fraud-and-cyber-crime. Accessed on: 29 July 2022.

Afr-IX telecom. (2019). The state of network reliability in Africa. 9 December. Available from: https://afr-ix.com/the-state-of-network-reliability-in-africa/. Accessed on: 29 July 2022.

Alderton, M. (2018). To the rescue! Why drones in police work are the future of crime fighting. Available from: www.autodesk.com/redshift/drones-in-police-work-future-crime-fighting. Accessed on: 15 February 2019.

Alvero, A.J., Arthurs, N., Antonio, A.L., Domingue, B.W., Gebre-Medhin, B., Giebel, S. & Stevens, M.L. (2019). AI and holistic review: informing human reading in college admissions. Available from: https://arxiv.org/ftp/arxiv/papers/1912/1912.09318.pdf

Basimanyane, D. & Gandhi, D. (2019). Striking a balance between CCTV surveillance and the digital right to privacy in South Africa - Considerations for the information regulator. *The African Policing Civilian Oversight Forum Research Paper No 27.* South Africa, Mowbray.

Burgess, M. (2019). Inside the urgent battle to stop UK police using facial recognition. *Wired.* 17 June. Available from: https://www.wired.co.uk/article/uk-police-facial-recognition. Accessed on: 28 July 2022.

BusinessTech. (2019). South African police officers to wear body cameras. 24 June. Available from: https://businesstech.co.za/news/technology/324999/south-african-police-officers-to-wear-body-cameras/. Accessed on: 27 July 2022.

BusinessTech. (2021). South African traffic officers to wear body cameras. 26 March. Available from: https://businesstech.co.za/news/technology/478897/south-african-traffic-officers-to-wear-body-cameras/. Accessed on: 27 July 2022.

Byrne, J. & Marx, G. (2011). Technological innovations in crime prevention and policing. A review of the research on implementation and impact. *Cahiers Politiestudies,* 3(20): 17-40. Antwerpen: Maklu-Uitgevers. Available from: https://www.ojp.gov/pdffiles1/nij/238011.pdf.

Centre for Risk Analysis (CRA). (2022). CRA polling: most serious problems in the country, 2021. Available from: https://twitter.com/centre_risk/status/1553627892638154752. Accessed on: 4 October 2022.

Chicago Police Department. (N.d). Welcome to the Chicago Police Department's online reporting system. Available from: https://home.chicagopolice.org/services/online-crime-reporting/. Accessed on: 29 July 2022.

Civilian Secretariat for Police Service. (2022). Commission 1: Status of the implementation of the Rural Safety Strategy. Presentation to the Minister of Police. Rural Safety Summit. 28 June. Parys, Free State - Available from: https://www.saps.gov.za/resource_centre/nscs/Commission1.pdf Accessed on: 7 October 2022.

Cowper-Johnson. G. (2014). Body-worn cameras: the future for law enforcement. *Servamus Community-based Safety and Security Magazine,* 107(6): 18-21. June. Pretoria: SARP Publishers.

Curran, C. (2022). Details of changes to the Domestic Violence Amendment Act. Miller Bosman Le Roux. 24 May. Available from: https://www.mblh.co.za/NewsResources/NewsArticle.aspx?ArticleID=4850#_msocom_1. Accessed on: 5 October 2022.

Denyer, S. (2018). Beijing bets on facial recognition in a big drive for total surveillance. *The Washington Post.* 7 January. Available from: https://www.washingtonpost.com/news/world/wp/2018/01/07/feature/in-china-facial-recognition-is-sharp-end-of-a-drive-for-total-surveillance/?itid=lk_inline_manual_10. Accessed on: 28 July 2022.

De Wet, P. (2022). SA's security companies are getting special rules for using drones, with 6 months to comply. *Business Insider.* 6 July. Available from: https://www.businessinsider.co.za/drone-regulations-for-security-companies-require-paperwork-and-pilot-training-2022-7. Accessed on: 27 July 2022.

Dolley, C. (2022). In SAPS Veritas - how the "dangerous" police firearms control offices symbolise a service in crisis. *Daily Maverick.* 28 February. Available from: https://www.dailymaverick.co.za/article/2022-02-28-in-saps-veritas-how-the-dangerous-police-firearms-control-offices-symbolise-a-service-in-crisis/. Accessed on: 29 July 2022.

Edelstein, I., Arnott, R. & Faull, A. (2020). Hotspot policing for murder and robbery. A Cape Town case study. Institute for Security Studies. *South African Report 34.* February.

ENACT. (2021). African organised crime index 2021. Evolution of crime in a Covid world. A comparative analysis of organised crime in Africa, 2019-2021. Available from: https://africa.ocindex.net/COUNTRY/SOUTH_AFRICA. Accessed on: 4 October 2022.

Federal Bureau of Investigation (FBI). (N.d.). Internet Crime Complaint Center IC3. Available from: https://www.ic3.gov/. Accessed on: 29 July 2022.

Geldenhuys, K. (2019a). Drones: allowing a bird's eye view on crime. *Servamus Community-based Safety and Security Magazine,* 112(4): 10-15. April. Pretoria: SARP Publishers.

Geldenhuys, K. (2019b). Drones: a threat from above. When criminals use drones to commit crime. *Servamus Community-based Safety and Security Magazine,* 112(4): 16-18. April. Pretoria: SARP Publishers.

Geldenhuys, K. (2022a). Will CCTV help to create safer places? *Servamus Community-based Safety and Security Magazine,* 115(3): 18-21. March. Pretoria: SARP Publishers.

Geldenhuys, K. (2022b). CCTV surveillance systems: do they infringe on our privacy? *Servamus Community-based Safety and Security Magazine,* 115(3): 22-24. March. Pretoria: SARP Publishers.

Guariglia, M. (2022). Police use of Artificial Intelligence: 2021 in review. Electronic Frontier Foundation. 1 January. Available from:

https://www.eff.org/deeplinks/2021/12/police-use-artificial-intelligence-2021-review. Accessed on: 29 July 2022.

Jacobsberg, I., Schepers, M. & Novazi, Z. (2020). South Africa: Every step you take, we'll be watching you - CCTV and data privacy. Available from: www.mondaq.com/southafrica/privacy-protection/976580/every step you take we39ll be watching you cctv and data privacy. Accessed on: 18 January 2022. In Geldenhuys, K. (2022b). CCTV surveillance systems: do they infringe on our privacy? *Servamus Community-based Safety and Security Magazine,* 115(3): 22-24. March. Pretoria: SARP Publishers.

Labuschagne, H. (2022). Police drones coming to South Africa. *My Broadband.* 4 July. Available from: https://mybroadband.co.za/news/security/451138-police-drones-coming-to-south-africa.html. Accessed on: 27 July 2022.

Lum, C., Koper, C.S., Wilson, D.B., Stoltz, M., Goodier, M., Eggins, E., Higginson, A. & Mazerolle, L. (2020). Body-worn cameras' effects on police officers and citizen behavior: A systematic review. *Campbell Systematic Review,* 16(3). September. Available from: https://onlinelibrary.wiley.com/doi/full/10.1002/cl2.1112

Meijer, A. & Wessels, M. (2019). Predictive policing: review of benefits and drawbacks. *International Journal of Public Administration,* 42(12): 1031-1039. Available from: DOI: 10.1080/01900692.2019.1575664

Miller, L., Toliver, J. & Police Executive Research Forum. (2014). *Implementing a body-worn camera program: Recommendations and lessons learned.* Washington, DC: Office of Community Oriented Policing Services. Available from: https://www.policeforum.org/assets/docs/Free_Online_Documents/Technology/implementing%20a%20body-worn%20camera%20program.pdf Accessed on: 5 October 2022.

National Institute of Justice (NIJ). (2022). Research on body-worn cameras and law enforcement. Available from: https://nij.ojp.gov/topics/articles/research-body-worn-cameras-and-law-enforcement#note3. Accessed on: 5 October 2022.

National Planning Commission (NPC). (2012). *National Development Plan Vision 2030. Our future make it work.* The Presidency: Republic of South Africa.

Okoye, C.J. (2019). "CCTV cameras pit security against privacy concerns." *The Citizen.* 9 March. Available from: www.citizen.co.za/news/2097937/ cctv cameras pit security against privacy concerns. Accessed on: 20 January 2022.

Perkins, G. (2018). Lights, camera, action! Body-worn cameras: challenges and opportunities in police research. *Policing: A Journal of Policy and Practice,* 12(1): 120-124. Available from: https://doi.org/10.1093/police/pax002. Accessed on: 27 July 2022.

Popenici, S.A.D. & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning,* 12(22): Available from: https://doi.org/10.1186/s41039-017-0062-8.

Presidential Commission on the Fourth Industrial Revolution (PC4IR). (2020). Summary Report and Recommendations. *Government Gazette* No. 43834. 23 October.

Republic of South Africa. (1996). Constitution of the Republic of South Africa Act 7. Pretoria: Government Printers.

Republic of South Africa. (1998). Domestic Violence Act 116. Pretoria: Government Printers.

Republic of South Africa. (2021). Domestic Violence Amendment Act 12. Pretoria: Government Printers.

Safer Spaces. (N.d.). Closed Circuit Television (CCTV) and crime prevention. Available from: www.saferspaces.org.za/understand/entry/closed circuit television cctv and crime prevention. Accessed on: 19 January 2022.

South African Police Service. (N.d.). MySAPS mobile application frequently asked question. Available from: https://www.saps.gov.za/services/mysaps_app.php. Accessed on: 5 October 2022.

South African Police Service. (2019). SAPS launches 2019/2020 Safer Festive Season operations in Umlazi, 25 Oct. Available from: https://www.gov.za/speeches/saps-launches-20192020-safer-festive-season-operations-umlazi-25-oct-24-oct-2019-0000. Accessed on: 5 October 2022.

South African Police Service. (2022). Media briefing following the appointment and announcement of the new National Commissioner of the South African Police Service, General Sehlahle Fannie Masemola. 1 April. - Available from: https://www.saps.gov.za/newsroom/msspeechdetail.php?nid=39063. Accessed on: 5 October 2022.

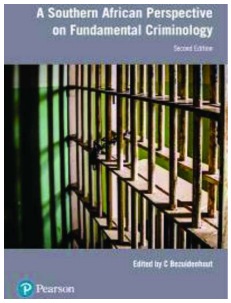
World Economic Forum. (2019). *Fourth Industrial Revolution.* Available from: https://www.weforum.org/focus/fourth-industrial-revolution.

Worldometer. (2022). China population. Available from: https://www.worldometers.info/world-population/china-population/. Accessed on: 28 July 2022.

BOOK REVIEW

Dr. Alice Maree
Criminologist, Lecturer, Incident and Analytics Manager at CITASA (Cash-in-transit Association of South Africa)

A Southern African Perspective on Fundamental Criminology



Author: Christiaan Bezuidenhout, ed.
Published: 2020, Pearson.
ISBN: 978-1-485-715504 (print)
ISBN: 978-1-485-5716822 (epdf)

Criminology is the scientific study of crime. Crime as a phenomenon is central in the Southern African context. To use two examples: in July 2021 South Africa was hit by riots and in July 2022, South Africans and foreigners were shocked by mass shootings and killings at taverns in different provinces. At a Soweto Township tavern, 16 people were shot and killed by a group of gunmen.

Different people from diverse levels of society and professions speculate about the nature and extent of crime, the causes of crime, the profile and characteristics of offenders and the reasons for their misbehaviour, while victims are suffering losses and desperately requesting protection. The focus in Southern Africa is not only on violent crimes but also on newer crimes such as cybercrimes and identifying the way forward to bring an end to crime in the Southern African setting.

The book, **A South African Perspective on Fundamental Criminology**, is a collective work of chapters authored by respected researchers in criminology and associated fields, edited by Prof. Christiaan Bezuidenhout. This book can be described as a collection of different crime-related themes on fundamental criminology, theoretical approaches and explanations as well as crime prevention and specific crime types. It offers a sound foundation on crime and the characteristics of criminology as an independent discipline. It paves the way to the measuring of crime, criminological theoretical explanations and causes of crime and also includes detailed discussions on specific crimes, offender - and victim typologies and concludes with the topical chapter on African Criminology.

The chapters are arranged in three sections (A, B and C) namely -

- An introduction to criminology in South Africa;
- An overview of the most common crimes in South Africa; and
- Criminology in practice and recent developments.

This division makes the book reader-friendly and useful to various professions.

Those who want to know about the fundamentals of the nature and extent of crime will be able to obtain the necessary information from Section A, without reading close to 670 pages. Those who have an interest in certain crime types will obtain information on recent research findings on various crimes in Section B, while practitioners and those who follow or want to follow criminology as a career will benefit most from Section C.

The reviewer, currently employed as an Incident and Analytics Manager at the Cash-in-Transit Association of South Africa (CITASA), and previously employed at the South African Banking Risk Information Centre (SABRIC) reviewed this book for its theoretical value and the practical application of crimes, for example, violent crimes such as cash-in-transit robbery and economic crimes. Chapter 7, entitled "Crimes of a violent nature" is extensive, although mention is only made of the different specific crime types discussed in the chapter under the heading, Study Objectives. Had the title of the chapter reflected the specific crime types, it would have assisted the reader who is looking for information on a specific crime. For example, "Crimes of a violent nature: Murder, assault, robbery, and rape." This change might inspire the reader who is looking for contemporary information on a specific crime type to read this chapter.

Chapter 9 deals with "Economically motivated crimes: an overview" and serves as a good introduction to copper cable theft, Ponzi and Pyramid schemes, cybercrime and organised crime. The same comment made about Chapter 7 is also applicable to this chapter. These are topical crimes in South Africa influencing all levels of society. This chapter also fulfils the role of creating awareness and empowering any reader.

Violence against women is a concerning issue, especially considering the gang rape of young women in Krugersdorp in July 2022. Chapter 7 establishes a good balance between women as victims but also as offenders with specific reference to rape. The focus of Chapter 8 is on sexual crimes while Chapter 10 focuses on the female criminal. Political crimes (Chapter 11) regarding corruption and other examples not only focus on the South African perspective but also from an international perspective. Debates on consensual and moral transgressions are discussed in Chapter 12 which summarises key findings for and against decriminalisation and explains the principles behind so-called victimless crimes. This chapter is not only useful for criminologists but also for focus groups and non-governmental organisations (NGOs) addressing the fields of pornography, abortion, sex work and substance abuse. The ultimate purpose when studying crime is to control and prevent crime. Initiatives as explained in Chapter 13 are theoretically based and address different fields of expertise such as criminology, law enforcement and architecture, to name a few.

The application of criminology by crime analysts and experts contributes further to the fight against crime through the use of technology and analytics. Therefore, Chapter 14, with the focus on crime mapping, the identification of hotspots, geographic profiling and crime mapping technology is valuable and will open the door to future job creation and technological developments. Knowing crime and applying technology and analytics go hand in hand as theoretical knowledge leads to a better understanding and application. Chapters 15 and 16, addressing the valuable contributions of forensic criminologists and experts, although voluntarily or at the request of the criminal justice system, highlight the need for the professionalisation of criminology in a Southern African context. The introduction and unfolding of forensic criminology open another field of specialisation. This book ends on a positive note, highlighting the development and future of criminology with the chapter on African Criminology, an answer to the pledge by many Southern African scholars in the 21st century.

The index is useful and most concepts are listed. Referencing is according to the Harvard method of referencing. The inclusion of newspaper article examples emphasises the practical application of criminology as a science.

Recommendation

A South African Perspective on Fundamental Criminology is highly recommended to a wide spectrum of readers, from students to professionals. It is a comprehensive and affordable textbook for scholars of criminology and other related sub-disciplines. It has the potential to be prescribed from the undergraduate to the postgraduate level. Practitioners and academia will also find the book a necessity in their daily dealing with the crime phenomenon. It will also make good reading material for laypersons with an interest in crime, especially the sections dealing with offender typologies and specific crimes.