Learning to Forget: A Critical Review of Knowledge Management and Knowledge Exchange Initiatives in the Detective Service

Jacob Tseko Mofokeng[*]

Department of Safety and Security Management, Faculty of Humanities, Tshwane University of Technology, South Africa

Abstract: KM and KE have recently become commonly used terms in law enforcement agencies. However, implementing KM initiatives successfully in the SAPS still poses a challenge. This paper reviews factors that influence the success or failure of KM and KE initiatives as manifested in the SAPS, with emphasis on the DS. Both KM and KE initiatives are of critical importance to solve criminal cases. The consulted literature review highlighted various dimensions that are critically influential in the implementation of KM and KE in the DS. These are the negligence of the FP, during which the building blocks for a successful schooling career are laid; and once detectives are recruited, the lack of a mentorship programme and training curriculum, which lack coherence, connection, as well as depth of understanding that accompanies systematic critical thinking.

Keywords: Curriculum, detective, knowledge exchange, knowledge management, mentorship.

INTRODUCTION

Learning centres across the globe do not realise that they lack the substantive concept of CT, believe that they sufficiently understand it, and assume that they are already teaching it to learners (Baker and Wick, 2019; Eigenauer, 2019; Kasemsap, 2017; Wilson *et al*., 2015). Lectures notes memorisation, and (largely ineffective) short-term study habits are still the norm in teaching and learning today, with the horrific ramifications of mass production of "knowledge-gap in practice graduates" (Flores *et al*., 2010; Heijltjes, Gog and Paas, 2014). Before the democratic dispensation, the SAPS recruited personnel with Grade 12, and years earlier, recruits without even a senior certificate were accepted. Some of these recruits are still active in the DS. Altbeker (1998) argues that detectives recruited into the SAP CID during the 1970s and 1980s were required to demonstrate their potential to become solid detectives as the standards of entry were high. However, Schönteich (in Kane-Berman, 2002) asserts that many would agree that the general quality of the police's detective work declined in the post-1994 period and that this was partly to be expected. Before 1994, the SAP used authoritarian policing methods and tough law enforcement strategies to combat crime. Many SAP detectives were more concerned about getting crime suspects convicted than upholding the law and conducting investigations in a legally correct manner.

The advent of the democratic dispensation brought the concept of "professionalism" that has emerged as a necessity in law enforcement agencies, to structure how these entities conduct their business (Faull and Rose, 2012:1). From research by De Vries and Steyn (2011), Faull and Rose (2012), and Mofokeng (2018), professionalism has emerged as an important factor in investigations of the public sector, academia, CJS, policing, and the field of criminology. Professionalism means many things to many people. In real estate, Filstad and Gottschalk (2009:89) postulate that professionalism "includes honesty and knowledge in addition to agents simply being professional in their interactions with their clients". For Faull and Rose (2012:1), professional status implies "expertise". It is not in the scope of this paper to discuss police professionalism; however, KM and KE activities play an important role in improving organisational competitiveness, performance, and processes. The spin-off for the consideration of "professionalism" as an OC is simply being an entity that values its interactions with its clients. An investigation is a police activity that is concerned with (1) the apprehension of criminals by gathering evidence that will lead to their arrest and (2) the collection and presentation of evidence and testimony to obtain convictions. Investigations are normally divided into two major areas of activity: (1) the preliminary investigation, normally conducted by officers in the uniform patrol division, and (2) the follow-up investigation, normally conducted by officers formally trained in investigative techniques, who are often part of a detective bureau (Mofokeng, 2015; 2018). Knowledge work in police investigations is based on a variety of information sources, such as incident reports, crime scene investigator reports, witness statements, suspect statements, tip lines, crime scene photographs and drawings, fingerprints,

*Address correspondence to this author at the Department of Safety and Security Management, Faculty of Humanities, Tshwane University of Technology, South Africa; E-mail: mofokengjt@tut.ac.za

DNA, physical evidence (ballistics, tool marks, blood spatter), informants, and property tracking (Mofokeng, 2018).

General detectives must make life or death decisions and conduct investigations into criminal acts much like physicians investigating what is ailing a patient (Jackson in Bauerlein and Bellow, 2015). Detectives interact with suspects, witnesses, and/or victims every day. They respond to extremely complex situations that often involve traumatised or angry people. To do so effectively requires professional conduct, top-notch CT, and reflection and writing skills (Mofokeng, 2010; 2012a-d; 2018), which are rarely focused on sufficiently as part of teaching and learning in the FP (Macupe, 2019) and later, in law enforcement in-service training, mentorship programmes, KM, KE, and OC (Mofokeng, 2010; Mofokeng and De Vries, 2012, 2016). MWCD (2002:176) defines "professionalism" as "the conduct, aims, or qualities that characterise or mark a profession or a professional person"; and it defines a "profession" as "a calling requiring specialised knowledge and often long and intensive academic preparation". These definitions imply that professionalism encompasses several different attributes, and, together, these attributes identify and define a professional. In the context of the policing profession, there is a serious but largely unwritten understanding, both in the profession and among the public at large, that police officials as public servants must hold themselves to high ethical and competency standards (Mofokeng, 2010; De Vries and Steyn, 2011). In essence, the basics of professionalism are quite easy to articulate. In return for professional autonomy, self-regulation, and recognition of their unique place in society, the public demands of police accountability, ethical standards, and unquestionable quality of delivering services. This calls for an OC that embraces professional knowledge and competence through effective implementation of KM, KE, and CT skills.

Lack thereof can be characterised as a knowledge gap in practice, which brought a great deal of criticism towards the policing profession (Mofokeng, 2010; Mofokeng and De Vries, 2012), as well as to other professions such as teaching (Slade *et al*., 2019; Woolfolk, 2019), where incumbents are often shocked when they encounter the reality and challenges of applying their knowledge in practice. Therefore, individuals assigned to conduct investigative activities must collectively possess "professional proficiency" for the tasks required. The utilisation of these concepts, to a large extent, places upon the DS the responsibility to ensure that investigations are conducted by personnel who collectively have the knowledge and skills required to perform these investigative activities. This paper reviews factors that influence the success or failure of KM and KE initiatives as manifested in the SAPS, with emphasis on the DS. The literature review provides a summary of previous studies in the field of KOs, KM, and KE. While the transformation towards increasingly knowledge-intense work, especially in highly developed countries, is a development that is no longer questioned, implementing KM initiatives successfully in the SAPS still poses a challenge. The factors leading to successful or unsuccessful implementation of these concepts are not obvious in public sector organisations such as the SAPS that strive to improve the KM approach. One reason for the lack of transparency, especially in the policing profession, is that the SAPS is a paramilitary organisation. Processes are highly regulated by legislative frameworks, and innovation still needs to find its way into decision-making processes and policymaking regimes (Mofokeng, 2012a; 2012d; 2018).

However, disciplines as diverse as psychology, philosophy, sociology, ethics, economy, business administration, management science, computer science, and information systems concern themselves with KM in general and with its success in particular (Earl, 2001; Begona, 2008; Liebowitz, 1999). Along with this diversity, there are also a fair number of publications that attempt to pinpoint the factors of KM initiatives that predominantly contribute to their success. The third section of this paper discusses the research design utilised. Thereafter, the data analysis and findings are presented. The final part presents suggestions for the implementation of KM and KE in the SAPS.

LITERATURE REVIEW

OC is believed to be the most significant factor in effective KM (Attar, 2020; Prystupa-Rządca, 2017). An effective OC can provide support and incentives, as well as encourage knowledge-related activities by creating suitable environments for KE and accessibility (Janz and Prasarnphanich, 2003:351). Ngoc (in Yusuf and Wanjau, 2014:47) argues that an organisation must have a strong culture that values trust, openness, and sociability to stimulate people's interactions and KE. An organisation becomes known for its participatory management style, which translates into productivity, and high performance becomes second

nature for its employees. The relationship between the management style and the level of moral development in an organisation is therefore essential to form high-performing teams (Abbas and Asghar, 2010; Belrhiti *et al.*, 2020; Morgeson *et al.* 2010; Stepsis, 1998; Tsai, 2011; Yan, 2016). According to Stepsis (1998:9), the level of moral development operating in a system determines the basis according to which its human interactions will be regulated whether, for example, for material gain, the maintenance and enhancement of the organisation, or respect for individual needs and rights that receive priority in the decision-making process. The level of moral development determines how individuals relate to one another and the organisation around issues such as loyalty, competition versus cooperation, success, and productivity (Stepsis, 1998:9). A high-performing culture is defined by a focus on generating and accomplishing objectives, as well as a strong results orientation and employee interdependence (Gudnason and Finnsson, 2017; Janicijevic, 2012).

An effective knowledge culture encourages innovation; from the initial creative idea to the experimentation and sharing of insights with others. There is a need to encourage flexible and adaptable behaviour. Routines and processes need to be flexible as it encourages people to look for opportunities to work towards creative alternatives (Debowski in Yusuf and Wanjau, 2014:47). The radically decentralised model of authority at the heart of self-managing organisations leads to solutions to problems that are based on peer-based accountability and rewarding, the transparency of key information, and bottom-up emergent processes where employees have the authority and responsibility to identify necessary tasks and ensure that they are completed. It is concluded that the self-managing organisation is a novel form of organising that can better explain certain real-life organisational outliers than the existing paradigms of organising (Martela, 2019:1). Gold *et al.* (2001:185) concur that a team-based, non-hierarchical, self-organising organisational structure is the most effective for KE. In the same vein, Claver-Cortés *et al.* (2007) point out the important role of flexible organisational structures in successful KM implementation. Claver-Cortés *et al.* (2007:171) further suggest that flexible structures help to achieve decentralisation of the decision-making process by facilitating the communication process at all organisational levels. Research indicates that mistakes in detectives' decision-making are likely the most common type of error in criminal investigations that may have been avoided if the available knowledge had been applied more systematically (Carson, 2013; Fahsing, 2016; Fahsing and Ask, 2013, 2016, 2018; Kassin *et al.*, 2013; Stelfox and Pease, 2005). Fahsing and Ask (2018) point out that biased decision-making in criminal investigations can impede or arrest the progress of justice.

Knowledge

Knowledge is the most important source in successful police investigations (Ashby and Longley, 2005; Baumard, 1999; Keikha, 2015; Luen and Al-Hawamdeh, 2001). Knowledge is often referred to as information combined with interpretation, reflection, and context. In cybernetics, knowledge is defined as a reducer of complexity or relation to predict and select actions that are necessary to establish a competitive advantage for organisational survival; that is, knowledge is the capability to draw distinctions in a domain of actions (Laise *et al.*, 2005). In the same vein, Salet (2017:137) points out that, firstly, knowledge and experience gained by investigative officers during previous investigations, training, and other moments in their career are important for the investigation process. For example, the routines used at the start of the investigation are largely based on knowledge and experience gained from previous police inquiries. "Such knowledge and experience can both promote and hamper the consideration of alternative directions of inquiry or scenarios, the consideration of a deviant (re)construction of the crime or the consideration of alternative actions in the inquiry. It can also hamper reflection on routines. In addition to their knowledge and experience, team members' expectations are also relevant to understanding the investigation process" (Salet, 2017:137).

However, Westera *et al.* (2016) argue that detectives are trained, the work is not prescriptive, thus central to any training is encouraging autonomy and a flexible approach that enables detectives to respond to the wide variety of challenging scenarios they are likely to come across in the field. In this regard, the management of detectives should include consideration of how to expose them to a variety of experiences. Not only does this involve time in the role, or different aspects of detective work, but also exposing detectives to increasingly complex, but achievable, challenges that are ideal for learning and expert feedback. Tacit knowledge was first introduced by Polanyi (1966), who defines it as the knowledge that

is not formally taught and often not explicable in words. Polanyi (1966:4) states that "humans can know more than they can tell". This notion is also expressed by various other authors (Johannessen and Olsen, 2011; MacFarlene, 2013; Rebernick and Širec, 2007). Polanyi (1966) differentiates between, at least for analytic purposes, tacit and explicit knowledge (Baumard, 1999; Dean *et al*., 2006). Polanyi (1966:6) postulates that "I am looking at Gestalt … as the outcome of an active shaping of experience performed in the pursuit of knowledge". Insch, McIntyre and Dawley (2008:564) provide a list of components of tacit knowledge, namely "inarticulable," "action" that leads to tacit knowing, "skills," "knowledge of experience", "abstract", and "practical experience".

Salet (2017:136) points out that "knowledge and experience, expertise, expectations, 'gut feeling' or 'common sense' and the nature of the evidence (team members attach more weight to forensic evidence, for example)" performed in the pursuit of knowledge form high-performing teams. Explicit knowledge can be defined as "knowledge in the head" (Norman, 1988:17) and is regarded as expressive knowledge. By this, the theorists mean mental models. Knowing and the mind are reduced to representative views of things. Some use the notion of "script"; others refer to the brain. It is indeterminate what "symbolically" means. Expressive knowledge can be encoded; it can therefore be written and easily transmitted. Law enforcement agencies need to manage both their explicit and tacit knowledge. Knowledge and information exist in various forms in police organisations; ranging from machine utilisation to the personal experiences of the officers (Dean *et al*., 2006; Gottschalk and Holgersson, 2006; Taylor, *et al*. 2013). A study by Westera *et al*. (2016) suggests that knowledge of the law is a core requirement that needs to be addressed alongside knowledge of investigative methods. Developing investigative knowledge is likely to incorporate learning about the tasks detectives conduct (e.g. interviewing, crime scene examination) and how those tasks are conducted effectively through the application of the characteristics identified in the present study (e.g. effective communication, thoroughness, management). This knowledge is the foundation for skill development and is likely to include underlying principles and processes involved. Explicit knowledge refers to principles, general police orders, and standard operating procedures, which are documented and verified for police officers (Dean *et al*., 2006; Glomseth, Gottschalk and Solli-Sæther, 2007). Tacit knowledge includes the ability, experience, and

skills of police officers. Tacit knowledge is dynamic and changes rapidly (Gottschalk, 2006). In police tasks, both tacit and explicit knowledge are considered in the field of KM (Luen and Al-Hawamdeh, 2001).

KO

Organisations increasingly depend on the contributions of KWs. KWs are people with high levels of expertise, education, and experience, whose primary role involves the creation, distribution, and/or application of knowledge (Jain, 2011). Education and training is a solid foundation for the making of an expert detective (Fahsing, 2016). In the context of this paper, these are considered to be senior investigating officers. In this knowledge era, all organisations are struggling to manage the collective knowledge they produce and use to improve productivity and performance in the organisation (Jain, 2011; Mofokeng, 2010, 2012a; Mofokeng and De Vries, 2012, 2016). There is a close correlation between personal KM and organisational KM. "If individuals become productive by managing personal knowledge, the organisation becomes productive" (Jain, 2011:1). Bennet (in Jain, 2011:1) defines KOs as complex adaptive systems that are composed of a large number of self-organising components that seek to maximise their own goals but operate according to rules in the context of relationships with other components. In an intelligent and complex adaptive system, the agents are people (Hazy, Goldstein, and Lichtenstein, 2007; Goldstein, 2007).

The systems (organisations) are frequently composed of hierarchical levels of self-organising agents (or KWs), which can take the form of teams, divisions, or other structures that have common bonds. Thus, while the components (KWs) are self-organising, they are not independent of the system that comprises them (the professional organisation). In the KO, innovation, and creativity are critically important. Filstad and Gottschalk (2009) postulate that creativity provides a view of organising for innovation by focusing on how individuals and teams come to shape knowledge in unique ways. Innovation consists of the creative generation of a new idea and the implementation of the idea into a valuable product. Creativity, feeds innovation and is particularly critical in complex and interdependent work. Taylor and Greve (2006) argue that creativity can be viewed as the first stage of the overall innovation process. Innovative solutions in a KO arise from diverse knowledge, processes that allow creativity, and tasks directed at creative solutions.

Creativity requires the application of deep knowledge because KWs must understand the knowledge domain to push its boundaries. Team creativity likewise relies on tapping into the diverse knowledge of team members (Taylor and Greve, 2006).

KM and KE

KM

KM as a field of study is concerned with simplifying and improving the process of sharing, distributing, creating, capturing, and understanding knowledge. KM therefore has direct relevance to policing (Gottschalk, 2006; Intezari *et al*., 2017). It is argued that knowledge is the most important resource in police investigations, and several police researchers make the case that successful investigation depends on knowledge availability (Hughes and Jackson, 2004; Luen and Al-Hawamdeh, 2001; Mofokeng, 2010, 2012c; Mofokeng and De Vries, 2016). Furthermore, Chen *et al*. (2003) and Mofokeng (2012a; 2012b) point out that KM in the knowledge-intensive and time-critical work of police investigations presents a real challenge to investigation managers. Leadership is considered one of the most influential factors in KM implementation in the SAPS context (Mofokeng, 2010; Mofokeng and De Vries, 2016). Every Detective Commander needs to know how a productive environment for investigators working on crime, based on an effective investigative KM system, may best be provided. KM is seen as a strategic tool to manage employees' knowledge (Mofokeng, 2010, 2012d; Mofokeng and De Vries, 2016), but it does not receive much attention, which is surprising given the fact that personnel are the most critical assets of organisations (Mofokeng, 2012a; Mofokeng and De Vries, 2016). Personal success is the foundation of organisational success, while personal issues are often linked to reduced productivity at work (Jain, 2011).

KE

Tacit knowledge, in the scope of KM in police work, is primarily in the area of creating and sharing knowledge and information (Dean *et al*., 2006). The conversions between tacit and explicit knowledge are the essence of knowledge creation, and Nonaka and Takeuchi (in Dean *et al*., 2006) argue that they are not separate but mutually complementary entities. Nonaka and Takeuchi (in Dean *et al*., 2006) state four types of knowledge transmission based on the assumption that knowledge is created through continuous interaction between tacit and explicit knowledge: (i) socialisation: from tacit to tacit knowledge as the process of sharing experience as on-the-job training, (ii) externalisation: from tacit to explicit knowledge requires the articulation of tacit knowledge and its translation into forms that can be understood by others, (iii) internalisation: from explicit to tacit knowledge means the conversion of newly created explicit knowledge into the own tacit knowledge of the individual, and (iv) combination: from explicit to explicit knowledge involves the conversion of explicit knowledge into more complex sets of explicit knowledge. The two main issues to be addressed here are the willingness and ability of police officers to create and share knowledge. According to Luen and Al-Hawamdeh (2001), the more difficult issue to tackle is that of willingness. There is a need for a culture of openness, collaboration, and sharing among police officers. This requires that police officers recognise the importance of collaboration and sharing knowledge with others and that this responsibility must be attached to all employees in the police force, as knowledge is generated in all phases of work and anchored in social communities in the police force.

METHODS

A meta-analysis is considered to elaborate on the findings of a study. In the meta-analysis, the main factors that influence the success or failure of KM and KE initiatives in the SAPS were identified through systematically reviewing and synthesising relevant published research. Meta-analysis is a methodology employed to synthesise the outcomes of various studies related to the same topic or outcome measured (Hunter *et al*., 1982). It is typically conducted as a quantitative procedure geared toward the comparison of effect sizes across a variety of research studies. A qualitative meta-analysis also referred to as meta-synthesis, follows the same replicable procedures of a quantitative meta-analysis; however, it is interpretive rather than aggregative (Paterson *et al*., 2001). Different academic databases were therefore searched to identify relevant research on the main factors that influence the success or failure of KM and KE initiatives. The results were further categorised based on the factors that affect KM application in law enforcement and specifically in the detective environment (Osterwalder and Pigneur, 2013). Several steps were followed in the process of synthesising the facts presented in the various studies. Firstly, the main factors used in the studies were extracted. Secondly, the factors were pre-sorted based on their titles only. As a next step, the factor descriptions provided in this paper were reviewed and concepts were re-sorted.

Finally, discussions are provided and recommendations are proposed.

RESULTS AND DISCUSSIONS

The objective of this paper was to review factors that influence the success or failure of KM and KE initiatives as manifested in the SAPS, and then to draw parallels with the DS. Extracting several publications' proposed success factors, one can identify various success factors. For the purposes of this paper, the following are considered the contributing factors to the failure of effective implementation of KE and KM in the DS and which affect CT skills, namely KE, inadequate mentorship, and flawed FP and basic training. An interpretation of each factor is provided as follows.

KE

Research indicates that KE is considered a critical component to the success of KM (Seba *et al*., 2012). KE is the basis for creating new ideas and the development of new opportunities (Arthur and Huntley, 2005). Research further shows that KE has a significant impact on police investigations (Glomseth *et al*., 2007). Knowledge transfer occurs at different levels in a police organisation: transfer of knowledge between individuals, from individuals to explicit sources, individuals to groups, between groups, among groups, and form groups to the organisation (Arthur and Huntley, 2005). The willingness of employees to share knowledge is influenced by various organisational factors (Mofokeng, 2015; Mofokeng and De Vries, 2012, 2016). This is what is lacking in the SAPS. Before the DS begins facilitating any KE activities, it must have a good sense of the supply of and demand for knowledge. Detective Commanders should be knowledgeable and competent to understand the dynamics in the detective environment and be able to act as "knowledge brokers".

Detective Commanders should facilitate and promote networks and partnerships between KWs (experienced detectives) and junior detectives, which can help reveal "who needs to know what" and "who knows what". That information would ideally be collected by any mentor identified by the Detective Commander and should share such with the broker to implement just-in-time knowledge-sharing activities. The DS should create a platform on which seekers (those lacking experience) and providers (experienced detectives) can identify and choose each other directly. Once junior detectives are enlisted at station level, an

orientation programme would be an ideal start, where preparatory meetings should identify concrete challenges to the inexperienced members' "requesting side" and how this lack of investigation skills can most usefully be addressed by the "providing side", namely the experienced detectives, in consideration of the current workload. The orientation or the meeting can be facilitated by either an identified mentor or by the Detective Commander, but some detectives may instead choose to work together directly, although this cannot be monitored directly by the Detective Commander.

Despite reforms made in the DS, there are still challenges in decreasing the disparities between high- and low-performing detectives. Commercial crime detectives often find it productive to collaborate with others, including public prosecutors, and this reality is yet to be realised in the general detective environment (Mofokeng, 2010; 2018). The implications are KS across commercial crime detectives and public prosecutors, which provides a powerful way to scale up locally successful investigations and reforms, and strengthening prosecutions. The key mechanisms for such KS are an adaptation to a changing landscape in the criminal environment and replication of success factors to other future investigation processes. The findings of the studies conducted by Mofokeng (2010; 2012) and Mofokeng and De Vries (2012; 2016) paint a bleak picture regarding KM and KE activities among detectives. The recent violence in South Africa also highlighted the lack of KE in the SAPS. The headline in the *City Press* of 8 September 2019, "Xenophobia: Police have no plan", says it all. In this article, Mashego and Tau (2019) highlighted that the failure of crime intelligence left the police in a vacuum, with no clear direction on how to respond to the rising crisis. "It appears that there is a leadership vacuum concerning intelligence-gathering … Our intelligence is dead" (senior police officer cited in Mashego and Tau, 2019:1).

Mofokeng and De Vries' (2012) findings revealed that the expertise among detectives seemed neither transferred nor shared. Their research respondents highlighted how the lack of command and control negatively impacted on the entire justice system. The respondents further indicated that the entire SACJS has been severely affected by this skills deficit in the DS. Moreover, the brunt of the "brain drain" was sorely felt in this department. The respondents' views were that the career path limitations of detectives was a contributing factor because many skilled detectives

were lost to greener pastures, as incentives and working conditions elsewhere were much better (Mofokeng, 2010, 2012a; Mofokeng and De Vries, 2012, 2016).

A Lack of a Formal Mentorship Programme

KS is influenced by job culture (Glomseth *et al.*, 2007). Studies have shown that in police forces, cultural factors, the size of the force, and awareness of the value of KM are among the major issues in KE activities (Seba and Rowley, 2010). It has been observed that when there is enough trust between employees, they respond better to one another (Mofokeng, 2010; Seba and Rowley, 2010). In the private sector, rewards are provided for KE but this does not happen in the public sector (Chiem, 2001). Mofokeng (2010; 2012a) and Mofokeng and De Vries' (2012; 2016) findings indicate that a lack of skills and experience among newly recruited detectives was another contributing factor to low conviction rates and the high withdrawal of cases in court. These challenges were amplified by inadequate mentorship programmes at the station level. The respondents were generally of the opinion that it seemed that mentorship programmes in the SAPS were not "filtering" down well to station level, especially concerning the general detectives. If mentorship programmes have already been implemented, the effectiveness thereof should be re-evaluated. Based on the findings, Mofokeng (2010; 2012b) argues that surely there should still be experienced detectives in the SAPS who could provide mentorship training to recently appointed detectives (Mofokeng, 2010; 2012b).

The synthesis of the literature explains, as indicated above, that an effective mentoring programme in the DS is more complex than previously described in the literature and different types of "interventions" have distinct processes and outcomes. Although the literature on mentoring in the law enforcement environment, especially in the general investigation, appears to have grown steadily, less attention has been paid to the specific profile and outcomes of mentoring investigating officers or general detectives to enhance IC. Specifically, little information regarding the prevalence and type of mentoring programmes for investigating officers and the views of detectives on the impact of mentoring on detectives' success has been uncovered in the literature, given the growth of "intervention" measures in the form of courses detectives were exposed to. There is a need for updated research on mentoring in the SAPS and

programmes to guide curriculum developers, administrators, and policymakers in the development, evaluation, and analysis of future mentoring research (Mofokeng, 2018; Mofokeng and De Vries, 2012, 2016).

Given the importance of mentoring in the criminal investigation setting, mentorship programmes should not only be lip service by the administrators in the DS. Although previous research was interested in whether mentoring programmes existed, and whether they were formal or informal (Mofokeng, 2012a), there is still a research gap to identify how they are administered and assessed. The major interest of this study was to emphasise the need to formalise mentoring. Prior research suggests that general detectives recognise the importance of mentoring relationships for their success at work or their professional career (Mofokeng, 2010), yet it is a topic that has rarely been discussed openly in the DS. Additional research is warranted and could be informed by research on the Detective Commanders' perceived values of mentoring and willingness to be knowledge brokers towards the acceleration of formalising mentoring programmes.

The notable differences between definitions of formal and informal mentoring are the lack of assessment procedures and the absence of structure or guidance for creating and establishing the informal relationship. Moreover, although informal mentorships may include the same activities, for example, professional development, psychological support, role modelling, or participation in court processes as formal relationships, informal mentorships are spontaneous and mentees' progress in the activities is not evaluated. The spontaneity of the relationship precludes formal assessment or external review. Prior research indicated that Detective Commanders were reluctant to release their members to attend the then DLP, which lasted long and took members away from the field. This contributed to some detectives not attending the DLP (Mofokeng, 2010). There might be resistance among Detective Commanders to release members due to the demands by the public to see reported cases yielding positive convictions, whereas in the DA, the constant demand to establish too many formal practices when the DS is still perceived as underperforming. The administrators may establish mentoring programmes in the future. However, it is worth noting that both formal and informal programmes would potentially indicate a stronger commitment to creating mentoring relationships, in addition to the prospective benefits of such associations in a particular station.

Therefore, in terms of formalising mentorship programmes, Detective Commanders should be assisted in determining training and skill needs that address CT among their members at their respective stations. CT skills have been neglected considering the perceived low performance of the general detectives. There might be underlying factors that contribute to this phenomenon, besides the unregulated allocated workload and lack of physical resources for the detectives. Salet (2017:128-129), referring to the Schiedam park murder case in the Netherlands and other cases, argues that "criminal investigative officers sometimes focus on only one suspect and persevere in that suspicion. They persist in believing in their own (re)construction of what happened in the criminal act, despite a lack of evidence for their (re)construction". People seek or interpret evidence in ways that are partial to their existing beliefs and expectations, often unconscious of their "confirmation bias" (Nickerson, 1998:175). Not only are people subject to this and other cognitive biases (Kahneman, 2011), of which they are typically unaware, but it may also be counterproductive for one to make oneself aware of them and to try to consciously counteract them or to counteract social biases such as racial or sexual stereotypes (Kenyon and Guillaume, 2014). "To understand how these investigative failures may arise and how measures can contribute to the prevention of this kind of failure, insight into the criminal investigation process is needed" (Salet, 2017:129).

Stations that do not seem to perform well should be provided with temporary mentors for a specific period. The will and desire of detectives to learn under the formal mentorship programme should be a buy-in factor that should also be taken into consideration by SAPS management (Mofokeng, 2010). The analysis indicates specific organisational factors that help organisations with the process of sharing best practices. Organisations with experience in sharing successes, the presence of a structure that ensures communication in an organisation, an OC that supports collaboration, and absorptive capacity where organisations have the skills to change practice should be the focus for policy writers and administrators in the DS. Effective mentorship programmes can go a long way in ensuring that Detective Commanders recognise existing knowledge gaps within the DS during docket inspections, and identify which category of cases is investigated effectively, as evidenced by convictions, as well those cases deemed cold in high volumes. The DS can develop better strategies this way. This, ultimately, might lead to an improvement in the productivity of individual detectives.

Flawed FP Training

The negligence of the FP is considered flawed by the Department of Basic Education. Despite the need for more CT, schools at the foundation level have not done nearly enough to give learners richer thinking tools. In too many schools, CT is not taught to young people (Macupe, 2019). In an article titled "Broken teachers, broken children – the high cost of matric" published in the *Mail & Guardian*, Macupe (2019:4) lambasted the education system that places pressure on teachers and learners due to an obsession with Grade 12 results while neglecting the FP, during which the building blocks for a successful schooling career are laid. A teacher quoted in this article argued that "[o]ur education system is centred on results: they don't care about imparting knowledge to learners, they just want results … at the end of the day, we end up teaching the kids to pass. We don't teach them to get the knowledge because we are under pressure to produce results: we are told that 'These are the results we want'." The use of the term "CT" to describe an educational goal originated with American philosopher John Dewey (1910), who more commonly called it "reflective thinking".

Dewey (1910:6; 1933:9) defined it as "active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it, and the further conclusions to which it tends, and identified a habit of such consideration with a scientific attitude of mind". Other researchers, such as Aikin (1942) and Smith, Tyler, and Evaluation Staff (1942), indicate that many of the schools that participated in the Eight-Year Study of the Progressive Education Association adopted CT as an educational goal, for which the study's Evaluation Staff developed tests. Glaser (1941) showed experimentally that it was possible to improve the CT of high school students. Bloom's influential taxonomy of cognitive educational objectives (Bloom *et al*., 1956) incorporated CT abilities, and Ennis (1962) proposed 12 aspects of CT as a basis for research on the teaching and evaluation of CT ability. McGurk *et al.* (in Westera *et al*., 2016) conducted a job and training needs analysis with four different English police forces to inform the development of a national detective training course. In addition to position and task analyses, 15 managers of detectives were interviewed and another 100 detectives completed a written questionnaire. Together

the findings suggested four clusters of main skill categories, namely: (1) *managing tasks*: implementing and controlling; (2) *managing information:* assisting people and assisting colleagues; (3) *dealing with people*: collecting, combining, appraising, creative thinking and deciding; (4) *effective communication*: communication style, writing skills, and personal style.

Research indicates that the negligence of the FP is not only a South African problem. According to Bouygues (in Forbes Media, 2018), schools do not provide instruction in the development of richer thinking skills. Too many institutions do not teach learners how and when to use evidence. Too many schools do not teach learners to take opposing points of view or think through issues that do not have clear right or wrong answers. Bouygues (in Forbes Media, 2018) argues that the goals of any country's education system should be to provide learners with the ability to reason through problems and situations in effective ways. The findings of the study conducted by the Reboot Foundation (2018) highlighted that while the public believes that CT is crucial, most people believe that schools do not do enough to prepare young people to think more effectively. Across almost all demographic variables, people supported more CT, and nearly all respondents (95%) said that CT skills are necessary in today's world. Dewey (1910) thought that education for reflective thinking would be of value to both the individual and society; recognition in educational practice of the kinship to the scientific attitude of children's native curiosity, fertile imagination, and love of experimental inquiry "would make for individual happiness and the reduction of social waste" (Dewey, 1910:iii). Schools participating in the Eight-Year Study took the development of the habit of reflective thinking and skill in solving problems as a means to leading young people to understand, appreciate, and live the democratic way of life characteristic of the United States of America (Aikin, 1942:17-18, 81).

Siegel (1988:55-61) offers four considerations in support of adopting CT as an educational ideal: (1) Respect for persons requires that schools and teachers honour students' demands for reasons and explanations, deal with students honestly, and recognise the need to confront students' independent judgment; these requirements concern how teachers treat students; (2) Education has the task of preparing children to be successful adults – a task that requires the development of their self-sufficiency; (3) Education should initiate children into rational traditions in such fields as history, science, and mathematics; and (4)

Education should prepare children to become democratic citizens, which requires reasoned procedures and critical talents and attitudes. To supplement these considerations, Siegel (1988:62-90) responds to two objections: the ideology objection that the adoption of any educational ideal requires a prior ideological commitment and the indoctrination objection that cultivation of CT cannot escape being a form of indoctrination.

In South Africa, these four considerations as offered by Siegel (1988) seem to be missing from the curriculum and processes as "the basic education department's diagnostic reports have, for the past five years, read like a copy-and-paste when it comes to the limitations of learners – concluding that they are not critical thinkers" (Macupe, 2019:4). Macupe (2019:4) argues that the reports for the years 2014 to 2018 all said the same thing: "In many cases, candidates appear to cope only with questions involving the application of routine procedures that have been taught in the classroom, and struggle with those that require more independent or creative thought." "While it's encouraging that many feel critical thinking is a shared responsibility, this lack of consensus helps explain why people often don't acquire better thinking skills: the teaching of the skill seems to simply fall through societal cracks" (Reboot Foundation, 2018:3). The FP thus adds to the demise of the quality of the curriculum to build solid reflective thinkers, and to the disconnecting or missing "ingredients" in the system to promote holistic systematic CT.

Therefore, there is a call for reforms in the FP. Research indicates that reforming school curricula towards sustainable school development results in both meaningful learning and the advancement of pupils' and teachers' wellbeing (Hargreaves and Fink, 2006; Thoonen *et al*., 2012). Reforming the curriculum can enable such development (Ng, 2009). Yet, curriculum reforms do not automatically result in sustainable changes in the everyday practices of schools (Cuban, 2013). School reforms are often shown to increase workload (Germeten, 2011) and demand new competencies (Valli and Buese, 2007), which cause stress. This further increases teachers' and other reform stakeholders' risk for burnout (Yu *et al*., 2015), and reduces the chance of the reform taking root (Mendenhall *et al*., 2013). The reform strategy is one of the most central determinants of reform success (Pietarinen *et al*., 2017).

The SKA led to the implementation of the outcomes-based education and training curriculum by

the SAQA. Years after the implementation of OBE, its fate was sealed when DoBE Minister Angie Motshekga announced during May/June 2010 that a new education curriculum will replace the widely criticised OBE system. The new education plan, titled Schooling 2025, came after years of criticism by teachers and education experts, who argued that OBE was destroying the education system in South Africa (Mofokeng, 2010). It is argued that there has been "considerable criticism of OBE" and that teachers complained of being overloaded with administrative work. "You can't transplant OBE from Canada, Australia or any advanced economy without due regard to our historical condition" (Nkondo in *City Press*, 2010:5).

When asked why OBE was adopted in the first place, Minister Motshekga (in *City Press*, 2010:5) pointed out that the excitement generated by the era of democracy was to blame: "We needed a new beginning, and OBE's values were attractive because we derived our principles from democracy". The implications for the SAPS are to consider these latest developments in order to adjust the teaching and learning environment of the SAPS as a whole. When course developers understand CT at a deep level, they will realise that instructors must teach content through thinking, not content, and then thinking. Bruce (2003:1-16) warns that care should be taken regarding "cut-and-paste" reforms in police environments without identifying the uniqueness of the current policing environment.

Flawed Basic Training

Training is important to understand how to conduct effective investigations. Organisational KM initiatives risk becoming unsuccessful if they fail to market the purpose of KM efforts and if they do not provide adequate training on how new systems and procedures should be used (Chourides *et al*., 2003; Koenig and Srikantaiah, 2004). Specifically designed KM training should additionally focus on increasing the acceptance of KM initiatives among employees and to develop their know-how and skills regarding knowledge and KM-related topics. Employees who understand the importance of KM are capable of performing KM tasks efficiently and with high quality. They can be expected to take on responsibility for knowledge-related projects and results. Before the Detective Dialogue: SAPS DS that was held in parliament in 2012, to discuss roles, training, careers, modernisation, and other challenges that confront general detectives, prior research already

addressed most of the challenges deliberated upon in parliament (PSC, 2009; Mofokeng, 2010).

The PSC (2009) and Mofokeng's (2010) findings corroborate the submissions made by the delegates at the Detective Dialogue, and, among others, confirmed that existing detectives were often not properly trained in advanced areas such as crime scene management or IT. It was emphasised that the SAPS needs to ensure proper training and resources, to conduct an audit to determine why there were disparities, and to link its IT with other departments. The NPA also commented that the training given to detectives was insufficient in many areas. Further problems around training were highlighted by the SAPS as lack of independent assessment of training, failure to consider the outcomes, and the fact that many detectives took promotion opportunities elsewhere for higher salaries. It was therefore recommended that improved career pathing and salary progression must be developed, with better incentives and identification of recruits (PMG, 2012).

According to the PMG (2012), the lesson learned from this dialogue should be carefully considered by the SAPS and incorporated into policy, strategic plans, and a White Paper or legislation, as appropriate. It was reemphasised that the challenges included the lack of retention of skills, overburdening of current detectives that may compromise quality, lack of incentives for recruits, and inadequate resources. A specific solution was needed that would address South Africa's unique situation. A mentorship programme, technology development, and public engagement would be considered. The chairperson summarised the recommendations that would be included in the committee's report, including the need for corrected statistics, a comparison against the ideal, interpretation facilities, training on crime scene management, partnerships, a legislated promotions policy, and proper resource allocation. Above all, clear and specialised training strategies were needed. Little has changed since the above noble resolutions were agreed upon during the Detective Dialogue.

CONCLUSIONS AND RECOMMENDATIONS

The literature review indicates that leadership, trust, and willingness to share information have a significant positive effect on the intentions of KE. This paper reviewed factors that influence the success or failure of KM and KE initiatives as manifested in the SAPS, with emphasis on the DS. Based on the analysis, there are

ongoing attempts to formulate concepts, theories, practices, and systems to realise new methods for dealing with organisational knowledge in the DS (Mofokeng, 2010, 2018; Mofokeng and De Vries, 2012, 2016). Research in the past two decades focused on mapping out methods to categorise and utilise knowledge in organisations as a value shop in criminal investigation teams (Gottschalk and Holgersson, 2006; Gottschalk *et al*., 2011; Glomseth *et al*., 2007; Seba and Rowley, 2010). Some of these attempts have provided clear guidelines, frameworks, and systems that could be utilised to improve the process involved in managing knowledge in the SAPS, although Bruce (2003:1-16) warns that care should be taken regarding "cut-and-paste" reforms in police environments without identifying the uniqueness of the current policing environment.

Other research attempts have provided weak and incomplete clarifications of the problem related to organisational knowledge and have not provided clear theoretical nor practical approaches to overcome it. This research interest was rationalised by the need to explain the nature of knowledge as a base for managing it. The study is underlined by the suggestion that better explanations of the phenomenon of organisational knowledge can be provided if three factors (classification, assessments, and characteristics) of knowledge are employed as guiding factors when analysing knowledge in organisations. Thus, based on the obtained results to improve the implementation of KM and KE activities, some suggestions and strategies are provided. They are intended to improve the general implementation of KM and KE in the DS by focusing on KS.

The following suggestions and recommendations are provided:

1. Encouragement of CT skills from the FP onwards. CT skills should be inculcated in the FP. It begins with encouraging schools and teachers to better incorporate CT exercises into curricula, at the primary, secondary, and detective college levels.

2. Minimum criminal investigation training standards for detectives should be developed. This will afford a blueprint that will guide the development and delivery of detective training. It should contain recommendations for standards and competencies to be included in training courses for entry-level detectives. Advanced courses should expand on these concepts and principles to provide greater breadth and depth of tradecraft, content, and critical and analytical thinking.

3. Building trust between police personnel should be a priority. It is necessary to identify factors that build trust between the police and creating these factors must become a priority in police programmes.

4. Improve the culture of KE: Better communication and better KE among detectives would improve the competencies of young and inexperienced detectives.

5. Due to the role of reward in increasing KS in the management system, the knowledge of rewarding must be included in KS. A reward system should therefore be developed.

6. Given the indispensable role of leadership in improving all aspects of KM, this factor must be considered. The Detective Commander must take the relevant training courses regarding KM to improve the KM process in different ways, such as understanding the impact on OC and other factors.

FUTURE RESEARCH

It was highlighted above that despite reforms made in the DS, there are still challenges to decrease the disparities between high- and low-performing detectives. It is therefore recommended that more research be conducted on the discretionary powers of police officials; backed by far more philosophical training that should be conducted. Police work by its nature is discretionary in the sense that it involves the exercise of choice or judgement. As in other law enforcement agencies, the detectives, from constables to lieutenant generals, including the Commissioner of the SAPS, are called upon to exercise discretion, which requires CT skills. Future research should focus on lower-level detectives, regarding the use of discretion by detectives in their day-to-day activities. Secondly, future research efforts should be streamlined to focus on understanding IC in knowledge work. IC for knowledge work is critical and the role of human resource management (HRM) in developing IC is significant. The core argument of ensuring a high-performing Detective Service is that IC, as the primary unit of analysis, is a holism composed of education,

training, PCs, and the environment. These four variables significantly shape individuals (1) before being employed or prior-to-work and (2) during employment or on-the-job.

LIMITATIONS OF THE STUDY

Although this paper attempted to include as much literature as possible in the analysis, this study had some limitations and they need to be taken into consideration when reviewing this study. Firstly, the study was based on content analysis, conducted as desktop research for a professorial inauguration lecture, with constrained time and budget; hence mostly academic open-access papers were considered. Secondly, the research considered keywords such as "knowledge sharing", "knowledge management", "knowledge workers", "organisational culture", "critical thinking", and "organisational knowledge", which poses the possibility that some sources might have been disregarded for not including in their keywords the set of keywords used for this study.

AUTHOR CONTRIBUTIONS

J.T. Mofokeng has reviewed related kinds of literature, designed, developed the concept of all analysis prepared, writing, and edited the manuscript text.

ACKNOWLEDGEMENTS

CONFLICT OF INTEREST

The author declares no potential conflict of interest regarding the publication of this work. In addition, the ethical issues including plagiarism, informed consent, misconduct, data fabrication and, or falsification, double publication and, or submission, and redundancy have been completely witnessed by the author.

ABBREVIATIONS

CID   = Criminal Investigation Department

CT   = Critical thinking

DA   = Detective Academy

DoBE   = Department of Basic Education

DLP   = Detective Learning Programme

DNA   = Deoxyribonucleic acid

DS   = Detective Service

FP   = Foundation Phase

IC   = Individual competency

IT   = Information technology

KE   = Knowledge exchange

KM   = Knowledge management

KS   = Knowledge sharing

KOs   = Knowledge organisations

KWs   = Contributions of knowledge workers

MWCD   = Merriam-Webster's Collegiate Dictionary

NPA   = National Prosecuting Authority

OBE   = Outcomes-based education

OC   = Organisational culture

PCs   = Personal characteristics

PMG   = Parliamentary Monitoring Group

PSC   = Public Service Commission

SACJS   = South African criminal justice system

SAP   = South African Police

SAPS   = South African Police Service

SAQA   = South African Qualifications Authority

SDA   = Skills Development Act (No. 97 of 1998)

HIGHLIGHT

1.   The literature review indicates two recruitment processes in the DS before the democratic dispensation, the SAPS recruited personnel with Grade 12 and years earlier, recruits without even a senior certificate were accepted. Those recruited before democratic dispensation were required to demonstrate their potential to become solid detectives as the standards of

entry were high, authoritarian policing methods and tough law enforcement strategies to combat crime utilised. Many SAP detectives were more concerned about getting crime suspects convicted than upholding the law and conducting investigations in a legally correct manner. Post democratic dispensation, there was a general view that the general quality of the police's detective work declined, and that this was partly to be expected, as the advent of the democratic dispensation brought the concept of "professionalism" that has emerged as a necessity in law enforcement agencies, to structure how these entities conduct their business.

2. The synthesis of the literature explains, as indicated above, that an effective mentoring programme in the DS is more complex than previously described in the literature and different types of "interventions" have distinct processes and outcomes. Although the literature on mentoring in the law enforcement environment, especially in the general investigation, appears to have grown steadily, less attention has been paid to the specific profile and outcomes of mentoring investigating officers or general detectives to enhance IC. Specifically, little information regarding the prevalence and type of mentoring programmes for investigating officers and the views of detectives on the impact of mentoring on detectives' success has been uncovered in the literature, given the growth of "intervention" measures in the form of courses detectives were exposed to. There is a need for updated research on mentoring in the SAPS and programmes to guide curriculum developers, administrators, and policymakers in the development, evaluation, and analysis of future mentoring research.

3. Research indicates that the negligence of the FP is not only a South African problem but a universal challenge. Therefore, there is a call for reforms in the FP.

4. Among others, results confirmed that existing detectives were often not properly trained in advanced areas such as crime scene management or IT.

5. Therefore, CT skills have been neglected considering the perceived low performance of

the general detectives. There might be underlying factors that contribute to this phenomenon, besides the unregulated allocated workload and lack of physical resources for the detectives.

REFERENCES

Aikin, W. M. (1942) *The Story of the Eight-Year Study, with Conclusions and Recommendations:* Volume I of *Adventure in American Education*. New York and London: Harper & Brothers.

Altbeker, A. (1998) Monograph No 31: Solving Crime. Pretoria: Institute for Security Studies.

Arthur, J. B. and Huntley, C. L. (2005) 'Ramping up the organizational learning curve: Assessing the impact of deliberate learning on organizational performance under gain sharing', Academy of Management Journal, 48, pp. 1159-1170.
https://doi.org/10.5465/amj.2005.19573115

Ashby, D. I. and Longley, P. A. (2005) 'Geocomputation, geodemographics and resource allocation for local policing', *Transactions in GIS*, 9(1), pp. 53-72.
https://doi.org/10.1111/j.1467-9671.2005.00205.x

Attar, M. M. (2020) 'Organizational culture, knowledge sharing, and intellectual capital: Directions for future research', International Journal of Business and Economics Research, 9(1), pp. 11-20.
https://doi.org/10.11648/j.ijber.20200901.12

Baker, R. and Wick, S. (2019) 'A narrative on integrating research and theory into undergraduate accounting curriculum', *Meditari Accountancy Research*, 27(2), pp. 325-344.
https://doi.org/10.1108/MEDAR-03-2018-0303

Bauerlein, M. and Bellow, A. (Eds.). (2015) The State of the American Mind: 16 Leading Critics on the New Anti-Intellectualism. West Conshohocken: Templeton Press.

Baumard, P. (1999) Tacit Knowledge in Organizations. London: Sage Publications.

Begona, L. M. (2008) 'A review of the main approaches to knowledge management', Knowledge Management Research & Practice, 6(1), pp. 77-89.
https://doi.org/10.1057/palgrave.kmrp.8500164

Bloom, B. S. *et al.* (1956) Taxonomy of Educational Objectives: Handbook I: Cognitive Domain. New York: David McKay.

Bruce, D. (2003) Democratic Reform of Police – Any Lessons for Kenya from South Africa? Johannesburg: Centre for the Study of Violence and Reconciliation.

Chen, H. J. *et al.* (2003) 'COPLINK Connect: Information and knowledge management for law enforcement: Decision Support Systems (DSS)', Digital Government: Technologies and Practices, 34(3), pp. 271-285.
https://doi.org/10.1016/S0167-9236(02)00121-5

Chiem, P. X. (2001) Form Follows Strategy: Open and Interactive Office Design Supports Cultural Changes at the new BP. Available at: www.destinationkm.com/print/default.asp?ArticleID=369.

Chourides, P., Longbottom, D. and Murphy, W. (2003) 'Excellence in knowledge management: An empirical study to identify critical factors and performance measures', Measuring Business Excellence, 7(2), 29-45.
https://doi.org/10.1108/13683040310477977

City Press. (2010) OBE gets overhauled. 24 July, p. 5.

Claver-Cortés, E. *et al.* (2007) 'Intellectual and environmental capital', Journal of Intellectual Capital, 8(1), pp. 171-182.
https://doi.org/10.1108/14691930710715123

Cuban, L. (2013) 'Why so many structural changes in schools and so little reform in teaching practice?', Journal of Educational Administration, 51(2), pp. 109-125. https://doi.org/10.1108/09578231311304661

Dean, R. N. *et al.* (2006) 'Testing the efficacy of the theory of planned behavior to explain strength training in older adults', Journal of Aging and Physical Activity, 15(1), pp. 1-12. https://doi.org/10.1123/japa.15.1.1

Dewey, J. (1910) How We Think. Boston: D.C. Heath.

Dewey, J. (1933) How We Think: A Restatement of the Relation of Reflective Thinking to the Educative Process. Lexington: D.C. Heath.

De Vries, I.D. and Steyn, J. (2011) 'Professionalisation in the public service and academia: A scientific perspective from a house divided', *Journal of Public Administration*, 46(1), pp. 682-696.

Earl, M. (2001) 'Knowledge management strategies: Toward a taxonomy', *Journal of Management Information Systems*, 18(1), pp. 215-233. https://doi.org/10.1080/07421222.2001.11045670

Eigenauer, J. D. (2019) 'The problem with the problem of human irrationality', *International Journal of Educational Reform*, 27(4), pp. 341-358. https://doi.org/10.1177/105678791802700402

Ennis, R. H. (1962) 'A concept of critical thinking', *Harvard Educational Review*, 32(1), pp. 81-111.

Fahsing, I. A. (2016) *The Making of an Expert Detective: Thinking and Deciding in Criminal Investigations*. Department of Psychology: University of Gothenburg.

Fahsing, I.A., and Ask, K. (2013) 'Decision making and decisional tipping points in homicide investigations: An interview study of British and Norwegian detectives', Journal of Investigative Psychology and Offender Profiling, 10(2), pp. 155-165. https://doi.org/10.1002/jip.1384

Fahsing, I. and Ask, K. (2016) The making of an expert detective: the role of experience in English and Norwegian police officers' investigative decision-making. Psychology, Crime & Law 22(3): 203–223. https://doi.org/10.1080/1068316X.2015.1077249

Fahsing, I. and Ask, K. (2018) 'In search of indicators of detective aptitude: police recruits' logical reasoning and ability to generate investigative hypotheses', Journal of Police and Criminal Psychology 33(1), pp. 21–34. https://doi.org/10.1007/s11896-017-9231-3

Faul, A. and Rose, B. (2012) 'Professionalism and the South African Police Service: What is it and how can it help build safer communities?', Institute for Security Studies, 240, pp. 1-21.

Filstad, C. and Gottschalk, P. (2009) 'How knowledge organizations work: The case of real estate agencies', International Real Estate Review, 12(1), pp. 88-97.

Flores, K. L. *et al.* (2010) 'Deficient critical thinking skills among college graduates: Implications for leadership', *Educational Philosophy and Theory*, 44(2), pp. 212-230. https://doi.org/10.1111/j.1469-5812.2010.00672.x

Forbes Media. (2018) How Critical Thinking Improves Life Outcomes. Available at: https://www.forbes.com/sites/helenleebouygues/2018/11/21/how-critical-thinking-improves-life-outcomes/#697added4811.

Germeten, S. (2011) 'The new national curriculum in Norway: A change in the role of the principals?', Australian Journal of Education, 55(1), pp. 14-23. https://doi.org/10.1177/000494411105500103

Glaser, E. M. (1941) An Experiment in the Development of Critical Thinking. New York: Teachers College, Columbia University.

Glomseth, R., Gottschalk, P. and Solli-Sæther, H. (2007) 'Occupational culture as determinant of knowledge sharing and performance in police investigations', International Journal of the Sociology of Law, 35(2), pp. 96-107. https://doi.org/10.1016/j.ijsl.2007.03.003

Gold, A. H., Malhotra, A. and Segars, A. H. (2001) 'Knowledge management: An organizational capabilities perspective', Journal of Knowledge Information Systems, 18(1), pp. 185-214. https://doi.org/10.1080/07421222.2001.11045669

Goldstein, J. (2007) A new model for emergence and its leadership implications. In J. Hazy, J. Goldstein, and B. Lichtenstein (Eds.). Complex Systems Leadership Theory (pp. 61-92). Mansfield: ISCE.

Gottschalk, P. (2006). Knowledge Management Systems in Law Enforcement: Technologies and Techniques. Hershey: Idea Group Publishing. https://doi.org/10.4018/978-1-59904-307-4

Gottschalk, P. *et al.* (2011) 'Information management for investigation and prevention of white-collar crime', International Journal of Information Management, 31, pp. 226-233. https://doi.org/10.1016/j.ijinfomgt.2010.07.002

Gottschalk, P. and Holgersson, S. (2006) 'Stages of knowledge management technology in the value shop: The case of police investigation performance', Expert Systems, 23, pp. 183-193. https://doi.org/10.1111/j.1468-0394.2006.00400.x

Gudnason, S. and Finnsson, T. R. (2017) The Search for High Performance in Organizations: A Study of the CHPS Framework. Available at: https://lup.lub.lu.se/student-papers/search/publication/8917007.

Hargreaves, A. and Fink, D. (2006) Sustainable Leadership. San Francisco: Jossey-Bass.

Hazy, J. K. *et al.* (2007) Complex Systems Leadership Theory: New Perspectives from Complexity Science on Social and Organizational Effectiveness. Mansfield: ISCE Publishing.

Heijltjes, A., Gog, T. and Paas, F. (2014) 'Improving students' critical thinking: Empirical support for explicit instructions combined with practice', *Applied Cognitive Psychology*, 28(4), pp. 518-530. https://doi.org/10.1002/acp.3025

Hughes, V. and Jackson, P. (2004) 'The influence of technical, social and structural factors on the effective use of information in a policing environment', Electronic Journal of Knowledge Management, 2, pp. 65-76.

Hunter, J. E., Schmidt, F. L. and Jackson, G. B. (1982) Meta-Analysis: Cumulating Research Findings Across Studies. Beverly Hills: Sage Publications.

Insch, G. S., McIntyre, N. and Dawley, D. (2008) 'Tacit knowledge: A refinement and empirical test of the academic tacit knowledge scale', The Journal of Psychology, 142(6), pp. 561-579. https://doi.org/10.3200/JRLP.142.6.561-580

Intezari, A., Taskin, N. and Pauleen, D. J. (2017) 'Looking beyond knowledge sharing: An integrative approach to knowledge management culture', Journal of Knowledge Management, 21(2), pp. 492-515. https://doi.org/10.1108/JKM-06-2016-0216

Jain, P. (2011) 'Personal knowledge management: The foundation of organisational knowledge management', *South African Journal of Libraries and Information Science*, 77(1), pp. 1-14. https://doi.org/10.7553/77-1-62

Janicijevic, N. (2012) 'The influence of organizational culture on organizational preferences towards the choice of organizational change strategy', *Economic Annals*, 57(193), pp. 25-51. https://doi.org/10.2298/EKA1293025J

Janz, B. and Prasarnphanich, P. (2003) 'Understanding the antecedents of effective knowledge management: The importance of a knowledge-centered culture', Decision Sciences, 34(2), pp. 351-383. https://doi.org/10.1111/1540-5915.02328

Johannessen, J-A. and Olsen, B. (2011) 'Aspects of a cybernetic theory of tacit knowledge and innovation', Kybernetes, 40(1/2), pp. 141-165.
https://doi.org/10.1108/03684921111117979

Kahneman, D. (2011) Thinking, Fast and Slow. New York: Farrar, Straus and Giroux.

Kane-Berman, J. (Ed.). (2002) South Africa Survey 2001/2002. Johannesburg: South African Institute of Race Relations.

Kasemsap, K. 2017. Promoting critical thinking in the modern learning environments. In R. Batko and A. Szopa (Eds.). *Strategic Imperatives and Core Competencies in the Era of Robotics and Artificial Intelligence,* pp. 50-80. Hershey: Pennsylvania IGI Global.
https://doi.org/10.4018/978-1-5225-1656-9.ch004

Keikha, F. (2015) 'Exploring the factor affecting intentions to knowledge sharing: The case of the Iran Police Force', International Journal of Information Processing and Management, 6(3), pp. 1-10.

Kenyon, T. and Guillaume, B. (2014) 'Critical thinking education and debasing', Informal Logic, 34(4):341-363.
https://doi.org/10.22329/il.v34i4.4203

Koenig, M. E. D. and Srikantaiah, T. K. (Eds.). (2004) Review of Knowledge Management: Lessons Learned, What Works and What Doesn't. Medford: Information Today.

Laise, D., Migliarese, P. and Verteramo, S. (2005) 'Knowledge organization design: A diagnostic tool', Human Systems Management, 24, pp. 121-131.

Liebowitz, J. (1999) 'Key ingredients to the success of an organization's knowledge management strategy', Knowledge and Process Management, 6(1), pp. 37-40.
https://doi.org/10.1002/(SICI)1099-1441(199903)6:1<37::AID-KPM40>3.0.CO;2-M

Luen, T. W. and Al-Hawamdeh, S. (2001) 'Knowledge management in the public sector: Principles and practices in police work', Journal of Information Science, 27(5), pp. 311-318.
https://doi.org/10.1177/016555150102700502

MacFarlene, A. (2013) 'Information, knowledge and intelligence', Philosophy Now, 98, pp. 18-20.

Macupe, B. (2019) Broken teachers, broken children – the high cost of matric. Mail & Guardian, 30 August.

Martela, F. (2019) 'What makes self-managing organizations novel? Comparing how Weberian bureaucracy, Mintzberg's adhocracy, and self-organizing solve six fundamental problems of organizing', Journal of Organization Design, 8(23), pp. 1-23.
https://doi.org/10.1186/s41469-019-0062-9

Mashego, A. and Tau, P. (2019) Xenophobia: Police have no plan as crime intelligence is caught napping. City Press, 09 September.

Mendenhall, A. N., Lachini, A. and Anderson-Butcher, D. (2013) 'Exploring stakeholder perceptions of facilitators and barriers to implementation of an expanded school improvement model', Children & Schools, 35(4), pp. 225-234.
https://doi.org/10.1093/cs/cdt011

Merriam-Webster's Collegiate Dictionary. (2002) 'Professionalism'. Available at: https://www.merriam-webster.com/dictionary/professionalism.

Mofokeng, J. T. (2010) Anti-Fraud Training in the South African Police Service (SAPS): A Strategic Perspective. Doctoral Thesis. Tshwane University of Technology.

Mofokeng, J. T. (2012a) 'Perspectives on skills gap on supervision and mentorship within South African Police Service', Acta Criminologica, S1:70-84.

Mofokeng, J. T. (2012b) 'An empirical analysis on the performance of South African Police Service Detective Service', OIDA International Journal of Sustainable Development, 5(4), pp. :89-96.

Mofokeng, J. T. (2012c) 'Investigating officers' perceptions of adult educators within the South African Police Service Detective Academy', OIDA International Journal of Sustainable Development, 5(4), pp. 79-88.

Mofokeng, J. T. (2012d) 'Police investigative structure and the adoption of strategic policing: The case of South Africa', OIDA International Journal of Sustainable Development, 5(6), pp. 119-130.

Mofokeng, J. T. (2015) 'An examination of factors influencing investigating officers' retention in the South African Police Service', Acta Criminologica, S5, pp. 34-51.

Mofokeng, J. T. (2018) 'Investigations and detective services', In R. Cornelis & C. Gumbi (Eds.). Policing in South Africa: Past and Present, pp. 337-384. Durban: LexisNexis.

Mofokeng, J. T. and De Vries, I. D. (2012) 'Marriage of convenience (expert perspectives on general detective-public prosecutor relations in South Africa)', OIDA International Journal of Sustainable Development, 4(4), pp. 27-34.

Mofokeng, J. T. and De Vries, I.D. (2016) 'Anti-fraud training in the South African Police Service (SAPS): A strategic perspective', International Journal of Social Sciences and Humanity Studies, 8(2), PP. 84-102.

Ng, S. W. (2009) 'Why did principals and teachers respond differently to curriculum reform?', Teacher Development, 13(3), pp. 187-203.
https://doi.org/10.1080/13664530903335558

Nickerson, R. S. (1998) 'Confirmation bias: A ubiquitous phenomenon in many guises', Review of General Psychology, 2(2), pp. 175-220.
https://doi.org/10.1037/1089-2680.2.2.175

Norman, D. A. (1988) *The Psychology of Everyday Things*. New York: Basic Books.

Osterwalder, A. and Pigneur, Y. (2013) 'Designing business models and similar strategic objects: The contribution of IS', Journal of the Association for Information Systems, 14(5), pp. 237-244.
https://doi.org/10.17705/1jais.00333

Parliamentary Monitoring Group (PMG). (2012) Detective Dialogue: SAPS Detective Services: Roles, Training, Careers, Modernisation & Other Challenges. Available at: https://pmg.org.za/ committee-meeting/14823/.

Paterson, B. L. *et al.* (2001) Meta-Study of Qualitative Health Research: A Practical Guide to Meta-Analysis and Meta-Synthesis. Thousand Oaks: Sage Publications.

Pietarinen, J. *et al.* (2017) 'Large-scale curriculum reform in Finland – Exploring the interrelation between implementation strategy, the function of the reform, and curriculum coherence', The Curriculum Journal, 28(1), pp. 22-40.
https://doi.org/10.1080/09585176.2016.1179205

Polanyi, M. (1966) The Tacit Dimension. Chicago: University of Chicago Press.

Prystupa-Rzątca, K. (2017) 'The role of organizational culture in knowledge management in small companies', Journal of Entrepreneurship, Management and Innovation, 13(3), pp. 151-174.
https://doi.org/10.7341/20171336

Public Service Commission (PSC). (2009) Consolidated Report on Inspections of Service Delivery Sites: South African Police Service. Pretoria: Monitoring and Evaluation, Communication and Information Services.

Rebernick, M. and Šurec, K. (2007) 'Fostering innovation by unlearning tacit knowledge', Kybenetes, 36(3/4), pp. 406-419.
https://doi.org/10.1108/03684920710747039

Reboot Foundation. (2018) The State of Critical Thinking. Available at: https://reboot-foundation.org/the-state-of-critical-thinking/.

Republic of South Africa. (1998) Skills Development Act, No. 97 of 1998. Pretoria: Government Printer.

Salet, R. (2017) 'Framing in criminal investigation: How police officers (re)construct a crime', The Police Journal: Theory, Practice and Principles, 90(2), pp. 128-142. https://doi.org/10.1177/0032258X16672470

Seba, I. and Rowley, J. (2010) 'Knowledge management in UK police forces', Journal of Knowledge Management, 14, pp. 611-626. https://doi.org/10.1108/13673271011059554

Seba, I., Rowley, J. and Lambert, S. (2012) 'Factors affecting attitudes and intentions towards knowledge sharing in the Dubai Police Force', International Journal of Information Management, 32(4), pp. 372-380. https://doi.org/10.1016/j.ijinfomgt.2011.12.003

Siegel, H. (1988) Educating Reason: Rationality, Critical Thinking, and Education. New York: Routledge.

Slade, M. L. *et al.* (2019) 'The impact of reflective practice on teacher candidates' learning', *International Journal for the Scholarship of Teaching and Learning*, 13(2), p. 15. https://doi.org/10.20429/ijsotl.2019.130215

Smith, E. R., Tyler, R.W. and The Evaluation Staff. (1942) Appraising and Recording Student Progress: Volume III of Adventure in American Education. New York and London: Harper & Brothers.

Stelfox, P. and Pease, K. (2005) Cognition and detection: Reluctant bedfellows? In M. J. Smith & N. Tilley (Eds.), Crime science: New approaches to preventing and detecting crime (pp. 194-210). Cullompton, UK: Willan.

Stepsis, J. A. (1998) 'Participatory management: A new morality', The Pfeiffer Library, 20(2), pp. 9-13.

Taylor, A. and Greve, H. R. (2006) 'Superman or the Fantastic Four? Knowledge combination and experience in innovative teams', Academy of Management Journal, 49, pp. 723-740. https://doi.org/10.5465/amj.2006.22083029

Taylor, T. Z. *et al.* (2013) 'A Police Officer's Tacit Knowledge Inventory (POTKI): Establishing Construct Validity and Exploring Applications'. Police Practice and Research, 14(6), pp. 1-27. https://doi.org/10.1080/15614263.2013.802847

Thoonen, E. E. J. *et al*. (2012) 'Building school-wide capacity for improvement: The role of leadership, school organizational conditions, and teacher factors', School Effectiveness and School Improvement, 23(4), pp. 441-460. https://doi.org/10.1080/09243453.2012.678867

Valli, L. and Buese, D. (2007) 'The changing roles of teachers in an era of high-stakes accountability', American Educational Research Journal, 44(3), pp. 519-558. https://doi.org/10.3102/0002831207306859

Westera, N. J. *et al.* (2016) 'Towards a more effective detective', *Policing and Society*, 26(1), pp. 1-17. https://doi.org/10.1080/10439463.2014.912647

Wilson, A. N. *et al.* (2015) Making critical thinking visible in undergraduates' experiences of scientific research. In M. Davies & R. Barnett (Eds.). *The Palgrave Handbook of Critical Thinking in Higher Education,* pp. 491-508. New York: Palgrave McMillan. https://doi.org/10.1057/9781137378057_29

Woolfolk, A. (2019) Educational Psychology. New York: Pearson.

Yan, Y. H. (2016) 'Relationship between organizational culture and organizational effectiveness: A study of nurses in Taiwan', *Studies in Health Technology and Informatics*, 225, pp. 957-958.

Yu, X. *et al.* (2015) 'The effect of work stress on job burnout among teachers: The mediating role of self-efficacy', Social Indicators Research, 122(3), pp. 701-708. https://doi.org/10.1007/s11205-014-0716-5

Yusuf, M. M. and Wanjau, K. (2014) 'Factors affecting implementation of knowledge management practices in state corporations in the National Treasury in Kenya', International Journal of Management Technology, 2(1), pp. 45-54.