Philosophical paradigms as the bases for knowledge management research and practice

Everest Turyahikayo C Law Development Centre, Kampala, Uganda



Knowledge Management & E-Learning: An International Journal (KM&EL) ISSN 2073-7904

Recommended citation:

Turyahikayo, E. (2021). Philosophical paradigms as the bases for knowledge management research and practice. *Knowledge Management & E-Learning*, 13(2), 209–224. https://doi.org/10.34105/j.kmel.2021.13.012

Philosophical paradigms as the bases for knowledge management research and practice

Everest Turyahikayo* •

Department of Academic Registrar Law Development Centre, Kampala, Uganda E-mail: turyahikayoeverest@gmail.com

*Corresponding author

Abstract: This paper examined six philosophical paradigms, namely positivism, interpretivism, post-positivism, pragmatism, post modernism and critical realism. The paradigms serve as the bases for knowledge management research and practice. Basing on a critical review of literature and drawing from tacit insights, the paper reveals that positivist managers and researchers tend to focus on explicit knowledge while paying little attention to tacit knowledge. In the same vein, interpretivists focus on tacit knowledge while ignoring explicit knowledge. Even when the post-positivist ontology provides useful insights, many managers and researchers may lack adequate skills to apply such insights in theory and practice. Pragmatism focuses on actions that possess instrumental value, yet there is a tendency to focus on personal value rather than organisational value. Postmodernism highlights the central nature of power structures and power struggle all of which tend to affect knowledge management practices. Critical realism prioritises tacit knowledge as the main source of competitiveness, yet tacit knowledge is insufficient on its own. The paper contributes to the understanding and debate of knowledge management research and practice.

Keywords: Paradigm; Positivism; Interpretivism; Post positivism; Pragmatism; Post modernism; Critical realism; Philosophy; Knowledge management

Biographical notes: Dr. Everest Turyahikayo holders a PhD in Knowledge Management. He is currently the Head of Academic Registrar's department at the Law Development Centre, Kampala-Uganda. He is also the founder and CEO of Kompetenz Trainers Ltd, an online global Knowledge management consulting firm (www.competencelearningcentre.com) with headquarters in Uganda-East Africa.

1. Introduction

The foundation of knowledge management as an academic and practical discipline has been an issue of contention among researchers and practitioners. Some scholars have claimed that knowledge management emerged recently from other disciplines (Uriarte, 2008). There is another set of scholars who argue that knowledge management is as old as mankind (Lambe, 2011; De Holan & Phillips, 2011; Tsoukas, 2011). This group of scholars hold the view that since time immemorial, people have found many ways of managing knowledge (Hayes, 2011). If that is the case, what are the philosophical explanations to researchers and practitioners' conceptualisation of knowledge

management? A handful of scholars have attempted to explain the philosophical bases of knowledge management. Some of the scholars are Spender and Scherer (2007), and Rechberg (2018) who traced knowledge management from disciplines such as sociology, economics and psychology. These disciplines are also rooted in philosophy. There is an overwhelming evidence to support the view that sociology emerged from philosophy (De la Rosa, 2017; Ferrarot, 2014). There is no doubt that psychology is rooted in philosophy (Postema, 2006; Schultz & Schultz, 2011). The same roots apply to economics (Hunt & Lautzenheiser, 2011). The purpose of this article is to examine the philosophical roots of organisational knowledge management. Only when the roots of organisational knowledge are clearly understood will managers and researchers be able to harness the knowledge resource.

2. Background

The point of departure in any academic engagement is the conceptualisation of key terms and phrases of the subject matter. In this paper, 'philosophy and knowledge management' as key terms are conceptualised. Philosophy comprises two words 'philo' meaning to 'study' or 'the study of'. The second word is 'sophia' meaning 'knowledge' or 'wisdom' or 'truth'. Philosophy is the rational inquiry aimed at knowledge acquisition in order to understand reality (Payne, 2015). Reality is all that is in the universe. Reality may include human behaviour in organisations, institutional policies, systems and practices, politics, economics and so forth. The philosopher's job is to give a comprehensive and rational account of the nature of reality in order to reveal truth about it (Moore, 2010). To philosophise is to apply scientific procedures on reality and investigate it for purposes of generating more knowledge and understanding about it (Russell, 1945; Solomon & Higgins, 2010). The epistemic community should be able to perceive utilitarian efficacies in the generated knowledge. This supports the view that philosophising is not an ordinary activity, but rather the highest level of abstraction as evidenced in the philosophical writings of Rene Descartes on idealism, Hegelian piece on dialectic discourses, and Socratic philosophy on reason and opinion (Shand, 1993; Ferber, 2007; Lynda, 2015).

Organisational knowledge is conceptualised as justified true belief about reality in the respective organisation (Nonaka, 1994; Davenport & Prusak, 2005). As seen in the preceding conceptualisation, organisational scholars have often borrowed some knowledge concepts from philosophy. Kulkarni, Ravindran, and Freeze (2006) define knowledge management as the generation, storage, dissemination and application of experiences, insights, skills, innovative ideas to decision making and problem solving in the organisation. There is a connection between philosophy and knowledge management. For example, Socrates one of the philosophers in antiquity advocated for various methods in knowledge generation such as use of allegories, analogies, stories and reflection (Lynda, 2015) and later he indicated that unexamined life is not worth living (Ferber, 2007). In examining life, one uses a number of mental tools such as knowledge based on previous experiences, critical reflection and observation. In the same vein, Aristotle, having reflected on the way people acquired knowledge concluded that all men desire to know (Gondek, 2013) implying that employees are always in need of learning about various aspects related to their jobs. This learning ought to be ignited by the appropriate factors and appreciation of the relevant paradigms.

3. The philosophical paradigms of knowledge management

The term 'paradigm' is derived from two Greek words namely 'para' meaning 'beside' and 'deiknynai' to 'display or show'. The two words were combined to form 'paradeiknyai' meaning 'to display side by side' (Flew, 1985). The Latin word 'paradigma' was used to refer to 'a model or pattern'. Thomas Kuhn borrowed the Latin meaning while defining paradigm as underlying assumptions and intellectual structure on which research and development in a field of inquiry is based (Kuhn, 1962). Most scholars after Kuhn did not look beyond the Kuhnian definition. For example, Raines (2013) conceptualised paradigms as sets of practices and beliefs. Similar definitions are found in Chandler and Munday (2016), Davies and Fisher (2018). A common thread in all these definitions point to the original conceptualisation of paradigms as adopted by Kuhn (1962). According to Iacob, Popescu, and Riste (2015) a paradigm comprises a model, an image on the domain of the study, theories, and agreed set of methods and tools. All these components should guide researchers and practitioners.

Although most examples of paradigms have been drawn from natural sciences (Kuhn, 1962), some scholars have attempted to identify paradigms in knowledge management. Rechberg (2018) for example gives a summary of four philosophical schools that fulfil the criteria for paradigms in knowledge management. These are; positivism, constructivism, critical realism and pragmatism. At present, few studies if, any have looked beyond these four paradigms as if to assume that Isabel Rechberg reached the 'paradigm ceiling', which assumption is strongly contested in this paper. Philosophy as an academic discipline has witnessed paradigm shifts such as positivism, interpretivism, post positivism, pragmatism, post modernism and critical realism. These paradigms have unique connections with organisational knowledge management. In the proceeding section, the connection between these philosophical paradigms and knowledge management is emphasised.

3.1. Positivist paradigm and knowledge management

The positivist paradigm is rooted in the realist philosophy of Plato who claimed that knowledge had to be certain, universal and immutable (Shand, 1993). Generating such kind of knowledge required following systematic, coherent and methodological procedures as those in natural sciences. Later, Aristotle claimed that knowledge as opposed to belief was truth (Fine, 2010) maintaining that knowledge is universal with true propositions (Chappell, 2012; Reed, 2008). The ontological stance of positivism is that reality is objective and out there for discovery using universal laws and methods (Ryan, 2018). Positivists claim that people's opinions, values and beliefs about reality might be false and inaccurate without scientific basis. As such, positivists view knowledge management processes as objective concepts that have to be discovered rather than be created by the organisation (Easton, 2010; O'Leary, 2007). Thus, knowledge management should be observable and measured based on scientific analysis (Mingers & Standing, 2017) so as to permit scientific predictions using deductive reasoning (Brooke, 2013). One of the medieval philosophers-Auguste Comte (1798–1857), while acknowledging the value of discourse in creating knowledge, contended that testimony cannot itself generate knowledge (Siebert, 2018). He recognised scientific knowledge as the highest form of knowledge (Hattaway, 1978; Babones, 2016; Brown, 2012). This type of knowledge is what Nonaka (1994) conceptualised as 'explicit knowledge' as found in organisational records such as reports, minutes of previous meetings, policies and action plans.

In the modern philosophy of science, two critical positivists deserve mention namely, Francis Bacon and John Locke. Bacon regarded any type of knowledge void of scientific means as mere speculation and conjecture (Mann, 2015). He might have invented the famous phrase 'Knowledge is power,' adding that scientific knowledge determined a person's intellectual capability, 'man is, but what he knows' (Müller-Merbach, 2005a, 2005b). It is likely that managers who subscribe to this paradigm tend to focus more on looking for scientific based evidence in solving organisational problems while focussing on long academic courses for knowledge accumulation. Bacon claimed that knowledge obtained through scientific means was objective since it adhered to rigorous methods of inquiry and was free from arbitrary whims (Vahabzadeh, 2009; Mcleod, 2008). Thus, positivist epistemologies and methodological prescriptions relate to experimental techniques in arriving at the hidden truth.

Building on the work of previous positivists, John Locke compared the mind with a white paper readily available to receive knowledge from human experience. These experiences were generated through empirical scientific inquiry following well laid down procedures (Gamlen & McIntyre, 2018; Easterby-Smith & Lyles, 2011). Unfortunately, positivists tend to ignore Polanyi's (1966) contention that humans know more than they can tell. In other words, much of the organisational knowledge exists in people's mind and such knowledge may not easily lender itself to the individual consciousness unless certain processes of externalisation and conversion are undertaken (Nonaka, 1994).

One major critique of positivism lies in the fact that knowledge management cannot be confined in a locality outside the human mind since the two are inseparable (Ryan, 2018). While positivists show how knowledge is acquired, they do not adequately explain how it is processed and shared among all constituent parts of the organisation (Shateri & Hayat, 2020). Knowledge management is part of the complex social world (Hasan, 2016), and cannot be confined in external repositories. Moreover, knowledge management is intertwined with human experiences, values, beliefs and practices (Ryan, 2018). Tacit knowledge for example is invisible (Amayah, 2013; Wamitu, 2016) revealed during formal and informal interactions among employees (Rechberg, 2018). Thus, it is necessary to examine the interpretivist paradigm with a view to develop a deeper understanding of philosophical roots of knowledge management.

3.2. Interpretivist paradigm and knowledge management

The interpretivist paradigm is derived from idealism and to some extent rationalism. Philosophers who subscribe to interpretivism include Socrates (Shand, 1993; Payne, 2015) as the founding father, Schopenhauer (Egyed, 2007), Immanuel Kant (Chignell, 2010), Descartes and Leibniz (Gamlen & McIntyre, 2018). The philosophy of science upon which interpretivist paradigm is built recognises the ability to think as the only source of true knowledge. Descartes himself claimed, 'I think therefore I am' (Gamlen & McIntyre, 2018). Knowledge generated through ideas was termed by Polanyi (1966) as tacit knowledge in his popular phrase 'we can know more than we can tell'. For Schopenhauer, Leibniz and Kant, ideas constitute the most perfect phenomena (Egyed, 2007; Jain, 2013). Ideas are mental episodes enough to enable us discover knowledge through intuitive reasoning (Chignell, 2010; Jorati, 2014; Siebert, 2018). In terms of knowledge management, managers have to create an environment that promotes free sharing of ideas not only in boardrooms but also in corridors, employee hubs, organisational intranets, social media, cocktail parties as well as informal staff interactions off site.

In support of interpretivism, a number of philosophers upheld the value of ideas at the expense of sensory knowledge (Mandalios, 2008; Sampaio, 2007). Martin Heidegger for example dismissed the notion held by positivists that human beings were mere observers of knowledge with no role to play in knowledge creation. To him, human beings and knowledge were inseparable (Sampaio, 2007). Human nature was made in such a way that we engage in a constant process of creating meaning of visible and invisible phenomena (Horrigan-Kelly, Millar, & Dowling, 2016; Oliver, 2012) through cognitive processes (Anderson, 2005). Moreover, as Fredrick Nietzsche argues, scientific observation aimed at knowledge generation through senses are unintelligible because of distortions arising from subjective sentiments (Jonas & Nakazawa, 2008). Organisational and human actions can be made intelligible through self-interpretations (Rosa, 2004).

From the foregoing, it is argued that interpretivists view knowledge as subjective, as well as culturally and contextually situated, based on people's experiences and their understanding (Ryan, 2018). The paradigm refutes positivist claims to objectivity of knowledge (Clarke, 2009). The ontological position of interpretivism is that there are many differing realities in the world and research needs to take into account effort by human beings to construct realities in an inherently subjective manner. Moreover, human behaviour is a complex interplay of socio-psychological factors (Brooke, 2013).

According to the interpretivist paradigm, knowledge can be socially constructed rather than being seen as universal scientific truth (Goodall & Roberts, 2003; Easterby-Smith & Lyles, 2011). Scholars such as Davenport and Prusak (2005) contend that knowledge is a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of the knower. Employees hold and interpret cultural beliefs and values on the basis of their lived experiences. It is not possible to have unified knowledge management practices due to multiple subjective meanings and mental episodes about knowledge management. Knowledge is processed and managed when employees interact amongst themselves (Rechberg, 2018) yet it remains part and parcel of the individual as the two are inseparable (Yin, 2011; Creswell, 2014). As such, knowledge management practices such as documentation, knowledge dissemination, application and generation depend largely on social interactive networks among employees.

The interpretivist paradigm, however, tends to downplay the importance of standards of interpretation and evaluation of understanding about reality (Easton, 2013). It would appear that epistemology and methodological track put into consideration the meaning attached to reality by the subject. Yet, behind an individual's interpretation there are bound to be errors. The individual's ability to process knowledge is very crucial in knowledge management, (Sudmann, Fredriksen, Børsheim, & Heldal, 2021) yet not clearly alluded to by interpretivists. If knowledge evolves through social practices and shared cultures between individuals and groups (Rechberg, 2018), how does one judge the quality of understanding about knowledge management across various groups? The next paradigm answers this question by combining key insights from positivism and interpretivism.

3.3. Post-positivist paradigm and knowledge management

The post-positivist paradigm conceptualises reality from multiple perspectives. It contends that perfect dualism between people and knowledge is not possible (Iofrida, Luca, Strano, & Gulisano, 2018). The paradigm regards knowledge generated through

scientific positivist theories as mere conjectures (Marsonet, 2017). Post-positivists contend that organisational problems are not discipline specific and so the need to have multiple knowledge perspectives for solutions to such problems (Thyer, 2008). Karl Popper, one of the leading proponents of post-positivism held that scientific discovery did not result into knowledge, but rather theoretical guesses prone to rejections just in case previously unobserved information surfaced (Gamlen & McIntyre, 2018; Jain, 2013). This explains why he advocated for the falsification of theories as opposed to their verification.

In order to understand knowledge management, the perspective of the subject should be the main focus (Gamlen & McIntyre, 2018). Since reality is not only ambiguous but also infinitely complex, any other approaches to knowing are not only seen as limited, but inappropriate and incapable of generating authentic accounts of a world that we are constantly constructing through our actions (O'Leary, 2007). The post-positivist paradigm thus calls for use of multiple sources (Joseph, Kushniruk, & Borycki, 2020) in knowledge creation, capture, storage, sharing and utilisation. However, there are cases when organisational problems require simple solutions hence making mixed methods uncalled for. In some cases, proximity issues among managers in an organisation with decentralised centres come into play while making post-positivist hinged decisions (Polónia & Gradim, 2021).

3.4. Pragmatist paradigm and knowledge management

The pragmatist stance is that scientific knowledge is recognised as just one of the numerous available types of knowledge (Marsonet, 2017). Pragmatists claim that knowledge is distorted through language and individual perceptual frames, and that there is no universally accepted knowledge except knowledge leading to positive consequences (Oliver, 2012). One of the leading pragmatists in the philosophy of science is John Dewey who claimed that the function of knowledge is to create positive change in organisations (Godfrey-Smith, 2002). Knowledge should enhance discovery of truth about how policies, practices, decisions benefit the organisation as a whole (Cavaleri, 2008; Visser, 2019). In order to generate knowledge that works for the organisation, efforts should be directed towards igniting experiences through trial and error in a learning and communicative process (Elkjaer & Brandi, 2018; Watson, 2010).

The essence of a pragmatist ontology is actions for organisational transformation (Goldkuhl, 2012). As Cavaleri (2008) indicates, pragmatism details an account of the way people generate knowledge, create beliefs and make decisions based on the prevailing organisational situations (Nenonen, Brodie, Storbacka, & Peters, 2017). As such, knowledge management efforts should aim at arriving at truth not for its own sake, but truth that is accepted, defended and open to criticism to the extent that it can be useful to the organisation as a whole (Easton, 2010). Pragmatism contends that methodological and epistemological criteria for knowledge management should not pre-occupy managers and researchers but rather how useful knowledge products can be (Fendt, Kaminska-Labbé, & Sachs, 2008; Rechberg, 2018).

Much as the pragmatist paradigm claims to possess a powerful lens for studying and practising knowledge management, it falls short of showing how best judgements can be made relating to the instrumentality of knowledge (Cavaleri, 2008). The pragmatists focus on the usefulness of actions and people's intentions. As revealed by De Monthoux (2017), it enables us to appreciate human interpretation of knowledge management but lacks in essence to showing whether there are key knowledge management dimensions for sustaining such usefulness, and how knowledge about them may be acquired. The

paradigm does not show in concrete terms how useful knowledge is embedded into organisational memory and whether it is fully absorbed into all production processes (Ullah, Mirza, Kashif, & Abbas, 2019). Notwithstanding the criticism, the paradigm provides useful theoretical and practical insights for knowledge management practices in organisations.

3.5. Post-modernist paradigm and knowledge management

Post-modernist ontology holds that individuals are constructs of social forces, and that there is no absolute truth that can be known since power dynamics in organisations amplify people's beliefs about what can be conceived as knowledge (Park & Allaby, 2017). Organisations operate in non-linear fashion calling for constant interrogation of decisions we make in an uncertain situation (Campbell, 2018).

Post-modernism is one of the key paradigms in the philosophy of science that has received less scholarly attention, yet it connects well with knowledge management. Unlike most paradigms that seem less concerned about power dynamics in organisations, post-modernism claims that tentative knowledge is generated through dynamic discursive formations of power networks (Brown, McLean, & McMillan, 2018). The traditional methods of positivism and interpretivism failed to show how power struggles affect social networks in knowledge management. As Campbell (2018) argues, post modernism is aimed at questioning the scientific meta-narratives and conjectural stories which tend to gain legitimacy from individuals who wield more power in organisations. Such individuals may, for example, use their influence to sabotage an innovation of edible vaccines (Martins et al., 2021).

In further support of the post-modernist stance, Diaconu (2014) claims that the traditional scientific methods of knowledge generation, and reliance on mental episodes through interpretivism, erroneously amplified our abilities to comprehend the situations around us. Moreover, knowledge production and the multiple contexts in which it is managed are intertwined (Tierney, 2001). In the post-modern era, individuals exist in a fabric of relations as no person has monopoly of knowledge (Lyotard, 1983). As such, focus should not be directed to scientific and interpretive methods of knowledge management but rather constant self-questioning and reflective self-interrogation of what one claims to know (Alp, 2012; Tierney, 2001). We cannot assume that knowledge management practices that worked last year will be useful this year. Moreover, wielders of organisational power such as employees in senior positions are no longer monopolies of knowledge but rather knowledge management facilitators. Knowledge is highly concentrated in every administrative layer. Post- modernism calls upon managers to come out of their comfort zone and reflectively conduct self-assessments in view of the prevailing knowledge management policies and practices. Unfortunately, the paradigm is yet to shed light on the impact of technology driven tools and devices that impact on internal organisational processes and procedures (Sousa, Dal Mas, & Da Costa, 2021). That notwithstanding, the post-positivist paradigm, if applied correctly, can provide a yardstick upon which organisations constantly measure their level of refinement in terms of knowledge management.

3.6. Critical realist paradigm and knowledge management

Critical realism concerns itself with understanding the difference between reality and human perceptions and experiences. It posts that reality is perceived at three levels of 'empirical', 'actual' and 'real' (Walsh & Evans, 2014). What can be observed about

knowledge in organisations is the empirical. The actual refers to the actions undertaken to adopt better knowledge management practices. The 'real' is the driving force towards the actual and empirical (Kontos & Poland, 2009; Sorrell, 2018). As such, knowledge management is made of interactive components at different levels of empirical, actual and real (Armstrong, 2019; Mingers & Standing, 2017).

Critical realists perceive knowledge as a product of struggle for competitiveness among knowledge intensive social players. Tacit element of knowledge is the most competitive source of labour security (Rechberg, 2018). Yet, ways and means of evaluating best practices and the useful epistemological and methodological specifics are not prescribed by critical realists (Tourish, 2013; Sorrell, 2018). Much as critical realism helps to bring to light the real and invisible components of knowledge management (Easton, 2010), the instrumental aspect arising from knowledge management is not alluded to. Moreover, the extent to which a group of workers performing the same task apply knowledge acquired from the same source is not clearly explained by the critical realist paradigm (Adeyelure, Kalema, & Motlanthe, 2019).

4. Implications for theory and practice

In this section, the discussion focusses on the implication of knowledge management paradigms to research and practice. The positivist paradigm views knowledge as an objective that has to be discovered rather than created by the organisation (Easton, 2010; O'Leary, 2007). The traditional knowledge management processes such as creation, documentation, storage, sharing and utilisation assume a linear repetitive and predictable trajectory (Rong, Liu, Gu, & Shao, 2017; Sensuse, Cahyaningsih, & Wibowo, 2015). Positivist managers direct their focus on seeking readily available linear occurring knowledge in databases, share the discovered knowledge through classroom-like arrangement using hard copy documents (Brooke, 2013). As such, the belief in positivism is that the highly formalised and bureaucratic knowledge management framework should enhance better performance through observation and measurement of knowledge products using scientific analysis (Mingers & Standing, 2017). Consequently, organisations are losing huge chunks of tacit knowledge from retiring employees (Kureshi & Asghar, 2015) because positivists focus on explicit knowledge stored in records while ignoring the most important tacit knowledge embedded in the human mind (Smith, 2016). Moreover, the highly formalised positivist approach to knowledge management especially in government institutions, has persistently led to making poor decisions (Kureshi & Asghar, 2015; Börjesson, 2015) largely because tacit knowledge is under-looked during the decision-making processes (Wamitu, 2016), including tacit knowledge generated during the interaction of the government workers and customers during their countless conversations (Ekionea & Fillion, 2021; Huber et al., 2020). Knowledge managers and researchers ought to appreciate the fact that the positivist paradigm may not be sufficient on its own. The need for multiple perspectives is urgent and critical.

In line with the interpretivist ontology, knowledge is processed and managed when employees interact amongst themselves (Rechberg, 2018), yet knowledge remains part and parcel of the individual as the two are inseparable. This implies that knowledge management practices such as generation, capture, storage, sharing and utilisation depend largely on social interactive networks of employees. In support of this position, Parka, Song, Lim, and Kim (2014) contend that knowledge creation occurs when information interacts with the beliefs and commitments of individual users. Through interactions among employees, tacit knowledge is activated and externalised within the unique

organisational contexts (Amayah, 2013). In order to enhance flexible interactions, interpretivist managers would put focus on coordinated dialogue and trust in an employee empowered environment (Sturdy, Wright, & Wylie, 2016). The major challenge in institutionalising the interpretivist paradigm is that many managers find it hard to capture and externalise tacit knowledge (Smith, 2016). As such, when employees retire from service, they tend to go with much of the tacit knowledge. Moreover, it is also likely that serving employees tend to forget much of the tacit knowledge (Monkman et al., 2020). Knowledge management researchers should conduct studies aimed at discovering how practitioners can capture and retain tacit knowledge especially (Taylor, 2013). Yet, meaningful studies would call for mixed study designs which most interpretivist researchers are neither willing to adopt nor capable of doing.

The post-positivist paradigm calls for multiple methods in knowledge management. The paradigm largely borrows insights from positivism and interpretivism (Creswell, 2014; Onwuegbuzie, 2012). The post-positivist ontology claims that there is no one best method of knowledge creation, capture, storage, sharing or application. Knowledge managers should devise multiple mechanisms for knowledge management in order to claim efficiency and effectiveness in decision making (Kureshi & Asghar, 2015), since most organisational problems require varying interventions (Aggarwal, Borycki, Wagner, & Gosselin, 2020). Post-positivist managers prioritise innovations through constant experimentation of ideas from multiple sources (Demircioglua &Audretsch, 2017). This is because most organisations today operate in a hostile environment with many uncertainties. Thus, the post positivism stance drives managers to embrace knowledge management practices that enable them to identify and deal with risks and remove dysfunctional organisational programmes (Moussa, McMurray, & Muenjohn, 2018). Yet, most managers do not pay attention to knowledge management practices (Turyahikayo, 2018). Moreover, managers tend to pay little attention to the analysis of unique contexts (Polónia & Gradim, 2021) in which innovations should be made. It is important that managers and researchers embrace the post-positivist paradigm in order to devise multiple approaches to managing organisational problems.

The pragmatists contend that knowledge management should be undertaken to pursue instrumental organisational goals (Easton, 2010). The role of pragmatist managers is to ensure that only knowledge management practices that work for the organisation are pursued. The main challenge is that managers tend to focus on knowledge management practices that serve their individual interests rather than organisational interests. Top management should nurture and sustain desired systems and strategies for creating, capture, storage, sharing and utilisation of individual and organisational knowledge for the benefit of the organisation (Abu-Shanab & Shehabat, 2018). Managers, can for example, promote communities of practice for provision of useful knowledge through storytelling (Smith, 2016). Such useful knowledge should be accessed timely (Kushniruk, Borycki, & Parush, 2020) for better decision making. Pragmatist researchers should not be bothered by the methodological and epistemological aspects of inquiry but rather how useful the study output can be (Fendt, Kaminska-Labbé, & Sachs, 2008; Rechberg, 2018; Filstad, Simeonova, & Visser, 2018).

In the post-modernist paradigm, managers are aware that knowledge production and the multiple contexts in which it is created are intertwined (Tierney, 2001). Individuals exist in a fabric of power relations as no person has monopoly of knowledge (Lyotard, 1983). Yet knowledge management systems and practices are determined by power structures (Caruso, 2017; Buyl, Boone, & Matthyssens, 2012). Postmodern managers realise that encouraging employees to disseminate their knowledge is tasking due to cross-cutting subjective interests (Heo & Toomey, 2016). Managers should

constantly interrogate their personal interests and the interests of all employees to ensure that this does not affect knowledge management practices (Abu-Shanab & Shehabat, 2018). One of the ways through which knowledge management can thrive is by allowing trust among employees to make decisions tied to the strategic plans (Rushmer, Hunter, & Steven, 2014). It is important for managers to realise that every employee has useful contribution to make. However, such contribution should be examined and questioned constantly in light of the knowledge management practices. Using any of the mixed methods designs proposed by Creswell (2014) and Onwuegbuzie (2012), researchers may inquire into the influence of power dynamics on knowledge management practices in organisations. Such studies can be informed by the tenets of post modernism with a view to devise means of creating flexible and decentralised power structures for an effective knowledge management.

The critical realist ontology holds that knowledge thrives in an environment of unfolding events involving people, technology, social structure and ideas (Mingers & Standing, 2017). Knowledge management is made of interacting components at different levels of empirical, actual and real (Armstrong, 2019). In order to promote effective knowledge management, active participation is key at all levels of the organisation (Filstad, Simeonova, & Visser, 2018). According to Kim and Lee (2010) managers should enhance participation in all knowledge management activities. In order to foster participation, management would provide financial resources to enhance organisational learning (Okwechime, Duncan, & Edgar, 2018). In this case, studies basing on critical realism would investigate the linkage between participation, resource availability and knowledge management in organisations.

5. Conclusion

Knowledge management paradigms provide useful methodological and theoretical conceptualisations for managers and researchers. The discussion in this paper adds on the ongoing debate regarding the philosophical paradigms of knowledge management. The debate is perhaps traced from the scholarly works of Spender and Scherer (2007) and Rechberg (2018). It is increasingly becoming important that managers and researchers make use of appropriate paradigms to inform decision making for an effective knowledge management theoretical advancement and practice.

While there are some related studies focusing on similar aspects, this study may be the first of its kind to examine the knowledge management paradigms in detail. The study contributes to the in-depth understanding of the philosophical paradigms in view of the knowledge management research and practice. With respect to practice, the discussion provides some insights that managers draw from while making decisions.

This study has two limitations. Inquiry into knowledge management paradigms should be taken as unfinished business because any moment is potential for paradigm sprout (Kuhn, 1962). As such, this paper could not discuss exhaustively all paradigms related to knowledge management in addition, this is a conceptual paper that can provide literature for empirical studies in the same field. Future researchers should focus on empirical studies with a view to discovering managers' experiences in applying the discussed paradigms.

Author Statement

The author declares that there is no conflict of interest.

ORCID

Everest Turyahikayo https://orcid.org/0000-0002-9887-7841

References

- Abu-Shanab, E., & Shehabat, I. (2018). The influence of knowledge management practices on e-government success: A proposed framework tested. *Transforming Government: People, Process and Policy, 12*(3/4), 286–308.
- Adeyelure, T. S., Kalema, B. M., & Motlanthe, B. L. (2019). An empirical study of knowledge sharing: A case of South African healthcare system. *Knowledge Management & E-Learning*, 11(1), 114–128.
- Aggarwal, M., Borycki, E. M., Wagner, E., & Gosselin, K. (2020). The current state of knowledge on mobile health interventions for opioid related harm: Integrating scoping review findings with the patient journey. *Knowledge Management & E-Learning*, 12(4), 448–468.
- Alp, K. O. (2012). Artist in postmodern creation process. *Procedia-Social and Behavioural Sciences*, 51, 985–988.
- Amayah, A. T. (2013). Determinants of knowledge sharing in a public sector organization. *Journal of Knowledge Management*, 17(3), 454–471.
- Anderson, R. L. (2005). Nietzsche on truth, illusion, and redemption. *European Journal of Philosophy*, 13(2), 185–225.
- Armstrong, R. (2019). Critical realism and performance measurement and management: Addressing challenges for knowledge creation. *Management Research Review*, 42(5), 568–585.
- Babones, S. (2016). Interpretive quantitative methods for the social sciences. *Sociology*, 50(3), 453–469. doi: 10.1177/0038038515583637
- Börjesson, L. (2015). Grey literature-grey sources? Nuancing the view on professional documentation: The case of Swedish archaeology. *Journal of Documentation*, 71(6), 1158–1182.
- Brooke, M. (2013). Which research paradigm for TESOL? *Theory and Practice in Language Studies*, 3(3), 430–436.
- Brown, G. W., McLean, I., & McMillan, A. (2018). A concise Oxford dictionary of politics and international relations. London, UK: Oxford University Press.
- Brown, M. J. (2012). John Dewey's logic of science. HOPOS: The Journal of the International Society for the History of Philosophy of Science, 2(2), 258–306.
- Buyl, T., Boone, C., & Matthyssens, P. (2012). The impact of the top management team's knowledge diversity on organizational ambidexterity a conceptual framework. *International Studies of Management & Organization*, 42(4), 8–26.
- Campbell, M. (2018). Postmodernism and educational research. *Open Journal of Social Sciences*, 6(7), 67–73.
- Caruso, S. J. (2017). A foundation for understanding knowledge sharing: Organizational culture, informal workplace learning, performance support, and knowledge management. *Contemporary Issues in Education Research* 10(1), 45–52.
- Cavaleri, S. A. (2008). Are learning organizations pragmatic? *The Learning Organization*, 15(6), 474–485.

- Chandler, D., & Munday, R. (2016). A dictionary of media and communication (2nd ed.). London, UK: Oxford University Press.
- Chappell, T. (2012). Varieties of knowledge in Plato and Aristotle. *Topoi*, 31, 175–190. doi: 10.1007/s11245-012-9125
- Chignell, A. (2010). Causal refutations of idealism. The Philosophical Quarterly, 60(240), 487–507.
- Clarke, C. (2009). Paths between positivism and interpretivism: An appraisal of hay's via media. *Politics*, 29(1), 28–36.
- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (3rd ed.). Los Angeles, CA: Sage,
- Davenport, T. H., & Prusak, L. (2005). Working knowledge: How organizations manage what they know. Boston, MA: Harvard Business School Press.
- Davies, C., & Fisher, M. (2018). Understanding research paradigms. *Journal of the Australasian Rehabilitation Nurses Association*, 21(3), 21–25.
- De Holan, P. M., & Phillips, N. (2011). Organizational forgetting. In M. Easterby-Smith & M. A. Lyles (Eds.), *Handbook of Organizational Learning and Knowledge Management* (2nd ed.). London, UK: John Wiley and Sons.
- De la Rosa, F. J. U. (2017). The "false" debate between positivism and verstehen in the origins of sociology. *Human Affairs*, 27, 344–362.
- De Monthoux, P. G. (2017). Actions and decisions: Pragmatism gateway to artful analytic management philosophizing. *Philosophy of Management*, 16, 279–290.
- Demircioglua, A. M., & Audretsch, D. B. (2017). Conditions for innovation in public sector organizations. *Research Policy*, 46(9), 1681–1691.
- Diaconu, M. A. (2014). Truth and knowledge in postmodernism. *Procedia Social and Behavioural Sciences*, 137, 165–169. doi: 10.1016/j.sbspro.2014.05.270
- Easterby-Smith, M., & Lyles, M. A. (Eds.) (2011). *Handbook of organizational learning and knowledge management* (2nd ed.). London, UK: John Wiley and Sons.
- Easton, G. (2010). Critical realism in case study research. *Industrial Marketing Management*, 39, 118–128.
- Egyed, B. (2007). Spinoza, schopenhauer and the standpoint of affirmation. *PhaenEx*, 2(1), 110–131.
- Ekionea, J. P. B., & Fillion, G. (2021). Assessing KM capabilities in two African healthcare organizations: Case study. *The Electronic Journal of Knowledge Management*, 18(3), 392–406.
- Elkjaer, B., & Brandi, U. (2018). Knowledge sharing and organizational learning: The case of management consultancy. *Teoria e Prática em Administração*, 8(2), 80–102.
- Fendt, J., Kaminska-Labbé, R., & Sachs, W. M. (2008). Producing and socializing relevant management knowledge: Re-turn to pragmatism. *European Business Review*, 20(6), 471–491.
- Ferber, R. (2007). What did socrates know and how did he know it? In L. Brisson & M. Erler (Eds.), *Gorgias-Menon: Selected Papers from the seventh Symposium Platonicum* (pp. 263–267).
- Ferrarot, F. (2014). On the strained relationship between philosophy and sociology. *Academicus International Scientific Journal*, 10, 14–19.
- Filstad, C., Simeonova, B., & Visser, M. (2018). Crossing power and knowledge boundaries in learning and knowledge sharing: The role of ESM. *The Learning Organization*, 25(3). 159–168.
- Fine, G. (2010). Aristotle's two worlds: Knowledge and belief in posterior analytics 1.33. *Proceedings of the Aristotelian Society*, 100(3pt3), 323–346. doi: 10.1111/j.1467-9264.2010.00289
- Flew, A. (1985). The dictionary of philosophy. London, UK: Macmillan.
- Gamlen, A., & McIntyre, C. (2018). Mixing methods to explain emigration policies: A

- post-positivist perspective. Journal of Mixed Methods Research, 12(4), 374–393.
- Godfrey-Smith, P. (2002). Dewey on naturalism, realism and science. *Philosophy of Science*, 69(S3), S25–S35.
- Goldkuhl, G. (2012). Pragmatism vs interpretivism in qualitative information systems research. *European Journal of Information Systems*, 21, 135–146.
- Gondek, P. (2013). The question "why?" as the foundation for knowledge of causes in Aristotle. *Studia Gilsoniana*, 2, 91–105.
- Goodall, K., & Roberts, J. (2003). Repairing managerial knowledge-ability over distance. *Organization Studies*, 24(7), 1153–1175.
- Hasan, M. N. (2016). Positivism: To what extent does it aid our understanding of the contemporary social world? *Quality & Quantity*, 50, 317–325.
- Hattaway, M. (1978). Bacon and "knowledge broken": Limits for scientific method. *Journal of the History of Ideas*, 39(2), 183–197.
- Hayes, N. (2011). Information technology and the possibilities for knowledge sharing. In
 M. Easterby-Smith & M. A. Lyles (Eds.), *Handbook of Organizational Learning and Knowledge Management* (2nd ed.). London, UK: John Wiley and Sons.
- Heo, M., & Toomey, N. (2016). Supporting sustained willingness to share knowledge with visual Feedback. *Computers in Human Behavior*, 54, 388–396.
- Horrigan-Kelly, M., Millar, M., & Dowling, M. (2016). Understanding the key tenets of Heidegger's philosophy for interpretive phenomenological research. *International Journal of Qualitative Methods*, 15(1). doi: 10.1177/1609406916680634
- Huber, J. F., Dexheimer, J. W., Ingraham, H., Desmond, C., Klunk, A., Kusnier, K., Nebrig, D., Flesch, L., Borich, A., Davies, S. M., & Dandoy, C. E. (2020). Initial steps to measurement and improvement of family centered communication during the pediatric patient journey of bone marrow transplantation. *Knowledge Management & E-Learning*, 12(4), 488–504.
- Hunt, E. K., & Lautzenheiser, M. (2011). *History of economic thought: A critical perspective* (3rd ed.). London, UK: Routledge.
- Iacob, S., Popescu, C., & Riste, A. L. (2015). The role of epistemological paradigms in research in social sciences and humanities. *Theoretical and Applied Economics*, 24(4), 247–252.
- Iofrida, N., De Luca, A. I., Strano, A., & Gulisano, G. (2018). Can social research paradigms justify the diversity of approaches to social life cycle assessment? *International Journal of Life Cycle Assessment*, 23, 464–480.
- Jain, S. (2013). Bourdieu's sociology: A post-positivist science. Thesis Eleven, 117(1), 101–116.
- Jonas, M. E., & Nakazawa, Y. M. (2008). Finding truth in 'lies': Nietzsche's perspectivism and its relation toe. *Journal of Philosophy of Education*, 42(2), 269–285.
- Jorati, J. (2014). Leibniz's twofold gap between moral knowledge and motivation. *British Journal for the History of Philosophy*, 22(4), 748–766.
- Joseph, A. L., Kushniruk, A. W., & Borycki, E. M. (2020). Patient journey mapping: Current practices, challenges and future opportunities in healthcare. *Knowledge Management & E-Learning*, 12(4), 387–404.
- Kim, S., & Lee, H. (2010). Factors affecting employee knowledge acquisition and application capabilities. *Asia-Pacific Journal of Business Administration*, 2(2), 133–152.
- Kontos, P. C., & Poland, B. D. (2009). Mapping new theoretical and methodological terrain for knowledge translation: Contributions from critical realism and the arts. *Implementation Science*, 4: 1.
- Kuhn, T. (1962). The structure of scientific revolutions (2nd ed.). Chicago, IL: University

- of Chicago Press.
- Kulkarni, U. R., Ravindran, S., & Freeze, R. (2006). A knowledge management success model: Theoretical development and empirical validation. *Journal of Management Information Systems*, 23(3), 309–347.
- Kureshi, N. I., & Asghar, A. (2015). Antecedents of decision-making errors in public sector. *Journal of Strategy and Performance Management*, *3*(4), 159–177.
- Kushniruk, A. W., Borycki, E. M., & Parush, A. (2020). A case study of patient journey mapping to identify gaps in healthcare: Learning from experience with cancer diagnosis and treatment. *Knowledge Management & E-Learning*, 12(4), 405–418.
- Lambe, P. (2011). The unacknowledged parentage of knowledge management. *Journal of Knowledge Management*, 15(2), 175–197.
- Lynda, G. (2015). Socrates on teaching: Looking back to move education forward. Procedia - Social and Behavioural Sciences, 174, 3970–3974.
- Lyotard, J. F. (1983). *The postmodern condition: A report on knowledge*. London, UK: Manchester University Press.
- Mandalios, J. (2008). Nietzsche and the necessity of freedom. Lexington Books.
- Mann, J. C. (2015). Pygmalion's wax: "fruitful knowledge" in bacon and montaigne. *Journal of Medieval and Early Modern Studies*, 45(2), 367–393.
- Marsonet, M. (2017). Pragmatism and evolutionary epistemology. *Academicus International Scientific Journal 16*, 105–112.
- Martins, M., Costa, M., Gonçalves, M., Duarte, S., & Au-Yong-Oliveira, M. (2021). Knowledge creation on edible vaccines. *The Electronic Journal of Knowledge Management*, 18(3), 285–301.
- Mcleod, S. K. (2008). Knowledge of necessity: Logical positivism and Kripkean essentialism. *Philosophy*, 83(2), 179–191. doi: 10.1017/S0031819108000454
- Mingers, J., & Standing, C. (2017). Why things happen-developing the critical realist view of causal mechanisms. *Information and Organization* 27(3), 171–189.
- Monkman, H., Kushniruk, A. W., Borycki, E. M., Sheets, D., Barnett, J., & Park, H. (2020). Opportunities for improving how and when Canadians are informed about new prescription medications. *Knowledge Management & E-Learning*, 12(4), 427–447.
- Moore, T. W. (2010). Philosophy of Education: An Introduction. London, UK: Routledge. Moussa, M., McMurray, A., & Muenjohn, N. (2018). Innovation in public sector organisations. Cogent Business & Management, 5(1): 1475047.
- Müller-Merbach, H. (2005a). Francis Bacon's praise: Knowledge, the source of power. Knowledge Management Research & Practice, 3, 45–46.
- Müller-Merbach, H. (2005b). How to structure knowledge: Aristotle and the four causes. Knowledge Management Research & Practice, 3, 183–184.
- Nenonen, S., Brodie, R. J., Storbacka, K., & Peters, L. D. (2017). Theorizing with managers: How to achieve both academic rigor and practical relevance? *European Journal of Marketing*, 51(7/8), 1130–1152.
- Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. *Organization Science*, 5(1), 14–37.
- Okwechime, E., Duncan, P., & Edgar, D. (2018). Big data and smart cities: A public sector organizational learning perspective. *Information Systems and e-Business Management*, 16, 601–625.
- O'Leary, Z. (2007). The social science Jargon Buster. London, UK: SAGE.
- Oliver, C. (2012). The relationship between symbolic interactionism and interpretive description. *Qualitative Health Research*, 22(3), 409–415.
- Onwuegbuzie, A. J. (2012). Putting the mixed back into quantitative and qualitative research in educational research and beyond: Moving toward the radical middle. *International Journal of Multiple Research Approaches*, 6(3), 192–219.

- Park, C., & Allaby, M. (2017). *A dictionary of environment and conservation* (3rd ed.). London, UK: Oxford University Press.
- Parka, C. H., Song, J. H., Lim, D. H., & Kim, J. W. (2014). The influences of openness to change, knowledge sharing intention and knowledge creation practice on employees' creativity in the Korean public sector context. *Human Resource Development International*, 17(2), 203–221.
- Payne, W. R. (2015). An introduction to philosophy. Bellevue College, USA.
- Polanyi, M. (1966). The tacit dimension. London, UK: Routledge & Kegan Paul.
- Polónia, D. F., & Gradim, A. C. (2021). Innovation and knowledge flows in healthcare ecosystems: The Portuguese case. *The Electronic Journal of Knowledge Management*, 18(3), 374–391.
- Postema, G. J. (2006). Whence avidity? Hume's psychology and the origins of justice. *Synthese*, 152, 371–391. doi: 10.1007/s11229-006-9004-5
- Raines, D. A. (2013). Research paradigms and methods. *Neonatal Network*, 32(6). doi: 10.1891/0730-0832.32.6.425
- Rechberg, I. (2018). Knowledge management paradigms, philosophical assumptions: An outlook on future research. *American Journal of Management*, 18(3). doi: 10.33423/ajm.v18i3.74
- Reed, I. (2008). Justifying sociological knowledge: From realism to interpretation. *Sociological Theory*, 26(2), 101–129.
- Rong, G., Liu, X., Gu, S., & Shao, D. (2017). A goal-driven framework in support of knowledge management. In *Proceedings of the 24th Asia-Pacific Software Engineering Conference*. IEEE.
- Rosa, H. (2004). Four levels of self-interpretation a paradigm for interpretive social philosophy and political criticism. *Philosophy & Social Criticism*, 30(5/6), 691–720. doi: 10.1177/0191453704045761
- Rushmer, R. K, Hunter, D. J., & Steven, A. (2014). Using interactive workshops to prompt knowledge exchange: A realist evaluation of a knowledge to action initiative. *Public Health*, 128(6), 555–560.
- Russell, B. (1945). A history of western philosophy and its connection with political and social circumstances from the earliest times to the present day. New York, NY: Simon and Schuster.
- Ryan, G. S. (2018) Introduction to positivism, interpretivism and critical theory. *Nurse Researcher*. 25(4), 41–49.
- Sampaio, E. (2007). O argumento do criador do conhecimento em Nietzsche [The argument of the knowledge creator in Nietzsche]. *Kriterion*, 47(115), 89–106.
- Schultz, D. P., & Schultz, E. (2011). *A history of modern psychology* (10th ed.). Australia: Wadsworth.
- Sensuse, D. I., Cahyaningsih, E., & Wibowo, W. C. (2015). Identifying knowledge management process of Indonesian government human capital management using analytical hierarchy process and pearson correlation analysis. *Procedia Computer Science*, 72, 233–243.
- Shand, J. (1993). *Philosophy and philosophers: An introduction to western philosophy*. London, UK: UCL Press.
- Shateri, K., & Hayat, A. A. (2020). Investigating the mediating role of organizational trust in the relationship between perceived organizational support and knowledge sharing. *Knowledge Management & E-Learning*, 12(3), 298–314.
- Siebert, M. K. (2018). Augustine's development on testimonial knowledge. *Journal of the History of Philosophy*, 56(2), 215–238.
- Smith, R. (2016). Virtues of Unknowing. *Journal of Philosophy of Education*, 50(2), 272–284.

- Solomon, R. C., & Higgins, K. M. (2010). The big questions a short introduction to philosophy (8th ed.). Australia: Wadsworth.
- Sorrell, S. (2018). Explaining sociotechnical transitions: A critical realist perspective. *Research Policy* 47(7), 1267–1282.
- Sousa, M. J., Dal Mas, F., & Da Costa, R. L, (2021). Editorial: Advances in health knowledge management: New perspectives. The Electronic Journal of Knowledge Management, 18(3), 407–411.
- Spender, J. C., & Scherer, A. G. (2007). The philosophical foundations of knowledge management: Editors' introduction. *Organization*, 14(1), 5–28.
- Sturdy, A., Wright, C., & Wylie, N. (2016). Managers as consultants: The hybridity and tensions of nonbureaucratic management. *Organization*, 23(2), 184–205.
- Sudmann, T. T., Fredriksen, E. H., Børsheim, I. T., & Heldal, I. (2021) Knowledge management from senior users of online health information point of view. *The Electronic Journal of Knowledge Management*, 18(3), 325–337
- Taylor, G. (2013). Implementing and maintaining a knowledge sharing culture via knowledge management teams: A shared leadership approach. *Journal of Organizational Culture, Communications and Conflict, 17*(1), 69–91.
- Thyer, B. A. (2008). The quest for evidence-based practice? We are all positivists! *Research on Social Work Practice*, 18(4), 339–345. doi: 10.1177/1049731507313998
- Tierney, W. G. (2001). The autonomy of knowledge and the decline of the subject: Postmodernism and the reformulation of the university. *Higher Education*, 41, 353–372.
- Tourish, D, (2013). 'Evidence based management', or 'evidence oriented organizing'? A critical realist perspective. *Organization*, 20(2), 173–192.
- Tsoukas, H. (2011). How should we understand tacit knowledge? A phenomenological view. In M. Easterby-Smith & M. A. Lyles (Eds.), *Handbook of Organizational Learning and Knowledge Management* (2nd ed.). John Wiley and Sons. London.
- Turyahikayo, E. (2018). Bureaucratic rigidity, risk aversion and knowledge generation and utilization in the public sector: Reality or illusion? *Management and Organizational Studies*, 5(3), 9–16.
- Ullah, I., Mirza, B., Kashif, A. R., & Abbas, F. (2019). Examination of knowledge management and market orientation, innovation and organizational performance: Insights from telecom sector of Pakistan. *Knowledge Management & E-Learning*, 11(4), 522–551.
- Uriarte, F. A. (2008). Introduction to knowledge management: A brief introduction to the basic elements of knowledge management for non-practitioners interested in understanding the subject. In *Asean Foundation* (pp. 45–65).
- Vahabzadeh, P. (2009). Ultimate referentiality: Radical phenomenology and the new interpretative sociology. *Psephilosophy & Social Criticism*, 35(4), 447–465.
- Visser, M. (2019). Pragmatism, critical theory and business ethics: Converging lines. *Journal of Business Ethics*, 156, 45–57. doi: 10.1007/s10551-017-3564-9
- Walsh, D., & Evans, K. (2014). Critical realism: An important theoretical perspective for midwifery research. *Midwifery*, 30(1), e1–e6.
- Wamitu, S. N. (2016). Functional boundaries as a tacit knowledge sharing factor and its effect on public sector performance in Kenya. *Open Journal of Business and Management*, 4, 225–237.
- Watson, T. J. (2010). Critical social science, pragmatism and the realities of HRM. *The International Journal of Human Resource Management*, 21(6), 915–931, doi: 10.1080/09585191003729374
- Yin, R. K. (2011). Qualitative research from start to finish. New York, NY: Guilford.