Professionalising the Police Pragmatically

John McCanney, Julie Taylor and Karen Morris

Contact: Julie.Taylor3@cumbria.ac.uk

Affiliation: University of Cumbria, Institute of Health, Fusehill Street, Carlisle, Cumbria, CA1 2HH.

Abstract

The College of Policing has stated its intention to have policing recognised as a profession. In pursuit of this ambition, they have created a Code of Ethics and introduced a graduate entry requirement for new recruits. These changes reflect common features of established professions such as medicine and the law.

Another common feature of established professions is an established body of knowledge that informs professional practice. The College has developed a Crime Reduction Toolkit as the genesis of a knowledge base for policing. The evidence presented on the toolkit is generally based on random control trials and their systematic review. While this is accords with the evidence-based approach supported by the College and others it has been criticised as being too quantitative. Some commentators have argued that it overlooks the qualitative approaches such as ethnography which have been the traditional research approach to the study of policing and ignores the voice of practitioners. It is generally accepted that to date research has had little impact on policing practice.

This article argues for the adoption of a pragmatic philosophical framework for the development and application of a professional knowledge-based for policing. Pragmatic philosophy would facilitate the incorporation of both qualitative and quantitative research

into the creation of a knowledgebase. Furthermore, pragmatism is an action-oriented philosophy that accords with the College of Policing's 'what works' agenda, and would not only accommodate practitioner research but provides a structure for changes to current practices that are needed if the police are to become a profession

Introduction

In 2012 the Coalition Government created the College of Policing as the professional body for policing. The College was given a mandate to transform policing into a profession (Lumsden, 2016; Holdaway, 2017). In pursuit of this ambition, the College of Policing has created a code of ethics, and introduced a graduate entry scheme for the police (Brown *et al.*, 2018; Hough and Stanko, 2019). Furthermore, it is committed to developing a codified body of knowledge to inform and influence police practices (Fleming & Wingrove, 2017; Hunter et al., 2019; McGinley et al., 2019). This is a vital step if policing is to achieve professional status, as such a body of knowledge is fundamental to any established profession (Greenwood, 1957; Hunter et al., 2019; Wilensky, 1964; Williams et al., 2016). The scholars producing this knowledge base have struggled to achieve consensus on its epistemological foundation (Williams & Cockcroft, 2019). Moreover, the evidence produced to date has had negligible impact on police practice (Lumsden and Goode, 2018). Furthermore, police officers and their managers are divided on the value of research evidence as a way of improving policing practices (Hunter, May and Hough, 2017; Fleming and Rhodes, 2018).

These difficulties have the potential to coalesce and to derail the development of the professional knowledgebase for policing. This could in turn undermine the entire professionalisation agenda as the professional traits of a code of ethics, graduate entry, and a professional knowledgebase are interconnected each reliant on the other to establish a claim for professional status. To prevent this, stakeholders involved in the creation and implementation of the knowledgebase must find some basis for agreement on the validation of research knowledge, the inclusion of experiential knowledge and the practical application of professional knowledge. This article proposes Pragmatism as an overarching philosophical framework that could underpin the professional knowledgebase. It is a flexible philosophy that can accommodate different research methods, different perspectives, and ways of

understanding. Its adoption as the philosophy for professional policing would accommodate the practical action-oriented perspective of the police and the more abstract, theoretical view of the academic. This combination could develop the autonomous, critical thinking workforce demanded by the College of Policing for 21st century policing.

The philosophy of Pragmatism developed out of the thinking of Charles Sanders Peirce, William James, John Dewey, and George Herbert Mead in the mid-19th century (Simpson, 2018; Kaushik and Walsh, 2019). They did not set out to create a philosophical movement and disagreements amongst them led them to champion different versions of pragmatism (Greene and Hall, 2010; Hookway, 2013). However, it is largely accepted that pragmatism is a philosophy that is anti-foundational, anti-dualistic, and accepts the notion of multiple realities. Pragmatists argue that knowledge is fallible, contextual and the basis of a belief on which we are prepared to act (Hothersall, 2018). Therefore, is created and tested within real world problem-solving (Greene and Hall, 2010; Simpson, 2018).

Creating the police knowledgebase

Developing a knowledge base to guide professional practice is a new venture for policing, as traditionally policing has been viewed as a craft (Tong and Bowling, 2006; Neyroud, 2011; Willis and Mastrofski, 2018). A craft does not maintain a codified body of professional knowledge that informs practice, instead it is based on practical knowledge and skills learnt in the workplace, under the guidance of more experienced practitioners (Fleming and Rhodes, 2017; Willis and Mastrofski, 2018). Currently policing practice and knowledge is acquired following an 'on the job' apprenticeship approach. The accepted view within policing is that policing is best learned by doing. The knowledge, and culture are shared through officer's storytelling with colleagues about how they dealt with problematic situations and people. Through this process schema are created and intersubjectivity develops an enculturation

process that arguably assists new recruits when faced with similar situations in the future (Brown et al., 2018; Rowe, 2018).

If the College of Policing are to transform policing from a craft to a profession, it will have to incorporate this idiosyncratic approach to problem solving with a body of professional knowledge that is codified and evidentially based, so as to both scientifically and ethically defensible (Greenwood, 1957; Tilley and Laycock, 2014).

The College of Policing currently promote evidence-based policing (EBP) as the best approach to building a professional knowledge base (Hunter, May and Hough, 2019; Thornton *et al.,* 2019). In 1998 Professor Sherman articulated the concept of evidence-based policing, claiming that 'police practices should be based on scientific evidence about what works best' (Sherman, 1998, p. 2). He proposed that the medical model of research, which relies on the use of random control trials and systematic reviews, should be adopted by the police to produce a scientific evidence base to inform their decision making and practices (Sherman, 1998, 2009; Mitchell and Lewis, 2017). This approach privileges quantitative research methods with randomised control trials promoted as the 'gold standard' research approach and, when these are not practicable, other rigorous designs such as quasi-experiments are accepted as valid alternatives to assess police interventions (Mitchell and Lewis, 2017; Ariel, 2019). The crux of evidence-based policing claim is that it must be based on rigorous scientific evidence. This scientific approach is based on a positivistic philosophy that argues that the social and the physical world are both are 'out there,' external to individual, and that individuals are subject to patterns of deterministic processes that influence their behaviour leading to a series of natural outcomes, similar to natural forces acting on the physical world (Neuman, 2011; Denscombe, 2017). The aim of scientific research is to examine and measure this social reality in an objective and detached manner, using a deductive approach and quantitative methodologies that use statistical analysis to test

theory and establish general laws that provide a reliable and valid basis for prediction and control of human behaviour (Burns, 2000; Creswell, 2009).

This approach is clearly demonstrated in the way that the College of Policing uses EMMIE an evaluation framework to assess systematic reviews of crime interventions. EMMIE considers, amongst other things, the size of any effect, how it worked, what factors inhibited or facilitated the effect, any implementation issues and the economic costs (Johnson et al., 2015; Thornton et al., 2019). To merit inclusion in an evaluation there must be a focus on crime reduction, a clear explanation of research methods and a quantitative measure of crime reduction on interventions (College of Policing, 2021b; Johnson et al., 2015). Successful interventions are published on the College of Policing website in the Crime Reduction Toolkit. The toolkit serves as the professional knowledge base (Hunter, May and Hough, 2017; Mitchell, 2019). To date there are over 60 interventions listed on the Crime Reduction Toolkit, these include hot spots policing, focused deterrence, Problem Oriented Policing, and drink drive stops (Mitchell and Lewis, 2017; Telep and Somers, 2019; College of Policing, 2021a). EBP has gained support both inside and outside policing, with some commenters claiming evidence-based policing is the new research orthodoxy within policing (Telep and Somers, 2019). The Government have provided funding through the Economic and Social Research Council, parts of the university sector have worked with the College of Policing to create and share knowledge about what works in policing (Fleming and Wingrove, 2017; Hunter, May and Hough, 2019). The Society for Evidence Based Policing (SEBP) was founded by a group of UK police officers in 2010 to promote the use of evidence-based policing and it now has over 2,800 members (Hunter, May and Hough, 2017; Murray, 2019). Since then, the SEBP and the College of Policing have become key players in both creating and promoting the use of evidence-based policing within UK police forces (Heaton and Tong, 2015).

The supporters of EBP claim that the development of these scientifically tested objective interventions provide an evidence-based foundation for professional police practice.

However, the requirements of EMMIE mean that overwhelmingly only experimental or quasi-experimental methods are deemed acceptable for inclusion in the database (Fleming and Rhodes, 2018; Mitchell, 2019). This has led ~~has motivated~~ some commentators to argue that the current College of Policing validation process operates as a technology of control, legitimising what is, and what is not, accepted as evidence for inclusion in the knowledge base (Lumsden and Goode, 2018).

There is further criticism in both academic and police circles that EBP is simply over scientific, too reliant on random control trials and systematic reviews to deal with the complexity of variety of policing problems, and its privileging of quantitative methods has led to the exclusion of qualitative approaches that could provide valuable knowledge for policing (Lumsden & Goode, 2018; Telep & Somers, 2019; Wood et al., 2018). The concern is that while experiments are useful for measuring an intervention's effects (Sidebottom and Tilley, 2020), experiments cannot answer questions that do not have a cause-and-effect basis, such as questions about meanings, perceptions, or emotions (Ariel, 2019). Yet these could be argued to be just the type of questions that police officers need to answer as they try to understand how individuals feel, and act as they try to make sense of their worlds, such complexity cannot be understood in purely statistical terms (Neyroud and Weisburd, 2014).

These concerns represent an interpretivist account of the world which asserts that the social world is fundamentally different from the physical world, arguing that human beings give meaning and relevance to their social reality, while physical objects and forces do not (Bryman, 2016). Social reality is created and experienced within interactions that are contextualised by historical and cultural factors, whilst at the same time remaining personal

and subjective (Creswell, 2009; Bryman, 2016). Interpretive research uses qualitative methodology to capture and understand the meanings and beliefs that individuals employ within these social interactions (Creswell, 2009; Denscombe, 2017). It is an inductive approach, developing theory as an ongoing part of the research process that accepts the researcher is actively involved in, and influences the research results (Denscombe, 2017). The subjective nature of the research means that the results are not generalisable but are bounded by context and human caprice (Burns, 2000).

While there are clear differences between these two world views it is important that those engaged in the development of the police knowledgebase do not allow abstract epistemological concepts to limit their thinking. Writers as varied as Lenin and Einstein have argued that when you are engaged in changing society you should use all the methodologies available to you (Feyerabend, 1993). Each methodology has its own strengths and weaknesses and is suited to answering different types of questions and providing different types of evidence.

There is growing acknowledgement in both academia and policing of the benefits of a wider epistemological foundation for the knowledgebase. That while a positivist approach to research can create evidence, there is value in other sources of evidence such as qualitative or mixed methods research (Lumsden and Goode, 2018; Hunter, May and Hough, 2019; Sidebottom and Tilley, 2020). Supporters of EBP such as Neyroud and Weisburd have expressed a similar view stating that while experimentation is appropriate for assessing claims of effectiveness there are, ‘equally, in many other cases, more qualitative designs that are more appropriate’ (Neyroud and Weisburd, 2014, p. 289). Whilst this suggests an acceptance of parity amongst research methods, the examples they provide later are all experimental designs with qualitative methods in a secondary, supportive, and explanatory role. The College of Policing have adopted a similar stance, their definition of EBP is wider

than that proposed by Professor Sherman, The College representatives claim that the research question is the deciding factor in methodological choice and appears to include quantitative, qualitative, and mixed methods research in the production of knowledge for policing. On their website the College state that, '*In an evidence-based policing approach, police officers and staff create, review, and use the best available evidence to inform and challenge policies, practices, and decisions'.* They go on to describe best available evidence as *'the best available evidence will use appropriate research methods and sources for the question being asked. Research should be carefully conducted, peer reviewed and transparent about its method, limitations and how the conclusions were reached. The theoretical basis and context of the research should also be made clear. Where there is little or no formal research, other evidence such as professional consensus and peer review may be regarded as 'best available' evidence if gathered and documented in a careful and transparent way'* (College of Policing, 2021c).

It has been suggested that this more inclusive definition is a response to the criticisms of EBP, described above, and it resonates with a claim often made by proponents of EBP that all types of research can be utilised in providing evidence to inform policing practice (Lum and Koper, 2017).

These commitments to a more inclusive research strategy have yet to be operationalised in any meaningful way. This may be due, at least in part, to the allegiance that researchers hold towards their preferred methodologies and their epistemological and ontological stance. (Knutsson and Tompson, 2017).

The debate about research methodologies and knowledge validation within policing reflects a long running epistemological and ontological controversy in social science research,

concerning the merits and demerits of two competing approaches, the scientific positivist tradition, and the interpretive approach (Burns, 2000; Bryman, 2016).

These different ontological and epistemological perspectives have led to a long running controversy about the competency of either of these paradigms to produce reliable and valid knowledge of the human condition. The interpretivist purist rejects the scientific approach as an oversimplification of the complexity of human experience, claiming it demeans notions of individual choice, freedom, and morality (Burns, 2000). While proponents of the scientific approach claim that the interpretivist approach is unscientific and presents biased subjective opinion rather than credible evidence (Denzin and Ryan, 2007). These differences have led some researchers to advocate the incompatibility thesis, which claims that qualitative and quantitative research paradigms cannot be incorporated into a single research project (Johnson & Onwuegbuzie, 2004). Other commentators have argued that quantitative and qualitative methods are not diametrically opposed but share some common ground. They are both striving to find answers to questions that increase knowledge about the human experience. They operate systematically using empirical processes, to make comparisons and they are open and transparent about their research(Flick, 2011; Neuman, 2011). This perspective sees qualitative and quantitative methodologies as different ends of a continuum of legitimate approaches to knowledge creation. The results produced from each approach can be combined to augment our understanding of a phenomenon (Burns, 2000; Creswell, 2009). Such a continuum would have a third research paradigm in the middle, mixed methods. The mixed methods approach uses quantitative and qualitative methods in combination, so that the weaknesses inherent in either approach are compensated by the strengths of the other to provide a more complete picture of the research problem (Denscombe, 2008; Feilzer, 2010; Creswell and Plano Clark, 2011). Quantitative methods such as random control trials can make causal predictions, but struggle to capture the

complexities inherent in social situations, or the meanings individuals attach to situations (Kaushik and Walsh, 2019). Qualitative approaches, such as focus groups, aim to understand meaning and motivation but are unable to produce the generalisable data associated with quantitative approaches (Denzin and Lincoln, 2000; Flick, 2011). Employing mixed methods can provide a more complete picture, which makes it an obvious choice for researchers exploring the complexities of social life or organisational management (Denscombe, 2008; Ansell, 2016). Supporters of mixed methods research argue that it can bridge the divide between qualitative and quantitative methods by accepting that research methods are simply techniques of data collection that do not need epistemological or ontological grounding (Bryman, 2016).

Despite this claim there are purists on either side who claim that the philosophical differences between the two methodologies are so fundamental that they should not be combined (Denscombe, 2008). Therefore, simply adopting mixed methods should not be seen as the panacea that resolves the controversy surrounding the validation of knowledge, either within EBP or the wider social sciences (Creswell and Plano Clark, 2011; Biddle and Schafft, 2015). However, it is widely accepted that pragmatism provides the philosophical foundation for mixed methods, (Denscombe, 2008; Creswell, 2018; Kaushik and Walsh, 2019), and it could be used as the philosophical framework for creating a police knowledgebase.

Pragmatism is a philosophy that has an affinity to policing both are concerned with human values and focus on solving problems in the real world. Problems are both social and individual and are founded on experience but are not determined by the past. Knowledge is perhaps most useful when it is instrumental in resolving current difficulties (Ansell, 2016).

Pragmatism

Adopting pragmatism as a philosophical framework could not only underpin the development of EBP but could provide the basis for change in the cultural and managerial aspects of policing that impact on professional practice. Pragmatism privileges the question, encouraging the researcher to choose the method most likely to provide an answer, rather than letting epistemological and ontological premises constrain the researcher's choice (Morgan, 2007; Biesta, 2010; Biddle and Schafft, 2015). Therefore, the pragmatic researcher can choose, amongst other things, observation, experience, or experiments, as they are all useful ways to understand people and their worlds. They are free to employ a single method, multiple methods or a mix of methods depending on which is most appropriate in the situation (Feilzer, 2010; Denscombe, 2017; Hothersall, 2018). Researchers working within a pragmatic framework would be free to develop police knowledge using the research methodology of their choice, bound only by the question they seek to interrogate. Pragmatism not only privileges the question but highlights that all inquiries are undertaken from a particular perspective and serve a particular purpose (Morgan, 2007; Hildebrand, 2013). Therefore, when considering a choice of research methodology, the researcher should ask 'what is this for' and 'who is this for' (Feilzer, 2010; Kaushik and Walsh, 2019). This approach recognises that the potential consequences of acting on a chosen solution will differ depending on the situation. If the likely outcome is relatively unimportant or easily reversed, it may be acceptable to lower the evidential threshold, however, in high-risk situations the standard of evidence would be higher. Adopting a contextual understanding of truth allows for a plurality of research methodologies and corresponding validation criteria to be used to inform decision making dependent on the context of the question (Feilzer, 2010; Hildebrand, 2013; Hothersall, 2018). This is applicable in the development of the policing knowledge base, researchers, whether they are practitioners or not, could select a research method that is likely to find support with police decision makers based on a cost benefit analysis. This

would allow different methodologies to be validated in ways that are appropriate to the problem being examined rather than an abstract generalised scientific standard.

Traditionally police officers have gained their knowledge of policing though doing the job of policing, an approach that resonates with pragmatic knowledge creation. Pragmatists claim that knowledge is created within problem solving situations, through an iterative process in which successful outcomes from previous experiences are hypothesised as potential solutions to the current problem situation. Potential solutions are tested, revised, and retested in both a cognitive and a practical process of intelligent reflection (Ormerod, 2006; Ansell, 2016; Kaushik and Walsh, 2019). This is not solely a mental process, it is an active process of thinking, action, and reflection, it has a physical element, it is literally 'something that we do' (Dewey 1916 p367). This approach situates problem solving in an existing reality based on a genealogy of problem-solving knowledge created as the individual transacts with a pre-existing reality that is both individual and communal. Following this approach decision making can be creative and novel, but to be cogent it must cohere with prior decision making. This is an inherently self-correcting process because the successful solution is validated in the real world by solving the current problem, which in turn further endorses original solution as justified knowledge (Ormerod, 2006; Ansell, 2016; Kaushik and Walsh, 2019).

This process leads to some practices becoming so refined by numerous iterative transactions that they become established truths and although these are not immutable, they would only be liable to revision by substantial, rigorous, accepted evidence while other claims are untested, ambiguous, and less secure and vulnerable to challenge (Hickman, 2009; Neubert, 2009; Feilzer, 2010). Future knowledge must be created within this layered reality of established and mutable truths (Reich, 2009; Biesta, 2010), therefore, practitioners cannot believe anything they like. They must make decisions that accord with previously established and interconnected truths. This encourages an acceptance of the established rules and practices

that are embedded in their current practices (Neubert, 2009; Reich, 2009; Ansell, 2016). This pragmatic concept of a layered reality provides assurance for researchers and practitioners that while pragmatism views truths as mutable it is an evolutionary process and not a revolutionary one. Long established and cherished practices would only be challenged by substantial and verified knowledge. This should give police managers confidence to accept research findings from within a pragmatic framework, even when they challenge existing practices.

At the same time pragmatism accepts that change is an essential aspect of the social world. Pragmatic knowledge is created within active transactions and is therefore contextual, always containing the possibility of a different outcome (Hickman, 2009; Neubert, 2009; Biesta, 2010). Pragmatic knowledge is created as individuals transact within experience, this transactive element means that knowledge is always fallible, as we never know how we or others will act in any given situation (Feilzer, 2010; Buchan and Simpson, 2019). Knowledge therefore, is not foundational but simply relevant in a particular time and place (Berringer, 2019). This led John Dewey to describe truth as a 'warranted assertion'. The term 'warranted' recognises that experience includes past achievements and established, while the notion of 'assertion' acknowledges that the knowledge is contextual, contingent, and fallible (Biesta, 2010; Ansell, 2016; Buchan and Simpson, 2019). The acceptance that knowledge is fallible, and the notion of warranted assertions reflects the current approach to problem solving within operational policing. Officers attend incidents with a compendium of knowledge and experience in their heads, they then have to transact within the situation they are faced with. Then, often depending on their actions and the reactions and actions of other participants, they act based on the 'warranted assertions' they form during their engagement in the situation. Pragmatism enables practitioners to act in this way, to use new experiences to develop their professional experience and wisdom, creating new knowledge that is useful in

the current real-life situation, this practice is recognised outside of policing (Mitchell and Lewis, 2017; Kaushik and Walsh, 2019). Furthermore, police practitioners should view the indeterminacy involved in professional decision making as part of their professional practice and not subject their choices to undue criticism (Mitchell and Lewis, 2017).

The contextual nature of pragmatic knowledge does not mean that knowledge is never applicable in other situations, because pragmatic inquiry relies on previous experience to guide the resolutions of current problems (Morgan, 2007; Neubert, 2009; Biesta, 2010; Kaushik and Walsh, 2019). Knowledge is not considered deterministic but can influence future decision making. The capacity of knowledge to influence should be determined by agreement amongst those engaged in making the knowledge rather than on abstract arguments on the generalisability of knowledge per se (Morgan, 2007).

This view of knowledge as influential but not deterministic is shared with EBP practitioners who have argued that research should be replicated in a variety of locations to ensure validity and local applicability (Sherman, 2015; Scott, 2017). The involvement of practitioners in validating knowledge accords with the demands of several commentators to involve police officers in creating of the knowledgebase (Fleming and Wingrove, 2017; Telep and Somers, 2019).

EBP emphasises the need for scientific rigor in the creation of police knowledge leading to the rejection of many potentially useful knowledge claims. Pragmatism validates knowledge through an iterative process that tests claim in real world transactions, there is a lack of concern with the mechanics of knowledge creation, but instead a focus on intelligently planning to achieve the desired consequences of the research. This ‘ends in view’ perspective provides a clear benchmark of efficacy by simply asking ‘did it work?’ (Hothersall, 2018). Police researchers adopting the benchmark of ‘did it work’ would have a clear validation

standard to apply to research data regardless of whether they came from a positivistic or an interpretivist perspective.

The philosophical rationale underpinning this claim is the unique pragmatic innovation, the claim of an intersubjective reality. An intersubjective social world is neither completely subjective nor completely objective, so knowledge can be both individual and communal. This negates the issue of objectivism and subjectivism and recognises a world that is pluralistic and changing (Reich, 2009; Biesta, 2010; Simpson, 2018). Pragmatism accepts that there is an objective social reality that exists apart from human experience. This is not static or fixed reality but one that is continually evolving through an interplay of past, present, and future experience(Kaushik and Walsh, 2019). This objective reality is experienced by individuals in a personal, individual manner, but this does not lead to a completely subjective reality. In most situations we need to collaborate with others to successfully resolve problem situations, this necessitates that we act within an environment of mutual meaning and understanding. These interpretations are established within a matrix of relationships and a catalogue of similar past experiences that coalesce to form a schema to interpret the current problem (Elkjaer, 2004). This leads to an intersubjective social reality that is established and accepted and at the same time one that is open to challenge and change(Biesta, 2010; Buchan and Simpson, 2019; Kaushik and Walsh, 2019).

Adopting such a pluralistic ontology opens the possibility of an objective social world that can be subjected to deductive logic, perhaps by statistical analysis exploring cause and effect, and an individuated world of meanings that can be explored inductively perhaps by observation.

This perspective allows police researchers to use quantitative and qualitative approaches depending on the nature of the question. Perhaps more importantly it opens up the possibility

of abductive logic. While pragmatism can accommodate both deductive and inductive logics pragmatism favours the use of abductive logic. In abductive logic the researcher moves backward and forwards between induction and deduction, between data and theory, and importantly between qualitative or quantitative methods (Feilzer, 2010; Simpson, 2018). The evidence is initially tested by one logic, then this solution is subjected to the further exploration by the other logic. This back and forth between deduction and induction facilitates either the exploration of meaning behind quantitative data or provide a statistical overview of a qualitative research project (Simpson, 2018). Applying the abductive approach to policing research would encourage collaboration between quantitative and qualitative researchers helping to ensure they produce findings that have the wider, deeper and richer understanding of policing issues that has been demanded by some commentators and practitioners and the high level of credibility expected by others (Brown *et al.*, 2018).

The utility of Pragmatism as a philosophical framework for professional practice in the adjacent profession of social work has been promoted by a number of scholars (Berringer, 2019). Social work is a more established profession than policing but it still faces challenges around the development of theory and the extent that it influences practice (Hothersall, 2018; Berringer, 2019). These challenges are similar to those faced by policing, historical practices based on experience, a need to resolve indeterministic situations in an ethical and moral manner and a drive to incorporate scientific evidence within practice. Berringer and Hothersall have cogently argued that pragmatism's future oriented perspective permits a variety of ways to create knowledge grounded in practice that can solve the controversy around social work research and practice (Hothersall, 2018; Berringer, 2019). These arguments are relevant and applicable to the development of policing as a profession.

Craft and Hierarchy Knowledge

In addition to the methodological controversy described above the creation of a police knowledge base must overcome the related barriers of craft knowledge and rank hierarchy.

In policing there is an almost universal respect for experience, it is the foundation of most officer decision making (Lee and Punch, 2004; Lumsden, 2016). Research suggests that most police officers, including those in managerial ranks, prefer to rely on their own experience or advice from trusted colleagues over 'evidence' provided by academic researchers who have little or no policing experience (Fleming and Rhodes, 2018; Hunter, May and Hough, 2019). The domination of craft knowledge is rarely questioned or challenged by police officers and is reified in a police occupational culture in which new recruits learn to be police officers through the stories told by more experience colleagues of how they dealt with incidents and their encounters with the public. These stories are often selective and biased towards chases, fights, and arrests that portray the police as crime fighters protecting the public (Reiner, 2010; Fleming and Rhodes, 2018). While several reasons have been suggested for the failure of EBP to become embedded in day-to-day policing practices. The predominance of experience and craft in police decision making is recognised as a strong and resilient barrier to the acceptance of EBP (Sherman, 2015).

Evidence Based Policing is founded on the belief that police actions should be based on research analysis, and scientific evaluation of empirical evidence, rather than the current use of untested practices emotions, hunches, custom and anecdotal experience, (Lum and Koper, 2017; Mitchell and Lewis, 2017). This challenges the existing reliance on experience and craft by using statistical evidence to test the efficacy of existing practices and policies. The Crime reduction toolkit has published evidence that 'scared straight' programmes appear to increase re-offending and not reduce it, and that electronic tagging has not has a statistically significant effect on crime (College of Policing, 2021a). A study of 36,000 domestic violence calls by Bland and Ariel suggests that the current widespread use by UK police forces of a

DASH risk assessment tool maybe questionable (Bland and Ariel, 2015). The policy of taking positive action in domestic violence, normally by arresting the suspect, which is common practice both in the USA and the UK, has been questioned by recent research which shows it having a criminogenic effect on African American and unemployed offenders (Mitchell and Lewis, 2017). Even the conventional model of policing which is based on the 3Rs, random patrol, rapid response and reactive investigation, has been challenged by research which suggests that this approach has little impact on crime levels (Telep and Somers, 2019). Sherman argues that this traditional approach should be replaced by the 3Ts targeting of the problem, testing the best solution and then tracking the outcome (Sherman, 2013; Mitchell and Lewis, 2017).

Research suggests that despite the support of the College of Policing, these evidence-based policing interventions have had a limited impact on operational policing practice (Sherman, 2015; Fleming and Rhodes, 2018). The reasons for this are complex but the findings of EBP are often seen as too theoretical and abstract to be understood or implemented by practitioners and the practitioner's voice and concerns are rarely heard within the research (Lumsden & Goode, 2018; Wood et al., 2018). This is a fundamental problem because if evidence-based policing is to be effective it must be widely understood, accepted, and used by operational officers, their supervisors, and managers (Lum and Koper, 2017). This highlights a further potential barrier because research findings not only challenge current police practices, but they have the potential to undermine the current rank-based hierarchy by creating a new source of validated knowledge within policing. Since its conception in 1829 the police have adopted a command-and-control management style which operates within a rank-based hierarchical structure that determines, in virtually all policing situations, whose voice will be heard and who makes decisions. Those with rank have the authority to define and validate what is police knowledge and practice, leaving the rank and file with little

involvement or influence (Christopher, 2015; Silvestri, 2006; Williams et al., 2019). This type of hierarchy as the potential to limit the application of EBP as senior people can enforce decisions based on their rank rather than research evidence (Mitchell and Lewis, 2017). Furthermore, if evidence based practices are to gain traction within policing its leaders must create an environment in which staff can raise questions and make suggestions, and acknowledge that while a command-and-control management style is appropriate in some situations, it is often counter-productive in dealing with routine day to day issues (Drummond-Smith, 2017). Recent research into the experiences of graduate officers has found that those without rank find it difficult to get their views and ideas heard especially when they present research findings that challenge existing practices. In most cases their suggestions are dismissed out of hand or simply ignored as they lack the authority of rank to back them up (Goode & Lumsden, 2018; Williams et al., 2016; Williams & Cockcroft, 2019).

A pragmatic knowledge creation challenges this 'authority knowledge' knowledge that is validated by the speaker's rank and argues for its replacement with the authority of science. However, it argues that this must be an evolutionary process which has the agreement of most practitioners (Midtgarden, 2012). This consensual process of knowledge creation is embodied in the pragmatic concept of a community of practice.

Community of Practice

Pragmatism sees research as a social endeavour, in which the meaning of knowledge is defined within the context of community and the situation (Biddle and Schafft, 2015). In an intersubjective world there are 'communities of practice'. These are groups of like-minded individuals who through interest or occupation are competent to research and debate issues in their particular areas of interest. Knowledge is created, used, and validated within these communities (Morgan, 2007; Denscombe, 2008; Feilzer, 2010; Buchan and Simpson, 2019). A dialectic process of research, debate and application leads to knowledge that is co-

produced and collective rather than individual (Denscombe, 2008; Henry, 2017). This means that in reaching consensus and validating knowledge claims the community members have a shared responsibility for the knowledge which they create (Ormerod, 2006; Greene and Hall, 2010).

Creating a pragmatic community of practice would provide an arena for policing in which all ranks could participate in open discussion of policing problems, contribute ideas and undertake research or consider the implementation of research findings. This could give participants an insight into the perspectives of others, and an appreciation that if asymmetrical relationships are accepted as the norm, they limit an individual's creativity and ability to participate in knowledge creation (Hansen, 2006; Biesta, 2010; Midtgarden, 2012). There is a risk averse culture in policing, a fear of criticism and of blame means that many experiences, especially when things go wrong, are rarely shared outside a group of trusted colleagues. This extends to official operational debriefings, whose findings are rarely shared outside those who attended the incident (Fleming and Rhodes, 2017; Brown *et al.*, 2018). If the community of practice ensured confidentiality, then a relatively untapped source of practitioner knowledge, discussion of failures and 'near misses' could be opened. By allowing such discussion and appropriate levels of dissent, diversity of thought and questioning practitioners at all ranks would be permitted the agency and the autonomy to question what is going on around them and suggest the necessary changes to police practices and create and embed a professional knowledgebase (Norman & Williams, 2017; Silvestri, 2006; Wood et al., 2018; Wood & Williams, 2017).

Ethical Policing

The adoption of a community of practice could also encourage developments in ethical policing.

Some supporters of EBP claim that it is unethical for the police to fail to implement evidence-based interventions. They argue that ethical considerations demand that police decision making must, when every possible, be based on robust, validated scientific evidence (Neyroud and Sherman, 2013; Lum and Koper, 2017; Mitchell and Lewis, 2017). However, such an approach only addresses one aspect of professional practice. While validated knowledge and competence does play a part in ethical decision making in any profession it only part of the process (Wood, 2020). Donald Schon (2016) argues that professionals do not simply mechanistically apply their specialist knowledge to resolve their client's problems. Indeed, they are often confronted by problems that are unfamiliar to them and do not have an obvious or established solution. In attempting to resolve these issues they may try to redefine the problem to see if a different perspective opens up possible solutions; they might focus on different aspects of the problem reflecting on this specific problem and consider solutions from their previous experiences and knowledge to find a workable solution that satisfies their client. Finding solution to these indeterminate problems leads to an element of subjectivity in professional practice and therefore it is important that professionals act in an ethical manner. Most professions have developed a code of ethics to guide practitioners to act in an ethical way and the College of Policing has produced a code of practice and a National Decision-Making Model to guide officers (College of Policing, 2014). The basis and effectiveness of such publications for establishing ethical policing has been questioned, as compliance with formulaic rules is rarely inculcates ethical practice in practitioners and fails to encourage the moral agency that is fundamental to ethical policing(Wood, 2020). While there is long running debate on whether a duty based philosophy, a consequentialist approach or a principled based philosophy is the best way to inform an ethical life the Aristotelian virtue ethics has seen a revival recently as the most appropriate philosophy to underpin professional practice (Banks and Gallagher, 2009; Perez and Moore, 2013; Wood, 2020). MacIntyre

(1981) argues that virtues are acquired through engaging with others in a variety of practices, they are characteristics of the individual and are manifest in a wide range of situations. Aristotle saw virtues as a 'golden mean' so in the area of fear it is a vice to be a coward, a virtue to have courage and a further vice to be reckless, maintaining the balance develops a good character(Perez and Moore, 2013). The relevance of virtue ethics to ethical policing can also be seen in the practice of 'practice'. When an officer initially engages in a practice, they must accept the norms, standards, and history of the practice, and accept their own incompetence. This recognition allows them to gain first proficiency and then excellence in the practice by repeated engagement in the practice (MacIntyre, 1981). They are motivated to achieve by notion of internal and external goods, internal goods are only achievable by successful and ethical engagement in the practice. This could be the pleasure gained being a good practitioner or utilising a skill. It is important to state that internal goods cannot be achieved by vice, such as cheating and that the individual achievements of internal goods benefits the whole community (MacIntyre, 1981).

Aristotelian virtue ethics is in accord with many aspects of Pragmatism and the concept of the community of practice. Virtue ethics encourages practitioners to act autonomously as moral agents, ethical practice is always exhibited within practice and within a community that understands and supports the ethical view. Pragmatism has a strong ethical perspective which accepts that there are generalised moral principles and norms that transcend experience and provide a general guide to experience. These principles have validity because they have been consistently successfully applied to previous situations. These principles are subsequently employed by practitioners within their community of practice, to inform its norms, research standards and ethics to provide benchmarks to review the integrity, robustness, and governance of such processes of inquiry (Hothersall, 2018). Pragmatism's acceptance of

plurality allows for the inclusion of community participation in problem resolution and therefore the benefits of procedural justice (Kaushik and Walsh, 2019).

The diversity and changeability of societal norms and the contextual nature of experience means that there must be a degree of moral flexibility to cope with the constant change. This recognises that there is genuine ambiguity and ambivalence in moral situations, there will not always be one perfect solution to each moral problem and every practitioner must have the flexibility to respond to the situation as they see fit (Neubert, 2009). This means that there is a need for imaginative and creative application of moral and normative principles (Neubert, 2009; Ansell, 2016). This approach encourages individuals and communities not only to challenge their beliefs, values, and interests but to deepen their understanding of the viewpoints of others. Ethical values are created and expressed within social situations and are open to review and revision within situations (Ansell, 2016; Simpson, 2018; Kaushik and Walsh, 2019). The dynamic and contextual nature of ethical decision making is recognised in the national decision-making model that is promoted by the College of Policing as the basis of all decision making in the police. Officers are advised to include ethical, community and organisational expectations as well as the dynamics of the specific situation they are faced with when making decisions on how to act. This reflects not only a pragmatic approach to ethics but the whole philosophy of pragmatism.

The community of practice is also useful as a paradigm for evaluating craft knowledge and professional experience. Despite its limitations there is an acknowledgement that ignoring experience and practitioner knowledge will limit the evidence base for professional policing (Bradley and Nixon, 2009). Therefore, if EBP is to guide policing practice in the 21st century it will have to incorporate police craft into the knowledgebase. This is problematic as craft knowledge is largely subjective, esoteric, and uncodified. It is unlikely to meet the criteria demanded of EBP research evidence in terms of rigor and validity. If experience is to be

included in the body of knowledge, then it must be collected and codified so that it can be assessed and categorized before it can be used to influence practice. However, including craft knowledge is not straight forward, the process of codifying of experiences can create abstract, academic knowledge that it is unrecognisable to those whose experiences were codified (Thacher, 2008). Contemplating craft knowledge within a community of practice could provide an alternative process that, by actively involving practitioners in the evaluation and codification of craft knowledge, preserves the authenticity and praxis nature of craft knowledge whilst agreement with the community would validate some practices for inclusion in the knowledgebase and reject others.

The College of Policing encourages police officers and staff to engage in the process of creating research knowledge (Brown *et al.*, 2018; Mitchell, 2019). This accords with other established professions where practitioners are actively engaged in creating knowledge to inform professional practice (Wilensky, 1964; Williams et al., 2016). Therefore, police practitioners need to become shared owners and participants with academia in developing the knowledge base. This will encourage officers to not only value the outputs of science but also its norms and procedures (Neyroud and Weisburd, 2014). However, police officers often lack the confidence and skills to undertake complex research projects, such as the RCTs and systematic reviews published on the Crime Reduction Toolkit (Williams et al., 2019; Williams & Cockcroft, 2019).

Police practitioners researching within a pragmatic framework could be encouraged to engage in qualitative research projects. Qualitative research is valued for the knowledge and insight it can provide into the human experience, but it requires a rigorous and methodical approach if it is to provide results that are accepted as valid enough to inform future decision making (Fereday and Muir-Cochrane, 2006).

Thematic analysis is not a classified as a pragmatic research method, but it has many pragmatic features. It is a qualitative research method that can provide creditable evidence to policy makers. It is a flexible method for analysing and reporting themes within qualitative dataset from a variety of perspectives along a continuum from a statistical, post-positivist paradigm to a more descriptive, constructivist worldview (Braun and Clarke, 2006; Ormerod, 2006; Nowell *et al.*, 2017). Positivist researchers can create a code book that explores the data using pre-set concepts often based on the research hypothesis. A single researcher can use the code book to guide their interpretation of data, while in research projects that use a team of researchers their individual application of the codes to the data can be compared to establish their level of inter-rater reliability in assessing the data (Ormerod, 2006; Terry *et al.*, 2017). The use of a code book attempts to minimise any potential researcher biases and to provide a level of objectivity in the interpretation of the data that is valued by positivist research. Many qualitative researchers reject this as an anathema to the character of qualitative research, with the researcher using their skills and experience to subjectively interpret the latent meanings in participants' responses, to providing an insight into the meanings attached to experience and not notions of 'accuracy' and 'objectivity'. Therefore, researchers from either perspective can use thematic analysis to interpret their data ((Braun and Clarke, 2006; Ormerod, 2006; Terry *et al.*, 2017). One of the strengths of thematic analysis is the employment of an iterative process of reflection on the data, the codes and the developing themes. A constructive researcher may review their interpretation of the data several times to verify their understanding of themes, whilst or in a more statistical approach a research team will review their analysis of the data several times before agreeing a consensual understanding of the data (Fereday and Muir-Cochrane, 2006; Nowell *et al.*, 2017; Terry *et al.*, 2017).

This process of reflection and review, the choice of codes and the other research decisions such as the theoretical basis of the research should be recorded and published. This allows other researchers to repeat the study in other settings, similar findings would increase the trustworthiness of the original results, while conflicting results would indicate the limitations of the research (Braun and Clarke, 2006; Nowell *et al.*, 2017; Terry *et al.*, 2017). Researchers should be encouraged to provide direct quotations from participants and access to raw data when appropriate would allow peers and others to critically evaluate findings, such openness would help establish the credibility of the research process and the findings (Fereday and Muir-Cochrane, 2006; Nowell *et al.*, 2017).

Thematic analysis is not tied to a particular epistemological position and can be used within different research paradigms, therefore is useful in answering a variety of research questions (Braun and Clarke, 2006; Nowell *et al.*, 2017; Terry *et al.*, 2017). Indeed, it is seen by some as a bridge between qualitative and quantitative research (Braun and Clarke, 2006; Nowell *et al.*, 2017). However, without an epistemological foundation to frame the research results could be considered incoherent and inconsistent (Nowell *et al.*, 2017).

Thematic analysis provides a straightforward method for collecting qualitative data, its iterative approach is pragmatic and the encouragement to share data and process with others accords with the pragmatic 'community of practice' practice' in which agreement is achieved amongst a group of like-minded individuals engaged in solving the same problem (Shields, 2003). The techniques of thematic analysis are relatively easy to understand and apply which makes it suitable for inexperienced researchers, such as police practitioner researchers (Braun and Clarke, 2006; Nowell *et al.*, 2017). Pragmatism can provide a foundation for the use of thematic analysis in policing research; it accepts a flexible and inclusive approach to knowledge creation, whilst being grounded by a focus on the research question and an 'ends in view' process of testing research data by application to the solution of real-world

problems. These features make thematic analysis particularly suited to developing practitioner involvement in the creation of the policing knowledge base, and in codifying the craft experiences of police officers for inclusion in the knowledge base.

While thematic analysis provides a qualitative research method for policing, it must be recognised that policing is a diverse activity which operates in a complex social world. To fully engage with such complexity and diversity requires a variety of research methods, including quantitative and mixed methods approaches (Biesta, 2010; Fleming and Rhodes, 2017).

Conclusion

The main motivation for professionalizing the police and creating a professional police knowledge base is that police now operate in a pluralistic and complex society. The police need a body of knowledge that is validated and defensible to replace the idiosyncratic experiential and 'authority' knowledge that is the current basis for practice in policing.

This is a creation of such a knowledgebase is challenging because the police have no history of a professional knowledgebase having always relied on experience and craft to inform practice and there is a strong hierarchy that determines the definition of police knowledge often based on personal caprice and popularism. These issues are exacerbated by the controversy between quantitative and qualitative methodologies and their efficacy in informing practice.

Adopting the philosophy of pragmatism as an overarching framework for developing a police knowledgebase could help to resolve these issues. It is a philosophy that is grounded in practice which echoes the operational and cultural milieu of policing, and it is flexible enough to accommodate a variety of epistemological claims and promotes a pluralistic ontology. These attributes coalesce to form a credible paradigm within which practitioners

and academics can develop an inclusive knowledgebase that accepts a variety of research methodologies. A consensus on the incorporation of craft knowledge and an adaptation of the existing rank-based hierarchy to replace idiosyncratic experiential and 'authority' knowledge as the basis for practice.

The tenets of pragmatic philosophy make it a natural collaborative partner in the development of a professional knowledgebase that is both academically robust and embedded in praxis. While adopting a pragmatic philosophical framework will require negotiation and agreement from stakeholders about the validity of knowledge claims. A generally agreed framework provides limits to the extent of any compromise. Furthermore, pragmatism with its inherent flexibility and inclusiveness can help practitioners find the common ground which exists not only between the different knowledge perspectives, but different ranks and roles within policing.

References

Ansell, C. (2016) 'Pragmatism', in C. Ansell and J. Torfing (eds) *Handbook on Theories of Governance*. Cheltenham, Gloucestershire, UNITED KINGDOM: Edward Elgar Publishing Limited, pp. 392–401. Available at: http://ebookcentral.proquest.com/lib/lancaster/detail.action?docID=4573684 (Accessed: 27 February 2020).

Ariel, B. (2019) '"Not all evidence is created equal": on the importance of matching research questions with research methods in evidence-based policing', in M. Renée and H. Laura (eds) *Evidence Based Policing: An Introduction*. Bristol, UK: Policy Press, pp. 63–86.

Banks, S. and Gallagher, A. (2009) *Ethics in professional life: virtues for health and social care*. Basingstoke [England]; New York: Palgrave Macmillan.

Berringer, K.R. (2019) 'Reexamining Epistemological Debates in Social Work through American Pragmatism', *Social Service Review*, 93(4), pp. 608–639. Available at: https://doi.org/10.1086/706255.

Biddle, C. and Schafft, K.A. (2015) 'Axiology and Anomaly in the Practice of Mixed Methods Work: Pragmatism, Valuation, and the Transformative Paradigm', *Journal of Mixed Methods Research*, 9(4), pp. 320–334. Available at: https://doi.org/10.1177/1558689814533157.

Biesta, G. (2010) ‘Pragmatism and the Philosophical Foundations of Mixed Methods Research’, in A. Tashakkori and C. Teddlie (eds) *Sage handbook of mixed methods in social & behavioral research*. 2nd ed. Los Angeles: SAGE Publications, pp. 95–118.

Bland, M. and Ariel, B. (2015) ‘Targeting Escalation in Reported Domestic Abuse: Evidence From 36,000 Callouts’, *International Criminal Justice Review*, 25(1), pp. 30–53. Available at: https://doi.org/10.1177/1057567715574382.

Bradley, D. and Nixon, C. (2009) ‘Ending the “dialogue of the deaf”: evidence and policing policies and practices. An Australian case study’, *Police Practice and Research*, 10(5–6), pp. 423–435. Available at: https://doi.org/10.1080/15614260903378384.

Braun, V. and Clarke, V. (2006) ‘Using thematic analysis in psychology’, *Qualitative Research in Psychology*, 3(2), pp. 77–101. Available at: https://doi.org/10.1191/1478088706qp063oa.

Brown, J. *et al.* (2018) ‘Extending the remit of evidence-based policing’, *International Journal of Police Science & Management*, 20(1), pp. 38–51. Available at: https://doi.org/10.1177/1461355717750173.

Brown, J. (2020) ‘Evidence-based policing: competing or complementary models?’, in N. Fielding, K. Bullock, and S. Holdaway (eds) *Critical Reflections on Evidence-Based Policing*. Abingdon, Oxon: Taylor & Francis Group, pp. 95–114. Available at: http://ebookcentral.proquest.com/lib/cumbria/detail.action?docID=5981674 (Accessed: 14 March 2021).

Bryman, A. (2016) *Social research methods*. 5th ed. Oxford; New York: Oxford University Press.

Buchan, L. and Simpson, B. (2019) ‘Projects-as-Practice: A Deweyan Perspective’, *Project Management Journal*, 00(0), pp. 1–11. Available at: https://doi.org/10.1093/oxfordhb/9780199563142.003.0022.

Burns, R.B. (2000) *Introduction to research methods*. 4th ed. London; Thousand Oaks, Calif: SAGE.

Christopher, S. (2015) ‘The Police Service Can Be a Critical Reflective Practice … If It Wants’, *Policing*, 9(4), pp. 326–339. Available at: https://doi.org/10.1093/police/pav007.

College of Policing (2014) *Code of ethics: a code of practice for the principles and standards of professional behaviour for the policing profession of England and Wales.* Coventry: College of Policing Limited.

College of Policing (2021a) *College of Policing - Crime Reduction Toolkit*. Available at: http://whatworks.college.police.uk/toolkit/Pages/Toolkit.aspx (Accessed: 11 September 2021).

College of Policing (2021b) *Information for systematic reviewers | What Works Centre for Crime Reduction*. Available at: https://whatworks.college.police.uk/toolkit/Pages/systematic-reviewers.aspx (Accessed: 9 September 2021).

College of Policing (2021c) *What is evidence-based policing? | What Works Centre for Crime Reduction*. Available at: https://whatworks.college.police.uk/About/Pages/What-is-EBP.aspx (Accessed: 22 December 2021).

Creswell, J.W. (2009) *Research design: qualitative, quantitative, and mixed methods approach*. 3. ed. Los Angeles: SAGE Publications.

Creswell, J.W. (2018) *Research Design Qualitative, Quantitative, and Mixed Methods Approaches*. 5th Edition. SAGE Publishing.

Creswell, J.W. and Plano Clark, V.L. (2011) *Designing and conducting mixed methods research*. 2nd ed. Los Angeles: SAGE Publications.

Denscombe, M. (2008) 'Communities of Practice: A Research Paradigm for the Mixed Methods Approach', *Journal of Mixed Methods Research*, 2(3), pp. 270–283. Available at: https://doi.org/10.1177/1558689808316807.

Denscombe, M. (2017) *The Good Research Guide: for small-scale social research projects*. Sixth edition. London New York, NY: Open University Press (Open UP study skills).

Denzin, N.K. and Lincoln, Y.S. (2000) 'Introduction: The Discipline and Practice of Qualitative Research', in N.K. Denzin and Y.S. Lincoln (eds) *Handbook of qualitative research*. 2nd ed. Thousand Oaks (Calif.): Sage, pp. 1–28.

Denzin, N.K. and Ryan, K.E. (2007) 'Qualitative Methodology (including focus groups)', in W. Outhwaite and S.P. Turner (eds) *The SAGE handbook of social science methodology*. London: SAGE, pp. 578–594.

Drummond-Smith, I. (2017) '"Yes, sir": Leadership and blind obedience in hierarchal organisations', *International Journal of Emergency Services*, 7(1), pp. 24–31. Available at: https://doi.org/10.1108/IJES-04-2017-0016.

Elkjaer, B. (2004) 'Organizational Learning: The "Third Way"', *Management Learning*, 35(4), pp. 419–434. Available at: https://doi.org/10.1177/1350507604048271.

Feilzer, M.Y. (2010) 'Doing Mixed Methods Research Pragmatically: Implications for the Rediscovery of Pragmatism as a Research Paradigm', *Journal of Mixed Methods Research*, 4(1), pp. 6–16.

Fereday, J. and Muir-Cochrane, E. (2006) 'Demonstrating Rigor Using Thematic Analysis: A Hybrid Approach of Inductive and Deductive Coding and Theme Development', *International Journal of Qualitative Methods*, 5(1), pp. 80–92. Available at: https://doi.org/10.1177/160940690600500107.

Feyerabend, P. (1993) *Against method*. 3rd ed. London; New York: Verso.

Fleming, J. and Rhodes, R. (2017) 'Experience is not a dirty word', *Policy and Politics Journal*, 20 June. Available at: https://policyandpoliticsblog.com/2017/06/20/experience-is-not-a-dirty-word/ (Accessed: 2 April 2021).

Fleming, J. and Rhodes, R. (2018) ‘Can experience be evidence? Craft knowledge and evidence-based policing’, *Policy & Politics*, 46(1), pp. 3–26. Available at: https://doi.org/10.1332/030557317X14957211514333.

Fleming, J. and Wingrove, J. (2017) ‘“We Would If We Could … but Not Sure If We Can”: Implementing Evidence-Based Practice’, *Policing: A Journal of Policy and Practice*, 11(2), pp. 202–213. Available at: https://doi.org/10.1093/police/pax006.

Flick, U. (2011) *Introducing research methodology: A beginner’s guide to doing a research project*. Los Angeles: Sage.

Goode, J. and Lumsden, K. (2018) ‘The McDonaldisation of police–academic partnerships: organisational and cultural barriers encountered in moving from research *on* police to research *with* police’, *Policing and Society*, 28(1), pp. 75–89. Available at: https://doi.org/10.1080/10439463.2016.1147039.

Greene, J.C. and Hall, J.N. (2010) ‘DIALECTICS AND PRAGMATISM Being of Consequence’, in A. Tashakkori and C. Teddlie (eds) *Sage Handbook of Mixed Methods in Social & Behavioral Research*. 2nd ed. Los Angeles: SAGE Publications, pp. 119–144.

Greenwood, E. (1957) ‘Attributes of a Profession’, *Social Work*, 2(3), pp. 45–55.

Hansen, D.T. (ed.) (2006) *John Dewey and our educational prospect: a critical engagement with Dewey’s Democracy and education*. Albany: State University of New York Press.

Heaton, R. and Tong, S. (2015) ‘Evidence-Based Policing: From Effectiveness to Cost-Effectiveness’, *Policing*, 10, pp. 60–70. Available at: https://doi.org/10.1093/police/pav030.

Henry, A. (2017) ‘Reflexive Academic-Practitioner Collaboration with the Police’, in S. Armstrong, J. Blaustein, and A. Henry (eds) *Reflexivity and Criminal Justice Intersections of Policy, Practice and Research*. 1st ed. 2017. London: Palgrave Macmillan UK, pp. 169–1990. Available at: https://doi.org/10.1057/978-1-137-54642-5.

Hickman, L.A. (2009) ‘John Dewey: His Life and Work’, in L.A. Hickman, S. Neubert, and K. Reich (eds) *John Dewey Between Pragmatism and Constructivism*. 1st ed. New York: Fordham University Press (American philosopy series), pp. 3–18. Available at: http://hdl.handle.net/2027/heb.08487 (Accessed: 15 February 2020).

Hildebrand, D. (2013) ‘Dewey’s pragmatism: instrumentalism and meliorism’, in A. Malachowski (ed.) *The Cambridge Companion to Pragmatism*. 1st edn. Cambridge University Press, pp. 55–80. Available at: https://doi.org/10.1017/CCO9781139022132.006.

Holdaway, S. (2017) ‘The re-professionalization of the police in England and Wales’, *Criminology & Criminal Justice*, 17(5), pp. 1–17. Available at: https://doi.org/10.1177/1748895817690214.

Hookway, C. (2013) ‘“The principle of Peirce” and the origins of pragmatism’, in A. Malachowski (ed.) *The Cambridge Companion to Pragmatism*. 1st edn. Cambridge University Press, pp. 17–35. Available at: https://doi.org/10.1017/CCO9781139022132.004.

Hothersall, S.J. (2018) 'Epistemology and social work: enhancing the integration of theory, practice and research through philosophical pragmatism', *European Journal of Social Work*, pp. 1–11. Available at: https://doi.org/10.1080/13691457.2018.1499613.

Hough, M. and Stanko, E.A. (2019) 'Designing Degree-Level Courses for Police Recruits in England and Wales: Some Issues and Challenges', *Policing: A Journal of Policy and Practice* [Preprint]. Available at: https://doi.org/10.1093/police/pay096.

Hunter, G., May, T. and Hough, M. (2017) *An Evaluation of the 'What Works Centre for Crime Reduction' Final Report*, p. 101.

Hunter, G., May, T. and Hough, M. (2019) 'Are the police embracing evidence-informed practice? A view from England and Wales', *Policing and Society*, 29(3), pp. 251–265. Available at: https://doi.org/10.1080/10439463.2018.1557180.

Johnson, R.B. and Onwuegbuzie, A.J. (2004) 'Mixed Methods Research: A Research Paradigm Whose Time Has Come', *Educational Researcher*, 33(7), pp. 14–26. Available at: https://doi.org/10.3102/0013189X033007014.

Johnson, S.D., Tilley, N. and Bowers, K.J. (2015) 'Introducing EMMIE: evidence rating scale to encourage mixed-method crime prevention synthesis reviews', *Journal of Experimental Criminology*, 11(3), pp. 459–473. Available at: https://doi.org/10.1007/s11292-015-9238-7.

Kaushik, V. and Walsh, C.A. (2019) 'Pragmatism as a Research Paradigm and Its Implications for Social Work Research', *Social Sciences*, 8(9), p. 255. Available at: https://doi.org/10.3390/socsci8090255.

Knutsson, J. and Tompson, L. (eds) (2017) *Advances in Evidence-Based Policing*. 1st edn. Abingdon, Oxon; New York, NY: Routledge, 2017. | Series: Crime science series; 19: Routledge. Available at: https://doi.org/10.4324/9781315518299.

Lee, M. and Punch, M. (2004) 'Policing by Degrees: Police Officers' Experience of University Education', *Policing and Society*, 14(3), pp. 233–249. Available at: https://doi.org/10.1080/1043946042000241820.

Lum, C.M. and Koper, C.S. (2017) *Evidence-based policing: translating research into practice*. First edition. Oxford, United Kingdom: Oxford University Press.

Lumsden, K. (2016) 'Police Officer and Civilian Staff Receptivity to Research and Evidence-Based Policing in the UK: Providing a Contextual Understanding through Qualitative Interviews', *Policing*, p. paw036. Available at: https://doi.org/10.1093/police/paw036.

Lumsden, K. and Goode, J. (2018) 'Policing Research and the Rise of the "Evidence-Base": Police Officer and Staff Understandings of Research, its Implementation and "What Works"', *Sociology*, 52(4), pp. 813–829. Available at: https://doi.org/10.1177/0038038516664684.

MacIntyre, A.C. (1981) *After virtue: a study in moral theory*. 2nd edn. London: Duckworth.

McGinley, B. *et al.* (2019) 'Police Recruit Training Programmes: A Systematic Map of Research Literature', *Policing: A Journal of Policy and Practice*, p. paz019. Available at: https://doi.org/10.1093/police/paz019.

Midtgarden, T. (2012) 'Critical Pragmatism: Dewey's social philosophy revisited', *European Journal of Social Theory*, 15(4), pp. 505–521. Available at: https://doi.org/10.1177/1368431011432373.

Mitchell, R.J. (2019) 'A light introduction to evidence-based policing', in R.J. Mitchell and L. Huey (eds) *Evidence Based Policing: An Introduction*. Bristol, UK: Policy Press, pp. 3–14.

Mitchell, R.J. and Lewis, S. (2017) 'Intention is not method, belief is not evidence, rank is not proof', *International Journal of Emergency Services*, 6(3), pp. 188–199. Available at: http://dx.doi.org/10.1108/IJES-04-2017-0018.

Morgan, D.L. (2007) 'Paradigms Lost and Pragmatism Regained: Methodological Implications of Combining Qualitative and Quantitative Methods', *Journal of Mixed Methods Research*, 1(1), pp. 48–76. Available at: https://doi.org/10.1177/2345678906292462.

Murray, A. (2019) 'Why is evidence-based policing growing and what challenges lie ahead?', in M. Renée and H. Laura (eds) *Evidence Based Policing: An Introduction*. Bristol, UK: Policy Press, pp. 215–230.

Neubert, S. (2009) 'Pragmatism: Diversity of Subject in Dewey's Philosophy and the Present Dewey Scholarship', in L.A. Hickman, S. Neubert, and K. Reich (eds) *John Dewey Between Pragmatism & Constructivism*. 1st ed. New York: Fordham University Press (American philosophy series), pp. 19–38.

Neuman, W.L. (2011) *Social research methods: qualitative and quantitative approaches*. 7. ed., international ed. Boston, Mass.: Pearson.

Neyroud, P. (2011) *Review of police leadership and training*. Volume One. Home Office. Available at: www.gov.uk/government/publications/police-leadership-and-training-report-review (Accessed: 23 October 2018).

Neyroud, P. and Sherman, L. (2013) 'Dialogue and Dialectic: Police Legitimacy and The New Professionalism', in J. Tankebe and A. Liebling (eds) *Legitimacy and Criminal Justice*. Oxford University Press, pp. 293–307. Available at: https://doi.org/10.1093/acprof:oso/9780198701996.003.0015.

Neyroud, P. and Weisburd, D. (2014) 'Transforming the Police Through Science: The Challenge of Ownership', *Policing*, 8(4), pp. 287–293. Available at: https://doi.org/10.1093/police/pau048.

Norman, J. and Williams, E. (2017) 'Putting Learning into Practice: Self Reflections from Cops', *European Police Science and Research Bulletin*, (Special Issue 3 Eur), pp. 197–203.

Nowell, L.S. *et al.* (2017) 'Thematic Analysis: Striving to Meet the Trustworthiness Criteria', *International Journal of Qualitative Methods*, 16(1), p. 160940691773384. Available at: https://doi.org/10.1177/1609406917733847.

Ormerod, R. (2006) 'The history and ideas of pragmatism', *Journal of the Operational Research Society*, 57(8), pp. 892–909. Available at: https://doi.org/10.1057/palgrave.jors.2602065.

Perez, D.W. and Moore, J.A. (2013) *Police ethics: a matter of character*. 2nd ed. Clifton Park, NY: Delmar/Cengage Learning.

Reich, K. (2009) 'Constructivism: Diversity of Approaches and Connections with Pragmatism', in L.A. Hickman, S. Neubert, and K. Reich (eds) *John Dewey Between Pragmatism and Constructivism*. 1st ed. New York: Fordham University Press (American philosopy series), pp. 39–66. Available at: http://hdl.handle.net/2027/heb.08487 (Accessed: 15 February 2020).

Reiner, R. (2010) *The politics of the police*. 4th edn. Oxford: Oxford University Press.

Rowe, M. (2018) *Introduction to policing*. 3rd edition. London; Thousand Oaks, California: SAGE.

Schon, D.A. (2016) *The reflective practitioner: how professionals think in action*. Abbingdon: Routledge.

Scott, M.S. (2017) 'Reconciling problem-oriented policing and evidence-based policing.', in J. Knutsson and L. Tompson (eds) *Advances in Evidence-Based Policing*. London, UNITED KINGDOM: Taylor & Francis Group, pp. 27–44. Available at: http://ebookcentral.proquest.com/lib/uclan-ebooks/detail.action?docID=4845352 (Accessed: 27 December 2021).

Sherman, L.W. (1998) 'Evidence-Based Policing', *Police Foundation* [Preprint]. Available at: https://www.policefoundation.org/wp-content/uploads/2015/06/Sherman-1998-Evidence-Based-Policing.pdf (Accessed: 9 March 2021).

Sherman, L.W. (2009) 'Evidence and liberty: The promise of experimental criminology', *Criminology & Criminal Justice*, 9(1), pp. 5–28. Available at: https://doi.org/10.1177/1748895808099178.

Sherman, L.W. (2013) 'The Rise of Evidence-Based Policing: Targeting, Testing, and Tracking', *Crime and Justice*, 42(1), pp. 377–451. Available at: https://doi.org/10.1086/670819.

Sherman, L.W. (2015) 'A Tipping Point for "Totally Evidenced Policing": Ten Ideas for Building an Evidence-Based Police Agency', *International Criminal Justice Review*, 25(1), pp. 11–29. Available at: https://doi.org/10.1177/1057567715574372.

Shields, P.M. (2003) 'The Community of Inquiry: Classical Pragmatism and Public Administration', *Administration & Society*, 35(5), pp. 510–538. Available at: https://doi.org/10.1177/0095399703256160.

Sidebottom, A. and Tilley, N. (2020) 'Evaluation evidence for evidence-based policing: randomistas and realists', in N. Fielding, K. Bullock, and S. Holdaway (eds) *Critical Reflections on Evidence-Based Policing*. Abingdon, Oxon: Taylor & Francis Group, pp. 72–92. Available at: http://ebookcentral.proquest.com/lib/cumbria/detail.action?docID=5981674 (Accessed: 14 March 2021).

Silvestri, M. (2006) ''Doing Time': Becoming a Police Leader', *International Journal of Police Science & Management*, 8(4), pp. 266–281. Available at: https://doi.org/10.1350/ijps.2006.8.4.266.

Simpson, B. (2018) 'Pragmatism: A Philosophy of Practice', in Cassell, C., Cunliffe, A., and Grandy, G., *The SAGE Handbook of Qualitative Business and Management Research Methods: History and Traditions*. 1 Oliver's Yard, 55 City Road London EC1Y 1SP: SAGE Publications Ltd, pp. 54–68. Available at: https://doi.org/10.4135/9781526430212.n4.

Telep, C.W. and Somers, L.J. (2019) 'Examining police officer definitions of evidence-based policing: are we speaking the same language?', *Policing and Society*, 29(2), pp. 171–187. Available at: https://doi.org/10.1080/10439463.2017.1373775.

Terry, G. *et al.* (2017) 'Thematic Analysis', in C. Willig and W. Stainton Rogers (eds) *The Sage handbook of qualitative research in psychology, 2e*. 2nd edn. London: SAGE. Available at: https://dx.doi.org/10.4135/9781526405555 (Accessed: 8 December 2020).

Thacher, D. (2008) 'Research for the front lines', *Policing and Society*, 18(1), pp. 46–59. Available at: https://doi.org/10.1080/10439460701718567.

Thornton, A. *et al.* (2019) 'On the development and application of EMMIE: insights from the What Works Centre for Crime Reduction', *Policing and Society*, 29(3), pp. 266–282. Available at: https://doi.org/10.1080/10439463.2018.1539483.

Tilley, N. and Laycock, G. (2014) 'The police as professional problem solvers', in Jennifer.M. Brown (ed.) *The future of policing*. Oxford, England; New York: Routledge, pp. 369–382.

Tong, S. and Bowling, B. (2006) 'Art, Craft and Science of Detective Work', *The Police Journal: Theory, Practice and Principles*, 79(4), pp. 323–329. Available at: https://doi.org/10.1350/pojo.2006.79.4.323.

Wilensky, H.L. (1964) 'The Professionalization of Everyone?', *American Journal of Sociology*, 70(2), pp. 137–158.

Williams, B.N., Brower, R.S. and Klay, W.E. (2016) 'Community-centred police professionalism: A template for reflective professionals and learning organisations with implications for the co-production of public safety and public order', *The Police Journal: Theory, Practice and Principles*, 89(2), pp. 151–173. Available at: https://doi.org/10.1177/0032258X16642449.

Williams, E. and Cockcroft, T. (2019) 'Knowledge wars: professionalization, organizational justice, and competing knowledge paradigms in British policing', in R.J. Mitchell and L. Huey (eds) *Evidence Based Policing: An Introduction*. Bristol, UK: Policy Press, pp. 131–144.

Williams, E., Norman, J. and Rowe, M. (2019) 'The police education qualification framework: a professional agenda or building professionals?', *Police Practice and Research*, 20(3), pp. 259–272. Available at: https://doi.org/10.1080/15614263.2019.1598070.

Willis, J.J. and Mastrofski, S.D. (2018) 'Improving policing by integrating craft and science: what can patrol officers teach us about good police work?', *Policing and Society*, 28(1), pp. 27–44. Available at: https://doi.org/10.1080/10439463.2015.1135921.

Wood, D. *et al.* (2018) 'The importance of context and cognitive agency in developing police knowledge: Going beyond the police science discourse', *The Police Journal: Theory, Practice and Principles*, 91(2), pp. 173–187. Available at: https://doi.org/10.1177/0032258X17696101.

Wood, D.A. (2020) *Towards ethical policing*. Bristol, UK: Policy Press.

Wood, D.A. and Williams, E. (2017) 'The Politics of Establishing Reflexivity as a Core Component of Good Policing', in S. Armstrong, J. Blaustein, and A. Henry (eds) *Reflexivity and Criminal Justice Intersections of Policy, Practice and Research*. London: Palgrave Macmillan UK, pp. 215–236. Available at: https://doi.org/10.1057/978-1-137-54642-5.