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Are the police embracing evidence-informed practice? A view from England and Wales

Abstract

The What Works Centre for Crime Reduction (WWCCR) in the UK's College of Policing has a key role in promoting the use of research in policing. Since 2014, the WWCCR has aimed to review - and make accessible - research to better inform and target crime reduction and to build police capacity to identify, evaluate and apply research evidence to practice. This comes amidst significant changes to entry requirements for policing in the UK as part of efforts to further professionalise the service and prepare for future challenges in policing. We report findings from in-depth interviews with senior police officers from forces across England and Wales, conducted as part of a three-year evaluation of the WWCCR. These interviews explored the traction of 'evidence-based practice' among senior officers and showed shifts over time in their accounts of the value placed on research and how it is promoted and used within their force. Additionally, an online survey across policing ranks, conducted in 2016, found differences by seniority in perceptions about the relevance of research for policing, and the level of organisational support for it. Findings are used to consider the status of research evidence in policing and its development within a policing profession.

Key words: Evidence-based practice; **what works; professionalisation**

Introduction

In 2013 the UK government launched the 'What Works Network', a nationally co-ordinated initiative to "improve the way government and other organisations create, share and use high quality evidence for decision-making" (www.gov.uk/guidance/what-works-network). The network's purpose was to support more effective and resource-efficient services across the public sector (HM Government, 2011; 2012) by proactively promoting research to address customers' needs (HM Government, 2013). There are seven What Works centres[1] focusing on six areas of public policy. The What Works philosophy is that good decision-making should be informed by the best available evidence; and that if such evidence is unavailable, decision-makers should be encouraged to use high quality methods to find out 'what works'.

The What Works Centre for Crime Reduction (WWCCR) situated within the UK College of Policing[2] was supported by a consortium of universities between 2014 and 2017. The Consortium's task was to synthesise and render accessible to practitioners the specialist knowledge base for crime reduction. This involved: collating over 300 systematic reviews of crime reduction interventions; completing systematic reviews in new areas of crime prioritised by practitioners; designing a 'system' (Crime Reduction Toolkit) to summarise that research for practice, based on its quality, cost, impact, why and where it works best and detailing implementation issues (Johnson et et, 2015; Thornton et al, 2019); and developing

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[1] National Institute for Health and Care Excellence (NICE), Sutton Trust/Educational Endowment Foundation, College of Policing What Works Centre for Crime Reduction, Early Intervention Foundation, What Works for Local Economic Growth, the Centre for Ageing Better, and the What Works Centre for Wellbeing. There are also 2 affiliates (in Wales and Scotland)
[2] College of Policing is the professional body for policing. Further details about the aims of the College are available at http://www.college.police.uk/Pages/Home.aspx

training and guidance to improve practitioners' capacity to use research evidence (Manning et al, 2017; Fleming et al., 2016 a-c).

The medical profession has generally been taken to be the exemplar of 'evidence-based' practice. Those seeking to encourage uptake of research evidence in other fields, where its use is historically or institutionally less embedded - like policing - can draw on the extensive learning from health (Greenhaugh et al., 2004; Nutley et al, 2007; Lavis et al, 2008). Greenhaugh and colleagues (2004), reviewing research literature across disciplines to establish how new ideas can be spread and sustained in health care organisations, highlighted a complex and multi-faceted process, whereby 'adoption' is influenced by a range of inter-linked individual, organisational and macro factors, including the wider socio-political climate, organisational goals and readiness for change, and the type and quality of connection between knowledge producers and adopters.

The practical tasks of 'translating' academic research for practice, and of making it useful and accessible ("push factors") are recognised as largely inadequate for encouraging use of evidence at the organisational level (Nutley et al., 2013; Powell et al, 2016). What Works centres have tended to focus effort on *'push strategies'* that make evidence available to decision-makers but over time these are often broadened to create a more balanced approach that includes a range of *'pull strategies'* – designed to stimulate interest and demand for evidence and to build organisational capacity for assimilating and contributing to the evidence base (Lavis et al, 2006).

Research suggests a mix of approaches are necessary to achieve an organisational shift towards evidence-informed practice (Breckon and Dodson, 2016; Rosseau and Gunia, 2016).

For example, Langer et al (2016) identify key mechanisms for evidence use as: building awareness about evidence and positive attitudes to it; agreement between users and providers of evidence about priorities; creating access to evidence; skills in using evidence; and regular interaction between users and researchers.

Organisational pre-requisites include workforce capability, skills and capacity for critical thinking; workforce motivation to engage with research; organisational support - both leadership and peer support for using research but also opportunity in terms of time and access to research evidence (Sharples, 2013; Lorence et al., 2014; Rosseau and Gunia, 2016; Griffiths et al, 2016).

Factors determining what evidence gets used includes the credibility and reputation of the research producer in the eyes of the potential user, and whether research is communicated clearly, in a timely way, and made relevant to users (Nutley et al, 2007; Lenihan, 2015). However, also fundamental is the importance of practitioners' involvement in and/or co-production of research (Bradley and Nixon, 2009; Sharples, 2013; Lenihan, 2015; Powell et al, 2016; Tilley and Laycock, 2017) and in turn, researchers' proximity to, and understanding of the realities of practice. This last point underlines some of the debates and tensions about the primacy and extent of influence of research in policing and the crucial role of professional experience in building the evidence base (Sparrow, 2016; Fleming and Rhodes, 2017; Tilley and Laycock, 2017).

The influence of the WWCCR in orientating the police service towards greater research use must be assessed in the context of broader developments in policing, which arguably offer a favourable environment for promoting research. The process of professionalisation - and the

College of Policing's role in setting professional standards and promoting good practice based on evidence - includes an aspiration to replace traditional forms of hierarchical accountability with a more autonomous workforce, who can exercise judgement and knowledge to deal with the increasingly complex policing landscape (Loader and Mulcahy, 2003; Neyroud, 2010; College of Policing, 2015; Tilley and Laycock, 2017). A report from the National Police Chiefs Council (NPCC), outlining their future vision for policing (NPCC, 2016), talks of embedding evidence into day-to-day policing, and a review of police leadership (College of Policing, 2015) has called for 'cultural change' where senior officers are expected to encourage within their force an ethos of enquiry, reflective practice and engagement with research.

In 2015, UK Government funding of £10 million (known as The Knowledge Fund) was awarded to 39 police forces and 30 universities for collaborative projects and knowledge exchange[3] and entry requirements for policing in the UK will change substantially from 2020, with an expectation that all officers will be educated to degree level and that continual professional development will be a routine aspect of career progression (College of Policing, 2015). Work is ongoing to develop the training curriculum and standards in collaboration with police forces and higher education institutions across the UK (College of Policing, 2016; Brown et al, 2018; Hough and Stanko, 2018).

Issues addressed in this paper

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[3] http://www.college.police.uk/News/College-news/Pages/PKF_Showcase_Conference_November_2017.aspx

The findings presented form part of a three-year evaluation undertaken to document the development of the WWCCR (Hunter et al, 2017; May et al., 2017). This was designed to chart how well the WWCCR embedded itself into the police service, and to track progress in achieving a cultural shift within policing that involved taking research evidence seriously. Our first report found – perhaps unsurprisingly, that the WWCCR had little visibility within the police, and that there was little sign of any major shift in culture. However, by the end of 2016, there had been some noticeable changes, and these are the subject of this paper.

The paper focusses mainly on changes in orientation towards evidence amongst chief officers[4]. It presents findings from in-depth interviews conducted with senior officers between May and September 2014 when the WWCCR was at an early stage of development (Time 1) and from September to December 2016 (Time 2) when progress had been made with building the evidence base, the Crime Reduction Toolkit had been launched (Thornton et al., 2019) and various training and promotional activities had taken place.

Chief officers were interviewed because, alongside the elected Police and Crime Commissioners (PCCs), they are drivers of force strategy. The interviews aimed to gain their perspective on the importance of research evidence for policing practice, to examine how the use of research was being promoted in force, and to identify shifts over time in their assessment of its influence on policing. The paper supplements these findings with the results of a quantitative online survey of officers, undertaken in 2016, to examine how views about the relevance of research use differed by rank.

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[4] Mainly rank of Assistant Chief Constable and above or corporate equivalent but on a couple of occasions the Chief Officer team nominated a Chief Superintendent who had responsibility for developing EBP for example.

The research concerned the nature of 'evidence' and how evidence is incorporated into decision-making. For reasons that will become clear, we think it important not to be overly restrictive in defining what counts as evidence nor to presume that research evidence can ever totally displace professional judgement and experience as the basis of decision-making in complex institutions such as policing. For this reason, we use the term *evidence-informed* when discussing findings, although *evidence-based* was mainly used by interviewees. To anticipate our findings, we found quite a marked shift over time towards more positive attitudes to evidence-informed decision-making amongst chief officers. However, we also found difference in the online survey findings between the views of senior staff and those of more junior rank who tended to be less convinvced about the role of evidence in police policy and practice.

Methods

Interviews with chief officers were conducted in two waves: 29 interviews were completed at Time 1 (2014) and 30 at Time 2 (2016); 12 officers were interviewed both times. This resulted in 59 interviews with 47 chief officers from 28 of the 43 forces across England and Wales.

Sampling strategy

A sampling frame was created in 2014 from force website biographies of 136 chief officers, of whom 26 (19%) were female. Selection of interviewees was purposive to include recruitment of male and female senior officers from forces across England and Wales, those

with and without higher academic qualifications and a range in terms of number of years served (Table 1).

[Insert Table 1 here]

Potential interviewees were sent an email explaining interview aims and inviting them to take part. This was followed by a telephone call. Where the officer did not respond or was unable to participate (10 of those we initially contacted), another interviewee was selected to meet as far as possible the selection criteria used for the original interviewee. Permission was sought from officers in 2014 to re-contact them in 2016 to discuss developments. Those who remained in post (n=12) at Time 2 were re-interviewed or if no longer in post, an alternate chief officer from the same force was interviewed to provide both an individual and organisational perspective on the status of evidence-informed practice.

Interviews were conducted either face-to-face or by telephone (if preferred by interviewee) and took on average 50 minutes to complete. As is common with semi-structured interviewing, the schedule was used flexibly, meaning that the ordering and precise wording of questions could be adapted where this enabled more free-flowing discussion. There were five main topic areas covered at both interviews: main factors influencing decision-making; organisational culture and the value placed on research use; extent to which research was meeting force needs; challenges to research use and; familiarity with WWCCR and College of policing services and resources. At the second interview, updates were requested of plans relating to evidence-informed practice that had been discussed at Time 1. The definition of research used in interviews was *'any published research (including 'grey' literature such as internal reports, working papers, technical reports, conference proceedings, student theses)*

on the effectiveness of a particular policy, intervention, tactic or approach which aims to reduce or prevent crime'. This definition was purposefully broad to capture the extent and range of information that was being used.

The survey

The online survey was hosted on the WWCCR microsite using ClassApps[5], advertised by the College with a hyperlink sent out via various College online networks.[6] It ran for over 13 weeks between October 2016 and January 2017. Alerts providing survey details and reminders were distributed to their members by the NPCC, Police Superintendents' Association of England and Wales and the Police Federation of England. In addition, chief constables for each UK force were contacted by email and those chief officers who participated in the depth interviews were asked to promote the survey within their force. The survey included a series of statements with which to assess personal interest in research, perceptions about its value for policing generally and the importance placed on research by the respondent's force.

The survey was originally designed as the 'after' element of a 'before-and-after' survey intended to track changes over time alongside the qualitative interviews undertaken with chief officers. However, though both surveys were carried out, they encountered various problems, mainly associated with low take-up rates, that substantially reduced their value (described in Hunter et al., 2017.) Both samples were self-selecting, representing around half a percent of the workforce, and the 'after' survey under-represents senior officers. We also

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[5] Survey software for creating and administering custom web surveys
[6] For example, the Police Online Knowledge Area (POLKA), the What Works microsite, and the Evidence Champions Network.

suspect that the sample is biased towards those favouring evidence-informed practice. For these reasons we have not offered an extensive presentation of the survey findings in this paper, though we have made some limited use of the 'after' survey to examine differences between ranks in views about the importance of evidence-informed practice.

[Insert Table 2 here]

Analysis

Interviews were recorded and transcribed, with analysis undertaken using Nvivo v10[7]. The primary coding frame was based on the interview schedule, covering key topics described above. This was refined by 'sub-coding' within each main topic area. So for example, a primary code was *influences on recent decision-making* and sub-codes were created for each type of influence discussed. Content coding was undertaken by at least two team members simultaneously with discussion and agreement of a final list of primary and sub-codes. Particular attention was paid in analysis to how research and evidence-informed practice was discussed across interview accounts at the two time points. The survey data were analysed using SPSS. The results presented comprise descriptive statistics, including chi-square tests to examine the differences between senior and other staff in their perceptions about evidence-informed practice.

Findings

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[7] Nvivo v10 is a qualitative data analysis computer software package to classify and arrange information and examine relationships in the data.

Most interviewees were educated to degree or postgraduate level (Table 1) and many reported a personal interest in research often instigated by university study undertaken whilst in post. Arguably this group should be receptive to research and what it might offer policing.

Influence of research for strategic and financial decision-making

At Time 1, research was reported as one of a number of factors affecting decision-making about strategy and operations in the past year. Research was interpreted broadly as encompassing various sources of local 'evidence'. For example, interviewees reported using local intelligence and analysis of force data – including 'demand' data for strategic and resource planning.

> It depends on what you mean by research evidence. If you're talking about, have we run randomised control trials to prove whether things work or not, no we haven't. If you're asking, do we carry out research, mine lots of data to inform the way we solve problems, yes we do. [T1-16]

National directives from Government and Her Majesty's Inspectorate of Constabulary and Fire and Rescue Services (HMICFRS) were also cited as shaping decisions about strategic and operational priorities as was the influence of local PCCs. Professional judgement was highlighted by some interviewees at Time 1, but others emphasised that they no longer solely relied on this:

> Historically, in police forces it was all done on professional judgement and intuition, why it would work. We are moving to a point where there has to be an

evidence base before we will invest what are finite and shrinking resources. [T1-01]

At Time 2, these same various influences persisted but there was some shift in how interviewees discussed the use of research evidence. More frequently than at Time 1, (5/29 compared to 14/30) interviewees referenced specific pieces of research that were informing decision-making in their force. This included, research on interventions such as *predictive policing*, diversion interventions for offenders and - as noted in the extract below - evaluation of use of body-worn video cameras as prelude to purchasing this equipment:

I've just invested a considerable sum of money in body-worn video for the force,

a couple of million pounds. That was born out of a piece of work we did with

Cambridge University. [T2-21]

At both time points, Government budgetary cuts to policing were discussed as likely catalyst for further engagement with research on what works, as a means of targeting resources more effectively:

We no longer have spare capacity in policing to develop strategy and deliver practice

without [evidence base] in place. … , "We're just not going to do what you're saying

because you can't prove that it's worthy of investment..." The [funding cuts] have taken

the fat out of policing, that probably allowed us to be ill-informed and deliver practice

that wasn't evidence based. [T1-03]

We are moving into an era where finance and resources are so tight that we're looking for winners, for programmes that work and are far more focused on outcomes, which leans heavily towards research-based work. [T2-12]

Other examples given of the more recent influence of 'evidence' included research that had helped the development of guidance for dealing with poor mental health among arrestees. And as noted below, one interviewee described his force's participation in research focusing on organisational fairness and its effects on staff well-being as influencing his staff interactions:

I now understand the concept of perceived organisational fairness, so everything I do in my interactions with my staff…, I actually make sure that I'm feeding and nudging that concept of perceived organisational fairness; everything else flows from that. [T2-04]

Plans for embedding research into strategy or practice, discussed at Time 1, were re-visited at Time 2. One interviewee, whose force had invested in building research capacity since Time 1, through collaboration with neighbouring forces and universities, explained what she described as an "integrated process" for using research to inform local practice, using the example of a recent review of force strategy for policing the night-time economy (NTE):

We have commissioned all sorts of things…, including literature reviews and experiments and trials and evaluations. So one of the things [I was] looking at was what works in terms of policing a night time economy. We undertook an audit across [Force] to say 'against What Works evidence, what are we doing

around NTE?...' if you take that whole approach from, we understand that NTE

policing takes up a lot of our time and resource… so we wanted to understand the

evidence base. We then understood what that evidence base meant in the local

context. And off the back of that we are evaluating an approach [to policing

NTE]. [T2-11]

Building research capability in force

Compared with Time 1, more interviewees provided concrete examples of how their force

was promoting research. These included adaptations to information technology systems, such

as allocating space on forces' intranet for publicising research and posting hyperlinks to the

WWCCR, including the Crime Reduction Toolkit; use of hand-held digital technology to

provide internet access to operational officers; training courses on evidence-based practice to

introduce the concept and how it might be applied locally - one interviewee reported that 200

police constables had completed the course in her force - and the targeting of 'relevant'

research evidence to frontline staff to help demonstrate the usefulness of research for

practice:

Most of the changes that we are talking about require a cultural change, a real

shift in how people approach policing and for me we need buy-in on the frontline.

That is why we have tried to focus on small interventions. I am pointing people in

the direction of small interventions that help them problem-solve in their area, so

they can hopefully see a couple of small benefits from using evidence-based

research which hopefully will then turn them into an advocate for it. [T2-07]

These types of activities were not exclusively organised by senior officers, with several interviewees citing examples of more junior staff initiating activities to endorse research. The role of *evidence champions* within forces – officers who voluntarily 'champion' research often because of a personal interest and enthusiasm – came from across policing ranks – and are examined in May et al. (2017).

Police and academic collaboration

At Time 1, experience of commissioning academic research was already common. Interviewees had commissioned work in areas such as tactical, organisational and police service 'consumer' surveys, and had tasked university students to conduct research or supported officers to undertake research using force data as part of their academic study. They also gave examples of research projects that forces had been involved in. However, by Time 2, accounts of collaboration with universities had markedly increased. This was in large part due to government funding of the Police Knowledge Fund[8] (KF). Of the 30 interviewees at Time 2, all but one represented a force that was part of a police and academic partnership (At Time 1 only 4/29 described a more formalized, longer-term partnership with a university). In addition to KF projects, interviewees discussed other research collaborations. Projects ranged in design from randomised control trials (RCT) to qualitative work; they involved collaboration with universities at local, regional and trans-regional level and were variously funded by government, charitable trusts and European bodies. Interviewees also

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[8] http://whatworks.college.police.uk/Partnerships/Knowledge-Fund/Pages/Police-Knowledge-Fund.aspx. Government funding of £10 million to support the development of police and academic collabortions.

spoke about associations with universities creating opportunities for officers to study for degrees or doctorates. The extract below describes plans to ensure return on investment in further education for officers, to 'harness' the knowledge gained for the force:

What we are trying to do is create longevity, so those who successfully complete the qualification, we'll use them to be a network... to support each other. I think in the past we have probably supported maybe two people to go on [degree courses]. I think what we need to do is look at the support we provide for them, once they have completed it, how do we harness the knowledge they have got? [T2-05]

One interviewee mentioned at Time 1 that his force was setting up an evidence-based practice group. By Time 2 the force had negotiated funding from the Office of the PCC to set up an evidence-based policing hub with a full-time coordinator, a seconded academic and a small team of staff who led on aspects of evidence-based policing in addition to their day-to-day jobs. Some of the activities of the hub were described:

We encourage staff to attend evidence-based policing cafés where they can go along and have conversations with like-minded people...We assist them if they're looking to gain some educational qualifications… There's an evidence-based policing website on our internal website that people can go on and find whatever work is out there…. This year we had the first evidence-based champions event … We think we've got about 55 pieces of research going on amongst our staff at the moment at master's, PhD or commissioned research level. [T2-09]

Organisational support for evidence-informed practice

Official mention in strategy

Our analysis indicated growing attention being given to *research evidence* in force planning. For example, perceptions of its status are illustrated in extracts from Time 1 below, where evidence-based practice was discussed as a *future* target but also something that was beginning to feature in routine force business:

> It's one of our statements within our five-year ambitions, that we must be evidence led. We must be able to demonstrate why we're doing things, why we're not doing things, based on the evidence that is available. [T1-20]

> We've put evidence-based policing as the strategic agenda item in our performance framework. It gets discussed [monthly] at strategic-performance meetings. [T1-01]

> In force work streams for 2014/15 I've managed to get one introduced [on] evidence-based policing... to raise awareness among officers. [T1-14]

This continued at Time 2, with accounts describing an increasingly foundational position for research in discussions about force strategy One interviewee described EBP "as now part of policing's DNA":

> More generically we have an evidence-based philosophy as a force so any business change from a performance point of view.., there is an expectation that [it] will be based on the 'what works' philosophy. [T2-08]

It's started to become far more embedded around making sure that all our approaches to operational matters are as effective and efficient as they can be. And I think that the evidence-based approach helps us with that enormously. [T2-05]

Widening appeal

There was general agreement among interviewees at Time 1, that research *tended* to be a concern of senior ranks and the concept of evidence-based practice had no significant currency among most operational officers, where professional knowledge and experience still held greater status:

An officer's credibility is based on experience. We learn from what we experience ourselves and from other people. That's a dominant part of police culture. So, when you get into the more nuanced territory of, 'well, what's the evidence for that?', it's not surprising the response will be, 'well, we learn from each other, not by looking at documents. [T1-24]

You know, my sense of policing is often it is quite anti-intellectual. In fact, when I hear somebody describe somebody as an intellectual in policing, it is not normally a positive endorsement... [T1-07]

But there were hints of widening appeal, with accounts of more regular use of the term "evidence-based" and of chief officers being challenged about the evidential basis of their decisions:

I think evidence-based practice has crept into [police] lexicon now, so we are challenged. The unions will challenge us, our staff will challenge us: 'What's the evidence base? Why are you making that assumption? … I wouldn't for a minute say it's embedded from chief constable to probationer, but as an organisation it's common for us to discuss evidence-based practice. [T2-21]

What I've noticed over the last couple of years is the way that the term 'evidence-based' has sort of crept into mainstream policing. You hear an awful lot now…, people talking about the 'evidence-base'. [T2-09]

The influence of leadership in promoting research was noted. For example, the effect of generational change in leadership was discussed, with a view that chief officers who remained unconvinced by research would inevitably retire, leaving scope for innovation with leadership change:

There are probably too many chiefs with an unconscious contempt for research, who don't read very much, who hold a professional judgment, intuitive view of the world and because they're senior they can stamp their authority and it stifles progress and innovation. [T2-08]

Policing [is] hierarchical, do as you're told, follow these rules. Society has moved away from that. Kids are taught to question… Policing has always operated on a hierarchical structure that says, "You do this, protect yourself, tick the box and follow the rules." That is no longer fit for purpose. [T2-02]

Coherence of support for research across service

Additionally, the need for a coherent message about the importance of research was raised. These comments focussed on the College of Policing's role in making clearer how evidence-informed practice is being introduced across the service and the extent to which other bodies in policing are similarly invested in the importance of research; essentially whether the message is being consistently endorsed:

> You have got the College [of Policing] in the centre, you have got NPCC leads doing their own work across the country… You have got HMI [her Majesty's Inspectorate] inspecting the Forces. How does it all link up…have [you] got a coherent story to tell [T2-13]

Organisational challenges for evidence-informed practice

The importance of organisational support for promoting evidence-informed practice is well established in the research literature discussed above. Perceptions of the kinds of organisational challenges to using research were consistently identified across interviews at times 1 and 2. These included the 'translation' of academic research for practice - noted as problematic even after the introduction of the Crime Reduction Toolkit – with research seen as lengthy and lacking in clarity or practical or 'local' relevance:

> It tends to be a bit too remote. With full-on academia, someone needs to put a layer of simplification on it and say, 'OK, here's three good reasons why you need to do this'. [T1-10].

> …the academic side has a kind of purist element to it so reports are written in a particular way, because they want to be published. In a policing context… we

don't necessarily have time to read lots … or necessarily understand all the statistical elements of quantitative analysis; but the big thing is, what does this mean for [Force]? How does it apply to us locally? What should we do? [T2-06]

Feedback at Time 2 about what the College of Policing and the WWCCR could do to improve engagement with research included the need to publicise where evidence-informed practice had been successfully applied – to hammer home 'live examples' of its impact on policing, "to gain traction in the service". This mirrored comments – also made at Time 1 about research needing to be locally relevant to practice to get people interested and to respond to the questions that police officers needed answering:

It's all very well pumping the email out, but you almost need someone to showcase something that they've done that works, that gains traction in the service. [T2-06]

It was also noted that research may well be happening in forces across the country that is not yet shared, therefore risking duplication of effort. A tendency in policing for isolationism was noted by one interviewee as a potential cultural barrier for sharing knowledge or trialling something that had been successful for another force:

There is a lot going on but there was a lot of us there thinking, "Wow, we didn't know about this", now that is partly because of us, partly because we don't have the time that we should have. But equally as well it seems to be going on, not in isolation but not in full view. [T2-01]

> In the past, forces have been very competitive about performance and therefore
> very reluctant to share what works or always seeking to find the new, best way of
> doing something. As a result, they'll be reluctant to be part of a bigger cohort of,
> "Let's find a new way of doing things." There's quite a culture of, "If it's not
> invented here, I don't like it." [T2-22]

Lack of time for engaging with research was frequently mentioned, and the effects of
'austerity'; despite this being noted by some as focusing attention on research to better deploy
resources, others saw it as organisationally challenging because of a reducing work force and
much more pressing police concerns.

> The problem with evidence-based policing is that it's no use running trials where
> it'll be years before we see results. Currently the police are very task-focused and
> are dealing with crisis management a lot of the time: we have a problem, we put
> resources in, we get the fix and then we move on to the next problem. [T1-14]

> We're pretty pressured day-to-day just keeping things going. ...having space to sit
> down and think about what works, what doesn't work, what we'd like to do…
> would be real luxury. [T2-34]

This included cuts to staff who would be most likely to champion research – for example
those in development and analytical positions but also in terms of time to focus on the
research evidence that may lie behind aspects of operational strategy:

I wonder if there used to be more space in organisations [to do research]. The cry has been, protect front-line staff. So, the 3,000 staff I lost, a lot have come from the creative positions. [T1-22]

[Reduced] officer numbers mean that time for training days, reflections, briefings and proper understanding when studies are developed, whether that's body-worn video or perpetrator-based domestic abuse programmes. Getting them to understand what the changes are, what we're trying to achieve and measure, is *ad hoc* and sometimes poorly informed because of how stretched we are. [T2-24]

Defining good quality research

Some interviewees noted an ambiguity about the 'evidence base' and how evidence is defined. The concept of a 'research hierarchy' was raised at Time 2 as a potential constraint to encouraging its greater use, because of how 'good' research is sometimes perceived to devalue professional knowledge and experience. For example, there were differences among interviewees in how they perceived 'quality' research. Some, who had been involved in experimental studies either in force or as part of degree study, were more likely to view other research methods as less valid. However, the ethical limitations of RCTs in developing solutions to contemporary policing problems were also highlighted:

I think one of the difficulties with evidence-based policing, is that it's quite difficult, isn't it, to have a trial or try to take a new approach when you're balancing such big risks, particularly around safeguarding, domestic violence, modern-day slavery, child sexual exploitation. [T2-09]

Others worried that an overly rigid concept of research would discourage creative thinking, fail to recognise professional knowledge, and effectively turn officers away from research:

> When I was studying, I was always told, when you've got a problem, apply the approaches that will help solve that problem or take it to the next stage. I just think evidence-based policing seems to be almost – it seems quasi-religious that you will only do the control studies … I think the reason some of our leaders turn away from it isn't that they don't value having a full and scientific understanding of something... It's just that it's very often their thoughts, experience, knowledge seem to be, you know, considered secondary. [T2-01]

> Experience, past-history, case studies and research are all very important on both immediate and for future decision- making. [T2-05]

However, there were also points made about a need for compromise from both police and academics, to create more constructive collaboration, and some appreciation of the nuance of research and its often limited capacity to offer definitive instructions for practice:

> The service culturally needs to be a bit more grown up about how it receives, thinks about and then builds on research. [T2-19]

> I think the police have got to try and make more of an effort to step towards some of the complexity [of] research, and academia needs to step towards how

evidence is presented to a fundamentally operationally task-orientated police service [T2-24]

I suppose for us as hard-nosed cops, we always want to see a very clear outcome from whatever academic research we embark upon and yet I think at times we've just got to manage our own expectations, that it won't always be possible to come out with some sort of definitive proposals... [T2-18]

The survey - views about importance of evidence-informed practice across ranks

While the in-depth interviews, at least in their accounts, indicated a mainly positive orientation to evidence-informed practice among chief officers, the online survey data showed some clear differences between senior ranks (ranging from deputy chief constables to chief inspectors or staff equivalents) – and other ranks (Inspector to Community Support Officer/staff equivalent). Table 3 compares responses of senior and other ranks to a series of questions designed to measure attitudes towards use of research in policing – five-point likert scales were collapsed into: agree, disagree and neutral. Findings show that compared to senior ranks, other ranks are significantly less likely to agree that *evidence-based practice* is important for policing, including compared to tacit or professional knowledge and are more ambiguous about the organisational priority given to research by their force.

[Table 3 here]

Discussion

This research sought to assess how the activities of the WWCCR may have influenced practitioners. Taking chief officers' accounts as blunt indicators of organisational support for research use, there is room for optimism, at least at a senior level. Our interviews explored influences on recent decision-making, the value placed on research and efforts to promote it in force. The interviews conducted at Time 2, in 2016, differed from earlier investigations in interviewees' accounts of the importance of research (defined in its broadest sense), in the number of examples provided of research that had influenced *recent* resource, strategic or operational decisions (encompassing research on crime reduction but also on police management styles and of police interactions with the public), in the increasing number whose force was part of a police and academic partnership and in the efforts being made to disseminate research throughout their force.

There is good evidence for the significance of 'leadership' in setting the cultural tone within an organisation. In this case police leaders can legitimise evidence informed practice, or they can cast it as a threat to professional identity (Griffiths et al., 2016; Rosseau and Gunia, 2016; McGill et al, 2017). Our interviews with chief officers show a mainly positive view of research and increasing recognition of its importance for policing. Further, leaders are in a position to protect strategic plans to embed evidence-informed practice against more short-term work pressures and the frequent lack of time for reflection and enquiry (Stetler et al, 2009); barriers commonly mentioned by police – and re-iterated in these interviews - as inhibiting engagement with research (Fleming and Wingrove, 2017).

There is no wholesale conversion across ranks to the potential merits of research for policing. However, the organisational readiness for evidence use needs to be assessed within the wider context of police professionalisation and while we have argued that professionalisation

provides a helpful environment and motivation for promoting evidence informed practice – a knowledge base being an essential element of a profession - there is less clarity about what professionalisation will require from the 'average' police officer in respect of evidence-informed practice. There have always been research enthusiasts in policing and not just in the more senior ranks (May et al., 2017) but coherence about what the service is aiming for in terms of evidence-informed practice and how exactly that is to be achieved was something that our interviewees felt was lacking from national discussions via the UK College of Policing, the policing inspectorate or National Police Chiefs Council. In most cases interviewees described small, incremental changes to embed evidence rather than any clear process of organisational change. Shepherd (2014) cites his concept of the *evidence eco-system*, to highlight the need for a system-wide or organisational coherence in embedding research evidence into practice; describing the role of What Works Centres – in this case the College of Policing – as "the eyes and ears" of that system (Shepherd, 2014, p.6).

Whilst it is early days for policing compared to more established professions, there are several important and related questions to consider: what kind of professionalism is being pursued in policing; and how can the research knowledge base for a policing profession be further developed and integrated into practice; what is the role of the 'professional' police officer in this process? For example, is professionalisation seeking to create a more creative and flexible workforce with greater critical and analytic skills and the ability to use evidence but remain within the current organisational command and control structure of the police? Or is the process aiming for the creation of a much more autonomous and self-directed workforce that does not require such tight supervision? Assessing progress requires a clearer idea of aims and the process for change.

The content of the degree and post-graduate curricula for the police service – currently under development in the UK and part of a substantial revision of the educational qualifications necessary to enter policing - will be key in developing the critical and analytical skills of future police officers and establishing the relevance of research evidence for policy and practice (Brown et al., 2018; Stanko et al., 2018). Tilley and Laycock (2017) suggest a re-orientation of police training from learning to police and apply the law to learning what is known about the problems to be policed but they also recommend a *"broad-based agenda for the injection of research-based evidence into policing"* including in the education and training of officers, in conducting police work and through reviewing policing failures. Our interviewees reported using research evidence to adapt managerial styles and for developing practices for dealing with vulnerable arrestees thus highlighting the scope for a professional knowledge base that extends beyond research on interventions to reduce crime.

The WWCCR and development of the Crime Reduction toolkit (Thornton et al, 2019) is, however, an important starting point in building the professional knowledge base and making that information accessible nationally. This process has highlighted - for police officers - the current lack of research to address their most pressing problems – common research needs, noted during our interviews, included research on dealing with cyber-crime and child sexual exploitation. The existing research on crime reduction interventions has lacked the necessary contextual information to help 'real world' or 'local' implementation of evidenced interventions and this has often affected police perceptions of the usefulness and relevance of research for policing practice. It also underlines the urgent need to develop the knowledge base and the importance of police engagement and participation in this process; to counter the risk that research is seen by practitioners as something externally imposed and irrelevant to the daily realities of policing.

The increasing number of police and academic partnerships reported by interviewees is a further point of optimism for instituting evidence use. Crawford (2017) notes the potential of effective partnership to '*re-articulate*' the way researchers engage with policing partners and vice versa. Historically, policing and academia have operated in different organisational cultures, have had different priorities, and working practices and relationships have been described as distrustful (Bradley and Nixon, 2009; Crawford, 2017; Heslop, 2011). These burgeoning partnerships need to be mutually beneficial and respectful of different organisational priorities. The persistently cited barriers to research use, including the complexity and length of academic research, irrelevance, untimeliness and academics' failure to translate findings for practice, can be addressed more effectively in the context of co-production (Bradley and Nixon, 2009; Sharples, 2013; Crawford, 2017). Co-production also seeks to incorporate into the research process – and on an equal footing with the 'scientific data' on what works - critically important practitioner knowledge and experience (Bradley and Nixon, 2009; Buerger, 2010; Fleming and Rhodes, 2017).

What counts as good evidence continues to be contentious and contested (Nutley et al, 2013) and our findings show debates about quality or research hierarchy in relation to design and data collection methods extend to police officers. A briefing paper from the College of Policing (College of Policing, 2017) has supported methodological pluralism, stating that research methods should be dictated by the nature of the research question, and that research should be combined with professional experience and judgment; necessary information to adapt the tested intervention for the realities of practice elsewhere (Hough, 2010). This is crucial to encouraging police investment in creating the evidence base (Fleming and Rhodes, 2017).

This then raises the question of how professional police officers will contribute to the research process – not just because they are commanded to do so by senior officers but because they are professionally invested in building the knowledge base (Buerger, 2010) Our interviews have suggested lack of coordination in how research conducted at force level is fed into the knowledge base nationally. It will be important to determine how this can be done in a systematic way so as to capture the range of action research activity across policing and to document what should be a continuous drive for evidence, of testing and re-testing interventions in order to elaborate on what works' and what does not (Shepherd, 2014; Laycock and Tilley, 2017)

There are some obvious limitation to these data. The chief officers who agreed to participate may have been more positive about evidence-informed practice than those who declined interview. Some may have presented an idealised account of the use of research in the force they represented. The survey, seeking views across all ranks, was self-selecting and uptake was very low; thus generalisations to the police workforce as a whole should be made cautiously. However we judge that these findings can shed *some* light on the exent of support for evidence-informed practice.

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