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Assessing the appetite for Evidence Based Policing: A UK based study

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Abstract

Whilst Evidence Based Policing (EBP) has emerged as a police approach in Europe, Australasia and the Americas, its level of implementation has received little scrutiny. In this study, a questionnaire completed by 625 police staff, employed by a major UK police force, examines how police employees both view and use evidence based practice. The study found that whilst the term EBP was widely recognized, its use was less apparent. The findings specifically distinguished lower ranked officers from senior police officers, as well as discriminating between warranted (sworn) officers and non-warranted (unsworn) civilian staff. It showed that lower ranking officers (Constables) were more likely to value experience over academic evidence and collaboration, whilst senior ranks were much more likely to embrace EBP principles. Further, civilian staff were less likely to view new ideas as a 'fad' and be more open to research experimentation and evaluation, albeit they had fewer internal avenues to pursue professional development. In summary, it is argued that to develop an environment where EBP can thrive, explicit implementation plans which consider such issues as organizational culture, are helpful.

INTRODUCTION

In recent years an approach known as evidence based policing (EBP) has appeared across Europe, Australasia and parts of North (and South) America (Knutsson & Tompson, 2017: foreword). Sherman (2013: 337) defines EBP as, “a method of making decisions about ‘what works’ in policing: which practices and strategies accomplish police missions most cost effectively”. Its origins can be traced back to the term “evidence-based medicine” introduced by Guyatt in 1992. This attempted to move clinical decision making from intuitive and unsystematic experience, to scientific and clinically relevant research (Smith & Rennie, 2014). The evolution of EBP is further explained by the College of Policing (CoP), the professional body formed in 2012, to improve police staff skills and knowledge in England and Wales. Describing itself as an organization that, “identifies, develops and promotes good practice based on evidence” (CoP, 2014:10), it argues an EBP approach, assists police officers and civilian staff create, review and use the best available evidence, to inform their decisions, policy and practice (College of Policing, 2018). Here, ‘best evidence’ refers to the most appropriate research methods and sources. This can include professional consensus, in the absence of other research, if obtained using careful and transparent methods. They further explain that EBP does not exist to provide definitive answers, but supports staff to question, challenge and innovate.

In the UK, prompted by the spiraling costs of public sector activity, and a desire for police forces to implement proven good practice, the approach is endorsed by government, policy makers and police leaders as a more effective and efficient way to work. However, whilst progress has been made the approach is no means embedded. Titler (2008) has previously recognized within the health profession, evidence based practice can be difficult to implement and requires strategies that address the complexity of business systems, practitioners, senior leaders, and—ultimately—organizational cultures. In evidence based policing, implementation plans are absent, with the approach generally expected to cement itself through natural evolution. Further, the benchmark from which it starts is poorly understood (Telep and Lum 2014). This article develops an approach which examines the level of interest police officers and civilian staff have, in using EBP principles, in one UK police force. It will explore the literature, pertaining to EBP, highlighting studies that both

support the reasons for its introduction and serve as potential obstacles to its implementation. The article provides a methodology to monitor development in relation to EBP practice, as well as highlighting the cultural obstacles to its mainstream acceptance. These findings emphasise the benefit of using implementation plans to support the introduction of EBP.

LITERATURE REVIEW

Whilst the form and process of EBP (especially in relation to experimental research design), has generated considerable debate (Sherman, 2015; Eck, 2017; Sparrow, 2016), most commentators generally agree that policing is too important a subject to rely upon intuitive and unsystematic approaches. They argue a more robust knowledge base is required to inform professional policy and practice (Lum, 2009; Moore, 2006; Welsh, 2006). There is consistent evidence to support this view. Chaplin & Shaw (2015), highlighted police officers suffer similar Criminal Justice misconceptions as do lay people, concluding that policing is a further example of a “science-practitioner gap”, where contemporary research findings are failing to filter through to operational level.

Further, the ability of the police to accept and use research-based evidence is also affected by numerous influences. At its core is the concern voiced by Sherman (2013:40), that research evidence must maintain its integrity, and not be used inappropriately to support, “intuition, anecdote and opinion”. Unfortunately, his concerns can be observed in the police context, in a number of ways. First, a simple disconnect can appear between research evidence and its practical application (Telep and Lum, 2014). Lum and Koper (2015), highlight the limited and inconsistent use of hot-spot patrol, which remains a well evidenced police approach. They argue that when police forces claim to use this tactic, they are often using conventional location-based deployments, which reduce its impact (Koper, 2008). The second example occurs when quasi-scientific methods are used inappropriately. This was illustrated by the FBI who interviewed a small number of incarcerated serial killers during the 1970’s to generate the organised / disorganised typology when profiling suspects. The

approach, which influenced murder investigations worldwide, was later found to have no empirical basis when tested by academics (Canter et al., 2004). In defence of their approach Douglas & Olshaker (1977:30), argued “degrees and academic knowledge [are not] nearly as important as experience and certain subjective qualities”. This led Canter (1994: 275), to counter, “a doctor is not expected to operate on a hunch and intuition, to learn his trade merely from hearing how others have treated patients in the past, to have no firmly established principles to operate on”. The final example illustrates that research can also be misinterpreted and misapplied. Since 2013, numerous UK police forces have built domestic violence initiatives and training on a widely publicised statement which highlights that 35 unreported incidents (on average) occur before a victim discloses the abuse. However, Strang et al., (2014), found the original 1979 Canadian study, did not specify any such statistic. Instead it found 53 of the 62 interviewed victims disclosed being assaulted by their partner on an average of 35 occasions. Clearly the evidence had been misinterpreted and promulgated by practitioners.

The reasons why research evidence is not collected robustly, interpreted accurately, or used appropriately, occurs for many reasons. Often the style and presentation of academic research is inaccessible to those outside the profession (Kirby, 2013). However, a further explanation relates to police organizational culture. Studies argue that police officers favour experience over science and exhibit a longstanding mistrust of research and evaluation (Sherman, 2015). Lum and Koper (2015: 4), also suggest police organisational culture supports decision-making based on “hunches and best guesses; traditions and habits; anecdotes and stories”. Whilst the outcomes of internal culture can sometimes be positive (Waddington, 1999), most commentators highlight its negative consequences, including the blocking of organizational reform (Alcott, 2012). Such internal culture can be difficult to resist (Cockcroft, 2015), and this has been shown to extend into Higher Education. Jaschke & Neidhardt (2007) commented police officers exhibit distrust and perceive academic work to be irrelevant. Heslop (2011) also found police recruits felt both physically and psychologically isolated when engaged in a foundation degree at a UK University, as they felt they were not perceived as ‘real students’. They also found themselves in conflict with

their lecturers as their operational experiences did not align with their academic theory (ibid: 305).

A widespread negative culture, which is resistant to academic research, could create a robust barrier to the implementation of EBP. Whilst commentators are starting to generate suggestions as to what factors support EBP (Sherman, 2015), there is little objective evidence relating to, the current level of the movement. Telep and Lum (2014), surveying three US police agencies, report that whilst evidence-based policing is a term routinely used amongst academics and in certain police quarters, it is not widely known or understood amongst the general policing population. They replicated Palmer's (2011) small scale study, showing that police officers are more likely to take information from within their own agency through policies and procedures, rather than academic text. However, understanding the attitudes of police officers and staff is critical if the process of EBP is to be embedded (Lum et al, 2012), and it is to this element the study now turns.

METHODOLOGY

Design

As this study aimed to provide a benchmark, this was a quantitative study, which used a survey design to quantify the attitudes and behaviour of police employees towards EBP. A copy of the questionnaire, influenced by prior studies (Salant & Dillman, 1994; Gliner & Morgan, 2000), is presented in the appendix. Questions, grouped in five general categories, were either presented in a closed-question dichotomous format, or rated on a five-point Likert scale:

- i. The key characteristics of practitioner respondents in relation to their exposure to academic research.
- ii. Current knowledge in relation to evidence-based policing, research methods in general, and Randomised Controlled Trials [RCTs] in particular.

- iii. The degree to which practitioner respondents understood the underpinning principles of scientific research and experiments.
- iv. Practitioner respondent views regarding suitability of evidence-based policing and research methodologies. This included questions regarding different scenarios (e.g. shoplifting, domestic abuse).
- v. Data describing the respondent's career history, academic background, age, gender and ethnicity.

Participants

The questionnaire was circulated by email to all staff working within the third largest police agency in England and Wales (a total of approximately 9000 staff). Although 1525 respondents answered the questionnaire, a high number of missing answers meant only 625 were suitable for analysis (428 from police officers and 197 from civilian staff).

From the 420 police officers who provided details, 297 reported being male (70.7%), 121 female (28.8%) and two transgender (0.5%). Age information was provided by 414 participants, with the highest frequency being in the 45-54 year category (n = 190). Participants divided themselves into the following ranks: Constable (n=220), Sergeant (n=107), Inspector (n=62), Chief Inspector (n=24), Superintendent (n=12) and Chief Superintendent (n=3), which reflects the distribution of ranks within the police force. Constables are the entry level to the service, and Sergeants are the first supervisory rank. Inspectors are the visible and most accessible leaders for the lower ranks (Constables and Sergeants) and Chief Inspectors are the link with senior ranks, which then extends to Superintendents and Chief Officers. Whilst there were no significant findings in relation to age or gender, unsurprisingly those participants with a higher rank were also associated with longer periods of service, with Constables serving between 6-10 years.

197 civilian (unwarranted or unsworn) employees were also involved in the study, and they occupied a diverse range of operational and non-operational roles, including: administrative

assistant, call handler, detention officer and crime scene investigators. They were evenly split in terms of male and female and proportionately spread across the age range. All participants were volunteers and their anonymity was maintained. The University ethics board provided favourable ethical opinion.

Data analysis

Descriptive statistics were explored and data was deemed to be non-parametric. Spearman correlations explored the relationships between a number of question items. Furthermore, 2x2 and rxc Chi-square analyses were conducted to investigate differences between (i) police officers of different ranks; and (ii) police and civilian staff. Where appropriate, multiple comparisons were implemented and Holm's (1979) Bonferroni correction was applied¹.

RESULTS

The data is presented in two stages. The first stage will relate to police officers, whilst the second section compares police officer with responses from civilian employees.

Stage 1: Police Officer responses

The academic discourse argues many police organizational cultures exist, defined by place, and role. It was therefore important to explore whether, within this police force, differences existed across officer ranks. The first analysis related to *attitudes to education*. Police officers were asked to specify the extent to which they believe academic knowledge to be directly transferable into policing tactics and practices. There were statistical differences noted between the ranks, $\chi^2(20) = 91.808, p < .001^{\dagger}, V = .256$. Overall, Constables were more likely to feel there was no need for an academic qualification, $\chi^2(1) = 6.801, p < .01, OR =$

¹ This was to control for familywise error (McDonald, 2014) in cases when $df > 1$ (Rosnow & Rosenthal, 1989; Sharpe, 2015). The approach is argued to be a popular, and more powerful, alternative to the standard Bonferroni adjustment (Abdi, 2010).

1.728, and less likely to agree that academic qualification should be an expectation of personal and professional development, $\chi^2(1) = 9.243$, $p < .01$, OR = .338. Conversely, Superintendents were more likely than other ranks to agree that academic qualification should be expected in professional development, $\chi^2(1) = 15.799$, $p < .01^+$, OR = 8.025. Inspectors were more likely to feel Higher Education became increasingly relevant as officers progressed through the ranks, $\chi^2(1) = 7.493$, $p < .01$, OR = 2.151, than Constables, $\chi^2(1) = 8.732$, $p < .01$, OR = .524. Following this trend, Constables were more likely to argue pursuing higher education for police officers, was 'not at all important', compared to other police officers, $\chi^2(1) = 10.928$, $p < .01$, OR = 1.907. Finally, whilst police officers differed in their responses as to how they viewed colleagues with a University education, no statistical differences were identified across ranks.

In relation to *personal approach to professional updates and tactical evaluation*, table 1 shows that a significant number of police officers never access educational literature to inform their role although this escalates as they progress through the ranks. All ranks stated they were more likely than Constables to access knowledge resources (internet, intranet, library or other academic resource), in order to assist in their professional role or development, $\chi^2(1) = 7.925$, $p < .01$, OR = .554.

Table 1. Significant Comparisons between Police Officer Ranks for the Frequency of Reading Publications

Publication (reading frequency)	Constable (n= 220)	Other Ranks (n=207)	χ^2	OR
Police Professional (frequently)	13.3%	52.9%	9.077**	0.137
Home Office (never)	66.2%	37.4%	35.189*	3.270
MoJ (never)	58.8%	38.6%	16.095*	2.276
College of Policing (never)	67.5%	41.1%	28.430*	2.972
POLKA (never)	61.7%	40.5%	19.222*	2.369
Any academic publication (never)	59.5%	39.7%	16.266*	2.238
Another publication (never)	61.8%	44.3%	12.173*	2.041
	Superintendent	Other Ranks		

	(n=12)	(n=414)		
Any academic publication (frequently)	41.7%	4.1%	33.593 ^{†*}	16.681
POLKA (never)	0.0%	53.5%	13.371 ^{†*}	-.177 [‡]

** $p < .01$; * $p < .001$; [†]Fisher's exact value has been reported; [‡]phi has been reported.

The ensuing section examined *knowledge of scientific methods and experience of experimentation*. The term 'evidence-based policing' (EBP) was widely recognised by police officers, with statistical differences separating the ranks, $\chi^2(5) = 40.493$, $p < .001$ [†], $V = .299$. Constables were less likely to be aware of the term, $\chi^2(1) = 28.450$, $p < .001$, OR = .330, whilst Chief Inspectors, $\chi^2(1) = 11.120$, $p < .01$, OR = 13.984, and Superintendents, $\chi^2(1) = 7.252$, $p < .01$ [†], phi = .130, most likely to recognise the term. This was replicated in their recognition of the term RCT, $\chi^2(5) = 38.484$, $p < .01$ [†], $V = .320$, with higher ranking officers more likely than Constables to say they did, $\chi^2(1) = 19.308$, $p < .001$, OR = .331. There were also differences between ranks, in terms of having received formal training about how to identify or evaluate effective crime reduction strategies or tactics, $\chi^2(5) = 20.920$, $p < .001$ [†], $V = .278$; with Superintendents most likely to have received such training in this regard, $\chi^2(1) = 28.759$, $p < .001$ [†], OR = 13.345. Specifically, respondents were asked to review 12 regularly used police tactics or interventions and asked respondents to determine if there was scientific research to support them. The overall finding was that senior ranks were much more likely to be aware whether there was research to support a specific approach, whilst Constables were the least likely.

The next section explored *willingness to engage with scientific and research studies*. Significant differences were reported across the police ranks, $\chi^2(20) = 65.476$, $p < .001$ [†], $V = .214$. Constables were more likely to argue that whilst 'both (knowledge and experience) are relevant, experience is more relevant', $\chi^2(1) = 13.966$, $p < .001$, OR = 2.084. Conversely, Superintendents, $\chi^2(1) = 29.861$, $p < .001$ [†], OR = 13.857, and Chief Inspectors, $\chi^2(1) = 15.660$, $p < .01$ [†], OR = 5.749, were more likely to argue the importance of scientific knowledge to policing. Respondents were then asked to indicate their level of agreement across four specific statements (see Table 2 below). In relation to the statement 'experience is more important than expert opinion in determining what works for policing', differences across

ranks were again evident across the ranks, $\chi^2(15) = 66.695$, $p < .001^+$, $V = .232$, with Constables the most likely to strongly agree (see Table 2a). Similarly differences were detected in response to the statement 'I am willing to try new tactics or strategies even if they are different to what I am currently doing', $\chi^2(15) = 33.743$, $p < .001^+$, $V = .158$. Again, whilst Constables showed some agreement, they were less likely to strongly agree, compared to other ranks (see Table 2b) or feel that collaboration with researchers is necessary (see Table 2c). Finally, Constables were more likely to strongly agree, that 'when a new idea is presented it is usually a fad and things will eventually return to normal' (see Table 2d).

Table 2. Significant Comparisons between Police Officers for Level of Agreement towards Scientific Methods

Statement (Agreement)	Constable (n=220)	Other Ranks (n=208)	χ^2	OR
(a) Experience is more important (strongly agree)	29.1%	10.6%	22.825*	3.469
(b) New tactics (strongly agree)	36.4%	58.7%	21.316*	.403
(c) Collaboration is necessary (disagree)	12.7%	4.3%	9.553**	3.225
(d) New idea is a fad (strongly agree)	19.5%	7.7%	12.639*	2.915
	Chief Inspector (n=24)	Other Ranks (n=404)	χ^2	OR
(c) Collaboration is necessary (strongly agree)	41.7%	14.4%	12.644 ^{†*}	4.261
	Superintendent (n=12)	Other Ranks (n=416)	χ^2	OR
(c) Collaboration is necessary (strongly agree)	66.7%	14.4%	23.822 ^{†*}	11.867

* $p < .001$, ** $p < .01$; [†]Fisher's exact value has been reported.

Asking whether respondents 'undertake online research to try and find out what others have done' also identified differences, $\chi^2(20) = 35.796$, $p < .05$, $V = .145$. Superintendents were more likely to say they would be 'very likely' to undertake the action, when compared

to other police ranks, $\chi^2(1) = 13.422$, $p < .01^+$, OR = 10.370. However, no significant differences were identified between respondents when asked how willing they would be to create treatment and comparison groups (and RCT), in the operational contexts of community-related and domestic abuse incidents.

Stage 2: Police Officers and Civilian Staff

The second stage of analysis compares civilian staff with the findings associated with police officer findings (stage 1). In recent years civilian staff have become more commonplace within police forces. Further, there has been considerable effort to merge sworn and unsworn officers into a single employee organization. However this study shows several differences between the two groups, relating to age, gender and qualifications (see Table 3 below).

In the sample police officer respondents were statistically more likely to be males, whilst civilian staff more likely to be females. Moreover, the age of staff was also found to differ, $\chi^2(4) = 91.727$, $p < .001^+$, $V = .400$; with police officers more likely found in the 35 to 54 year age groups, and civilian employees in the 55 to 64 age group. Further, civilian staff had a shorter overall employment period, more likely working between 1-5 years and 6-10 years, whereas police officer respondents were more likely to have a more substantial employment period (11 - 20 years, 20+ year categories).

No statistical differences were reported between the groups in regards to educational experience prior to joining the police force, but there were significant differences in qualifications since joining, $\chi^2(9) = 147.551$, $p < .001^+$, $V = .466$. Police officers were significantly more likely to have obtained qualifications, and more likely to have completed study for a promotion examination or achieved multiple qualifications. In contrast police staff were more likely achieve a qualification external to the service.

Table 3. Significant Comparisons between Police Officers and Civilian Staff for Personal and Professional History

Personal and professional history	Police Officers (n=420)	Civilian Staff (n=193)	χ^2	OR
<i>Gender:</i> Males	70.7%	50.3%	24.095*	2.390
Females	28.8%	49.7%	25.334*	.409
	Police Officers (n=414)	Civilian Staff (n=189)		
<i>Age:</i> 35 to 44	40.3%	21.7%	19.964*	2.441
45 to 54	45.9%	34.4%	7.034**	1.618
55 to 64	1.7%	23.3%	78.120*	.057
	Police Officers (n=432)	Civilian Staff (n=192)		
<i>Length of employment:</i> 1 to 5	2.5%	13.5%	28.810*	.167
6 to 10	12.3%	30.2%	29.253*	.323
11 to 20	45.4%	26.6%	19.661*	2.296
Over 20	39.8%	28.1%	7.863**	1.691
	Police Officers (n=443)	Civilian Staff (n=197)		
<i>Qualifications:</i> None	23.9%	43.7%	25.269*	.406
Private	3.8%	14.2%	22.457*	.241
Other	2.9%	16.8%	39.023*	.150
Promotion exam	23.7%	2.0%	45.322*	14.989
Multiple	37.9%	17.8%	25.581*	2.828

* $p < .001$, ** $p < .01$.

Police officers were more likely than civilian staff to read publications from the College of Policing, $\chi^2(3) = 16.787$, $p < .01$, $V = .162^2$, and POLKA, $\chi^2(3) = 17.297$, $p < .01$, $V = .165^3$, and recently accessed material from the internet, intranet, library or other academic resource in order to assist in their professional role or development, $\chi^2(1) = 6.394$, $p < .05$, OR = 1.560. There was no difference between the groups in the level of personal support they experienced when trying to test new methods of working.

In relation to the section examining *knowledge of scientific methods and experience of experimentation*, the term, EBP, was recognised by a high proportion of employees, with no differentiation across police or civilian staff members. When asked whether UK police

² Police officers more likely to 'rarely' read the publication, $\chi^2(1) = 6.407$, $p < .05$, OR = 1.726, with civilian staff more likely to 'never' read the College of Policing publications, $\chi^2(1) = 13.668$, $p < .001$, OR = .529.

³ Police officers more likely to 'sometimes' read publications from POLKA, $\chi^2(1) = 11.451$, $p < .01$, OR = 2.429, with civilian staff more likely to 'never' read such publications, $\chi^2(1) = 9.360$, $p < .01$, OR = .582.

officers have sufficient understanding of the causes of crime in order to develop effective interventions, police officers were more likely to respond 'no', $\chi^2(1) = 7.929, p < .01, OR = 2.329$. In contrast, civilian staff were more likely to think that UK police officers have a 'sufficient understanding of the most important areas, but with some gaps in areas of low importance', $\chi^2(1) = 7.965, p < .01, OR = .569$. There were no significant differences when comparing the attitudes of police officers and civilian staff in relation to the value they placed on professional experience in operational decision-making, or the balance between knowledge of research and experience. However, Police officers were more likely than civilian staff to strongly agree with the statement, 'when a new idea is presented it is usually a fad and things will eventually return to normal', $\chi^2(1) = 7.211, p < .01, OR = 2.303$.

Civilian staff appeared more open to experimentation and evaluation. They were more likely to accept withholding a tactic from one area to provide more accurate evaluation, $\chi^2(1) = 6.569, p < .01, OR = .567$. Similarly, civilian staff were more likely to say they would seek assistance from their organisation to create an acceptable evaluation method, whilst police officers reported being 'not at all likely' to use this practice, $\chi^2(1) = 7.354, p < .01, OR = 2.658$.

In relation to *attitudes to education*, police officers and civilian staff differed in the minimum level of education they felt should be required by all officers, $\chi^2(7) = 15.684, p < .05^+, V = .157$. Police officers were significantly more likely to argue there should not be a minimum requirement, $\chi^2(1) = 7.458, p < .01, OR = 1.778$, with civilian staff opting for 'A' levels as a minimum qualification (although the latter was not found to be significant following a Bonferroni correction). Civilian staff were significantly more likely, compared to police officers, to think that Higher Education academic qualifications should be more relevant as police officers progress through the ranks, $\chi^2(1) = 6.144, p < .05, OR = 0.639$.

There were also significant differences as to whether professional experience can compensate for academic qualifications, $\chi^2(3) = 23.665, p < .001, V = .192$. Police officers were more likely to state 'experience can completely compensate for qualifications', $\chi^2(1) = 7.375, p < .01, OR = 1.723$, whereas civilian employees were more likely to suggest 'qualifications should be a prerequisite for a promotion', $\chi^2(1) = 19.194, p < .001, OR = .213$.

Moreover, in general there were differences between police officers and civilian staff regarding their views on pursuing higher education for police officers, $\chi^2(4) = 18.838, p < .01^+$, $V = .174$. Specifically, police officers were more likely to argue this was 'not at all important', $\chi^2(1) = 7.918, p < .01$, $OR = 1.637$, whereas civilians stated this was 'very important', $\chi^2(1) = 7.799, p < .01$, $OR = .397$. In relation to the importance of pursuing higher education for the rank of Chief Inspector and above, statistical findings were noted, $\chi^2(4) = 14.639, p < .01$, $V = .151$. Specifically, civilian employees were significantly more likely to deem this as 'essential', compared to police officers, $\chi^2(1) = 7.445, p < .01$, $OR = .474$. Civilian staff were at an increased likelihood of 'acknowledging and recognising the additional achievement' of Higher Education, $\chi^2(1) = 17.307, p < .001$, $OR = .300$.

DISCUSSION

This study examines a specific police force in relation to how their employees view, understand, and use EBP principles. The methodology provides a benchmark, from which progress can be measured - both within and between police forces. It is accepted there are limitations with this study design and data. Although police agencies in the UK have many uniformities, it is accepted the size and location of the force assisting here may be different to other police forces, including: corporate identity (and support of EBP); senior leadership priorities, supervision ratios; frequency and seriousness of incidents dealt with; organisational resilience; and occupational culture. Further, within the survey there were many incomplete questions. However even accepting these deficiencies there are clear trends found within the data, which support three specific points.

First, at a superficial level there is widespread recognition of the term *evidence based policing*, which is accepted by a large number of staff as an important approach. This was further supported by some understanding as to 'what works' within policing. Also, there was a recognition that academic understanding and qualification were necessary factors for staff to be promoted. However, the actual use of research to inform police initiatives, at an organizational level, appeared extremely limited and this generally rested on senior police

ranks, rather than lower police ranks or civilians. This supports the finding by Telep and Lum (2014), who found that whilst the term may be routinely used in certain quarters, it is not widely embedded in the wider police population.

Secondly, clear distinctions can be made between different staff groups. The analysis illustrated diverse cultures at work which impact on the attitude, commitment and engagement with EBP approaches. Chan (2001) previously argued that the terms 'cultures' rather than 'culture' best described the police service, as norms, values and behavior varied across different ranks, specialist officers and locations. The academic literature has often discussed the separation of cultures between senior and frontline officers and this has been played out in this particular study. Whilst senior ranks saw the importance of EBP and were more likely to engage in academic practice, the concept was not valued as highly by lower ranks, who favored experience and were less likely to value academic qualification or collaboration. To explain this it could be argued that frontline officers observe the benefit of experience and street craft on a daily basis, as they wrestle with the ambiguity of daily challenges. In the tension between the urgent and the important, front line officers are more likely to accede to the former. For senior officers, who have the benefit to seeing a bigger picture, EBP has more purchase.

A further distinction was observed between police officers and civilian (unwarranted or unsworn) staff. Civilian staff reported being more willing to experiment and more likely to acknowledge the value of Higher Education. The reason for this distinction could be as a result of the different pathways they experience. Whilst the use of police civilian staff has increased significantly (especially in the UK), and attempts have been made to develop a one employee culture, the two groups experience different recruitment, development and promotion pathways. Whilst all police staff (sworn and unsworn) were recruited with similar educational levels, police officers appeared to generate more qualifications through internal organizational development, whilst civilian staff were more likely to gather qualifications through external means (Further or Higher Education). As such, and without the experience of the daily operational challenges front line officers experience, it may be that they are able to establish a more objective viewpoint. Whatever the reason for these distinctions it is

important that EBP does not become associated with just one section of police employees.

The discussion surrounding organisational culture moves the debate to its final point – the ability to implement EBP. Organisational culture is directly linked to the implementation of police reform. This is particularly relevant as discretion is an internationally observed phenomenon in policing (Banton, 1964; Punch, 1979; Reiner, 1985; Chan 2001), and is said to increase as it moves down the hierarchy (Wilson, 1968:7). Historically, there is significant evidence to show that rank and file officers are difficult to move in a direction they feel is unwarranted. A central driver for EBP, and indeed the wider agenda of police professionalization, is to direct employee choice through the consideration of best evidence, rather than relying on intuitive judgment (Alcott, 2012). The literature review, coupled with this study, found that some elements of the police value experience over academic evidence, and are less likely to engage in EBP. Whilst government and oversight institutions can create policy and standards, it ultimately relies on police leaders to improve performance at organizational and operational level (Coombs et al., 2006; Pfeffer, 2007). As significant organizational reform rarely evolves naturally, it seems important to consider the use of implementation plans, to help engender an infrastructure whereby EBP can flourish.

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SURVEY QUESTIONNAIRE

This questionnaire is summarized. For a full copy please contact the authors.

1. In the last six months, how often have you read the following journals or publications? (list supplied). Frequently/ Sometimes/ Rarely /Never
2. In the last six months have you accessed any material from the Internet, Intranet, a library or other academic resource to assist your professional role or development? Yes (specify)/ No.
3. Prior to this survey, had you heard of a Randomised Controlled Test? Yes/ No
4. How confident would you be to describe an RCT (very - not at all).
5. Which of the following police approaches are effective, supported by scientific research? National intelligence Model; Alley gating; Neighbourhood Policing; Crack House closures; Hot Spot Policing; Neighbourhood Watch; Penalty Notices for Disorder (PNDs); Restorative Justice; Police Cautions; Domestic Violence Protection Notices (DVPNs); Gang Injunctions; Sexual Offences; Prevention orders.
6. Prior to this survey, had you heard the term "Evidence Based Policing"? Yes / No;
7. Have you received formal training about how to identify or evaluate which policing strategies or tactics are effective at reducing crime? Yes (specify) / No.
8. Have you ever been involved in a RCT Yes (specify)/ No.
9. How supported do you feel in your current role to try and test new methods of working? (Very - not at all).
10. After you have employed a tactic / practice to address or respond to a crime or disorder problem, how then do you know it was effective? (Maryland evaluation scale/ independent researcher/organizational assistance/ online research.
11. Would you be willing to engage in an RCT (explained) in a community based initiative very willing – not willing (explain).
12. Would you be willing to engage in an RCT (explained) in a domestic abuse initiative very willing – not willing (explain).
13. Please indicate your level of agreement with the following statements (strongly agree - strongly disagree).
 - a) I am willing to try new tactics or strategies even if they are different to what I am currently doing.
 - b) Experience is more important than 'expert opinion' in determining what works in policing; Collaboration with researchers is necessary for a police force to improve their ability to reduce crime;

- c) When a new idea is presented it is usually a fad and things will eventually return to normal.
- 14. In operational decision-making, what do you think the balance should be between knowledge based on systematic research and experience (professional and personal)?
 - a) Scientific knowledge should make the largest contribution;
 - b) Both are relevant but scientific knowledge is more relevant;
 - c) Scientific knowledge and experience offer equal benefit;
 - d) Both are relevant but experience is more relevant;
 - e) Scientific knowledge should have little contribution.
- 15. To what extent do you believe academic knowledge is directly transferable into policing tactics and practices? (very – not at all).
- 16. What minimum level of education do you think all Police Officers should have? (list provided).
- 17. Do you think Higher Education academic qualifications should be more relevant as police officers progress through the ranks? Yes/ No.
- 18. At what rank do you think Higher Education academic qualifications should be required for Police Officers? (listed).
- 19. Can professional experience completely compensate for academic qualification?
- 20. How important do you think pursuing higher education is for police officers in general?
- 21. In your opinion how do you think your colleagues view other officers / staff who have an extensive university education?
- 22. What police area/ department do you work?
- 23. Length of service (list supplied).
- 24. Educational experience (list supplied).
- 25. Gender? (list supplied).
- 26. Age category (list supplied).
- 27. Ethnicity (list supplied).
- 28. Since joining the police what educational pursuits have you engaged in? (list supplied).
- 29. Rank / role