



An Evaluation of the 'What Works Centre for Crime Reduction'

Year 1: Baseline

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February 2015

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ACKNOWLEDGEMENTS

We are very grateful to the large number of people who gave up their time to be interviewed in person or to complete our on-line questionnaire. We should also like to thank staff at the College of Policing for their advice and support. We are especially grateful to Krisztián Pósch for his help in preparing Appendix C.

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SUMMARY

This evaluation forms part of a three-year programme of work funded by the Economic and Social Research Council (ESRC), in collaboration with the College of Policing, as part of the *What Works Centre for Crime Reduction* (WWCCR). This report covers the first year of the evaluation, which sought to establish a baseline from which to measure change over the three-year programme in the understanding, use and application of research evidence in crime reduction. The emphasis throughout is on understanding not simply *what* works, but *how* it works.

Aims of the evaluation

The overall aims of the evaluation are to:

- Assess the impact of the WWCCR which is hosted by the College of Policing to determine whether it has appropriately engaged key stakeholders, produced tools and guidance that stakeholders find clear and easy to use, and improved stakeholder understanding and application of research evidence to inform practice and decision-making;
- Chart outputs, modes of dissemination and user reactions about the WWCCR over the course of the evaluation;
- Identify changes over time in the use of research evidence by key stakeholders, especially in strategic decision-making and resource allocation;
- Use an *action research* model to provide feedback to the College of Policing and the academic partners over the course of the project.

Methods

In-depth interviews (N=49) were conducted with three main stakeholder groups targeted by College of Policing and the WWCCR, these were: Senior and middle management police officers (n=29); Police and Crime Commissioners (PCCs) (n=10); and Community Safety Partnership managers (CSPs) (n=10). In addition, a quantitative web-based survey was undertaken with officers of chief inspector rank and above (including civilian staff equivalents), PCCs and CSP managers. This resulted in 655 valid responses, mainly from chief inspectors (49%), superintendents (24%) and chief superintendents (9%), or civilian staff equivalents. Areas covered by the interviews and survey included:

- (i) factors influencing decision-making and the extent to which research evidence meets practitioners' needs;
- (ii) organisational culture and the use of research evidence;
- (iii) familiarity with and use of research evidence;
- (iv) experience of commissioning or undertaking research;
- (v) extent to which College of Policing services and resources promote an evidence-based approach to policing.

The role of research evidence

- Most interviewees across the three groups cited research evidence as one of many factors which affected their decision-making.
- The survey findings broadly supported the qualitative analysis: around three in five (57%) respondents felt that research evidence played an important role in their day-to-day decision-making, and two-thirds (68%) reported that research evidence had changed or influenced their working practices.
- Most (72%) survey respondents reported at least one occasion during the previous 12 months where research evidence had affected how they had allocated resources, although one in four said that they rarely (24%) or never (2%) looked for research evidence to inform decisions about policy or operations.
- Interviewees highlighted a range of other influences which affected their decision-making, including financial considerations, national guidance, public opinion and professional judgement.
- Survey respondents, identified practice-based experience/professional judgement (81%), local force guidance/publications (80%) and input from local colleagues/staff (77%) as influencing factors.
- The role of professional judgement was highlighted by some police interviewees, but others noted a reduced reliance on this.
- PCC interviewees spoke about the importance of public opinion in their decision-making, stressing that their elected status made them an important conduit for public opinion.
- CSP interviewees noted their strategic assessment, involving local intelligence from partner agencies as central to their decision-making about strategy.
- Almost three-fifths of survey respondents felt that investment in crime reduction and prevention was driven by politics rather than research evidence (56%).

Experiences of commissioning, conducting and participating in research

- Experience of commissioning research was widespread amongst interviewees, although the topic focus of the studies being commissioned varied widely among our three professional groups.
- Between one-fifth and a third of interviewees in each of the professional groups drew upon university students to conduct research. The 'commissioning' of 'cheap' local students was seen by many interviewees as an area ripe for development in a time of fiscal constraint.
- Experience of collaborating for the purposes of research rather than formal commissioning of studies was examined in the survey, with 75 per cent of respondents reporting no emphasis on collaboration with external partners.

Barriers and capacity building

- Interviewees noted that the effort and time needed to access, interpret and understand the practical application of research discouraged its wider use.
- Despite a large minority (44%) of survey respondents stating that evidence-based approaches were promoted by their organisation, over half felt there was no organisational emphasis on the use of research evidence to inform decision-making (51%).
- Nearly half of the survey sample felt that research findings were unclear and full of jargon (48%), and a third believed research lacked clear enough messages to make it usable (34%).

Opportunities to keep abreast of emerging research

- The opportunities available to survey respondents and interviewees to keep abreast of emerging findings varied. Although almost a third of survey respondents said they had accessed and read academic publications, only a few of the chief officers, PCCs or CSPs interviewees were able to identify a piece of research which had influenced their professional thinking in the year prior to interview.
- Whilst interviewees considered keeping abreast of new research as crucial, it was also considered to be a luxury in their time-poor working lives.

- Forty-two per cent of survey respondents lacked access to research evidence through sources such as peer reviewed academic journal articles. Only one-third felt able to keep up-to-date with research evidence on policing and crime reduction (34%). Their most common source for obtaining information about research evidence was via a general web search such as Google.

Synthesising and dissemination of research findings

- Synthesising and disseminating research was regarded as challenging by many interviewees because of time and resource constraints.
- Whilst all the police interviewees relied on force analysts to produce short reports on police data, many were starting to disseminate through their professional networks, in-house seminars, promoting research through evidence champions and evidence-based policing sessions.
- In a number of areas performance teams were tasked with horizon scanning. Interviewees tended to rely on their professional networks as both a source of information and also a place to disseminate new findings and evidence.

Knowledge gaps and needs

- Two-fifths (41%) of survey respondents felt that much of what is done to tackle crime has no research evidence to justify it.
- Only one in six stated that when new policies and procedures are introduced, they are made aware of the research evidence which supports them. By contrast, almost half (47%) acknowledged that some approaches to tackling crime are ignored, despite these being supported by research evidence.
- More than two-fifths (45%) of survey respondents said there had been occasions where they had sought research evidence to inform policy or operations, but could not find it.

The College and its role in facilitating a culture which values research

- There was a lack of knowledge about the particulars of the WW Centre amongst interviewees; Only 12 per cent of survey respondents reported being aware of the WWCCR.

- The most common College products accessed by survey respondents were the Police Online Knowledge Area (80%), the Knowledge Bank in POLKA (67%), Authorised Professional Practice (APP) (65%), and College of Policing published research (57%) and many felt that College services and resources had had either a minor (38%) or moderate effect (33%) on encouraging the use of evidence-based good practice in their day-to-day work.
- The 'reach' of the College and its ability to be relevant to operational police officers as well as those holding more senior or strategic positions was mentioned as an area that should be addressed.
- Various suggestions were made about improving the marketing of College services and products. These included, demonstrating local relevance when disseminating research; simplifying and increasing the accessibility of the College and a greater emphasis on the use of research as part of professional development.
- Among interviewees, a key theme was the need for the College to create useable tools for applying research and to become an authoritative and 'quality assured' repository of evidence-based best practice in crime reduction. Coupled with this was the view that the College needed to do this over the longer-term and in a systematic way to establish its reputation and that of research as "*here to stay*", rather than a fleeting "*fad*" for policing and crime reduction.

1. INTRODUCTION

This evaluation forms part of a three-year programme of work funded by the Economic and Social Research Council (ESRC), in collaboration with the College of Policing (hereafter The College), as part of the *What Works Centre for Crime Reduction (WWCCR)*. The programme intends to draw upon inter/national good practice to build on and enhance the UK's capacity to develop, disseminate and apply evidence-based approaches to policing and crime reduction. The emphasis throughout is on understanding not simply *what* works, but *how* it works. The programme of work, involving staff at the College and a consortium of UK universities (the Commissioned Partnership), includes development of a series of systematic evidence reviews on crime reduction topics (both the collation of existing reviews and the writing of new reviews on topics identified by stakeholders), the creation of a standard system to rate and rank interventions in terms of their effectiveness and cost-savings, and training programmes to enhance professionals' capacity and skills to appraise research evidence.

This programme of work by the Commissioned Partnership included provision for an independent evaluation, and this report presents baseline findings from this work. The focus of the evaluation is on strategic rather than tactical decision-making; and for this reason we are assessing the impact of the centre largely, but not exclusively, on middle/senior rank police officers, community safety managers, and on Police and Crime Commissioners (PCCs), rather than front-line staff and their supervisors. The evaluation includes an assessment of both *impact* and *process* and has been conceived of as *action research*. This means that we are providing feedback to the College of Policing and the academic partners over the course of the project in order to maximise the chances of successful outcomes.

The evaluation is particularly interested in whether there are changes in the organisational culture at senior and middle levels in the use of evidence for policy and strategic decision-making, whether this includes greater prioritisation of the creation of research evidence, and whether there are observable shifts in the allocation of resources that reflect the impact of research. In the first year of the evaluation we have sought to establish a baseline from which to measure change over the three-year programme in the understanding, use and application of research evidence in crime reduction both within policing and amongst other crime reduction practitioners.

1.1 The context

In March 2013 the Cabinet Office launched the 'What Works Network', a nationally co-ordinated initiative aimed at positioning the research evidence on 'what works' at the centre of public policy decision-making¹. Currently there are seven research centres² focusing on six key areas of public policy, including health, education, early intervention, well-being, ageing, local economic growth and crime reduction. These 'research hubs' are intended to build on existing models of delivering evidence-based policy - such as the well-established and well-funded *National Institute for Health and Clinical Excellence* (NICE). This provides independent evidence-based guidance to the NHS and health professionals about the targeting of funding and the most effective ways to prevent, diagnose and treat disease and ill health. The *Educational Endowment Foundation* has also developed a toolkit to appraise interventions in education in terms of their cost and impact.

The What Works centres are being developed in a political environment which, it is argued, is increasingly amenable to the idea of evidence-based decision-making, particularly in the context of 'austerity' and cost effectiveness. Government white papers, including the Cabinet Office Open Public Services (2012) and the Civil Service Reform White Paper (2012) assert government commitment to scrutiny and transparency across departments, and initiatives are in place to increase and make easier access to government administrative data for the purposes of research and evaluation (Mulgan and Puttick, 2013; UK Administrative Data Research Network, 2012). However, a recent report by the National Audit Office (2013) suggests that these ambitions are not yet embedded in practice. The NAO's assessment of the frequency and quality of impact and cost-effectiveness evaluation across key government departments, and the use of such evidence to support resource allocation and policy development, highlighted a number of issues. These included a lack of robust impact evaluations, a lack of clarity in government decisions about what to evaluate and a failure to effectively apply learning from evaluative research.

¹ This was accompanied by suggestions that future spending reviews would tie departmental funding to the extent to which policies are evidence-based. See Smith (2013).

² 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.

For some years now, the College of Policing and its predecessor the *National Policing Improvement Agency* (NPIA) have been promoting the importance of research evidence to inform practice in policing and crime reduction. An NPIA action plan for improving knowledge use in policing (NPIA, 2010) presented a vision of “*a police service that routinely uses good quality knowledge to decide what to target, what action to take and what resource to deploy*” and cited a range of targets to be achieved by 2013, over which the WWCCR now take ownership. These include investing in research and developing research partnerships, quality assuring research evidence and sharing and embedding that knowledge in professional practice. There have been various practical activities organised to increase engagement with research, including for example *Research Fairs* and other events to match academic expertise with policing priorities.

A key area for the WWCCR, and for this evaluation, however, is not just the creation and availability of rigorous evidence on what works best to reduce crime, but also an understanding of how this evidence is adopted throughout an organisation and the extent to which it is accepted and valued within the professional culture (Ritter and Lancaster, 2013). One commonly mentioned inhibitor within policing culture, for example, is the traditional reactive ways in which police have operated, with performance targets for arrests and convictions prioritised over preventative approaches (Cherney and Head, 2011).

The most effective mechanisms for bridging the inherent gaps between research knowledge and practice are frequently debated. Recommendations focus on the accessibility and format of information, the need to involve practitioners as evidence producers so research is more firmly embedded in and relevant to frontline experience; increasing skills and capacity through training and development programmes and the ‘championing’ of research-based practice within the organisation (Sharples, 2013; Cherney and Head, 2011).

1.2 Aims of the evaluation

The overall aims of the evaluation are to:

- Assess the impact of the WWCCR to determine whether it has appropriately engaged key stakeholders, produced tools and guidance that stakeholders find clear and easy to use, and improved stakeholder understanding and application of research evidence;

- Chart outputs, modes of dissemination and user reactions over the course of the evaluation;
- Identify changes over time in the use of research evidence, especially in strategic decision-making and resource allocation;
- Use an *action research* model to provide feedback to the College and the academic partners over the course of the project.

A central issue for the evaluation is the definition of 'research evidence'. The WWCCR is intended to stimulate greater use of evidence, and its success in so doing will obviously depend at least in part on the definitional boundaries that are placed around evidence. Inherent in the work of all the What Works centres are inter-related principles of public domain accessibility (usually through, although not limited to, publication) and quality (usually achieved through peer review prior to publication). Research evidence is closely related to, but not identical to, academic research. This report treats as research evidence any structured analysis of methods of reducing crime that (a) result in a published report following (b) some sort of independent quality assessment.

1.3 Methods

Our overall approach to the evaluation consists of a straightforward 'before and after' design, supplemented in the hiatus between 'before' and 'after' with research that explores consumer reactions to the products of the WWCCR. The methods thus far have comprised qualitative in-depth interviews and a quantitative web-based survey with the main stakeholder groups, which will be replicated in the final year of the evaluation. The survey covered five themes (mapped against the evaluation plan): (i) factors influencing decision-making; (ii) extent to which research evidence meets practitioners' needs; (iii) organisational culture and the use of research evidence; (iv) familiarity with and use of research evidence; and (v) College services and resources. The in-depth interviews covered similar ground, but also covered experience of commissioning or undertaking research, perception of competency in assessing the quality of research, and ideas on how the College can better promote the use of research evidence.

We defined evidence as any published research (including 'grey' literature such as internal reports, working papers, technical reports, conference proceedings, student dissertations and theses) on the effectiveness of a particular policy, intervention, tactic or approach which aims to reduce or prevent crime.

Feedback on both our proposed approach to sampling and early drafts of the interview schedule (see Appendix A) and survey were provided by the Commissioned Partnership's Academic Board and the Knowledge, Research and Practice Unit (Formerly the Research, Analysis and Information Unit) at the College. The interview schedule was piloted with two senior police officers and an online version of the survey was piloted with a small number of uniformed officers ($N=6$) from three force areas prior to its launch. A note of endorsement for the research from the College CEO, Chief Constable Alex Marshall, accompanied all requests for assistance.

Depth interviews

A target was set of 50 depth interviews with three main stakeholder groups targeted by the College and WWCCR (chief police officers, Police and Crime Commissioners (PCCs) and Community Safety Partnership (CSP) managers). A sampling frame was created for each group. For the chief officers this included information contained in the Police Almanac and from biographies on police force websites on age, rank, years of service, academic qualifications, including whether part of an accelerated promotion scheme, whether holding a position as National Policing Lead or any other relevant specialist area or secondment. For PCCs this included information on political affiliation, professional background, academic qualifications, age and gender. For CSPs we gathered information on geographical region and type of authority only as no other information was readily available.

Based on this information, a first selection of interviewees was informed by the need to include:

- A geographic spread;
- A mix of urban and rural areas (as crime reduction priorities will likely differ);
- Those with and without previous academic qualifications in relevant areas (chief officers and PCCs);
- A range of professional backgrounds (PCC);
- Those with a specialist area or position as National Policing Lead (chief officers) ;
- A mix of political affiliation/independent (PCC) ;
- A range in terms of years served (chief officers); and
- A gender and age mix.

Each potential interviewee was emailed a letter explaining the aims of the research and inviting them to participate in an interview. This email request was followed up with a telephone call. Where there was a refusal or an inability to participate, another interviewee

was selected to replicate as far as possible the selection criteria used for the original interviewee (e.g. in terms of specialism or academic qualifications).

The make-up of the final interview sample is described in Table 1 and comprised: 29 chief officers from 28 police forces; 10 PCCs across a range of professional backgrounds, including police (3); military (2); business (2); local politics/council (3) and 10 CSP managers drawn from the 10 regions of England and Wales.

Depth interviews were conducted either face-to-face or by telephone (if preferred by the interviewee) between May and September 2014.

Table 1: Job title of interview sample (N=49)

Job title/role	Number
Chief Officer	
Chief Constable	11
Deputy Chief Constable	8
Assistant Chief Constable	6
Assistance Commissioner	1
Commander	1
Senior Corporate Personnel	2
Police and Crime Commissioner	
Conservative	6
Labour	1
Independent	3
Community Safety Partnership Manager	
Unitary Authority	4
Metropolitan District	3
County Council	2
Inner London Borough	1
Total	49

Limitations

We struggled to recruit CSPs: three tranches of interview invitations, reaching 26 CSPs over four months were despatched before we reached our target sample of 10. We suspect that these interviewees may be unrepresentative of CSP managers nationally, their high awareness and use of research being factors that inclined them to agree to be interviewed.

A total of 18 PCCs were contacted to get our final sample of 10. It should be noted that our PCC sample was heavily biased towards Conservative Party nominees. This was due to a consistently poor response rate from those of other political affiliations, which also hindered our attempts to redress the balance.

A typology of interviewees

As part of our qualitative analysis, interviewees were coded into four broad 'research aware' categories:

- Research savvy;
- Regular users of research (which included two sub categories);
- Limited users of research; and
- Research indifferent

As discussed above, levels of research awareness turn on definitions of what counts as research. In both the in-depth interviews and the survey we tried to prompt participants to share our definition, whereby research evidence is any structured analysis of methods of reducing crime that (a) result in a published report following (b) some sort of quality assessment. But the concept is a loose and flexible one, and it must be recognised that some participants will have applied other definitions in answering our questions.

As analysis continues, it may be possible to develop a more elaborate typology which permits us to place people on dimensions beyond, simply, levels of research usage. However, this dimension is obviously of central interest to the evaluation. Interviewees were categorised based on our analysis about the extent of their and their organisation's use of research (or at least their perception of this) in decision-making and resource allocation. Experience of commissioning and conducting research was also taken into consideration. However, readers should be clear that if interviewees had been coded predominantly by commissioning, for example - they would have been spread very differently across the types: for instance, the majority of chief officers would have been classified as research savvy rather than regular users. Similarly, the categories to which interviewees were assigned do

not necessarily reflect their level of research knowledge and awareness, as distinct from usage: some of those classed as 'research savvy' were open about their lack of expertise in appraising research studies (but were surrounded by those who did possess such skills), while a number of those categorised as 'limited research users' demonstrated some proficiency in this respect. It was also apparent that while research evidence regularly informed the decisions of those with whom we spoke – and their wider management teams – such support for research was often not perceived to be present across all departments within the organisation. This issue was noted frequently by chief officers

Survey

The finalised online survey ran for a six-week period from 16th June to 1st August 2014. Alerts providing details about the survey were distributed by the following organisations to their members:

- Association of Police and Crime Commissioners;
- Association of Chief Police Officers;
- Police Superintendents' Association of England and Wales;
- The Association of Scottish Police Superintendents;
- The Superintendents' Association of Northern Ireland;
- Police Federation of England and Wales (chief inspectors only); and
- Scottish Police Federation (chief inspectors only).

Alerts about the survey were also circulated on the Police Online Knowledge Area (POLKA) and disseminated within local forces via College evidence champions. In addition, Chief Constables/Commissioners for each of the UK forces ($N=49$) were contacted individually by email. CSP chairs and managers were contacted in England and Wales using a directory maintained by the Home Office ($N=699$)³. In Scotland CSPs were contacted directly by email ($N=32$) and via a Scottish Community Safety Network bulletin.

Each of these sources was asked for assistance in raising awareness of the survey throughout their respective organisations. For those representing police personnel, they were informed that the survey targeted officers ranked chief inspector and above (including civilian staff equivalents). They were also informed that the survey was confidential and securely located on the College website, and provided with a link to access it.

³ 65 of these emails could not be delivered to the intended recipient.

Each of these sources was contacted again one week prior to the closure of the survey, with tailored feedback on the number of responses received, and a further request for assistance in raising awareness of the survey, and encouraging any non-completers to participate. By the time the survey closed in early August 2014 we had received 993 responses⁴. Of the 993 responders, 157 (16%) started but failed to complete the survey. Of the 836 that completed, 90 (11%) did not provide any details of their rank or role, and there were responses from police and community support officers (PCSOs) (2), constables (22), sergeants (15) and inspectors (39).

The analyses which follows in this report focuses on the 655 respondents who completed the entire survey and belonged to one of the groups targeted by the research: PCCs, CSP managers, and senior police officers ranked chief inspector or above (including civilian staff equivalents). As described in Table 2, most survey respondents were chief inspectors (49%), superintendents (24%) and chief superintendents (9%), or civilian staff equivalents.

Responses were received from 46 police force areas⁵, with an average (median) of 10 returns per force (mean=13.3; range=1-58; SD=13.5). Most respondents were male (70.3%) with an average (median) age of 47 years (mean=46.6; range=21-72; SD=6.5).

Respondents had an average (median) of 22 years of service/employment (mean=21 years; range=0-48; SD=7.9). Two-thirds reported that their highest level of educational attainment was either a first degree level qualification (including foundation degrees, graduate membership of a professional Institute) (39%) or a university postgraduate/higher degree (e.g. Masters or PhD) (27%). Most (86%) reported that they were not currently studying towards a qualification, but chief inspectors (16%) and superintendents (17%) were more likely to report doing so than chief superintendents (10%) and other (7%) survey respondents ($\chi^2(1, N=529)=8.16, p=0.043$). The full findings from the survey are set out in Appendix B.

⁴ Our original bid to the ESRC had set a target of 800 respondents.

⁵ Thirteen (2%) respondents did not indicate in which force area they worked and 32 (5%) stated "other" in response to this question.

Table 2: Job title of survey respondents (N=655)

Job title/role	Number	Percent
Chief Inspector/staff equivalent	322	49
Superintendent/staff equivalent	154	23.5
Chief Superintendent/staff equivalent	61	9
Other	33	5
Other senior police staff equivalent (e.g. staff officer)	33	5
Community Safety Partnership Manager	26	4
Community Safety Partnership Chair	7	1
Assistant Chief Constable/Commissioner	4	1
Chief Constable/Commissioner	3	0.5
Commander	3	0.5
Deputy Chief Constable/Commissioner	3	0.5
Police and Crime Commissioner	3	0.5
Police and Crime Commissioner's Office	3	0.5
Total	655	100

Analysis

The in-depth interviews were recorded and fully transcribed, with analysis undertaken using Nvivo 9. A primary coding frame was developed, based on the key areas or themes covered by the interview schedule. This was refined by further 'sub-coding' within each of these main areas. The survey was analysed using SPSS. The results presented here comprise largely of descriptive statistics, though techniques of exploratory and confirmatory factor analysis were also used to identify the constructs used by survey respondents in thinking about research evidence (see Appendix C).

Structure of report

The following chapters draw together key findings from the depth interviews and online survey, highlighting where feedback from these various groups differ or concur. Chapter 2 explores the key factors in decision-making about strategy and resource allocation, the extent to which research features in these decisions and interviewees' experiences of commissioning and conducting research studies. Chapter 3 examines barriers and opportunities to greater use of research, the existing organisational structures for disseminating or discussing research and perceptions about key gaps in knowledge. Chapter 4 assesses the level of engagement with the College and its resources and the role envisaged for the College in facilitating a cultural shift in the value placed on research. The final chapter reviews findings against the original aims of our evaluation and presents a number of recommendations for the WWCCR.

2. THE CURRENT SITUATION

This chapter explores the current role of research in decision-making by interviewees and survey respondents. We start by examining the factors that influence strategic decision-making and resource allocation, including the extent to which research features in such decisions. The latter half of the chapter considers interviewees' experiences of commissioning and conducting research studies.

2.1 Considerations that have influenced decision-making and resource allocation

The role of research evidence

Most of the interviewees across the three groups – chief officers, PCCs and CSPs – cited research evidence as one factor in their decision-making. However, the frequency with which it was drawn upon varied widely across interviewees. We identified four broad typologies of research-users – those who had embedded it in their decision-making (the 'research savvy'); those who used it regularly (the 'regular users'); those who recognised its importance but drew on it infrequently (the 'limited users'); and an outlier who operated in a near research vacuum, favouring his professional judgement instead ('the research indifferent'). The various categories are explored further in 2.2.

The survey findings broadly support the qualitative analysis: around three in five (57%) respondents felt that research evidence played an important role in their day-to-day decision-making⁶, while two-thirds (68%) reported that research evidence had changed or influenced their working practices. Most (72%) survey respondents reported at least one occasion during the previous 12 months where research evidence had affected how they had allocated resources. Almost as many said that research had helped them to: develop new practice (70%); assess the impact of current practice (67%); better understand a crime problem (63%); and justify existing practice (62%).

We have recently had a conference about evidence based policing set up by the ACC. Since then I have certainly seen an increase in its use to test decision-making. (Survey#678, Chief Superintendent/civilian staff equivalent)

⁶ In other words they stated that they "Agree" or "Strongly agree" with the statement "Research evidence plays an important role in my day-to-day decision-making".

Though superintendents (77%) were more likely to report having used evidence in the last year to inform the allocation of resources than chief inspectors (69%) and chief superintendents (72%), these differences were not statistically significant ($\chi^2(2, N=537)=3.83, p=0.147$). (None of the other survey respondents provided an answer to this particular question.) Chief superintendents (77%) and other (79%) respondents were more likely to have reported using evidence to develop new practice than chief inspectors (66%) and superintendents (68%) ($\chi^2(3, N=655)=8.31, p=0.040$). Other respondents were also more likely to report having used research evidence in the last 12 months to justify existing practice (77%), when compared with chief inspectors (59%), superintendents (58%) and chief superintendents (53%) ($\chi^2(3, N=655)=16.0, p=0.001$). There were no significant differences observed between these different roles and the use of evidence to assess the impact of current practice, or to better understand a crime problem.

The survey asked respondents about how they access and use published research evidence. One in four practitioners said that they rarely (24%) or never (2%) **seek out** or **look for** research evidence in order to inform decisions about policy or operations. The most common response was for this to happen sometimes (47%), with fewer saying this occurred very often (24%) or always (3%).

A similar picture emerged in relation to the **actual use** of research evidence to inform decisions about policy or operations, with half (52%) saying they sometimes used research for this purpose, one in five reporting that they very often (18%) or always did (2%), but with around one in four stating that they rarely (26%) or never (3%) used research evidence for this reason.

There was considerable overlap and correlation between these responses, with four in five (82%) of these frequent users of research having also drawn upon this evidence to allocate resources in the last year (as discussed above). Similarly, 88 per cent of those who reported having sought out research evidence (sometimes, very often or always) also reported actually using this material to then inform their decision-making (again sometimes, very often or always).

We found some – but not many – indicators of the types of people from the sample who make little use of research; 35 per cent of chief inspectors rarely or never using research evidence, compared to 29 per cent of superintendents, 23 per cent of chief superintendents and 15 per cent of other survey respondents ($\chi^2(3, N=653)=16.68, p=0.001$). Those who used research rarely were also more likely to have longer lengths of service (mean 22.4 vs.

20.5 years, $t(369.3)=-2.87$; $p=0.004$). This is unlikely to be a product of the fact that senior staff placed more of an emphasis on research, since there were no significant differences in the average service length reported by chief inspectors (mean=21.6 years) superintendents (22.4) and chief superintendents (21.6) ($F(2, 527)=.75$, $p=0.474$). Men were more likely than women to use research evidence rarely to inform their decisions about policy or operations (31% vs. 23%; $\chi^2(1, N=647)=3.97$, $p=0.046$), while those currently studying towards a qualification were less likely to do so (16% vs. 30%; $\chi^2(1, N=528)=5.79$, $p=0.016$). Age of respondents, size of their force⁷, and educational level appeared unrelated to levels of research usage. As we shall discuss, levels of research usage appear to be as much a function of people's current role as their background.

Other factors influencing decision-making

Beyond research, a broad range of other and often competing influences on decision-making were highlighted by our interviewees. These included financial considerations, national guidance, public opinion and confidence, professional judgement, practice-based evidence⁸, local intelligence and data analysis, local policing and partner priorities (including those of elected representatives at council and/or PCC level) and national developments (e.g. elections, legislation etc.).

Survey respondents, similarly, identified an average (median) of eight different information sources which they had reportedly used on a routine basis during the course of the previous 12 months to inform their day-to-day decision-making (mean=8.5; range=2-19; SD=3.2). The most common sources of information were practice-based experience/professional judgement (81%), local force guidance/publications (80%) and input from local colleagues/staff (77%) (see Figure 1). There was no relationship between age, gender or length of service and the number of information sources used to inform day-to-day decision-making. There were however significant differences observed based on the survey respondent's role, with chief superintendents drawing upon a wider range of information

⁷ This was a binary (yes/no) variable to indicate whether the respondent belonged to a larger or smaller force, based on the number of uniformed police officers serving in 2013, and taking the mid-point within this range as the cut-off. The number of officers in the 23 larger forces responding to the survey ranged from 1,902 to 29,755. The corresponding range for the 23 smaller forces was 760 to 1,827. Those respondents belonging to one of three non-territorial forces (n=14) or reporting their force area as 'other' (n=32) were assigned as belonging to smaller forces.

⁸ We use this term to refer to the structured (and often quantitative) analysis that in-house analysts carry out. It can sometimes be of good or excellent quality, but is neither placed in the public domain through publication, or subject to independent quality assurance.

sources (mean=9.5) than chief inspectors (mean=8.2) ($F(3, 651)=2.88, p=0.035$)⁹. Those educated to at least first degree level also reported using a wider range of information sources (mean 8.7 vs. 8.0) ($t(470.5)=-2.57; p=0.011$), as did those currently studying (mean 9.3 vs. 8.3) ($t(527)=-2.36; p=0.018$).

Returning to our in-depth interviews, the police, PCCs and CSP managers placed emphasis on different factors in their decision-making. Chief officers tended to focus on intelligence and data analysis – including ‘demand’ with respect to resource allocation – as well as practice-based ‘evidence’ – i.e. what was going on in other areas. National guidance or directives from the Home Office and Her Majesty's Inspectorate of Constabulary (HMIC) was another key factor. This group also commonly mentioned the influence of their PCC in shaping force strategy. The role of professional judgement was expressly highlighted by some, but others emphasised that they no longer solely relied on this; nevertheless the implication was that it continued to be a salient factor.

Several of our PCC interviewees spoke about the importance of public opinion in their decision-making, stressing their elected status made them an important conduit for public opinion; some for example, mentioned their impending re-election. There were, however, conflicting views as to whether public opinion was or should be a main consideration in determining strategy, as this quote illustrates:

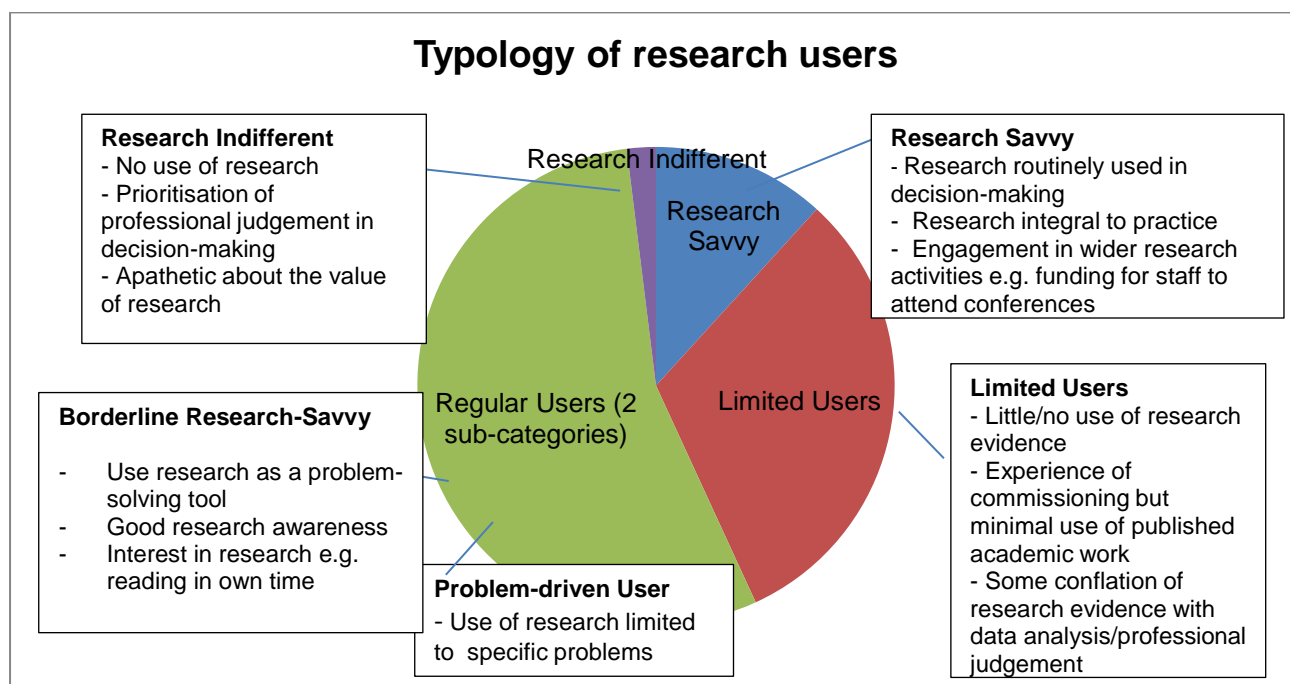
Things might be popular. Anti-social behaviour might be something people are particularly bothered by but actually it's not a major issue. Anti-social behaviour in itself might cause people a lot of grief, [but] where do you invest money, those who shout the loudest or where you know there are real problems? (PCC 5)

In all CSP interviews, the key factor in decision-making was their local strategic assessment, which aggregated local intelligence from partner agencies to identify priority areas of work (e.g. domestic violence). For most, the outcome of this was for the CSP to take action to better understand the nature of the problem and explore possible solutions, which involved consulting the academic literature, commissioning further research and networking with their CSP peers around the country to identify models of good practice. A minority relied predominantly on local data, or public opinion to inform their strategies.

⁹ Adjustments were made for multiple testing within all ANOVA analyses using the Bonferroni correction (i.e. $\alpha = 0.05/\text{number of tests}$).

2.2 Influence of research on decision-making and resource allocation

As detailed above, our interviewees fell into four broad categories in terms of their use of research in decision-making. For ease of understanding, we have presented the categories in the figure below:



As noted in section 1.3, our interviewees would have been categorised very differently had we used a different criterion to that of research use. To demonstrate this, we also coded the interviews on experience of commissioning only and found that the majority ($n = 38$) had done so on one or more occasions. Of those who had no experience of commissioning research, eight were participants in regional partnerships with universities, with whom they collaborated on research. This included supporting research students to conduct academic studies in their force or office. Only three interviewees had neither commissioned research nor engaged in research partnerships of this kind.

'The Research Savvy'

At the top of the ladder, were 'the research savvy'; we categorised only six interviewees in this way, so this group were very much outliers. Notably four of the six 'research savvy' were chief officers, whilst only one PCC and one CSP manager were so classified.

For the 'savvy', research was integral to their approach to policing and crime reduction. This group routinely used research in their everyday practice, both explicitly and implicitly. There was thus both an expectation that all decisions would be grounded in the academic evidence:

It's fundamental to me as a commissioner for my commission to use research... nothing comes to me for funding, nothing comes to me for agreement unless they can show that there's a clear body of evidence that illustrates this works or it's worth us investing some money to see whether it will work in this particular area. (PCC 5)

And a sense that research knowledge tacitly informed discussions and the general style of policing or crime reduction practice:

I know all the Chicago stuff, reassurance policing styles, the work that the National Policing Improvement Agency [NPIA] did about four years ago on what builds confidence in terms of engagement and the sensitivities there ... That's a big area where we don't necessarily say, 'OK, this is what the research says ...' but that would be implicit in our discussions, not just because it's politically attractive. That's an example of where our accumulation of evidence over the years would lead us to a certain sort of policing style. (CO 24)

These interviewees also engaged in wider research activities, including convening research seminars for staff, funding staff to attend an annual criminology conference to build links with academics, and, in one case, establishing an independent research institute to aid their evidence-based practice.

Despite (or perhaps because of) their research knowledge, they perceived that they still had further work to do, to fully embed the use of research in decision-making and to fulfil their aspiration of creating an 'evidence-based organisation'. In this respect they cited the same challenges to making greater use of the research as other interviewees, including the accessibility of evidence and scepticism about its value.

The survey results broadly support this conclusion, showing that just two per cent of the 655 respondents 'always' used research evidence to inform their decisions. However, it is important to note that the majority of survey respondents were of a lower rank than interviewees.

'The Regular Users'

The overwhelming majority of our interviewees in each professional group fell into this group. Interviewees were further categorised into two sub-groups: the 'borderline research savvy' and the 'problem-driven research user'. The 'borderline research savvy' group comprised approximately a quarter of regular users. This group predominantly used the research evidence as a problem-solving tool; however they demonstrated a higher level of personal research awareness than the problem-driven research users and reported reading research in their own time. Most significantly, this group demonstrated a strong aspiration to embed research in decision-making. This ambition was both explicitly expressed by interviewees and evident from some of the examples they highlighted, which included convening academic research seminars for staff.

They're now empowered to draw out the intelligence and the research. Accessing the research now is becoming part of the cultural norm... There's a growing confidence. ...I've had seminars for middle-ranking and senior leaders and they've been exposed to, say, [named individual] doing a briefing about evidence-based approaches to policing. I've had [named individual] talking about domestic abuse and we've had victim workshops based around What Works... Is it [use of research] embedded fully? No. Will we have nay-sayers who try to undermine it? Yes. But a sense of momentum is building both in our force and at a national level too. (CO 3)

The 'problem-driven research users', which encompassed most interviewees in this regular user category, drew on the research evidence but their use of it tended to be limited to specific issues – usually for significant emerging problems or ones that had proved intractable:

We don't obsess about it but I think it is a part of our problem-solving. Whatever problem we're dealing with, I'm pretty confident we'll look around widely and that means research evidence as well as local things – what works in the region, other Forces, other partners. (CO 15)

This presence of a large group of frequent research-users is borne out by the survey results. Half (52%) of respondents said that they "sometimes" used research evidence to inform decisions about policy or operations and one in five said that they used it "very often" (18%).

'The Limited Users'

A significant minority of interviewees (n= 16) demonstrated research awareness, but were only able to cite one or two examples where they had drawn upon the research evidence or commissioned research studies.¹⁰ Most of this group had commissioned research but made little use of published academic work. They favoured evidence-based decision-making but the main sources drawn upon were local data analysis and practice-based evidence from their organisation and others:

I'm about to police an event so part and parcel of my decision-making...was based on the available evaluation of the previous policing event and how it worked. I don't think that will be seen in research terms at the moment, but I think it is, if you look at it in its kind of broadest terms...So I think on the operational side, our use of the grey [literature] and our own organisational learning – is kind of - on the basis of national work - good I think. In terms of the broadening out into the traditional formative academic research, it could do better. (CO 7)

While some of this group conflated data analysis and practice-based knowledge with research evidence, others appeared to have a good understanding and appreciation of research.

'The Research Indifferent'

Only one of our interviewees appeared 'indifferent' to research: he made no use of the research, demonstrated no experience of commissioning studies and was apathetic about the value of research. The primary influences on this interviewee's decision-making were his professional judgement and public opinion.

I did all the seminars but I couldn't be bothered to do the essays to be honest. I thought I'm too busy catching crooks. I was a senior policeman by then. My role was to lead my officers and the community. It was not to take time off or spend my spare time getting some qualification that would not necessarily make me more effective. (PCC 8)

Although our interview sample located only one person who was 'research indifferent', the existence of this group of outliers is also evident in the survey findings: three per cent

¹⁰ When categorising interviewees we considered their use of research evidence and experience of commissioning as well as their general research awareness demonstrated in the interview.

reported "never" using the research evidence. As people who are indifferent to research are almost by definition unlikely to participate in evaluation research, it is reasonable to assume that we have underestimated the size of this group.

Survey findings regarding use of research evidence

In contrast to the qualitative findings, almost three-fifths of survey respondents felt that investment in crime reduction and prevention was driven by politics rather than research evidence (56%), and two-fifths agreed that while research evidence was important, it was not as important as judgement and experience in making decisions (43%). There was no relationship between the view that investment in crime reduction is politically-driven rather than research-driven and any of these variables: age, gender, rank, level of educational attainment, current involvement in studying or length of service.

Despite a large minority (44%) of survey respondents stating that evidence-based approaches were promoted by influential figures or leaders within their organisation, half felt there was no organisational emphasis on the use of research evidence to inform decision-making (51%). Only one in four felt their organisation provided sufficient support and resources to implement evidence based practice (25%), or encouraged collaboration with different research institutes in tackling crime reduction problems (25%). Other respondents (36%) were more likely to report receiving encouragement to collaborate than chief superintendents (34%), superintendents (23%) and chief inspectors (20%) ($\chi^2(3, N=655)=15.3, p=0.002$). Force size, by contrast, had no bearing on respondents' perceptions of encouragement to collaborate.

It's so variable from force to force and depends heavily upon the CC/ACPO team as to whether evidence-based practice is valued or not. It is not something that fits within my own force's strategy at all and has been ignored in favour of personal opinion in some significant decisions. (Survey#518, Superintendent/civilian staff equivalent).

Nobody wants to be associated with anything that can be construed as failure. Centrally we need a mechanism that provides real financial support for evaluation and makes it easier to incorporate into practical policing. We need to find a mechanism to separate evaluation from performance management and develop a culture which accepts that some initiatives do not work as well as hoped, but rather than reject them as failure, to adapt and learn from the experience. The only true failure is failing to try in the first place. (Survey#818, Other senior police staff equivalent)

There was no relationship between gender, age, force size or length of service and perceptions of insufficient organisational emphasis on the use of research evidence. However, chief inspectors (55%) were significantly more likely to express this view when compared with superintendents (54%), chief superintendents (46%) and other (41%) colleagues ($\chi^2(3, N=654)=8.35, p=0.039$).

2.3 Experiences of commissioning, conducting and participating in research

Experience of commissioning research was widespread amongst interviewees. Only five interviewees (one PCC, two chief officers and two CSPs) across the three groups had no experience of this. However, the nature of commissioning varied widely. First, there were distinct differences in the topic focus of commissioned work. Much of the research commissioned by PCCs centred on victim's experiences of the criminal justice system and their needs. A number of PCCs had joined forces to fund a piece of research on this subject and several others had commissioned related studies, such as the victims of domestic violence. It is important to note that responsibility for commissioning the majority of practical and emotional support services for victims of crime was transferred from national government to PCCs on 1st October 2014 (Ministry of Justice, 2013). Therefore PCC interest in commissioning research in this area had also been influenced by this national priority. Chief officers commissioned research in a variety of areas including tactical policing (e.g. hot spots, predictive policing and use of body worn cameras), organisational matters (e.g. demand management and mobile data solutions), and police service consumers (e.g. victim satisfaction and public confidence). Similarly, the focus of CSP commissioning was research into thematic areas (e.g. evaluation of custody triage) and organisational issues (e.g. determining agency roles in preventing and addressing domestic abuse).

Chief officers were more involved than the other two groups in active academic research – usually randomised controlled trials (RCT) – and were often conducting these themselves with some technical input from universities. For example, one CSP had directly commissioned an RCT through the partnership (another CSP and one PCC had RCTs ongoing in their areas but these had not been commissioned through their organisations), whereas five of the 29 chief officers were engaged in RCTs. Notably CSPs more commonly commissioned research from independent local 'consultants' rather than universities. One CSP interviewee said that this was due to the relative expense of university research while several others felt that universities lacked the necessary in-depth understanding of local issues. Two CSPs reported disappointment with the university research they had

commissioned, citing slippage in the delivery of research outputs and failure to meet interviewee recruitment targets.

Research collaboration rather than formal commissioning was examined in the survey and 75 per cent of respondents reported no emphasis on collaboration with external partners for research purposes. Between one-fifth and a third of interviewees in each of the professional groups drew upon university students to conduct research. This practice encompassed those at undergraduate, master's and PhD level, including those working in the police force. In some cases – mainly amongst chief officers and some PCCs – local students were strategically matched to knowledge gaps by means of recently established local and regional research partnerships with universities and colleagues from neighbouring areas. Many of those who were not currently using university students in this way aspired to do so. The 'commissioning' of 'cheap' local students was seen by many interviewees as an area ripe for development in a time of fiscal constraint.

2.4 Ways of thinking about research evidence

The low proportion of eligible people who responded to the survey (see Methods section above) clearly creates difficulties in deriving measures of 'research savviness' to use in our 'before and after' evaluation design, because we have only limited confidence in the representativeness of our 'before' survey. With this in mind we have undertaken further analysis of the survey with a view to identifying the main constructs – or concepts – which respondents used in thinking about the use of research evidence in their organisations. One aim of this work was simply exploratory and interest-driven; the other was to see if an easy-to-use audit tool could be devised to detect changes across area and time in the orientation of the police and related organisations to evidence. This analysis – described in more detail in Appendix C – used the data reduction techniques of exploratory and confirmatory factor analysis to see if there were patterns in responses to the survey items that point to the main concepts that underpin respondents' thinking on research evidence. We found clear evidence of three constructs or dimensions:

- Levels of organisational support and cultural commitment to evidence-based practice
- Personal skills and capacity as research users
- Personal orientation towards evidence based practice.

These three dimensions – measured by 18 questionnaire items – are inter-correlated, but not tightly correlated. That is, people with research skills and commitment to evidence based practice may find themselves working within an unsupportive organisational culture – or vice versa.

3. BARRIERS, CAPACITY BUILDING AND KNOWLEDGE GAPS

In this section we examine the barriers cited by interviewees to greater use of research. In addition we report on the opportunities available to interviewees and survey respondents to keep abreast of emerging research findings and to synthesise and disseminate findings more widely within their organisations. Finally we detail the range of knowledge gaps highlighted.

3.1 Barriers to greater use of research

Interviewees were asked what barriers stood in the way of the greater use of research. A lack of time was the most commonly highlighted barrier. As one CSP told us: *“It may sound like a limp excuse but most of the time and due to budget cuts, you’re running just to keep up, never mind keep abreast of research, particularly when so much is coming out all the time”*.(CSP 5) Many, however, took steps to consult research despite these challenges: *“It’s something I see as being my job to do and I’ll make time to do it even when I don’t have that time”* (CSP 5). The perceived lengthy time to complete and disseminate research studies was also reported as a barrier because such timescales would fail to meet the need for immediate results:

The problem with evidence-based policing is that it’s no use running trials where it’ll be four or five years before we see any useful 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. (CO 14)

This was echoed in the survey findings: while three-quarters of the crime prevention practitioners questioned felt that research evidence should be used more when allocating resources (75%), just over half (54%) stated that they lacked the time to be able to seek this research evidence out. While a higher proportion of chief inspectors (58%) reported time constraints as a barrier to sourcing evidence, relative to superintendents (53%), chief superintendents (51%) and other (47%) survey respondents, these differences were not statistically significant ($\chi^2(3, N=655)=4.40, p=0.220$).

Financial considerations were another frequently mentioned barrier to greater use of research. CSPs, in particular, reported that local budget reductions had significantly impinged on their ability to commission research:

...so previously we have done evaluations on new pieces of work, which we have then commissioned from local universities, so it is independent and external. Or we have traditionally, over the three years of this strategy cycle, identified key projects within that... evaluated each of those, so by the time we get to the start of the next year's cycle we have got a really good idea about effectiveness and the outcomes... has it made a difference? Is anybody better off? What impact has that made? Now I can't do that. Now I don't do that. I don't even bother asking anybody for money to do it, because I know what the answer would be.
(CSP 7)

In a similar vein, some interviewees said that budget cuts had resulted in the loss or significant reductions in staff research capacity – also discussed in Section 4. Nevertheless, a number of interviewees felt that the financial climate had created impetus to make greater use of the research since *“we can't afford to make the wrong decisions”*.

A related challenge to that of time and resource capacity, was the accessibility of research. Some interviewees described *“just trawling round on Google trying to find pieces of research”* and *“being frustrated by my inability to find it [an academic study]”*. There was consensus that research would be more readily used if it was more accessible: *“if it [research] was handy, then I think people are much more likely to at least look at it”* [CSP]. We were also told that greater use of research was hindered by difficulties in interpreting its meaning and practical relevance. Interviewees described struggling to decipher the language of academic publications:

I am kind of struggling with some of that language when you are not immersed in it on a daily basis. It is like, ‘God. What is it saying? What does this mean?’
(CSP 7)

Similarly, others commented that research studies needed to provide clearer direction on the implications of their findings:

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 from here on in’. (CO 10).

Taken together, the effort and time needed to access, interpret and understand the practical application of research findings was perceived to discourage its wider use:

I think the reality for me is, you've got to want to read it and look at it and you've got to believe in it because it's not that easy to access, it's not that easy to understand and it's not that easy to really make an evaluation of how valuable is that piece of work to you. (CSP 9)

There was also a perception that research often lacked contextual relevance. In this respect, a number of interviewees commented that research studies were too general and lacked sensitivity to how their findings and recommendations might vary according to the local context. This resulted in it 'lacking credibility' amongst staff. However, some interviewees noted that there was often a mind-set within the police that's, "If we didn't invent it, we don't want it". (CO 8)

These views were apparent in the survey responses too: nearly half of the survey sample felt that research findings were often unclear and full of jargon (48%), and one-third agreed that research evidence did not have clear enough messages to make it usable (34%). Only a minority felt that academics were producing research evidence that is relevant to practice (42%).

Produce something that is really innovative. I think a lot of practitioners dismiss a lot of research (especially around volume and violent crime) as stating the obvious - males drink too much and fight on a Friday night causing a rise to crime. Don't need a paper on that. (Survey#148, Chief Inspector/civilian staff equivalent).

There is often scepticism within policing in terms of recognising that academic research can be successfully applied in a local environment. Some research is clearly interesting in terms of its findings, but may not necessarily be easy to apply in a practical setting. (Survey#747, Chief Inspector/civilian staff equivalent).

Four out of five (81%) survey respondents had not received training and/or support around the use of research evidence during the previous 12 months. However, 40 per cent said they felt well enough informed about research to be able to tell the difference between good and bad studies. Being confident in one's ability to appraise the quality of research evidence was significantly associated with having studied to at least degree level (48.1% vs. 25.1%; $\chi^2(1, N=633)=30.90, p=0.000$) and currently studying towards a qualification (53.3% vs. 38.0%; $\chi^2(1, N=528)=6.32, p=0.012$).

The implication here is that there is a strong need both for research to become more practically and contextually relevant and for assistance to research users in translating research findings into practice implications for their operational environment. The proposed scoring system in development by the WWCCR to assist practitioners with interpreting research findings – ‘EMMIE’ — should meet this need by scaling research studies in terms of their: Effect (effect direction and size); Mechanism (mechanism/s or mediator/s activated); Moderator (contexts for activation of the mechanism/s or mediator/s); Implementation (conditions that support or obstruct delivery); and Economics (assessment of the cost effectiveness or cost-benefit ratio of what is delivered).

3.2: Opportunities to keep abreast of emerging research

The opportunities available to both survey respondents and interviewees to keep abreast of emerging findings varied. Although almost a third of survey respondents said they had accessed and read academic publications, only a few of our chief officers, PCCs or CSPs interviewees were able to identify a piece of research which had influenced their professional thinking in the year prior to interview. Many did, however, keep up-to-date with some areas of policing and crime reduction (e.g. those who held a National Policing Lead or a policing/crime prevention priority). Many police interviewees were keen to keep up-to-date with their particular business area in addition to keeping abreast of findings from reports published by oversight bodies such as HMIC and the Independent Police Complaints Commission (IPCC). PCCs tended to concentrate on professional and public opinion alongside other core business activities and CSPs on the research being published around crime prevention activities, as illustrated below:

So, Authorised Professional Practice (APP) bulletins, absolutely, I look at them often. Home Office circulars; the guidance from government; HMIC thematic reviews, often they're a good read; some of the sort of think-tank stuff, often politically charged, I know, but some of that is useful reading; Policy Exchange and things like that. (CO 1)

It's quite difficult really in terms of capacity because there's so many things to read but I try and scan stuff and my staff officers scan stuff on my behalf as well. But it's not always easy just in terms of volume of stuff that's available. (CSP 1)

Whilst only a handful of interviewees highlighted a particular piece of academic work that had influenced their thinking or decision making, interviewees kept up-to-date with emerging work in their field in a number of other ways, for example:

- professional journals
- College of Policing website
- establishing links with academics
- attending conferences
- sitting on multi-agency working groups
- chairing partnership groups
- horizon scanning (usually conducted by a small team or an individual within the organisation)
- through academic studies

Some interviewees expressed frustration at both the lack of available time and resources to keep up-to-date with emerging research findings. Commonly they spoke about the problems of shrinking budgets, fewer staff and increasingly burdensome workloads. While keeping abreast of new research was seen as crucial, it was also considered to be a luxury in their time-poor working lives. Few interviewees felt they devoted enough time to reading or searching out new research findings. A number did, however, highlight how they attempted to keep abreast by regularly checking sources which provided summaries of research, for example, professional journals and websites (IPCC, HMIC, MoJ). The following quotes are illustrative of interviewees' frustrations:

I have very, very little time [to keep up to date with findings] because we are all working three jobs now and have had almost 50% of our budget cut over the last three years... That means my workload has almost tripled... I do not have the capacity to do any personal development at the moment because I am just chasing my tail doing the things that we need to do to respond to the need – local government – the need has increased and the money has gone down. (CSP 4)

I'm disappointed by the lack of time I have to do that [keep up to date]. I've got a pile of books at home on different topics that I've bought but which I haven't had time to read. I've got a pile of professional magazines on the desk here and don't even get much chance to dip into those. I do read the British Society of Criminology's magazine and it helps that it's quite succinct. I'll read a few pages

before bed in the way that other people might read a novel. It's a once-a-week dipping-in type of thing. (PCC 9)

I don't read as much as I'd like. It's where you go for ready access. Someone sent me a bunch of stuff recently and I realised it was all from the Police Journal, which we don't subscribe to. In an era of cuts, the provision of journal-type information or internet subscription has also been cut so your access to it has been reduced, and that's research with a police badge on it...So currently, the way in which I do keep up-to-date is hit and miss, it's random. (CO 20)

A large minority of the survey respondents lacked access to research evidence through sources such as peer reviewed academic journal via their organisation (42%). Perhaps as a consequence, only one-third felt able to keep up-to-date with research evidence on policing and crime reduction (34%). From a range of 15 possible options (Figure 1), survey respondents identified an average (median) of 12 different sources they had previously¹¹ used for this purpose (mean=12; range=1-15; SD=2.3). The most common source regularly¹² used for obtaining or finding out about research evidence was via a general web search (e.g. Google or Google Scholar) (86%).

Other prominent sources included external reports or bulletins produced by HMIC, ACPO or the College (84%), an in-house expert/colleague at work (81%), in-house force reports or bulletins (76%), conference/workshop presentations (68%), professional journals (e.g. Police Professional) (67%), reports or bulletins from central government (e.g. Home Office, MoJ) (67%), newspapers (66%) and an external expert (e.g. academic, consultant, other policy advisor) (57%).

By contrast, fewer respondents used social media (e.g. Twitter, LinkedIn) (39%), academic journal articles (31%), community safety websites/blogs (30%), the Society of Evidence-Based Policing (17%), research databases (e.g. Proquest) (10%) and the Cochrane/Campbell Collaboration website (7%) for this purpose. These results are illustrated in Figure 1, below.

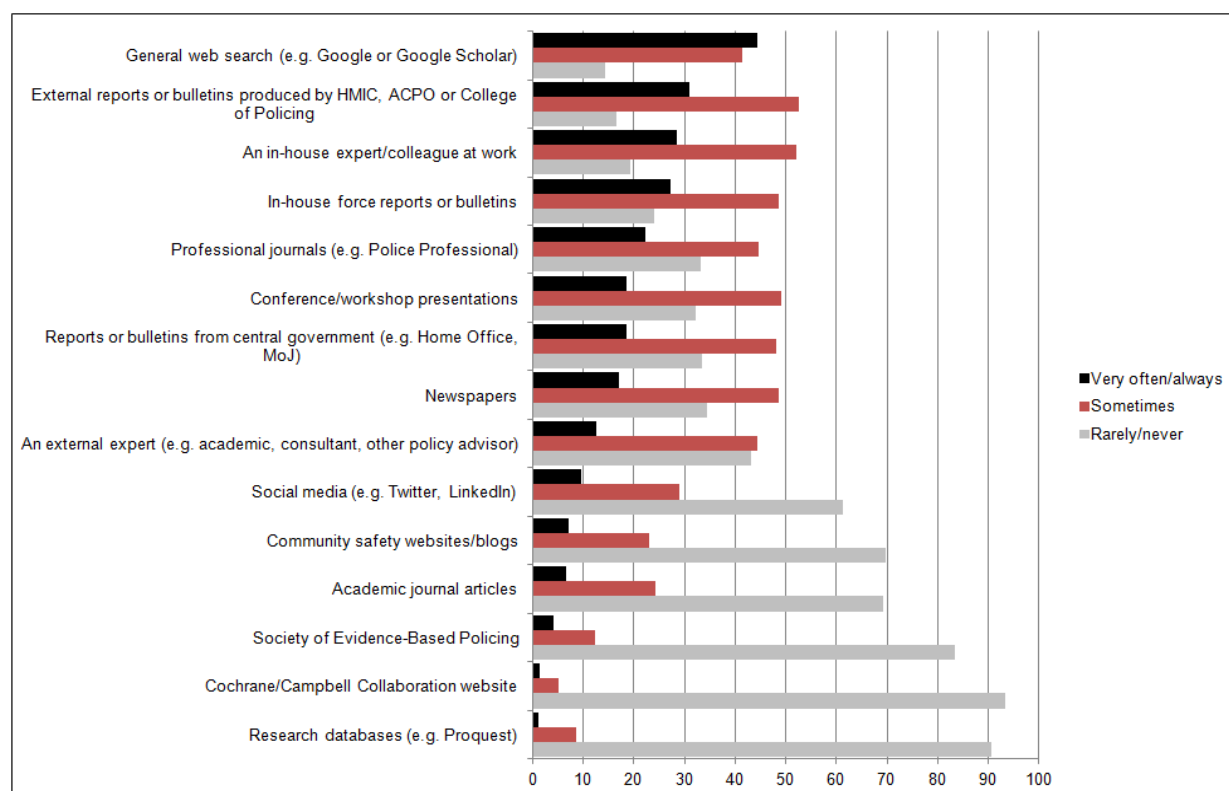
The only relationship observed between the number of different ways respondents reportedly obtained or found out about research evidence was based upon their length of service ($r=-.084$, $p=0.033$). Those having been in service for less than 10 years reportedly

¹¹ Either having used this source "always", "very often", "sometimes" or "rarely" to obtain or find out about research evidence.

¹² In other words, having used this as a source for obtaining or finding out about research evidence "always", "very often", or "sometimes".

used a wider range of sources (mean=12.8) than their colleagues with 10 to 19 years' experience (mean=11.8, $p=0.015$), 20 to 29 years' experience (mean=11.8, $p=0.014$), and 30 years or more service (mean=11.6, $p=0.034$) ($F(3, 642)=3.68, p=0.012$). There were no differences based on gender (mean 11.8 vs. 12.1) ($t(409.5)=-1.66; p=0.097$), the respondent's role ($F(3, 654)=0.543, p=0.653$), the size of their force area (mean 12.0 vs. 11.7) ($t(640)=-1.45; p=0.149$), being educated to at least degree level (mean 12.0 vs. 11.7) ($t(632)=-1.14; p=0.256$) and whether currently studying (mean 12.3 vs. 11.8) ($t(527)=-1.67; p=0.096$).

Figure 1: Sources for obtaining and finding out about research evidence, and frequency of use by crime prevention practitioners (N=655)



3.3 Synthesising and disseminating research findings

Synthesising and disseminating research was regarded as a challenge by many interviewees, again time constraints and budget cuts were frequently cited as barriers to such activities. Despite this nearly all the interviewees reported having structures in place to disseminate research within their organisation; this was in contrast to the survey findings

reported below, where few respondents felt informed about the research evidence supporting the introduction of new policies and procedures to reduce crime.

Whilst all the police interviewees relied on force analysts to produce short reports on police data, many were also experimenting with other forms of dissemination, such as their professional networks, in-house seminars, promoting research through evidence champions and evidence-based policing sessions.

We had one initial workshop which was mainly police, and then we brought some academics in, in effect to test the methodology and thinking to make sure that we weren't off track and to give them some feedback. We then held a full day seminar that we invited all the neighbourhood inspectors to and everyone at chief inspector and above, so we got pretty good coverage at that. We now have a full-time Chief Inspector leading on prevention, part of whose remit is about progressing the 'What Works' approach. (CO 11)

In a number of areas, performance teams were tasked with horizon scanning; police interviewees, PCCs and CSPs all tended to rely on their professional networks as both a source of information and also a place to disseminate new findings and evidence.

We have a department that looks at crime reduction initiatives and how we can actually work better and smarter to do that. Also within our Corporate Services Department we have Horizon Scanning that adds to that mix as well. (CO 21)

Here in [force area] we've got a Force lead in evidence-based policing. That was set up by my predecessor and we're looking this year at a series of master classes here. We're trying to promote some of the emerging learning around some of the more difficult issues we're trying to deal with. (CO 10)

3.3 Knowledge gaps and needs

Two-fifths (41%) of those questioned as part of the survey felt that a lot of what is done to tackle crime has no research evidence to justify it, with only one in six (16%) stating that when new policies and procedures are introduced, they are made aware of the research evidence which supports them. By contrast, almost half (47%) acknowledged that some approaches to tackling crime are ignored, despite these being supported by research evidence. More than two-fifths (45%) of the respondents said there had been occasions where they had sought research evidence to inform policy or operations, but were unable to

find it. Interviewees highlighted a variety of topics in which they felt research was lacking. These fell into five broad categories (detailed in Table 3); the first four of these encompass thematic research topics, whereas the fifth comprises organisational matters.

Table 3: Perception of gaps in knowledge and research needs (N=49)

Emerging topics	<ul style="list-style-type: none"> - Cyber-crime - Child sexual exploitation - Organised crime (including Human-trafficking) - Effectiveness of Prevention
Niche topics	<ul style="list-style-type: none"> - Nature of rural crime and policing in rural communities - Underlying drivers of sexual exploitation by ethnic minorities - Link between gypsy and traveller communities and criminality - Effectiveness of CCTV - Evaluation of the Multi Agency Risk Assessment Conference (MARAC)
Intractable & long-standing topics	<ul style="list-style-type: none"> - Domestic violence – effectiveness of perpetrator programmes; effective responses - Nature/drivers of hate crime (incl. of those with learning disabilities) - Victims and witnesses – experiences of the criminal justice system (CJS) and effectiveness of services - Effective pathways for those with mental health issues in the CJS - Anti-social behaviour – effective responses to it and links to serious crime - Young offenders – effective preventative interventions
Singly-mentioned topics	<ul style="list-style-type: none"> - Effectiveness of therapeutic communities - Additional evidence on effectiveness of cautioning versus prosecution - Definitive research on street lighting - Experiences of women in the CJS and its effect on their children - Deterrence - Additional research on hot-spots policing - Additional research on predictive policing - Effective responses to gun crime - Annual review of lessons learnt from child serious case reviews - Why homicide rate has reduced in local area - Why domestic violence reporting rate has reduced in local area - Effective responses to ‘sex workers’
Organisational topics	<ul style="list-style-type: none"> - Possible uses of technology for community safety (e.g. use of mobile applications to report crime) - Demand management - Optimum shift patterns for armed police - Criteria for the conduct of counter-terrorism investigations

Some interviewees noted that they had been unable to find research in the areas they highlighted, but were conscious that this may be due to their difficulty in 'knowing where to look' rather than its absence. The first of these topic areas was 'national problem' areas of crime, which included the topics of cyber-crime, child sexual exploitation and organised crime. While such crimes are not a new phenomenon, they were perceived by interviewees to be relatively recent challenges (perhaps because their profile has grown substantially in recent years). The second category encompassed niche issues, which were particular to specific types of locality or community but mentioned by a number of interviewees. The most frequently mentioned was rural crime – both the policing of crime in rural communities and effective responses to rural crime. The third area in which the need for further research was commonly highlighted was that of intractable and longstanding crimes, including interventions for domestic violence etc. Whereas the above three categories comprise issues that were mentioned by two or more interviewees, the fourth area comprises only topics that were singly mentioned. The fifth and final area identified was research at the organisational level, such as on management of demand.

4: THE COLLEGE AND ITS ROLE IN FACILITATING A RESEARCH CULTURE

In this section we examine the extent to which interview and survey respondents were aware of the College and used its services or resources as a routine part of their professional activities. We also report on the organisational challenges perceived to inhibit the wider application of research evidence (also discussed in previous sections) in crime reduction and the role envisaged for the College in facilitating a cultural shift in the value placed on research.

4.1 The underlying ‘theory of change’ in stimulating evidence-based practice

A first step in assessing the College’s role in stimulating movement towards a culture which values research is to sketch out the theory of change that is implicit in the WWCCR. The College has identified a range of activities and programmes that form the WW Centre and it has started to formalise its theory of change, which previously has only been implicit in these activities.

It makes sense to think in terms of two types of activity that can encourage an organisation to give research evidence and its use a privileged place within its culture. ‘Push’ strategies involve providing the right people within the organisation with the right tools to exploit evidence. ‘Pull’ strategies provide incentives to staff to seek out and use these tools. The pull strategies should stimulate demand for high quality evidence, at the same time as push strategies provide the necessary supply.

The key ‘push’ factors that the College has identified are, of course, the work of the academic consortium and the associated development of the web-tool for displaying WW evidence. These will start to become accessible to users at the end of 2014 or early 2015.

The College has identified both explicit and implicit ‘pull’ strategies. The former include the establishment of ‘evidence champions’ and training programmes for middle managers and front-line staff (including master-classes and evidence base-camps). The latter involve embedding the need for research awareness in existing procedures and products (e.g. in Authorised Profession Practice documents, in training curricula and promotion criteria, in authorising special projects etc.).

In Year 2 of the evaluation we think that it would be useful to work with the College to refine this theory of change, to identify which specific groups are being targeted by the various push and pull strategies, and to develop a sharper idea of what is thought to be achievable by what date. With two years of the evaluation left, and the products of the WWCCR now becoming available, it will be important for the evaluation to have realistic criteria by which to judge 'interim success' in achieving cultural change. It would also be useful to establish whether the boundaries between 'research evidence' and other forms of evidence, such as in-house analysis, need to be clearly articulated – and policed – or not.

4.2 Familiarity with the College and use of its resources

Interview respondents were quick to admit their lack of knowledge about the particulars of the WW Centre; only 12 per cent of survey respondents reported being aware of the WWCCR. This is unsurprising given the timing of the interviews and survey, which coincided with the early development of the work of the Centre. However, all were aware of the College of Policing and had at the very least visited its website on occasions.

For several of the non-police interview respondents, the branding of the College as 'policing' was of concern and considered to limit its appeal as a 'go to' resource for other crime reduction practitioners, as described by a CSP Manager and PCC:

I think it's about the language. When you think of College of Policing, what resonates is that's about policing. But for me policing is so much broader than that [crime reduction]. The police get involved in so much stuff that you might well be put off by the name. OK, I'm in the Community Safety Unit and have got a responsibility around crime reduction but I take a very broad view of what community safety and policing is so there might be something in the language of how it's named. You might need to do something about the understanding of that. (CSP 8)

The College of Policing is only ever going to give you police-centric research. Policing is a society issue, it isn't just based on policing, so I am quite cynical and I can never ever see the College of Policing fulfilling more than 40% of my research needs. (PCC 7)

Frequency of use of College services and resources

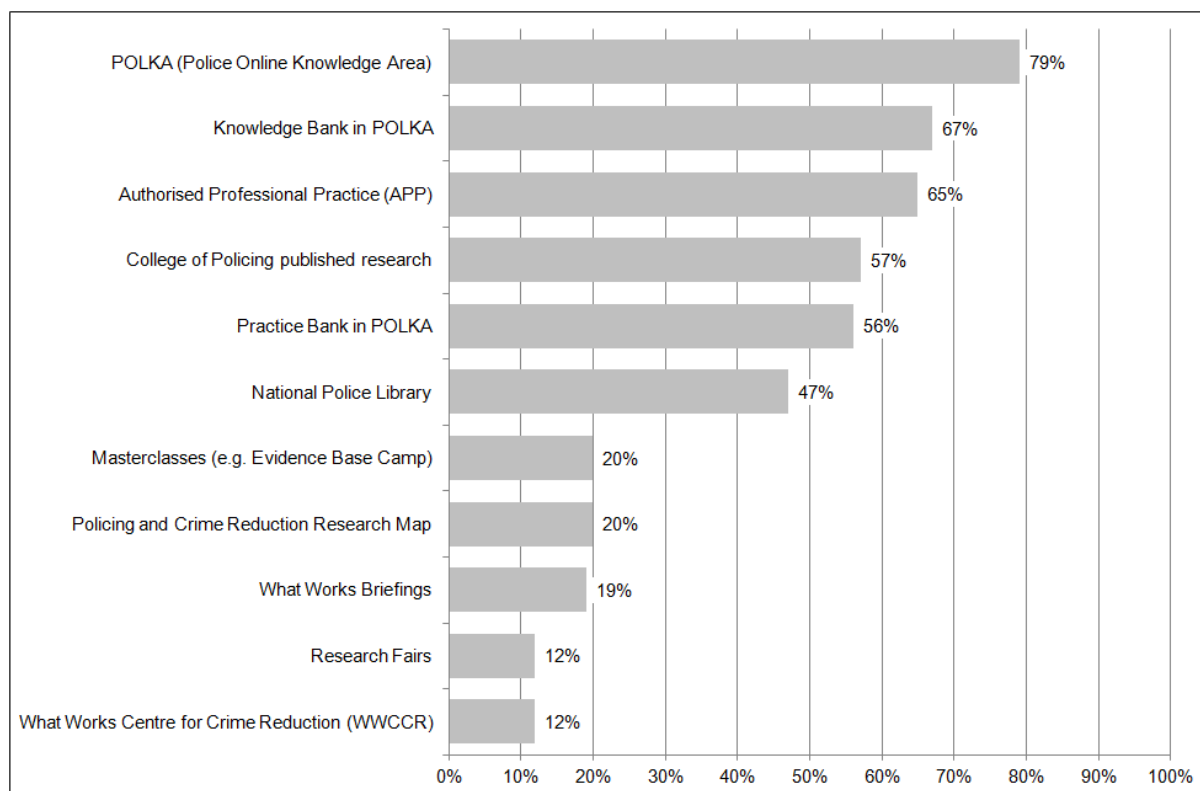
The College provides a range of services and resources that seek to promote evidence-based practice and in a simple assessment of its current reach, we asked our interviewees and survey respondents whether they had ever used any of these products before, and for those they had accessed, how useful they found them to be in promoting evidence-based good practice (Figure 2 and 3).

Eighty-nine per cent of survey respondents indicated that they had previously used at least one of 11 College services or resources. The average (median) number used was five. As illustrated in Figure 2 the most common College products previously accessed by those completing the online survey was the Police Online Knowledge Area (POLKA) (80%), followed by the Knowledge Bank in POLKA (67%), Authorised Professional Practice (APP) (65%), College published research (57%) and the Practice Bank in POLKA (56%).

By contrast, fewer than half indicated that they had previously used the National Police Library (47%), the Policing and Crime Reduction Research Map (20%), attended a Master-class (e.g. an Evidence Base Camp) (20%), viewed a 'What Works' Briefing (19%), or had participated in a Research Fair (12%).

This general pattern of more common knowledge about and use of POLKA and APP was replicated amongst the interviewees.

Figure 2: College services and resources previously accessed by crime prevention practitioners (N=655)

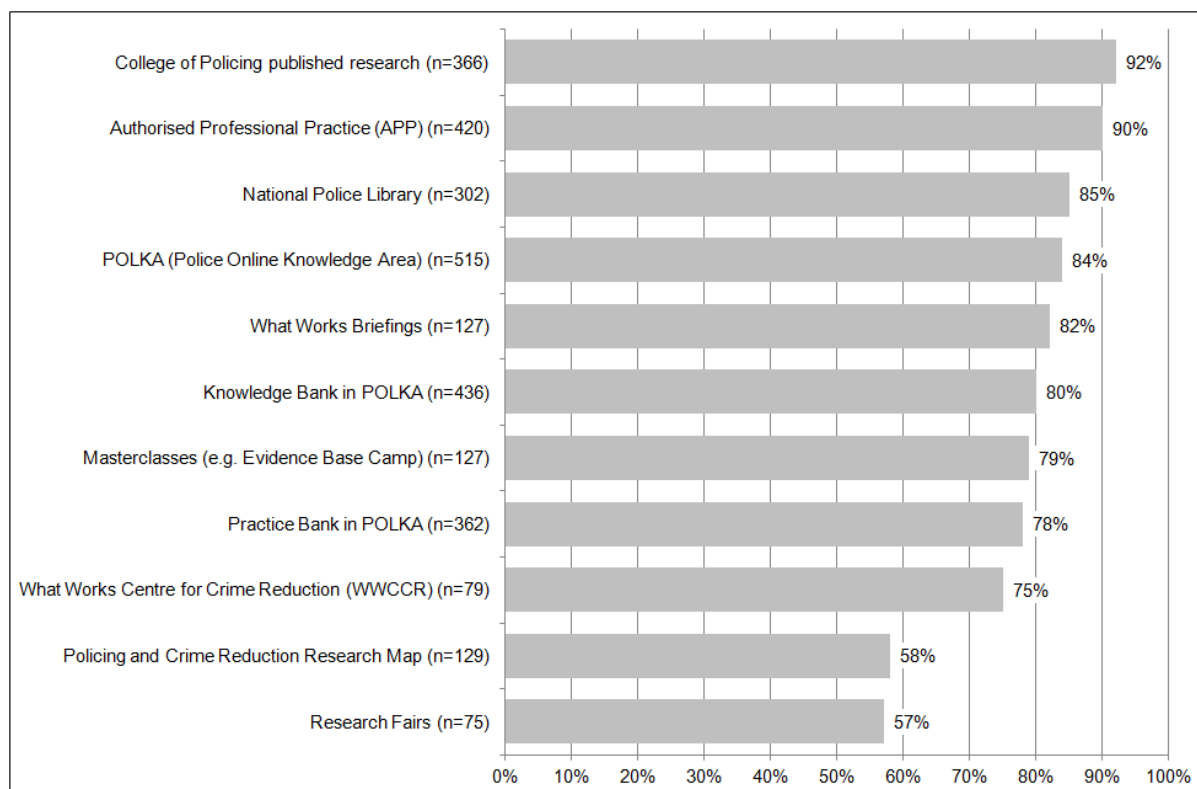


The perceived utility of those College services and resources which had been accessed by survey respondents was high, with most rating them as either “somewhat” or “very useful” in promoting evidence-based practice (Figure 3).

The highest ratings¹³ were reported for College published research (92%), Authorised Professional Practice (APP) (90%), the National Police Library (85%), the Police Online Knowledge Area (POLKA) (84%) and ‘What Works’ Briefings (82%). Among those reporting having used a College service and resource, four-fifths described having found these to be “reasonably” (73%) or “very clear and easy to use” (7%).

¹³ Those describing a product as “somewhat” or “very useful”.

Figure 3: User perceptions of College services and products as “somewhat” or “very useful” in promoting evidence-based good practice



4.3. Facilitating an organisational culture which values research

There was some consensus among our interviewees that it was still “early days” for the College, and expectations about its role in facilitating the wider use of evidence-based research in policing and crime reduction was tempered by this perception. Some interviewees were convinced that change was already underway, citing examples from their force of how research was being applied to practice. Most interviewees, however, were optimistic about the potential of the College, proffering advice as to how it could help effect cultural change over the medium to longer-term (discussed below).

Survey respondents were asked to consider what effect the College services and resources had had on encouraging the use of evidence-based good practice in their day-to-day work. More than two-thirds felt that it had had either a minor (38%) or moderate effect (33%) on this and around one in seven (14%) said it had no effect. One in twenty reported a major effect (5%), with the remainder unable to estimate its impact on individual practice (“don’t know” 12%).

A similar picture emerged in relation to survey respondents' views on the effect the College has had on stimulating the development of a policing culture that values evidence and research. Sixty-nine per cent felt it had generated a minor (37%) or moderate (33%) effect on policing culture. One in eight (13%) felt that, to date, the College had had no effect. The remaining respondents were of the view that it had either had a major effect on this (6%), or that its influence was thus far unclear ("don't know" 12%).

In my day to day business I am overwhelmed with information. I am aware of the work of the College of Policing but have not engaged in a way where I felt compelled to use its resources for guidance or been aware that other sources of information arise from the work of the College. (Survey#86, Chief Inspector/civilian staff equivalent).

Challenges

We have noted in preceding sections, some of the organisational pressures which can create challenges for the value ascribed to research evidence or its wider use in routine practice. Of note was reference in our interviews with chief officers to a deep-bred culture within policing which prioritises 'experience' above all else.

Coppers build up their expertise and profile on the basis of what they've seen and heard and been told. 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.' Things have changed a lot but at the time I joined, the last thing you wanted to do was tell a fellow officer that you're a graduate. (CO 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, which is quite interesting. We need to do some groundwork on our culture and our willingness to accept academic work. (CO 7)

Another commonly raised issue during interviews was cost cutting and its impact on practice. The following interview extracts however, show how reduced budgets can be perceived to inhibit or conversely to encourage a greater reliance on the research evidence of what works. The first extract highlights a lack of personnel to advance or

develop a research agenda and the second argues for the need to use scant resources to maximum effect:

I wonder if there used to be more space in organisations to do [research]. The cry has been, protect the front-line staff. So the 3,000 staff I lost, a lot have come from the creative positions; like policy development has all gone. (CO 22)

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. Performance indicators are one thing [but] if you're looking for long-term outcomes you're looking for programmes of work that have validity about them. That's the cultural change really. (CO 12)

In addition, the demise of the 'performance target' in policing was flagged as a factor in support of the greater use of research evidence on what works:

I think if you were able to show that a Force could save X amount of pounds (£) by adopting this approach, or could reduce crime by X per cent, you'd have a lot of interest and take-up. We've come out of this performance era where crime detection was everything. Reduction is what matters now. (CO 14)

The 'reach' of the College and its ability to be relevant to operational police officers as well as those holding more senior or strategic positions was mentioned as an area that should be addressed. This was discussed in terms of it affecting a cultural shift throughout the organisation rather than a currently perceived top-down approach. A current lack of relevance for operational or 'frontline' officers was raised in both the interviews and the survey:

I suspect, they'll think that's not relevant to them because they're doing early, lates and nights [shifts] or they've got eight rape cases on the go. Why would they look at something to do with the College of Policing? So I still think there is something of a disconnect between the value that the College of Policing can provide, and does provide, and the awareness of officers and this is a gap that we need to address. I do think some people see it as something that senior officers link into. Actually, it should be the other way about, it should be inverted. (CO 21)

I don't think that officers and staff in forces are aware of what the College has to offer as it is not actively promoted. I feel that the College expects officers and staff to go to POLKA for most things but most officers and staff don't even know

about POLKA, what it contains, and how it can be of used. (Survey#87, Chief Inspector/civilian staff equivalent)

In a practical example of this trend, access to external degree courses which seek to develop expertise in research critique, design and application are limited to senior ranks and thus, in the words of one Chief Constable, do nothing to develop a “critical mass” within policing:

It's got to be about more than just sending three or four people to Cambridge every year. How do we get that critical mass? I don't think we've thought it through at all. (CO 24)

Similarly, a survey respondent noted the importance of factoring in research knowledge and expertise as a routine part of career progression:

Make the use and acquisition of knowledge a valued part of career progression. In the same way if a registrar wants to progress to consultant they need to demonstrate the acquisition of knowledge for the medical profession - that should be the same from Inspector to Chief Inspector or Superintendent (Survey#302: Chief Superintendent/civilian staff equivalent).

Views on how the College can further develop a research culture

Three-fifths (62%) of survey respondents expressed a view on practical ways in which the College might help stimulate a greater interest in research and its value for crime reduction practice. These accord with issues raised in earlier sections about barriers to using research, including limited time or access, unnecessary complexity of published research findings, or the perceived lack of local relevance. The most common themes raised in the survey were:

- the better marketing of College services and products (19%);
- demonstrating local relevance when disseminating research results (19%);
- raising awareness of research and evidence, for example via email bulletins (18%);
- simplifying and increasing the accessibility of research evidence (14%); and
- a greater emphasis on the use of research evidence as part of continuous professional development (11%).

Among the interviewees, a key theme was the need for the College to create useable tools for applying research and to become an authoritative and 'quality assured' repository of evidence-based best practice in crime reduction – 'to scrutinise, weed out and promote research' in the words of one PCC. But there was also a view that the College needed to do this over the longer-term and in a systematic way in order to establish its reputation and that of research as "here to stay", rather than a fleeting "fad" for policing and crime reduction.

You need to build a track record of producing useable tools and applicable, evidence-based research that can be almost immediately applied and which gets results. Through that, you'll build a reputation. We need to build a research culture that's here to stay. It won't be quick to build. It'll take time to develop and the focus needs to be on building that evidence base, developing a culture, providing useable products and not necessarily jumping from one fad in policing to the next. A fairly systematic approach is what's needed. (CO 2)

The potential for the College to fill the vacuum created by the "decline of ACPO" was noted but also the need for the College to better market and promote its products and services:

I do not believe that the College of Policing has properly marketed its difference from NPIA. The emergence of a Professional Body type status and membership may well have a positive effect on this and may bring the College into prominence it should enjoy. Service is crying out for this professional leadership aspect and with decline of ACPO into a different entity there is likely to be a greater role for the College to play. (Survey#4, Chief Inspector/civilian staff equivalent)

5. DISCUSSION AND IMPLICATIONS

In this first year we have sought to establish our starting point or baseline from which to measure the impact of the WWCCR. This is to be assessed over the three years in terms of changes in the understanding, use and application of research evidence amongst the main stakeholder groups. We have discussed above the limitations of our sampling approach and the extent to which our findings can be said to reflect the current 'status' in the use of research evidence amongst crime reduction practitioners. There is also the issue of what counts as research evidence; we provided a relatively broad definition for the purposes of our interviewees and survey respondents. When reference was made to use of, or reference to, research, this was not restricted to the results of systematic reviews or randomised control trials, but encompassed a range of data, including force 'experiments', horizon scanning, analysis of local crime data and research conducted by university students.

The influence of research

The influence of research might be described as currently marginal but certainly emergent. Those in senior roles cited research as one influencing factor among many in determining crime reduction strategies and this was broadly supported by the findings of the online survey, with over half of respondents stating that research evidence played an important role in their day-to-day decision-making and two-thirds reporting that it had changed or influenced their working practices. However, only a few of our interviewees were able to identify a piece of research which had influenced their professional thinking in the past year.

Factors including budgetary constraints, national or local imperatives for specific action and public opinion were all considered to be important contributors to determining policy, and of note was the majority view among survey respondents that political imperatives were a key driver of strategic decisions. The value of professional judgement and experience was also commonly highlighted.

In categorising our interviewees by their reported engagement with research, from the "Research Savvy" to the "Research Indifferent", most fell somewhere in the middle, in a group we called the "Regular User". This was someone who used the research evidence as a problem-solving tool and demonstrated a high level of personal research awareness, often reading research in their own time. They had aspirations to embed research in decision-

making and provided various examples of how they were encouraging the use and appreciation of research within their organisation.

There was evidence of links with universities and academics and examples of regional academic partnerships between universities and crime reduction agencies. Amongst the more senior ranks, experience of commissioning research with local universities was common and a minority had used university students to conduct research locally. In contrast, however, such links were much less obvious to those responding to the survey, where the majority reported no emphasis on collaboration with external partners for research purposes.

Opportunities and barriers

Unsurprisingly time and access were the main barriers mentioned to the wider use or appreciation of research, so consulting the research evidence was in no way a routine professional activity. The sources of research information also varied, with limited access to peer reviewed journals and some reliance on web-based sources, including via Google and Google Scholar. Of note were comments made about how the presentation of research findings inhibited use; for example nearly half of the survey sample felt that research findings were unclear and full of jargon and a third believed research lacked clear enough messages to make it usable.

Confidence in assessing the quality of research evidence was an issue for many. Only two-fifths of survey respondents felt they were well enough informed about research to be able to tell the difference between good and bad studies and under a fifth had ever received any training and support in this area. Among the more senior-ranked interviewees, while many had undertaken study in crime research and methods as part of their career development, there was some appetite for additional training in this area.

A range of knowledge gaps were identified, including in 'emerging' areas such as child sexual exploitation, cyber-crime and more 'niche' areas such as policing crime in rural areas and rural crime. Further research knowledge about how to address more long-standing problems such as domestic violence, victim satisfaction, and anti-social behaviour were also mentioned.

Engagement with the College and the WWCCR

The specifics of the WWCCR were unclear to most of those we interviewed and surveyed. This was not unexpected given that the Centre is in its first year of development. However,

knowledge about the College was common and most had made some use of its products and services. The most popular resources were the Police Online Knowledge Area (POLKA), the Knowledge Bank in POLKA and Authorised Professional Practice (APP).

Various suggestions were made about how the College could improve the marketing of its services and products. These included, demonstrating local relevance when disseminating research; simplifying and increasing its accessibility and a greater emphasis on the use of research as part of professional development.

Professional culture

Understanding how evidence is adopted throughout an organisation and the extent to which it is accepted and valued within the professional workplace is key to the success of the WWCCR. Whilst most interviewees engaged, at some level, with research evidence, many continued to rely on their professional experience to inform key strategic decisions (see Telep and Lum, 2014). A lack of time, fiscal constraints and a perceived lack of research competency were all highlighted as barriers to the greater use of research. Among interviewees, a key theme was the need for the College to create useable tools for applying research and to become an authoritative and 'quality assured' repository of evidence-based best practice in crime. Coupled with this was the view that the College needed to do this over the longer-term and in a systematic way to establish its reputation and that of research as "*here to stay*", rather than a fleeting "*fad*" for policing and crime reduction.

There was some consensus among our interviewees that it was still "early days" for the College, and expectations about its role in facilitating the wider use of evidence-based research in policing and crime reduction was tempered by this perception. On the one hand there were interviewees who believed change was already underway, citing examples from their force of how research was being applied to practice; on the other hand there were interviewees and survey respondents who believed the message about the value and importance of using research to inform and improve practice was still very much in its infancy - if imbedded at all. Regardless of this, most interviewees were optimistic – to an extent that was not shared amongst survey respondents – about the potential of the College to assist in affecting a cultural shift in the view and use of research. The 'reach' of the College and its ability to embed an evidence-based culture that is relevant to operational police officers as well as those holding more senior or strategic positions in policing, crime reduction and community safety is, for most interviewees, how its success will be judged.

Implications

We have discussed earlier the types of activity that can encourage an organisation to give research evidence and its use a privileged place within its culture. We suggest that there are two main ways of facilitating this: using 'push' and/or 'pull' strategies. 'Push' strategies involve providing the right people within the organisation with the appropriate tools to exploit evidence. 'Pull' strategies, by contrast, incentivise staff to seek out and use these tools. It is with those in mind that we consider the implications of these baseline evaluation findings for the ongoing work of the Centre and College.

As already noted, Year 1 was early days for the WWCCR. The key 'push' products, including the work of the academic consortium and the associated development of the bespoke web-tool for displaying research evidence, were not available during these baseline interviews. What we are largely able to comment upon at this stage is the interest or enthusiasm for research in crime reduction practice. The key messages from our baseline findings highlight the importance of how research results are presented, the approaches to its promotion and dissemination, as well as the need to build capacity for the confident appraisal and application of research evidence in crime reduction.

- There was an appetite, certainly amongst senior practitioners, for research to inform policy and practice but there was also a very strong message about the need for research findings to be presented concisely, to be free of academic jargon and to demonstrate clearly their relevance to practice. The EMMIE model emerging from the WWCCR, with its translation of findings from the systematic review of different interventions into concise summaries covering impact, the context in which approaches work best, issues of implementation and delivery, and cost-effectiveness, seems particularly apt.
- Time and budgetary pressures were commonly cited barriers to engagement with research, particularly within policing, and this underlines the need for brevity in the design of research outputs but also has implications for how research is disseminated. The opportunities to seek out and consider research are described as limited or non-existent so easy access to key findings will be important. Shepherd (2014) for example has recommended that new research findings be routinely disseminated via a variety of outlets including social media (e.g. twitter) as well as in relevant trade journals (i.e. Police Professional and Police Review).
- Professional judgment and experience were frequently mentioned as counterbalances to the use of research evidence when discussing influences on practice and crime reduction strategy. Again this emphasises the importance of demonstrating the local

relevance of research. However, in addition, responding to the knowledge gaps identified by crime reduction professionals (and we are aware that this is being done) will help to highlight the potential usefulness of research in areas where professional experience may be limited.

- Anxiety about competency to appraise or understand research was another inhibitor to use and there was also a view (garnered via the survey) that ‘research savviness’ was not amenable or necessary for frontline policing. Bottom-up approaches to facilitating an organisational culture which values research should include embedding research awareness into existing procedures, in training curricula and promotion criteria and this was often recommended by our interviewees. For example, the Diploma in Policing is the minimum mandatory qualification which regular Police Constables are required to achieve and forms part of the Initial Police Learning and Development Programme (IPLDP). Thus, including a module on the importance of research evidence to strategic and operational decision making will help to embed early on an understanding of research and its importance, as well as equipping officers with the necessary competencies to assess research evidence. An emphasis on the use and application of research should form part of professional development and promotion.
- The College, in collaboration with others, is supporting the use of research in practice¹⁴, through ‘evidence champions’, training programmes for both strategic and front-line staff as well as through helping to establish links between crime reduction practitioners and local universities. While, these types of activities were commonly mentioned at least in our interviews, what was less clear was how such activities were being deployed within different forces and organisations and to what effect, and that will be an area for consideration in Year 2.

¹⁴ The adoption of ‘effectiveness’ as one of three elements of HMIC’s new inspection framework should also assist in supporting the use of research evidence in crime reduction.

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Appendix A: Qualitative interview schedule

About the research

This study is part of a three-year programme of work funded by the Economic and Social Research Council (ESRC), in collaboration with the College of Policing as part of the What Works Centre for Crime Reduction (WWCCR). The programme intends to draw upon inter/national good practice to build on and enhance the UK's capacity to develop, disseminate and apply evidence-based approaches to policing and crime reduction.

For the purposes of this work, we define evidence as any published research (including 'grey' literature such as internal reports, working papers, technical reports, conference proceedings, student dissertations and theses) on the effectiveness of a particular policy, intervention, tactic or approach which aims to reduce or prevent crime.

The research informing the development of the WWCCR is being conducted by a consortium of universities and this component is an independent evaluation of these activities being led by the Institute for Criminal Policy Research (ICPR), Birkbeck, University of London. The aims of the evaluation include better understanding of:

- levels of awareness and use of research evidence by senior police managers, Police Crime Commissioners (PCCs) and chairs or managers of local Community Safety Partnerships (CSPs);
- the extent to which these key audiences are aware of the products of the WWCCR and the College of Policing;
- whether these products and activities have increased their use of research evidence;
- how this evidence has been used (including changes in the allocation of resources that can be attributed to the use of evidence); and
- changes over time in the use of evidence (if possible we will be interviewing you again in 2016 to measure this).

What taking part will involve

We would like to conduct an interview with you about the extent to which you use or apply research evidence about approaches to crime reduction to your work; what opportunities you have to increase or update your knowledge of current research; and your views on the value of current research evidence. For some of these questions, we will also be asking you to provide examples to illustrate your answers. The interview will take about an hour.

We would like to record this interview but be assured that what you say will remain anonymous as we use no names when reporting our findings. Please only take part in the research if you want to. You are free to refuse to answer any of the questions without giving a reason.

Do you have any questions before we start this interview?

Check that interviewee has been given the study information sheet and that the consent form has been signed. Note of force or AREA

Section 1: About you

- How long have you been a serving officer (for police respondents)?

Prompt for details of any period of secondment

- What is your current rank/job title?

- How long have you been in your current position/role?

- Can you tell me about any academic or 'in-service' professional qualifications you have been awarded, including since joining the Police Service? [or for PCC and CSP, as part of your career development]

Prompt for highest level of educational attainment overall

Prompt for extent of qualifications/additional study taken as part of career

- For police respondents: Can you give me details about any specialist portfolios you have held/are holding or ACPO business areas you have been involved with?

Prompt for any involvement in CoP's activities as part of role?

- For PCCs: Can you tell me about your work as a PCC to date in terms of your objectives and plans to achieve them?

Prompt for details about the development of the crime plan

Prompt for resources made available

Prompt for how the key objectives were decided upon

Prompt for key influences on the choice of objectives

Section 2: Using research evidence

We want to gain some insight into the extent to which research evidence plays a part in your day-to-day work and decision-making. We're interested in how much you personally use research evidence, and encourage the use of it, but also your views on the importance of research for informing the work of the [Police Service/PCC/CSP] as a whole.

- In the past year, what are the considerations which have influenced your decisions about strategies to reduce crime?

Prompt for most important influences on decision making versus less important

For police respondents, prompt for influences on policing style or philosophy advocated

Prompt for some recent examples to demonstrate answer

- What other information do you use to help your decision-making (e.g. intelligence packages, Authorised Professional Practice bulletins, training resources, central government guidance, other)?

- What part (if any) does research evidence play when you make these strategic or operational decisions?

Prompt for type of research evidence which might be used or relied upon

Prompt for from where this research evidence was sourced

- [Are you involved in the allocation of resources] What are the key considerations which influence decisions you make about the allocation of resources?

Prompt for most important influences on decision re resource allocation versus less Important

Prompt for influence on how resources are divided between function and branches

Prompt for some recent examples to demonstrate answer

- In the past year, has any research evidence influenced how you allocate resources?

Prompt for details

Prompt for if this has ever happened

- Have there been occasions where you have sought research evidence to inform strategy and/or operational decisions, but have been unable to find it?

Prompt for in which particular areas of policy and/or operations has this evidence been lacking

Prompt for how this situation was dealt with and if any further efforts were made to account for the lack of research

- Is there an area of your work for which you think further research would be particularly useful?
- Have you/your organisation ever commissioned a piece of research?

Prompt for what this research was, why it was needed, who conducted the research (and when) and views on outcomes/findings of research.

- Have you/your organisation ever been involved in conducting research?

Prompt for what this research was, why it was needed, when it was conducted

- Have you/your organisation ever participated in research?

Prompt for what this research was, why it was needed, who conducted the research (and when) and views on process and outcomes/findings of research.

- Of what benefit do you think, this research was to [organisation]?

Section 3: Exposure to research evidence

- Please take a few minutes to consider this question: In the past year can you think of any pieces of research which have had an impact on your thinking about [policing/crime prevention]?

prompt for description of the research and why it was used , approximate dates when used, how research was identified and what impact it had

If no recent examples are offered, prompt for any research which may have had some influence on working practice over longer period (taking them back to the last time)

- What opportunities do you personally have to keep up-to-date with emerging research findings?

Prompt for what extent of access to research papers/reports/monographs

Any link to academic institution

Government Research (MoJ, Home Office, NOMS)

Access to forums where research is discussed or disseminated (College of Policing - POLKA)

Attendance at conferences/working groups

ACPO portfolio

PoP website

Crime Solutions website

Web-based materials

Other

- How confident do you feel in your ability to assess the quality of research evidence?

Prompt for details of why confident or lacking in confidence

Prompt for source of any expertise [for example, learning that they have achieved]

Prompt for what is looked for in determining quality of research evidence

- Have you ever received any training in using research evidence in decision-making?

Prompt for details as to what this entailed, when this training was given, who provided it and views on usefulness

- Would you want any [further] training or support in this area?

Prompt for what kind of training/support

Prompt for knowledge about courses offered via the College to improve one's ability to appraise or assess evidence?

- What opportunities are there within your Force to synthesise and disseminate research findings more widely?

Prompt for use of Evidence briefing notes

Prompt for networking with more experienced colleagues

Prompt for use of In house newsletter

Prompt for use of Evidence Champions

Evidence Based camps

Prompt for any other sources

Section 4: Improving the use of research evidence

- What importance is currently placed on using research evidence by your [organisation]?
Prompt for examples to demonstrate answer
- Currently, what parts of your organisation are most research-savvy, and make most use of research?
- What do you think are the main challenges to greater use of research evidence in policing?
- In your experience, to what extent is research evidence presented in a way that is useful and appropriate for use by [organisation]?

Prompt for examples of how research evidence has been used/translated into practice

Prompt for how well research evidence can be translated into practice

Prompt for what changes are needed to make presentation/dissemination of research evidence more appropriate to working realities

- What do you think can be done to improve the engagement of [organisation] with the research evidence?
- What do you know of the College of Policing's activities and products?

Prompt for extent of engagement with different aspects of the College

Prompt for regularity of use of the College (regular versus occasional)

Prompt for last time used the College

Prompt for specific knowledge of the following

What Works Briefings

What Works Centre for Crime Reduction (WWCCR)

Policing and Crime Reduction Research Map

College of Policing published research

National Police Library

POLKA (the Police OnLine Knowledge Area) and the Knowledge Bank

Authorised Professional Practice

Efficiency and Knowledge Support Unit

- To what extent have these (mentioned) been useful for police practice/decision-making?
Prompt for extent to which they think College products and activities are oriented towards evidence-based practice/decision making
- To what extent do you think these (mentioned) have met your needs for research evidence?
Prompt for examples of evidence needs and which products have been used to meet these needs
Prompt for what has been lacking from the College to address evidence needs
- How and in what ways do you think that the College of Policing and the WWCCR can help to increase understanding and the application of research evidence?
Prompt to remind respondent of remit of WWCCR to improve access to the crime reduction evidence base and to increase the use of evidence to inform practice
- In what ways do you think College/WWCCR can help develop a policing culture that values evidence and research?
- Finally, do you have any further comments to make about any of the issues discussed here?

Thank you for taking the time to contribute to and inform this research

Appendix B: A breakdown of the online survey results

Factors influencing decision-making

The first set of questions ask about the range of different sources of information that you might draw upon or refer to in order to inform the decisions you make as part of your job.

1. Thinking about the last 12 months, which of these do you routinely use to inform your day-to-day decision-making? (N=655)

Sources of information to inform decision-making	Responses	Percent
Conferences/seminars	300	50.4
Newspapers	303	46.3
Academic journals/books	209	31.9
Professional journals (e.g. Police Professional, Police Oracle)	307	46.9
Social media (e.g. Twitter; LinkedIn; Facebook)	213	32.5
Home Office website	233	35.6
Ministry of Justice website	73	11.1
College of Policing	320	48.9
POLKA (Police Online Knowledge Area)	271	41.4
APP (Authorised Professional Practice)	271	41.4
ACPO guidance/publications	403	61.5
Local force guidance/publications	522	79.7
In-force Problem Profiles	314	47.9
Practice-based experience/professional judgement	527	80.5
Resident surveys/consultations	179	27.3
Input from local colleagues/staff	501	76.5
Website blogs	71	10.8
Local Police and Crime Plan	391	59.7
Other	100	15.3

2. From the different sources you've just identified, which one do you find most useful and why?

Most useful source of information	Responses	Percent	Percent of cases
Advice from colleagues	105	15.2	17.4
Professional experience with other resources	93	13.5	15.4
Local force guidance	80	11.6	13.2
Professional experience (only)	69	10.0	11.4
APP	43	6.2	7.1
Journals/academic sources	39	5.7	6.4
ACPO	35	5.1	5.8
Force problem profiles	29	4.2	4.8
POLKA	28	4.1	4.6
Conferences/seminars	21	3.0	3.5
Crime plan	19	2.8	3.1
College of Policing products	16	2.3	2.6
Resident surveys/consultations	15	2.2	2.5
Force policies	11	1.6	1.8
Police journals	10	1.5	1.7
Newspapers/magazines	10	1.5	1.7
Home Office website	10	1.5	1.7
Social media	9	1.3	1.5
Search engine e.g. Google	7	1.0	1.2
NDM	7	1.0	1.2
Commission research	5	0.7	0.8
Local Intelligence	4	0.6	0.7
Legislation (PNLD)	3	0.4	0.5
MoJ Website	3	0.4	0.5
Regulation	2	0.3	0.3
IPCC	2	0.3	0.3
Police Oracle	2	0.3	0.3
STRA	1	0.1	0.2
www.peoplealchemy.co.uk	1	0.1	0.2
Other forces websites (also international e.g. USA, NZ)	1	0.1	0.2

Most useful source of information	Responses	Percent	Percent of cases
DMM	1	0.1	0.2
NFIB	1	0.1	0.2
Industry	1	0.1	0.2
Blog	1	0.1	0.2
CPS Guidance	1	0.1	0.2
LCPC	1	0.1	0.2
SCOMIS	1	0.1	0.2
GAIN	1	0.1	0.2
Professional/Legal Guidance	1	0.1	0.2
TOTAL	689	100	113.9%

3. Please indicate the extent to which you agree or disagree with these statements. We define research evidence as any published research (including internal reports, working papers, technical reports, conference proceedings, systematic reviews, journal articles, student dissertations and theses) on policies, interventions, tactics or approaches which aim to reduce or prevent crime, or improve policing.

Please select one option on each line

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Research evidence plays an important role in my day-to-day decision-making (N=655)	3.2%	16.3%	23.1%	46.9%	10.5%
During the last 12 months, I can think of at least one occasion where research evidence has affected how I allocate resources (N=654)	3.1%	12.1%	13.0%	50.3%	21.6%
During the last 12 months, I have used research evidence to help me understand a crime problem (N=653)	4.9%	16.1%	16.5%	46.9%	15.6%
Research evidence has changed or influenced my working practices (N=651)	2.2%	10.1%	19.4%	52.8%	15.5%
During the last 12 months, I have used research evidence to justify existing practice (N=653)	2.5%	16.4%	19.6%	48.2%	13.3%
During the last 12 months, I have used research evidence to develop new practice (N=650)	2.5%	13.1%	14.0%	53.2%	17.2%
During the last 12 months, I have used research evidence to help think about ways that I might assess the impact of practice (N=655)	2.1%	12.4%	18.8%	52.4%	14.4%

Extent to which research evidence meets your needs

This section looks more generally at how well published research evidence meets your needs. Again, by evidence we mean any published research (including internal reports, working papers, technical reports, conference proceedings, systematic reviews, journal articles, student dissertations and theses) on policies, interventions, tactics or approaches which aim to reduce or prevent crime, or improve policing.

4. Please consider the statements below about research evidence and indicate the extent to which you agree or disagree with them.

Please select one option on each line

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I lack the time to be able to seek research evidence out (N=655)	1.7%	26.0%	18.5%	42.0%	11.9%
Research findings are too often unclear and full of jargon (N=655)	1.8%	23.5%	27.0%	41.5%	6.1%
We should use research evidence more in allocating our resources (N=654)	0.3%	4.4%	20.6%	57.0%	17.6%
Research evidence is important, but it is not as important as judgement and experience in making decisions (N=653)	1.7%	17.2%	38.1%	35.8%	7.2%
Academics are producing research that is relevant to practice (N=652)	0.5%	12.0%	45.7%	39.9%	2.0%
Research evidence doesn't have clear enough messages for us to make it usable (N=654)	1.4%	26.8%	37.9%	30.9%	3.1%
Investment in crime reduction and prevention is driven by politics rather than research evidence (N=654)	1.2%	16.5%	26.3%	40.2%	15.7%
During the last 12 months, I have received training and/or support around the use of research evidence (N=651)	33.3%	47.9%	4.9%	10.8%	3.1%
I am not well enough informed about research to be able to tell the difference between good and bad research studies (N=654)	6.1%	34.3%	26.6%	28.1%	4.9%

Organisational culture & use of research evidence

This next set of statements and questions look at how your Force or organisation supports the use of published research evidence more generally.

5. Please consider the statements below and indicate the extent to which you agree or disagree with them.

Please select one option on each line

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Organisational priorities are the real factors that affect our decision-making (N=655)	0.2%	5.3%	6.4%	61.5%	26.6%
Decisions often have to be made quickly which makes it difficult to consider research evidence (N=652)	0.5%	14.1%	13.7%	56.1%	15.6%
There is no organisational emphasis on the use of research evidence to inform decision-making (N=654)	2.4%	26.5%	19.7%	41.7%	9.6%
I do not have access to academic journals through work (N=655)	3.2%	37.9%	16.6%	33.6%	8.7%
I am encouraged by my organisation to collaborate with different research institutes in tackling crime reduction problems (N=653)	11.5%	34.5%	29.2%	21.9%	2.9%
My organisation provides sufficient support and resources to implement evidence based practice (N=653)	6.4%	36.0%	32.2%	24.5%	0.9%
My organisation encourages and supports its workforce to gain knowledge and understanding from research evidence (N=655)	7.0%	32.5%	29.8%	28.5%	2.1%
When new policies and procedures are introduced, I am made aware of the research evidence which supports them (N=655)	12.1%	51.6%	20.2%	16.2%	0%
Evidence based approaches are promoted by influential figures or leaders in my organisation (N=653)	5.4%	24.7%	26.5%	38.9%	4.6%

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
A lot of what we do to tackle crime has no research evidence to justify it (N=653)	2.5%	25.3%	31.5%	34.6%	6.1%
I keep up-to-date with research evidence on policing and crime reduction (N=654)	3.5%	30.9%	31.7%	31.3%	2.6%
We ignore some ways of tackling crime, despite them being supported by research evidence (N=655)	1.2%	13.0%	39.2%	42.1%	4.4%

Familiarity with and use of research evidence

The next few questions look at how you might access and use published research evidence. Again, when referring to evidence we mean any published research (including internal reports, working papers, technical reports, conference proceedings, systematic reviews, journal articles, student dissertations and theses) on policies, interventions, tactics or approaches which aim to reduce or prevent crime, or improve policing.

6. How often do you seek out or look for research evidence in order to inform decisions about policy or operations? (N=649)

Never (2.2%)

Rarely (24.0%)

Sometimes (47.3%)

Very often (23.9%)

Always (2.6%)

7. How often would you say that you actually use research evidence to inform decisions about policy or operations? (N=653)

Never (3.1%)

Rarely (25.7%)

Sometimes (51.5%)

Very often (18.2%)

Always (1.5%)

8. How do you find out about research evidence? Please indicate how frequently you obtain or find out about research evidence from the following sources.

	Never	Rarely	Sometimes	Very often	Always
An in-house expert/colleague at work (N=653)	3.5%	13.9%	52.1%	26.0%	2.5%
An external expert (e.g. academic, consultant, other policy advisor) (N=650)	10.2%	32.9%	44.5%	12.3%	0.2%
In-house force reports or bulletins (N=649)	4.9%	19.1%	48.7%	25.4%	1.8%
External reports or bulletins produced by HMIC, ACPO or College of Policing (N=653)	2.5%	14.1%	52.5%	28.5%	2.5%
Reports or bulletins from central government (e.g. Home Office, MoJ) (N=653)	5.5%	27.9%	48.1%	17.0%	1.5%
General web search (e.g. Google or Google Scholar) (N=652)	3.7%	10.6%	41.3%	38.0%	6.4%
Professional journals (e.g. Police Professional) (N=652)	7.2%	25.9%	44.6%	20.6%	1.7%
Conference/workshop presentations (N=650)	4.5%	27.8%	49.1%	17.7%	0.9%
Cochrane/Campbell Collaboration website (N=652)	83.9%	9.5%	5.1%	1.5%	0%
Academic journal articles (N=653)	30.6%	38.6%	24.3%	6.0%	0.5%
Society of Evidence-Based Policing (N=649)	64.1%	19.4%	12.3%	3.7%	0.5%
Research databases (e.g. Proquest) (N=650)	70.5%	20.0%	8.5%	0.9%	0.2%
Community safety websites/blogs (N=653)	41.0%	28.8%	23.1%	6.6%	0.5%
Social media (e.g. Twitter, LinkedIn) (N=654)	35.9%	25.5%	29.1%	8.4%	1.1%
Newspapers (N=652)	11.5%	22.9%	48.5%	15.6%	1.5%

9. Have there been occasions where you have sought research evidence to inform policy or operations, but have been unable to find it? (N=628)

Yes (44.7%)

No (37.3%)

Don't know (18.0%)

College of Policing services and resources

The College of Policing provides a range of resources that seek to promote evidence-based practice. This section looks at your awareness of these resources and how useful you may have found them.

10. Thinking specifically about the following resources provided by the College of Policing, please indicate whether you have ever used this resource before, and for those that you have used please state how useful you found them to be in promoting evidence-based good practice.

	I have never used this resource	Not at all useful	Not very useful	Somewhat useful	Very useful
What Works Briefings (N=653)	80.6%	0.2%	3.4%	13.8%	2.1%
What Works Centre for Crime Reduction (WWCCR) (N=649)	87.8%	0.3%	2.8%	8.5%	0.6%
Policing and Crime Reduction Research Map (N=646)	80.0%	1.1%	7.3%	11.0%	0.6%
College of Policing published research (N=644)	43.2%	0.5%	4.2%	48.0%	4.2%
National Police Library (N=648)	53.4%	1.7%	5.1%	29.3%	10.5%
POLKA (Police Online Knowledge Area) (N=650)	20.8%	3.5%	9.2%	49.5%	16.9%
Knowledge Bank in POLKA (N=648)	32.7%	3.4%	10.2%	40.9%	12.9%
Practice Bank in POLKA (N=648)	44.1%	2.9%	9.3%	33.2%	10.5%
Authorised Professional Practice (APP) (N=650)	35.4%	1.8%	4.8%	38.9%	19.1%
Masterclasses (e.g. Evidence Base Camp) (N=651)	80.5%	0.9%	3.2%	12.6%	2.8%
Research Fairs (N=653)	88.5%	1.4%	3.5%	5.4%	1.2%

**11. Overall, to what extent have you found these resources clear and easy to use?
(N=648)**

Please select the statement which most closely matches your views.

I have not used any of these resources (19.1%)

Very clear and easy to use (6.5%)

Reasonably clear and easy to use (65.0%)

Not at all clear and easy to use (9.4%)

12. Of the College of Policing resources that you have used, which did you find to be the least clear and easy to use, and why?

College resource least clear and easy to use	Responses	Percent	Percent of cases
POLKA	88	46.6%	47.3%
APP	30	15.9%	16.1%
College of Policing/WWC generally	23	12.2%	12.4%
Resources (General)	23	12.2%	12.4%
National Library	11	5.8%	5.9%
Research Map	6	3.2%	3.2%
Public Order Manual	2	1.1%	1.1%
SLDP	1	0.5%	0.5%
Local Authority Website	1	0.5%	0.5%
Research fairs	1	0.5%	0.5%
ACPO	1	0.5%	0.5%
Gateway website	1	0.5%	0.5%
Published research	1	0.5%	0.5%
TOTAL	189	100.0%	101.6%

Why unclear/difficult to use	Responses	Percent	Percent of cases
Unintuitive/hard to navigate	62	31.3%	37.8%
Search function poor	29	14.6%	17.7%
Information not relevant - too much opinion/lacks credible sources/out of date	26	13.1%	15.9%
Complex language/data	12	6.1%	7.3%
Information requires analysis + consolidation to increase utility for time poor users	9	4.5%	5.5%
Access: Booking into Service	8	4.0%	4.9%
Never heard of	7	3.5%	4.3%
Information too simplistic/low level/irrelevant	6	3.0%	3.7%
Not aware of functionality	5	2.5%	3.0%
Hard to access (IT)	5	2.5%	3.0%
Information should be centralised into once resource	5	2.5%	3.0%
Improved training required	5	2.5%	3.0%
More communication between users required (forum function)	4	2.0%	2.4%
Differentiation between information present on resource required	3	1.5%	1.8%
Not fully functional	3	1.5%	1.8%
Not encouraged to use/little incentive	2	1.0%	1.2%
Format should be standardised to improve efficiency of scanning	2	1.0%	1.2%
Lack of support when contact made with resource management	2	1.0%	1.2%
Function too general so unfit for service	1	0.5%	0.6%
Resource requires increase in depth and breadth of information	1	0.5%	0.6%
Temporal issues - Information not guaranteed to remain on resource	1	0.5%	0.6%
TOTAL	198	100.0%	120.7%

13. What effect do you think these College of Policing resources have had on encouraging the use of evidence-based good practice in your day-to-day work? (N=653)

No effect (13.5%)

Minor effect (37.5%)

Moderate effect (32.5%)

Major effect (4.9%)

Don't know (11.6%)

14. What effect do you think the College of Policing has had on stimulating the development of a policing culture that values evidence and research? (N=652)

No effect (12.6%)

Minor effect (36.7%)

Moderate effect (32.7%)

Major effect (6.1%)

Don't know (12.0%)

15. How do you think the College of Policing can best help stimulate the development of a policing culture that values evidence and research?

Ways to stimulate the development of a police culture that values research evidence	Responses	Percent	Percent of cases
Better marketing of the College	79	11.2%	19.4%
Display local relevance - promote results	76	10.7%	18.7%
Raise awareness e.g. email bulletins	74	10.5%	18.2%
Simplify/increase accessibility of credible research	56	7.9%	13.8%
Training/assessment for staff re research, part of CPD	46	6.5%	11.3%
Improve accessibility of websites/research dissemination/social media	39	5.5%	9.6%
Target across force	36	5.1%	8.8%
Increase capacity (less focus on KPIs/more time/more money/etc)	35	4.9%	8.6%
Encourage culture change	34	4.8%	8.4%
Conduct relevant critical research	29	4.1%	7.1%
College as centralised research/journals bank - publish what has and has not worked across all forces	29	4.1%	7.1%
Consult other orgs - practitioners/academics/etc	28	4.0%	6.9%
Senior staff support needed for paradigm shift	24	3.4%	5.9%
Increase geographical accessibility/make online courses	16	2.3%	3.9%
Target senior staff	16	2.3%	3.9%
Organisational change	16	2.3%	3.9%
Make HMIC/political priority	14	2.0%	3.4%
Forces to reference research in decision making	10	1.4%	2.5%
Limit political intervention	9	1.3%	2.2%
Make it cost effective	8	1.1%	2.0%
No need for it	8	1.1%	2.0%
Provide incentives to use research	7	1.0%	1.7%
Include research at doctrine level for new recruits	5	0.7%	1.2%
Have advisory body/resource to help forces with implementing research	5	0.7%	1.2%
Support back office functions/staff	4	0.6%	1.0%
Academic secondments	4	0.6%	1.0%
Encourage use by force analysts	1	0.1%	0.2%
TOTAL	708	100.0%	174.0%

About you

Here we are asking for details of your gender, age and job title in order to explore differences in responses based on these factors. We will also combine details of your initials, gender and year of birth to create a unique identifier (e.g. A-A-M-1990). This will enable ICPR researchers to probabilistically match responses provided here with a follow-up survey planned for 2016. This will allow us to measure individual-level changes in things like the use of research evidence, and knowledge and awareness of College of Policing resources over time. However, details of this unique identifier will remain confidential, and will not be reported or shared with anyone outside the College of Policing, or the independent research team at ICPR, or used for any other purposes.

16. Please enter your initials.

17. Please select your gender (N=649)

Female (29.7%)

Male (70.3%)

18. What is your current age (in years)?

Median 47 (mean=46.6; range=21-72; SD=6.5; N=644)

19. Please enter your year of birth.

20. In which force or organisation do you currently work?

Organisation/Force area	Frequency	Percent	Valid Percent
Avon and Somerset Constabulary	24	3.7	3.7
Bedfordshire Police	2	0.3	0.3
British Transport Police	1	0.2	0.2
Cambridgeshire Constabulary	4	0.6	0.6
Cheshire Constabulary	29	4.4	4.5
City of London Police	10	1.5	1.6
Civil Nuclear Constabulary	10	1.5	1.6
Cleveland Police	19	2.9	3
Cumbria Constabulary	4	0.6	0.6
Derbyshire Constabulary	10	1.5	1.6
Devon and Cornwall Police	15	2.3	2.3
Dorset Police	3	0.5	0.5
Durham Constabulary	8	1.2	1.2
Dyfed-Powys Police	2	0.3	0.3
Essex Police	23	3.5	3.6
Gloucestershire Constabulary	6	0.9	0.9
Greater Manchester Police	12	1.8	1.9
Gwent Police	10	1.5	1.6
Hampshire Constabulary	33	5	5.1
Hertfordshire Constabulary	7	1.1	1.1
Humberside Police	13	2	2
Kent Police	13	2	2
Lancashire Constabulary	2	0.3	0.3
Leicestershire Constabulary	8	1.2	1.2
Lincolnshire Police	1	0.2	0.2
Merseyside Police	9	1.4	1.4
Metropolitan Police Service	49	7.5	7.6
National Crime Agency	3	0.5	0.5
Norfolk Constabulary	10	1.5	1.6
North Wales Police	16	2.4	2.5
North Yorkshire Police	11	1.7	1.7
Northamptonshire Police	4	0.6	0.6
Northumbria Police	1	0.2	0.2

Organisation/Force area	Frequency	Percent	Valid Percent
Nottinghamshire Police	15	2.3	2.3
Other	32	4.9	5
Police Scotland	58	8.9	9
Police Service of Northern Ireland	10	1.5	1.6
South Wales Police	13	2	2
Staffordshire Police	18	2.7	2.8
Surrey Police	23	3.5	3.6
Sussex Police	7	1.1	1.1
Thames Valley Police	58	8.9	9
Warwickshire Police	2	0.3	0.3
West Mercia Police	1	0.2	0.2
West Midlands Police	13	2	2
West Yorkshire Police	15	2.3	2.3
Wiltshire Police	5	0.8	0.8
Total	642	98	100
Missing	13	2	
TOTAL	655	100	

21. What is your current rank/job title?

Job title/role	Number	Percent
Chief Inspector/staff equivalent	322	49.2
Superintendent/staff equivalent	154	23.5
Chief Superintendent/staff equivalent	61	9.3
Other	33	5
Other senior police staff equivalent (e.g. staff officer)	33	5
Community Safety Partnership Manager	26	4
Community Safety Partnership Chair	7	1.1
Assistant Chief Constable/Commissioner	4	0.6
Chief Constable/Commissioner	3	0.5
Commander	3	0.5
Deputy Chief Constable/Commissioner	3	0.5
Police and Crime Commissioner	3	0.5
Police and Crime Commissioner's Office	3	0.5
Total	655	100

22. Please tell us briefly about your current role (e.g. working on traffic division, responsible for motorway patrols)

23. What is your total length of service/employment (in years)? (Please include any periods on secondments)

Median 22 (mean=21.1; range=0-48; SD=7.9; N=643)

24. What is your highest level of educational attainment?

Please select one of the options below

Highest level of educational attainment	Frequency	Percent	Valid Percent
First degree level qualification	249	38	39.3
University Higher Degree (e.g.PhD, MSc)	173	26.4	27.3
A Level	58	8.9	9.1
GCSE/O Level	46	7	7.3
Vocational or professional qualification	46	7	7.3
Diploma in Higher Education	32	4.9	5
Higher Grade/Advanced Higher (Scotland)	9	1.4	1.4
Teaching qualification (excluding PGCE)	7	1.1	1.1
Standard/Ordinary (O) Grade/Lower (Scotland)	5	0.8	0.8
CSE	3	0.5	0.5
Nursing or other medical qualification not yet mentioned	3	0.5	0.5
AS Level	1	0.2	0.2
None of the above	1	0.2	0.2
Other school (including school leaving exam certificate or matriculation)	1	0.2	0.2
Total	634	96.8	100
Missing	21	3.2	
TOTAL	655	100	

25. Are you currently studying for a qualification?

Please select the statement that applies to you

Are you currently studying?	Frequency	Percent	Valid Percent
I am not currently studying	454	69.3	85.8
I am studying for a first degree (e.g. BA, BSc)	8	1.2	1.5
I am studying for a higher degree (e.g. MPhil, PhD)	8	1.2	1.5
I am studying for a postgraduate degree (e.g. MA, MSc)	22	3.4	4.2
I am studying for some other qualification	37	5.6	7
Total	529	80.8	100
Missing	126	19.2	
TOTAL	655	100	

26. Finally, is there anything further you would like to say to inform our evaluation; for example, on the use and role of research evidence in decision-making; about your current involvement in research as a participant, funder or commissioner; to highlight any particular gaps in knowledge or understanding; or to comment on the work of the College of Policing?

General comments	Responses	Percent	Percent of cases
Translation of research findings which is better tailored to local situations/circumstances	18	9.4%	13.8%
Accessibility to research and researchers at the College must improve	17	8.9%	13.1%
Not enough time to consume research	17	8.9%	13.1%
Culture change needed e.g. less results based, short term	13	6.8%	10.0%
Funding issues e.g. need more funded degrees for Police, commissioning research, in house analysis	13	6.8%	10.0%
Engage with civilian staff/other services	12	6.3%	9.2%
Better marketing of the College needed	11	5.8%	8.5%
College needs links with Universities	10	5.2%	7.7%
More engagement across all ranks (not just middle and upper)	7	3.7%	5.4%
Survey flawed/misleading	7	3.7%	5.4%
Simplify information sent out	7	3.7%	5.4%
Performance indicators used arbitrarily, without understanding	7	3.7%	5.4%
Research is useful	7	3.7%	5.4%
More pertinent research areas/targeted briefs to officers for their function	7	3.7%	5.4%
Seek further contact from us/College	6	3.1%	4.6%
Further research education/training required	4	2.1%	3.1%
Resource limitations	4	2.1%	3.1%
More coordination across Forces required e.g. for IT systems	3	1.6%	2.3%
Previous research has been ignored in past	3	1.6%	2.3%
Introduce mandatory research field into police reports	2	1.0%	1.5%
Limit bureaucracy	2	1.0%	1.5%
Senior staff unresponsive to research opportunities	2	1.0%	1.5%
EPB difficult to achieve with status quo	1	0.5%	0.8%
Most decisions made from experience	1	0.5%	0.8%
Some parts of Police more responsive to research e.g. Neighbourhood Policing	1	0.5%	0.8%
Too much information	1	0.5%	0.8%

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Current wastefulness pursuing controls not based in evidence	1	0.5%	0.8%
General comments	Responses	Percent	Percent of cases
Need for academic rigour with research	1	0.5%	0.8%
Public sector should be more neoliberal	1	0.5%	0.8%
College needs to be more meritocratic and independent from being a post for retired police	1	0.5%	0.8%
Need for skills database	1	0.5%	0.8%
Current decision making models insufficient - heuristics etc.	1	0.5%	0.8%
Police too risk averse to experiment with new (research) approaches	1	0.5%	0.8%
Necessity of reacting to public volition may not always intersect with research aims	1	0.5%	0.8%
TOTAL	191	100.0%	146.9%

Appendix C: Developing an evidence-based policing audit tool

Our online survey instrument sought to differentiate between three key features which were assumed to be important underlying aspects of evidence-based policing. The first set of questions sought to explore and measure the extent to which respondents valued the use of research evidence as an aid to their decision-making and professional practice (example items: “During the last 12 months, I have used research evidence to help me understand a crime problem”, “Research evidence has changed or influenced my working practices”).

The second set of questions focused on potential obstacles to using research evidence, including time pressures (e.g., “I lack the time to be able to seek research evidence out.”), the accessibility of academic research findings (e.g., “Research findings are too often unclear and full of jargon.”), scepticism about the importance of research evidence in decision-making (e.g., “Research evidence is important, but it is not as important as judgement and experience in making decisions.”), and potential ameliorating factors, like the degree of direct exposure to research evidence the respondent had experienced recently (e.g., “During the last 12 months, I have received training and/or support around the use of research evidence”).

Finally, the third series of questions aimed to better understand the influence of organisational culture on the use and uptake of research evidence (e.g., “There is no organisational emphasis on the use of research evidence to inform decision-making”, “My organisation provides sufficient support and resources to implement evidence based practice.”), while also inquiring about the relevance of research evidence to an operational policing and crime reduction context (e.g., “Decisions often have to be made quickly which makes it difficult to consider research evidence.”).

In order to ensure that the theoretical model we have proposed is a sound one, we applied multivariate statistical techniques, and exploratory and confirmatory factor analysis to assess our presumptions (full technical details are available from the research team on request).

As a first step we used exploratory factor analysis which allows all items in the analysis to rely (i.e. load) on an optional, but appropriate, number of emerging factors. As with all data reduction techniques we only kept those items in the model which could preserve a handful (i.e. at least one quarter) of their original attributes (in other words they had sufficiently high explained variance). We also posited that although these factors compassed the use of research evidence, they were still conceptually distinct from each other and provided unique

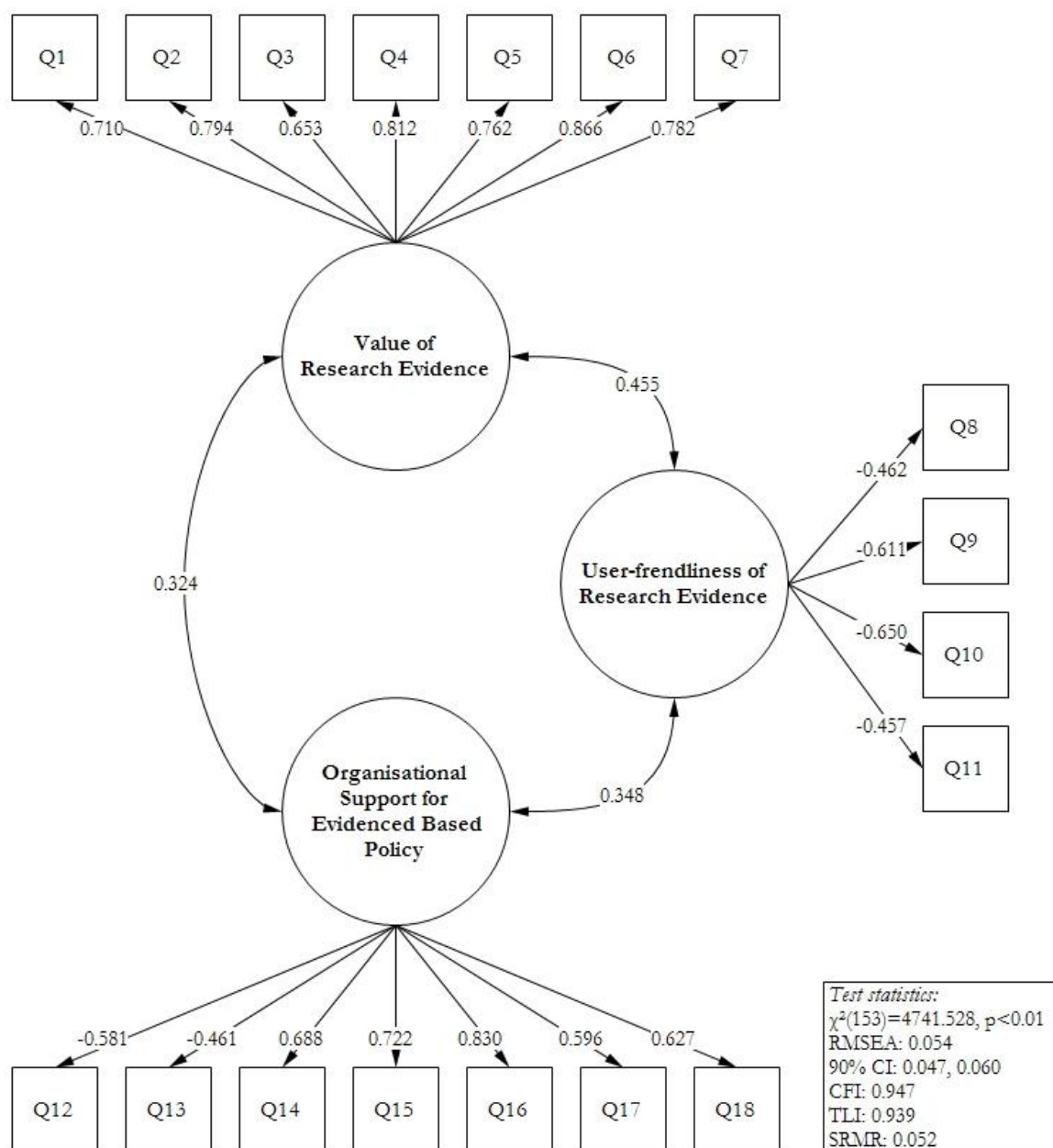
insights into the attitudes and behaviours of the respondents. The self-selecting nature of the survey sample inevitably made us depart somewhat from our initial conceptualisation. As discussed below, our analyses confirmed that the use and belief in the value of research evidence remained intact (confirming our theoretical stance). In contrast, the second factor was left only with one variable about time pressure and the experienced opaqueness of academic research (three items) while other considerations did not seem to align with them. The third factor which emerged represented organisational influences and the accessibility to research evidence. We labelled the first factor “Value of research evidence”, the second “User-friendliness of research evidence”, and the third “Organisational support for evidence-based policy”.

Table A1: Exploratory factor analysis loadings (values higher 0.3/smaller -0.3 are marked)

Items	Factor		
	1	2	3
Research evidence plays an important role in my day-to-day decision-making (Q1)	,669	,193	-,164
During the last 12 months, I can think of at least one occasion where research evidence has affected how I allocate resources (Q2)	,776	,141	-,092
During the last 12 months, I have used research evidence to help me understand a crime problem (Q3)	,643	,083	-,087
Research evidence has changed or influenced my working practices (Q4)	,794	,099	-,144
During the last 12 months, I have used research evidence to justify existing practice (Q5)	,744	,096	-,129
During the last 12 months, I have used research evidence to develop new practice (Q6)	,858	,073	-,128
During the last 12 months, I have used research evidence to help think about ways that I might assess the impact of practice (Q7)	,765	,139	-,109
I lack the time to be able to seek research evidence out (Q8)	-,096	-,202	,433
Research findings are too often unclear and full of jargon (Q9)	-,072	-,055	,688
Research evidence doesn't have clear enough messages for us to make it usable (Q10)	-,216	-,075	,608
I am not well enough informed about research to be able to tell the difference between good and bad research studies (Q11)	-,289	-,137	,309
There is no organisational emphasis on the use of research evidence to inform decision-making (Q12)	-,201	-,526	,200
I do not have access to academic journals through work (Q13)	-,023	-,440	,205
I am encouraged by my organisation to collaborate with different research institutes in tackling crime reduction problems (Q14)	,186	,659	-,085
My organisation provides sufficient support and resources to implement evidence based practice (Q15)	,060	,716	-,139
My organisation encourages and supports its workforce to gain knowledge and understanding from research evidence (Q16)	,132	,823	-,057
When new policies and procedures are introduced, I am made aware of the research evidence which supports them (Q17)	,057	,591	-,081
Evidence based approaches are promoted by influential figures or leaders in my organisation (Q18)	,112	,633	,046

Table A1 shows the final factor structure with moderate to high loadings assuming that the factors are unrelated (i.e. orthogonal) to each other. These results support our hypothesis that the factors under scrutiny are rooted in three theoretically distinct concepts. There are three major limitations of the current approach. First, we assumed that the factors are unrelated to each other while in fact we posited that they are distinct but related features of evidence-based policy attitudes and behaviours. Moreover, the current model – in line with the rules of exploratory factor analysis – allow all the items to rely on all factors even though we assume that these items should be exclusive to one or the other. Finally, we do not have any definitive statistical test to determine whether this measurement model truly represents the relationship between our variables. In order to address these shortcomings we conducted a confirmatory factor analysis.

Figure A1: Confirmatory factor analysis and test statistics (standardized values)



The confirmatory factor analysis (set out in Figure A1) provided further evidence that the identified factor structure is an appropriate representation of the items. The test statistics indicated that the model has a good fit and the items display strong association with their underlying factors. Our expectation that there will be a certain level of association between the factors has also been met, showing moderate relationships between them. Both the

exploratory and confirmatory factor analysis pinpointed the same three-factorial measurement structure.

We suggest that future iterations of an evidence-based policing audit tool should differentiate between personal judgment and use (“Value of Research Evidence”), perceived accessibility (“User-friendliness of Research Evidence”), and organisational characteristics (“Organisational Support for Evidence Based Policy”).

Additional analysis and recommendations for further research

As a next step we derived the factor scores from the confirmatory factor analysis and conducted some further investigation looking for interpretable differences across several different variables (age, gender, respondent's role, level of educational attainment, police force area). No differences were detected. The distribution of the results appeared to be mostly uniform. We suspect that this is due to self-selection bias. It is likely that since participation in the survey was voluntary, only those respondents most receptive to evidence-based policy/practice engaged with the process.

Further development and validation of the survey could involve a small number of force areas (3-6) and include additional constructs to better discriminate between the individual and organisational influences on the use of evidence-based policing, and assist in identifying the most important features. Examples, set out in Figure A2, could include 'need for cognitive closure'¹⁵ and 'procedural justice'¹⁶ elements.

¹⁵ Mannetti, L., Pierro, A., Kruglanski, A. W., Yaris, T., & Bezinovic, P. (2002). A cross-cultural study of the need for cognitive closure scale: Comparing its structure in Croatia, Italy, the USA and the Netherlands. *British Journal of Social Psychology*, 41, 139-156.

¹⁶ Tyler, T.R., Blader, S.L. (2003). The Group Engagement Model - Procedural Justice, Social Identity, and Cooperative Behavior. *Personality and Social Psychology Review*, 7(4), 349-361.

Figure A2: Possible additional constructs to discriminate between the individual and organisational influences on the use of evidence-based policing

