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Evidence-based Policing: using science to improve the workforce, management and leadership in policing

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A "Pracademic" focus: a foot in both camps – science and professional practice

Chief Constable (Thames Valley Police and National Policing Improvement Agency)

Academic – Researcher, author and teacher at Cambridge

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Evidence Based Policing

Evidence based policing is:

"the use of the best available research on the outcomes of police work to implement guidelines and evaluate agencies, units, and officers"
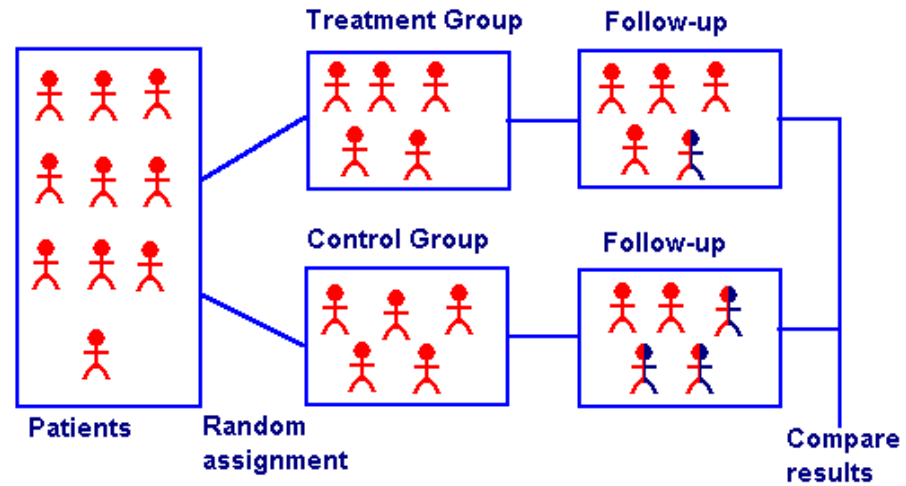
(Sherman, 1998: 3)

Ideas in American Policing

POLICE FOUNDATION

July 1998

Evidence-Based Policing

By Lawrence W. Sherman

What Kind of Evidence?

- <u>Not This Kind</u>

- <u>But This Kind</u>

- Policing Depends on Skill?

- Policing is about split-second decisions?

- Policing cannot afford to wait for research?

- Policing is learned by doing, not studying?

Except that most policing – particularly innovation, reform and change - requires "System II" thinking….

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Lawrence W. Sherman

The Rise of Evidence-Based Policing: Targeting, Testing, and Tracking

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Research for Policing Strategies

Targeting: Aiming for biggest impact
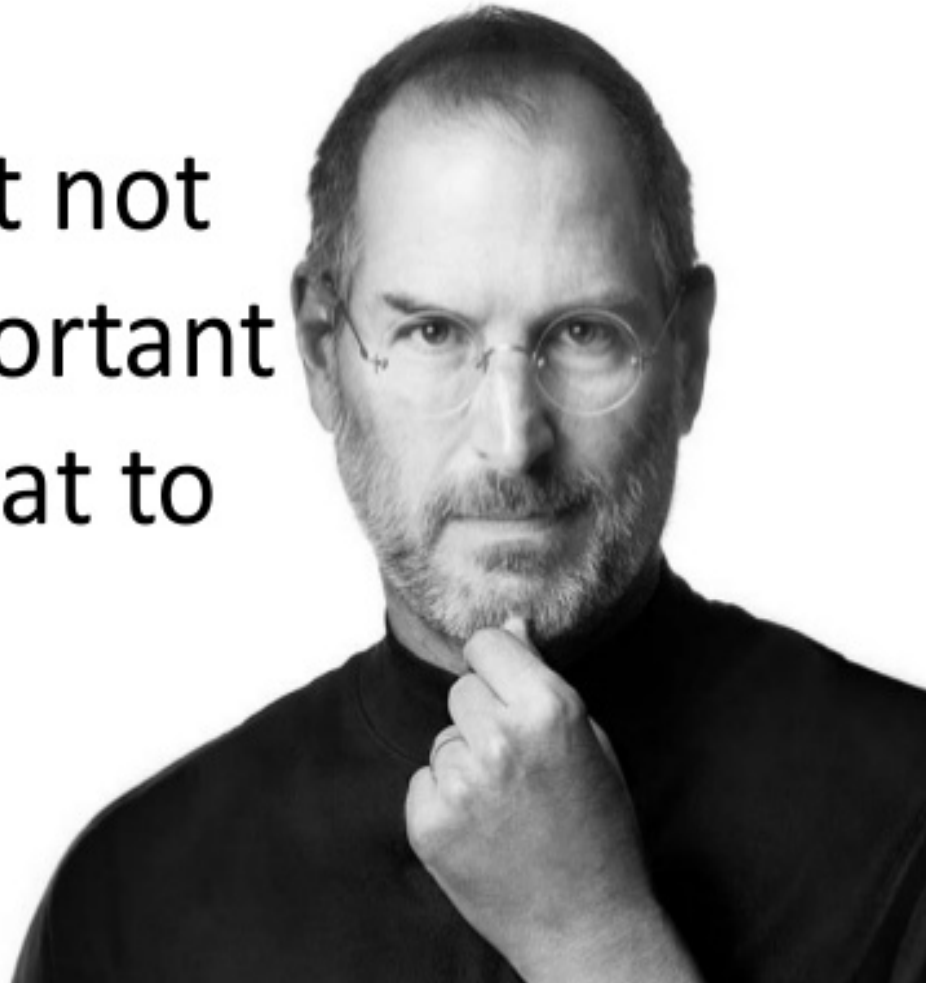
Testing: Deciding what works and How?

Tracking: Measuring implementation and outcomes: crime, harm, incidents, complaints, confidence….

TARGETING

"Deciding what not to do is as important as deciding what to do."
- *Steve Jobs*

Evidence-based Policing emphasizes evidenced based prioritization

All Targets Have Concentrations

The "POWER FEW"

Places, Victims, Offenders

frequency

harm

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Testing: What Works?

- ***Comparing*** two interventions

- Designed to tackle the same kind of problems: prevent crime, reduce disorder, improve morale, raise confidence, reduce complaints, increase performance

THEN ASKING:

- Which one works better?

- Which one costs less?

- Which one gets best result for same cost?

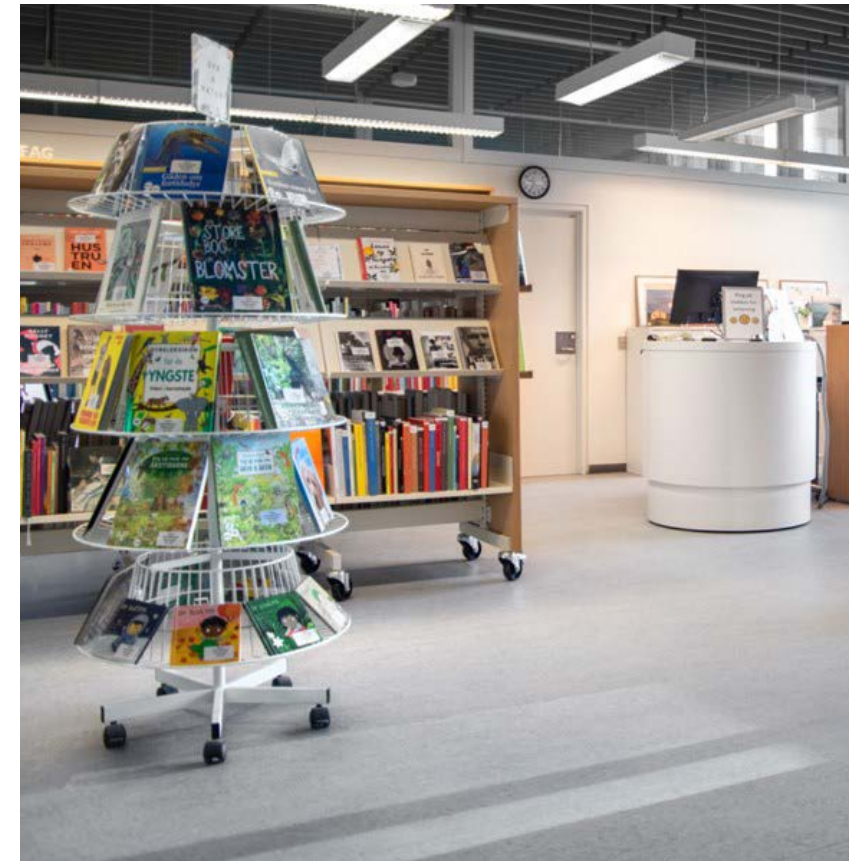- Key example: Hotspot Policing v Random/Reactive Police Patrol

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Tracking

Crime → Where → When

Policing → Patrol, POP → Arrests

Match? → Ratios → Trends
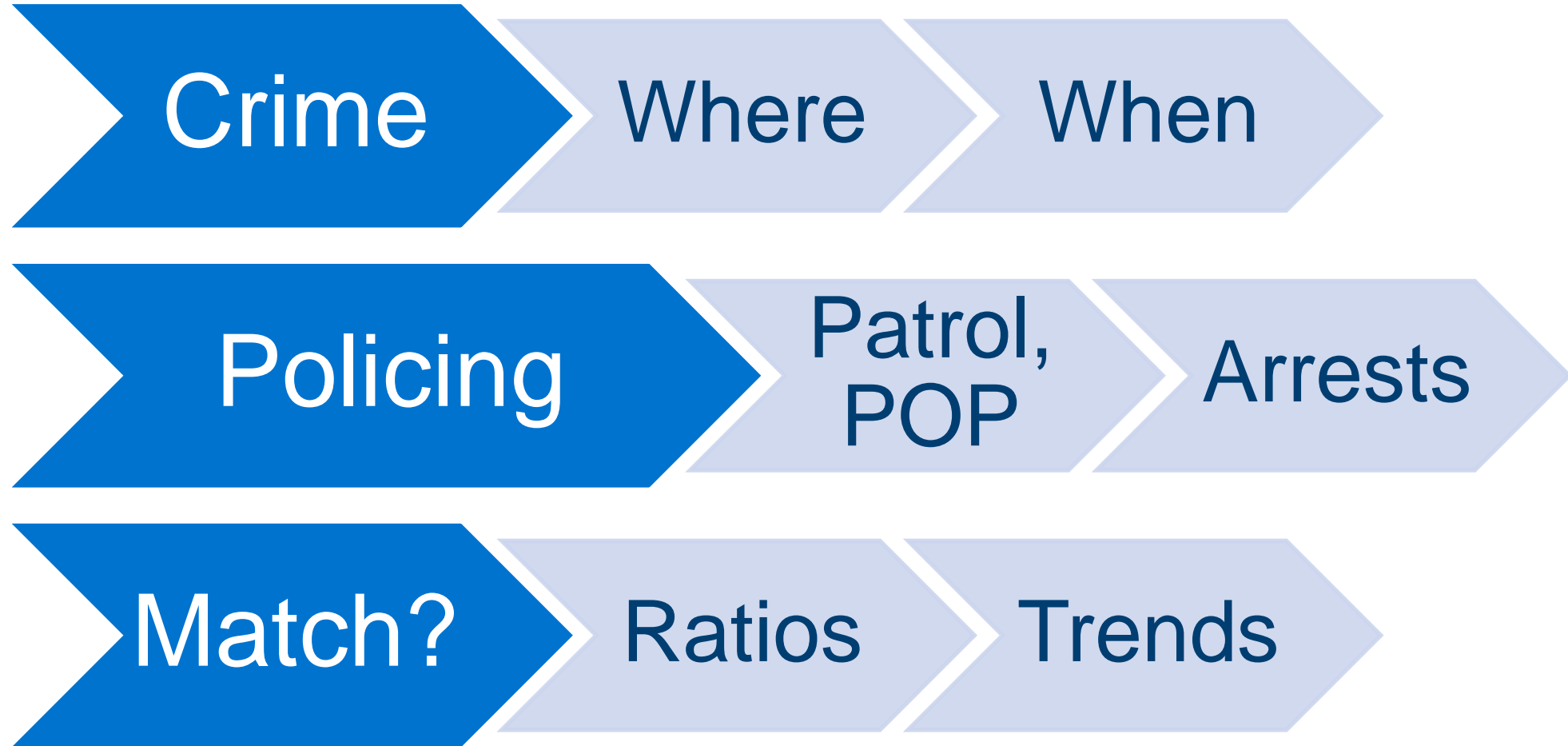
What is NOT evidence-based: the Management Fads….the airport book carousel…

1. Simple – quickly understood.

2. Prescriptive – tell you what you should do.

3. Falsely encouraging – promise impressive results for many outcomes

4. One-size-fits-all – work everywhere

5. Easy to cut-and-paste – can be quickly partially implemented

6. In tune with the zeitgeist – fit with current ideas

7. Novel, not radical – they sound new but usually only superficially different to what's gone before

8. Legitimised by gurus and disciples – their credibility comes from the opinions of influencers rather than evidence

Miller and Hartwick (2002) in Harvard Business Review

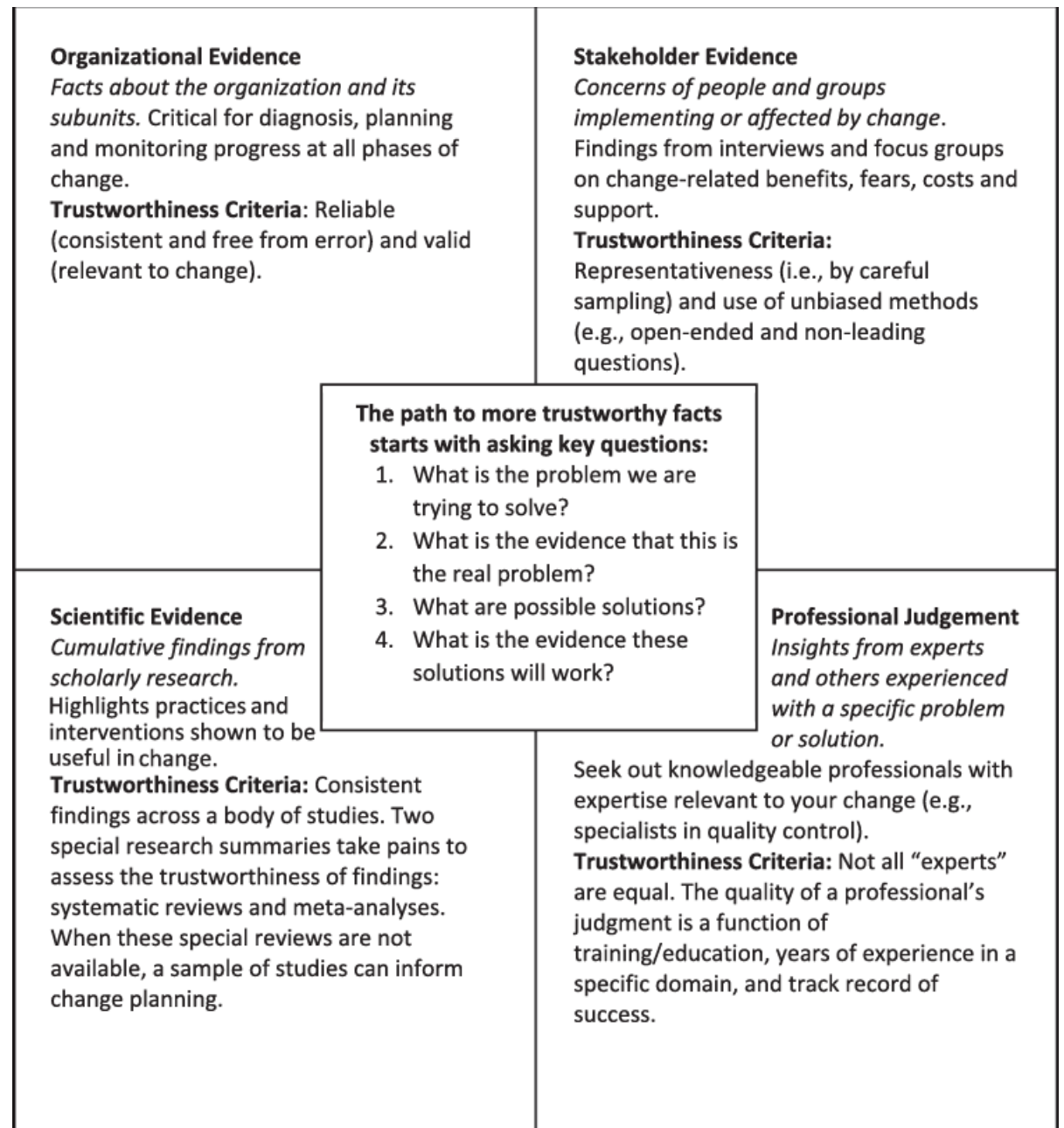Brown, J., Belur, J., Tompson, L., McDowall, A., Hunter, G., & May, T. (2018). Extending the remit of evidence-based policing. *International Journal of Police Science & Management, 20*(1), 38–51. https://doi.org/10.1177/1461355717750173
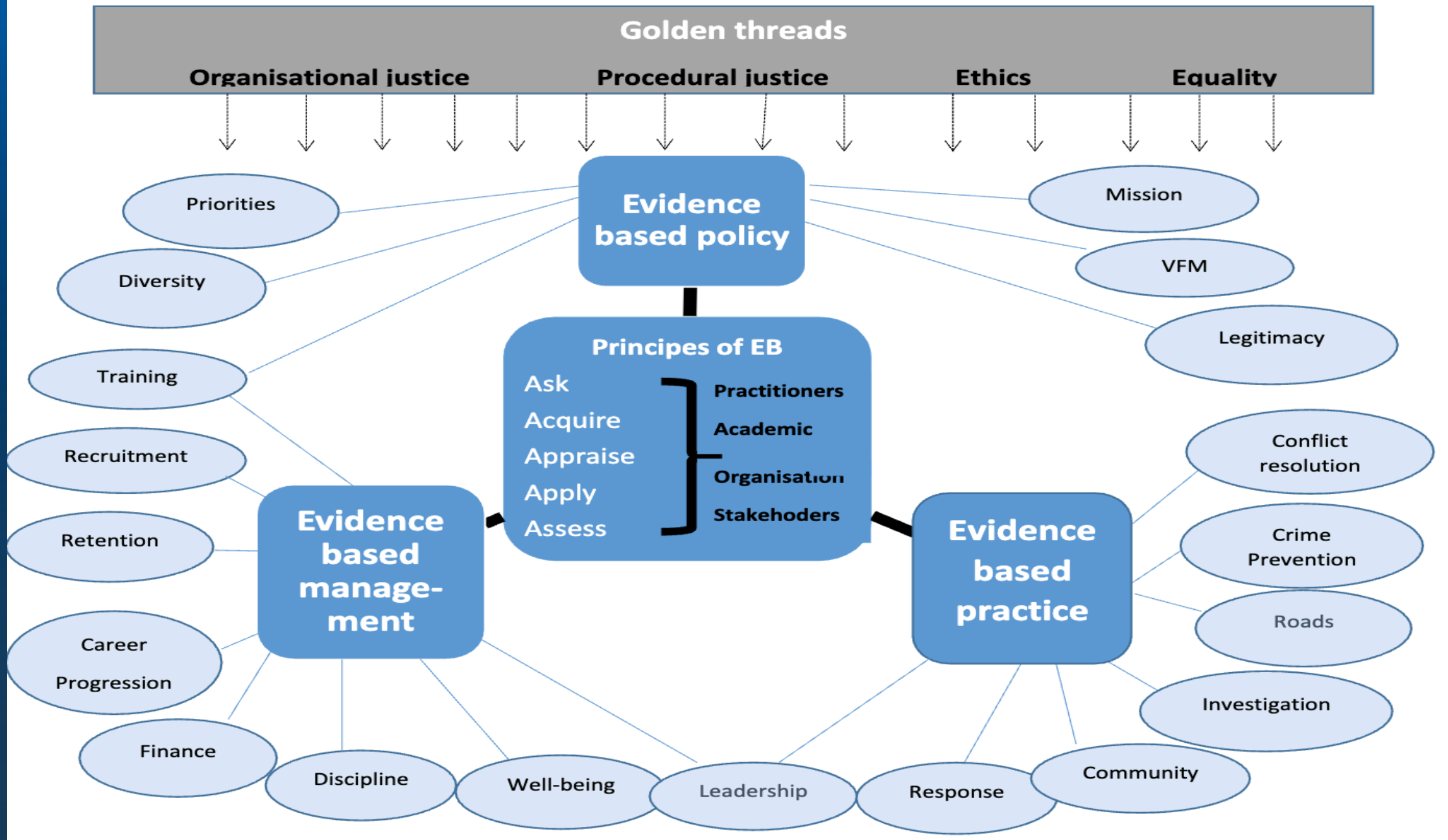
Evidence-based HR?

- Use **multiple sources and types of evidence**

  - including professional expertise, organisational data, stakeholder perspectives

- Adopt **an explicit and structured approach to gathering and using evidence**.

  - starting always with a detailed diagnosis of the HR-relevant business issue or challenge

- Focus on the **most trustworthy or reliable evidence** rather than all the evidence.

Organizational Evidence
Facts about the organization and its subunits. Critical for diagnosis, planning and monitoring progress at all phases of change.
Trustworthiness Criteria: Reliable (consistent and free from error) and valid (relevant to change).

Stakeholder Evidence
Concerns of people and groups implementing or affected by change. Findings from interviews and focus groups on change-related benefits, fears, costs and support.
Trustworthiness Criteria: Representativeness (i.e., by careful sampling) and use of unbiased methods (e.g., open-ended and non-leading questions).

The path to more trustworthy facts starts with asking key questions:
1. What is the problem we are trying to solve?
2. What is the evidence that this is the real problem?
3. What are possible solutions?
4. What is the evidence these solutions will work?

Scientific Evidence
Cumulative findings from scholarly research. Highlights practices and interventions shown to be useful in change.
Trustworthiness Criteria: Consistent findings across a body of studies. Two special research summaries take pains to assess the trustworthiness of findings: systematic reviews and meta-analyses. When these special reviews are not available, a sample of studies can inform change planning.

Professional Judgement
Insights from experts and others experienced with a specific problem or solution.
Seek out knowledgeable professionals with expertise relevant to your change (e.g., specialists in quality control).
Trustworthiness Criteria: Not all "experts" are equal. The quality of a professional's judgment is a function of training/education, years of experience in a specific domain, and track record of success.

Where to start?

What workforce? what leadership?

What capacity & to do what?

What requirements and standards?

What constraints?

What opportunities?

Factfile

History of industrial revolution

1.0
◆ **1780 – Mechanisation**
Industrial production based on machines powered by water and steam

2.0
◆ **1870 – Electrification**
Mass-production using assembly lines

3.0
◆ **1970 – Automation**
Automation using electronics and computers

3.5
◆ **1980 – Globalisation**
Offshoring of production to low-cost economies

4.0
◆ **Today – Digitalisation**
Introduction of connected devices, data analytics and artificial intelligence technologies to automate processes further

5.0
◆ **Future – Personalisation**
The fifth industrial revolution, or Industry 5.0, will be focused on the co-operation between man and machine, as human intelligence works in harmony with cognitive computing. By putting humans back into industrial production with collaborative robots, workers will be upskilled to provide value-added tasks in production, leading to mass customisation and personalisation for customers

What workforce and to do what?

Rapid changes – Industry 4.0, 5.0, 6.0 and on

Labour markets and demography

Gap analysis – current workforce to current and future challenges

What requirements?

- **Qualifications**

  - Degrees and more? Evidence suggests degree itself is not significant (Brown, 2020*)

- **Integrity**

  - Vetting (Dale, 2023) and Recruiting "Virtue" (Delattre, 1996)

- **Age**

  - Age of recruits matters – youth is not a good substitute for experience (Diggle, 2022)

- **Diversity**

  - Race Action Plan, Gender Agenda – 'Representative police service'? (Davies et al., 2021)

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Constraints and Opportunities?

- Regulated workforce – the police agent/officer, police auxiliaries and police support staff

  - A workforce with powers and independent oversight

  - Regulations on qualifications to become and remain a police officer

- Dis-ability – the wake up to neuro-diversity (Maunder, 2023)

- Nationality

Recruitment: fairness and procedural justice
(Gilliland, 1993)

Procedural Justice Rules

Formal Characteristics
Job relatedness
Opportunity to perform
Reconsideration opportunity
Consistency of administration

Explanation
Feedback
Selection information
Honesty

Interpersonal Treatment
Interpersonal effectiveness of administrator
Two-way communication
Propriety of questions

Test Type

Human Resource Policy

Human Resource Personnel

Hiring Decision

Performance Expectations

Salience of Discrimination

Locus of Special Needs

Distributive Justice Rules
Equity
Equality
Needs

Overall Fairness of Selection *Process*

Overall Fairness of Selection *Outcome*

Outcomes

Reactions During Hiring
Job-application and job-acceptance decisions
Application recommendations
Test motivation
Legal battles

Reactions After Hiring
Performance
Organizational citizenship behavior
Job satisfaction
Organizational climate

Self-Perceptions
Self-esteem
Self-efficacy
Future job-search intentions

Moderators of Rule-Fairness Relationship
Applicant's prior experience
Stage in selection process

Initial Training and development

"Training success (or otherwise) has traditionally been measured in terms of trainee satisfaction with the training or trainer, and/or their performance in exam related tasks. Thus, conclusions about whether or not the training "works" have been based on 'artificial' assessments and scarcely focused on the intended outcome of improving service to the public, if that could be assumed to be the ultimate goal of producing a professional police officer in a liberal democracy.. "

Review of Police Leadership and Training

Peter Neyroud QPM

Chief Constable

Specialisation

"This review has highlighted that the specialist policing of RASSO can improve the investigative process on several levels, improving the efficacy of the individual components of the investigation such as interviewing and evidence col-lection, better engagement with victims, better officer well-being, and overall improved policing outcomes."

Dalton et al. (2022) A Systematic Literature Review of Specialist Policing of Rape and Serious Sexual Offences.
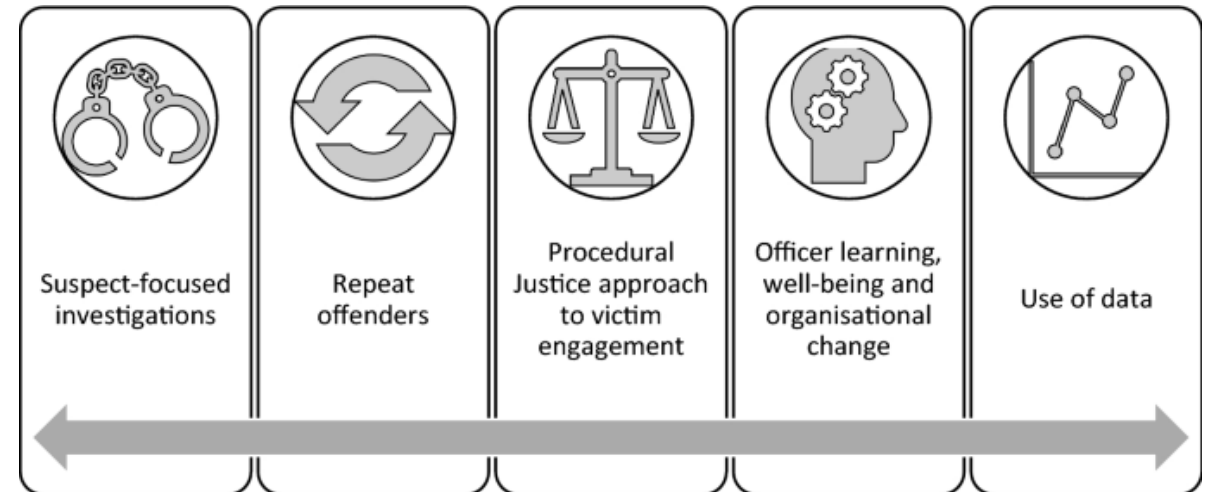
Promotion and development of supervisors and leaders

College of Policing

Working together to share knowledge

Effective supervision

Rapid evidence assessment

Karen Moreton, Jenny Kodz, Helen Fitzhugh, Jitka Smith and Ella White

- Role model
- Building effective relationships
- Communicating effectively
- Demonstrating fairness and respect
- Support well-being
- Supporting delivery of good service
- Supporting professional discretion in decision-making

Deployment: what is best practice in organizations?
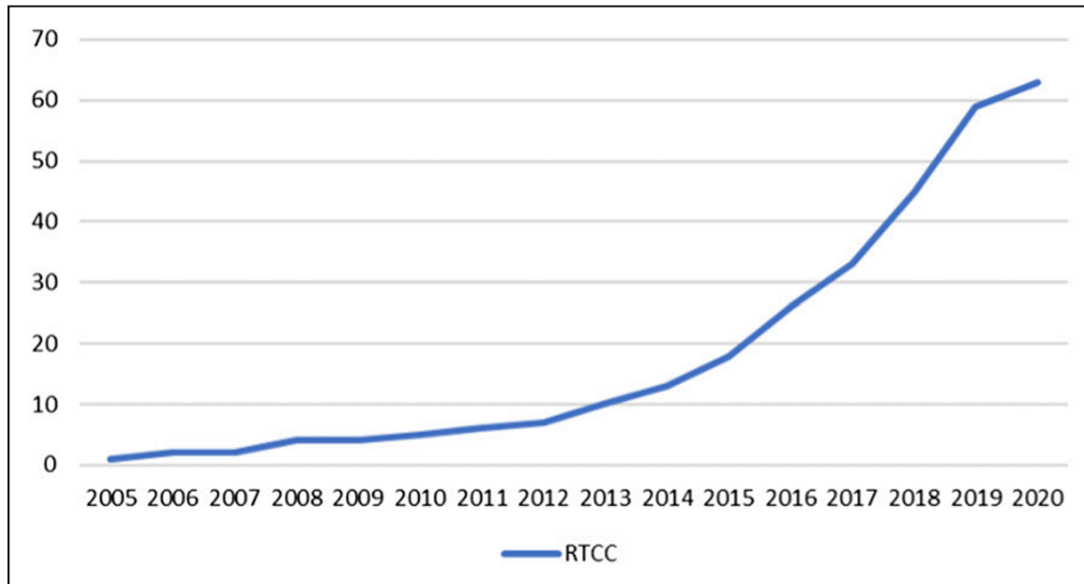
Figure 2. Cumulative growth of real-time crime centers in the United *States, 2005 – 2020*
Note. N = 61; Reference Q3.

Table 1. Fusion and real-time crime center features.

	Jurisdiction	Role	Function	Crime types	Partnerships	Technology
Fusion center	State or regional	External; horizontal or vertical structure	Intelligence collation, analysis and dissemination; regional risk assessments	Threat and hazards approach; jurisdictional needs	Local; state; federal; private	Access to local state and federal databases
Real-time crime center	Municipal or county	Internal; horizontal or vertical structure	Real-time information sharing capabilities; surveillance; post-incident investigative support	Disorder and disturbance calls; property crime; violent crime; jurisdictional needs	Local; state; federal; and private	Access to local state and federal databases, CCTV; video analytics, automated detection systems, photo recognition

"…measuring effectiveness may require an attitudinal shift within agency cultures that emphasizes evaluations of policies, procedures, and technologies to ensure that outcomes meet both departmental and community needs" Prezeszlowski et al. (2022)

Description	Number of studies
Category 1: case and situational factors ("solvability factors") including characteristics about victims and suspects, situational elements of crimes, weapons used, witnesses present, evidence collected, etc.	36
Category 2: Research on variations in investigations and clearance rates across space, time, and groups. Such studies might include analyses of differences or disparities in clearance rates across geographic places or amongst various gender, racial, ethnic, age, or other demographic categorizations	12
Category 3: Studies that examine police agency organizational characteristics or factors that may contribute to case clearance, including staffing, resources, investigative organization, workload, accountability, training, etc.	25
Category 4: Studies that examine or estimate investigative effort and its impact on case resolution, such as the amount of time or effort devoted to developing witnesses, encouraging victims to provide statements, collecting and processing evidence, and other case-development activities	16
Category 5: Studies evaluating the impact that technologies have on investigations and investigative case clearances, including forensic technologies (e.g. DNA testing and ballistics imaging), crime analysis and information technologies, and surveillance technologies (e.g. body-worn cameras, license plate readers, closed-circuit televisions, gunshot detection systems, etc.)	17
Category 6: Studies that examine the role of patrol officers in investigations	4
Category 7: Studies that examine the role that citizens or community engagement and cooperation play in investigations	8

Table 1.
Categories of investigative research and number of studies found

Effective police investigative practices: an evidence-assessment of the research

Heather Prince, Cynthia Lum and Christopher S. Koper

Criminology, Law and Society, George Mason University, Fairfax, Virginia, USA

As identified by some researchers (see for instance Gyapong and Gyimah-Brempong, 1988; Loveday, 2008, 2015), the use of civilianisation as a comprehensive strategy in policing, raises a number of fundamental questions:

(1) to what extent is it possible to substitute civilian employees without loss of service delivery efficiency and effectiveness?

(2) are civilian employees substitutes or complements to officers in organisational service delivery?

(3) how elastic[3] is the demand for these factors in the production of police services?

(4) will a civilisation programme yield substantial reductions in unit costs of police services? (Gyapong and Gyimah-Brempong, 1988).

Shaping the police workforce: a state-of-the-art literature review

Garth den Heyer
Walden University, Minneapolis, Minnesota, USA;
Police Foundation, Washington, District of Columbia, USA and
Scottish Institute for Policing Research, School of Social Sciences (Geography),
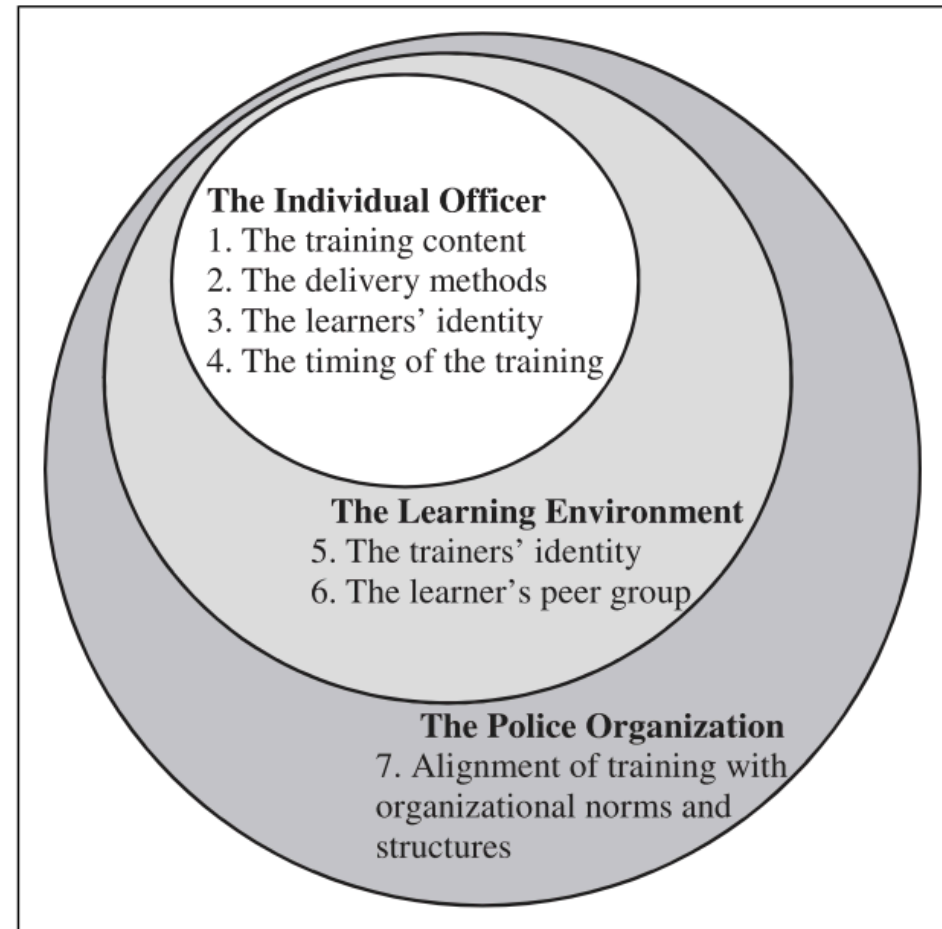*University of Dundee, Dundee, UK, and*
Jonathan Mendel
Scottish Institute for Policing Research, School of Social Sciences,
University of Dundee, Dundee, UK

Workforce mix and modernisation

Training

"Policing scholars and reformers have increasingly called for improvements to police training that emphasize communication and de-escalation skills. Although many programs addressing these issues exist, evidence of their effectiveness has been scarce. Our findings provide evidence that such training may improve police officer attitudes but perhaps not behaviors."

Mclean, K., Wolfe, S.E., Rojek, J., Alpert, G.P., Smith, M.R., 2020. Randomized controlled trial of social interaction police training. Criminology & Public Policy 19 805–832.. https://doi.org/10.1111/1745-9133.12506

The Individual Officer
1. The training content
2. The delivery methods
3. The learners' identity
4. The timing of the training

The Learning Environment
5. The trainers' identity
6. The learner's peer group

The Police Organization
7. Alignment of training with organizational norms and structures

Figure 1. The domains and mechanisms of the general, ecological training model.

Well-being, Health and safety and occupational health

"Considering the areas of improvement identified by forces, future developments of police wellbeing should consider: how to support the implementation of evidence-based, targeted approaches; how to guide practitioners in completing the BLWF, in a consistent way that would be conducive to supporting peer review, development of wellbeing and analysis of progress; and how to align the perspectives of the individual to the organisation…"

Phythian et al. (2022) Developments in UK police wellbeing: A review of blue light wellbeing frameworks
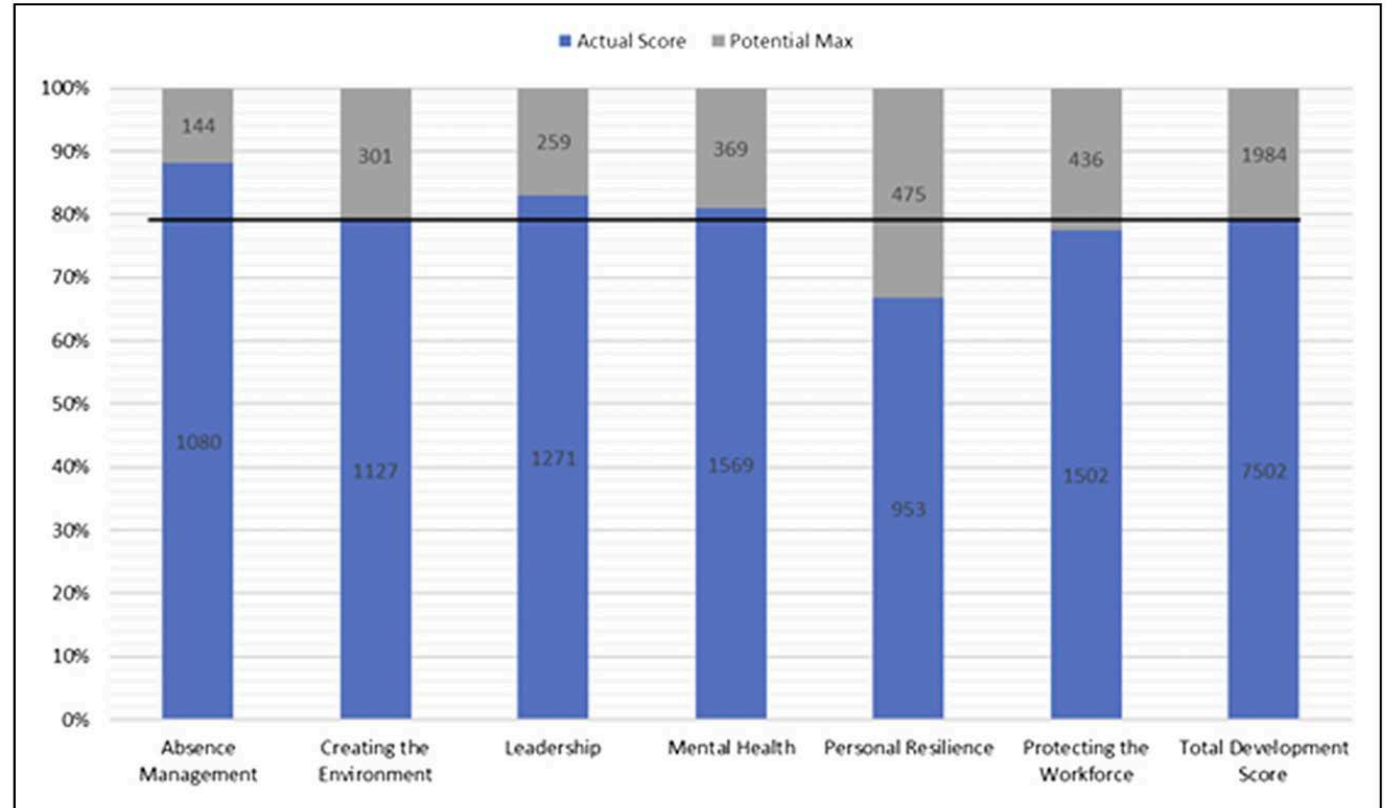
Figure 1. Proportion of development across each of the six themes, using the total development score as a benchmark for comparison.

Procedural Justice and internal legitimacy: the importance of Fairness

"police agencies that implement managerial practices shaped by organizational justice are not only likely to reduce officer misconduct, but they may also enhance implementation of community policing initiatives"

ORGANIZATIONAL JUSTICE AND POLICE MISCONDUCT

SCOTT E. WOLFE
Arizona State University

ALEX R. PIQUERO
Florida State University

Performance and Professional standards

….their organizations' **performance appraisal systems were deficient** with respect to well-established key components of performance appraisal.

Most officers ..had little or no opportunity for input, **did not receive informal feedback** on a regular basis, received evaluations that were based on personal traits (as opposed to performance criteria), and their appraisals did not to lead to improved job performance or the identification of career development objectives

. ….**supervisors received little or no training**….

the discussion **focused on the negative consequences of inadequate performance** appraisal at the individual level (e.g. employee development) and the organizational level (e.g. poor utilization of resources and undermining other systems and organizational change strategies).

Larry M. Coutts & Frank W. Schneider, *Police Officer Performance Appraisal Systems - How Good Are They* , 27 POLICING: INT'l J. POLICE Strat. & MGMT. 67 (2004).

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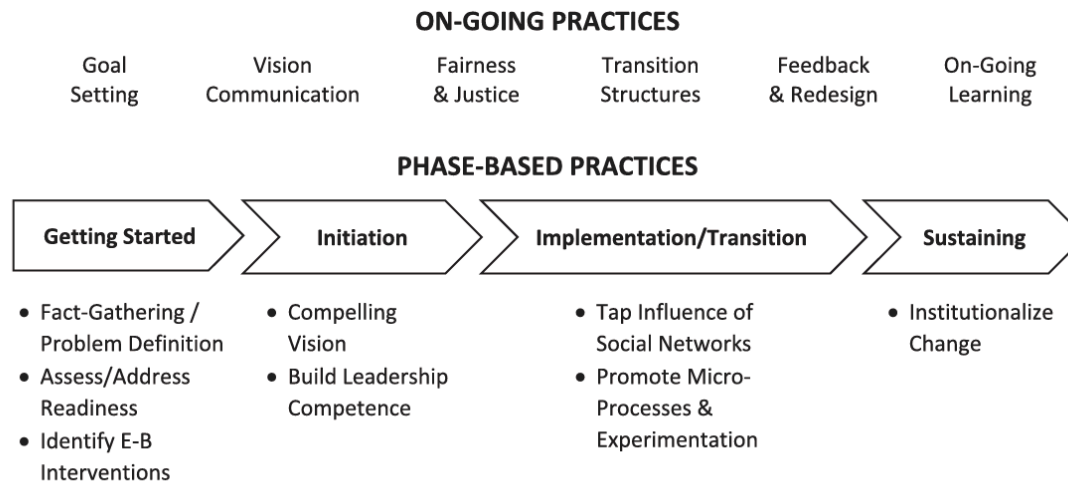
Leading the change

Quality evidence and the practices it gives rise to transform the change process, build trust in change leaders and actively engage members at all levels. Your actions as an evidence-based change manager will be increasingly effective as you become more reflective, critical, and curious about your own organization, its processes and stakeholder experiences.

Rousseau and Ten Have (2022) Evidence-based change management

ON-GOING PRACTICES

| Goal Setting | Vision Communication | Fairness & Justice | Transition Structures | Feedback & Redesign | On-Going Learning |

PHASE-BASED PRACTICES

| Getting Started | Initiation | Implementation/Transition | Sustaining |

- Fact-Gathering / Problem Definition
- Assess/Address Readiness
- Identify E-B Interventions

- Compelling Vision
- Build Leadership Competence

- Tap Influence of Social Networks
- Promote Micro-Processes & Experimentation

- Institutionalize Change

Figure 2   Evidence-BasedChangeFramework.

Police Leadership: tasks

- "Creating a shared vision"

- "engender organisational commitment"

- "care for subordinates"

- "driving and managing change"

- "Problem-solving"

Effective {Police} Leadership: qualities

- Ethical

- Building Trust and "trustworthiness"

- "legitimacy in the eyes of ones staff"

- Understanding the need to be a "role model"

- Communication

- Decision-making

- Critical thinking

Pearson-Goff, M. and Herrington, V. (2014). Police Leadership: a systematic review of the literature. *Policing, 8,1,* 14-27

Moura et al findings in 2022

- The new attributes identified include

  - authoritative;

  - emotional intelligence;

  - investigative;

  - strategic

  - thinking;

  - resilient.

- four new actions emerged as important for police leadership:

  - Data analytics;

  - enhance police interactions with external entities;

  - dealing with leadership adversities;

  - creating effective action plans.

Questions?