HOW TO MORPH EXPERIENCE INTO EVIDENCE?

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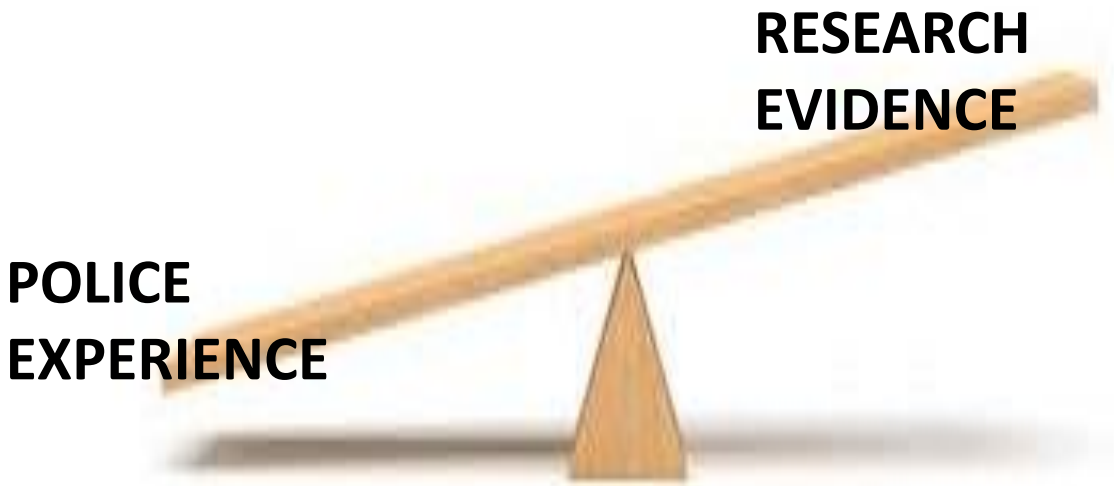
How do academics and police see EBP?

Academics

Police



Is EBP evidence all about Randomised Controlled Trials (RCTs)?

My **RC**i**T**is

There are other ways of collecting and evaluating EBP (horses for courses).

EBP according to Sparrow (2016)

- EBP process is too slow to inform operational police decision-making.
- EBP mounts evaluations of extant strategies and so does not extend or narrow the police repertoire
- EBP concentrates on large aggregated data sets, so neglects important micro-level choices pivotal for success
- EBP emphasises large data and complex designs and so the rate of experimentation is reduced.
- EBP perpetuates traditional mind-sets by privilaging approaches which attract senior-level support.

EBP Research evidence: So is it police friendly?

Research evidence

- Evaluations are not seen to be derived from police experience.
- Daily police decision-making is not reflected in set-piece research.
- Evaluations come as finished products and do not need iterative improvements
- Results take too long
- ‘Killing the cubs’ – maintaining successful schemes holds less kudos then innovation.

Two ways of looking at a police career

- “An officer can have a 30 year police career or a one-year police career repeated thirty times” (Anon in Pease and Roach, 2017).
- A ‘one-year thirty times’ officer will learn a set of tactics early-on and apply them thereafter.
- A ‘thirty-year career’ officer revises actions in the light of outcomes and so constantly reworks the **conditional probabilities** applied.

Example 1. Ace thief-takers study

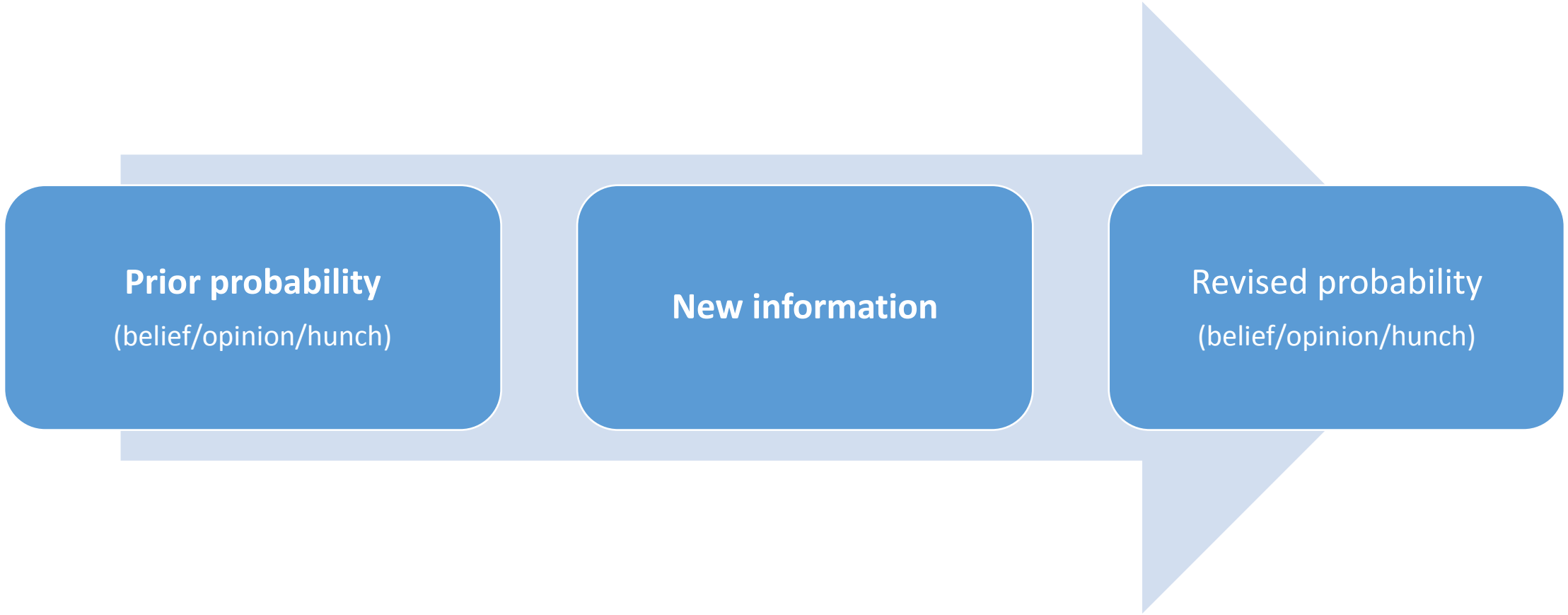
- 12 nominated thief-takers from 5 UK police forces.
- All rely on similar cues to identify ‘potential offenders’ initially (e.g. location, appearance, gait, lack of eye-contact).
- They all stop those who arouse their suspicion (even on a day off) and ask them politely where they are going; what they are doing; if they are lost; if they can help?
- Bayesian-thinking - adjust their beliefs as they acquire more information **They are prepared to be wrong!**

The skills of policing

“At its simplest, the acquisition of skill consists of a process of predicting likely outcomes, observing the actual outcomes and revising conditional probabilities” (Pease and Roach, 2017, p.89)

Bayesian thinking and conditional probability

(Downey 2014)



PISA: Adopting a Bayes-like approach to evidence

- **P**redictive **–** Encourages predictions of most likely outcome.
- **I**terative – Allow refinement of implementation as circumstances change without the criticisms that arise when a scheme to be evaluated is changed during the course of the evaluation.
- **S**calable **–** Applicable across the range of implementer roles. Initiatives consist of a range of people making a series of interlocking decisions. Set piece evaluation tends to collapse these into a single entity.
- **A**ccessible **–** Comprehension of the process should require no expertise beyond that to be expected from the average practitioner (e.g. police).

Example 2. Police cell ‘nudge’ study (Roach and Weir).

- Original study – large dataset showed non-significant result so dropped (writing on wall!)
- Current study -revised hypotheses and predictions (not about re-offending per se and 18 custody staff).
- New first step (wall-gazing)
- DV messages in 4/14 cells
- Simple question
- Will revise hypoth’s and prior probabilities before step 2.

So what are the advantages of adopting this approach?

1. It starts with judgements and beliefs of/made by police (ideally informed by the research literature).
2. It uses any information rather than relying on set piece experiments.
3. It provides quick feedback to enable adjustments of judgement
4. It is iterative in revising degree of belief in propositions.
5. It requires implementers to think about ‘mechanisms’.

So how are we hoping EBP will advance?

Willing police collaborators to test initiatives sampled across ranks, to:

Establish and roughly quantify a belief

Clarify the mechanism which would be relevant were the belief vindicated

Identify what types of evidence would lead to the belief to be revised

***No comparison groups or frequentist type evaluation*

Putting our money where our mouth is!

- Nate Silver's book "The Signal and the Noise" (Silver 2010) has a key chapter entitled "Less and Less and Less Wrong".
- If we are wrong about encouraging the advancement of EBP in a Bayesian direction to fit with how police think and make decisions then we are happy to
    1. Consider the evidence
    2. Revise our hypotheses and predictions.
    3. Apologise profusely and go home with our tails between our legs.

Thank you for listening.

Please do contact me with any ideas and comments

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References

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