EVIDENCE-BASED POLICING (EBP) AS A STRATEGY FOR ACCOMPLISHING POLICE GOALS MORE EFFECTIVELY, THE CHALLENGES EBP FACES, AND ITS PROSPECTS FOR IT BEING ADOPTED WIDELY IN GREECE

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Introduction

Evidence-based policing (EBP) is a dynamic and noteworthy paradigm shift in the history of modern policing. With a view to properly understanding its *raison d'être* and recent rise, I intend to offer a brief yet all-encompassing background on its origins and on evidence-based social policy, which gave rise to experimental criminology (EC), of which EBP is a pre-eminent example. I shall continue by describing the three components of said strategy, namely Targeting, Testing, and Tracking. Furthermore, I intend to distinguish between older iterations of EBP and the novel, Triple-T (3T) strategic approach, by offering two examples.

Hence, I aim to provide, a characteristic example of EBP prior to the invention of the 3T (the 1995 experiment in which Sherman and Weisburd used a randomised controlled trial (RCT) to try to ascertain the effectiveness of police patrol as a general deterrent in crime hotspots in Minneapolis, Minnesota), and one very recent, noteworthy example of the successful implementation of 3T (the 2013 experiment, by Sherman in Trinidad and Tobago, the results of which, however, have yet to be

officially published).

Following these two examples/major pieces of evidence and having established and analysed its roots –which I deemed as *sine qua non*, in understanding such a radical paradigm and in ascertaining its challenges – I shall dedicate the remainder of my essay to critically assessing said challenges faced by EC and EBP/3T in particular, as well as to evaluating the prospects and surmising the possible pitfalls, should 3T be adopted and properly implemented in Greece.

Evidenced-based Social Policy

Modernity can trace its roots to the cultural movement of the Enlightenment. Whether one postulates that it begins earlier with Francis Bacon's scientific method (and his death in exploring it) (Klein, Winter 2012), or by Baruch Spinoza in his role as chief challenger of the fundamentals of revealed religion, received ideas, tradition, morality, and divinely constituted political authority (Israel, 2001, p. 159), or later, as Toumlin (1992) posits, with the twin founding pillars of modern thought, i.e. modern science as represented by Isaac Newton (cf. *Principia Mathematica*, 1687), and modern philosophy, as represented by Descartes (cf. *Discourse on Method*, 1637).

The debt we owe to that era is the great transition in so many professions from customs to science and form opinions to evidence. That Enlightenment ideal of objective knowledge is also crucial to the success of a liberal democracy, in which the rule of the majority protects individual liberty under the rule of law, via the institution of the police (Sherman, 2011b). Apart from our inherent and inadvertent biases, the centrality of evidence in all matters of public debate and policy is of paramount importance in protecting our liberal democracy, from both extremes of the political spectrum, as well as from the post-modernist and nihilist intelligentsia. A case-in-point is Bruno Latour (2004, p. 227) who spent several decades stressing the 'social construction of scientific facts', and who now laments the ammunition he fears he and his colleagues have given to the Republican right:

While we spent years trying to detect the real prejudices hidden be-

hind the appearance of objective statements, do we now have to reveal the real objective and incontrovertible facts hidden behind the illusion of prejudices? And yet entire Ph.D. programs are still running to make sure that good American kids are learning the hard way that facts are made up, that there is no such thing as natural, unmediated, unbiased access to truth, that we are always prisoners of language, that we always speak from a particular standpoint, and so on, while dangerous extremists are using the very same arguments of social construction to destroy hard-won evidence that could save our lives.

Conversely, Noam Chomsky (1993, p. 286), points out the irony, from the other side of the aisle:

Left intellectuals took an active part in the lively working class culture. Some sought to compensate for the class character of the cultural institutions through programs of workers' education, or by writing best-selling books on mathematics, science and other topics for the general public. Remarkably, their left counterparts today often seek to deprive working people of these tools of emancipation, informing us that the 'project of Enlightenment' is dead, that we must abandon the 'illusions' of science and rationality – a message that will gladden the hearts of the powerful, delighted to monopolise these instruments for their own use.

Experimental Criminology

Moreover, given the overabundance of criminological theories and their inability to explain crime, examination of empirical tests of criminological theory between 1968-2005, reveals that the overall level of variance explained is often very low with 80-90% unexplained (Weisburd & Piquero, 2008, Abstract). Furthermore, it is often hard to find common ground on anything (cf. Robert Martinson's infamous "nothing works"), let alone on something as essential to our society as the competence of our policing, despite Sutherland's definition that "Criminology is the body of knowledge regarding... the processes of making laws, of breaking laws, and of reacting toward the breaking of laws" (Laub, 2006, p. 240, italics mine).

Experimental criminology is part of a larger and increasingly expanding scientific research and evidence-based movement in social policy via its origins in facts derived from objective knowledge. It is not made merely on the basis of experience, hunches, peer opinions, and occupational cultures (Chalmers, 2003, as found in Sherman, 2009, p. 6), and hence, I propose, it offers the requisite commensurability to criminology.

What is the most efficient way of preventing crime in a liberal democracy? How can we find the best evidence as to what works, and what does not? How can our elected officials make sure police are held accountable for their effectiveness and conduct? According to Sherman (2009), the promise of EC offers ten principal elements of a viable model to answer the foregoing questions:

1. Identify key *factual* questions about policies affecting life and liberty. 2. Formulate testable hypotheses about competing answers to those questions. 3. Conduct randomised experiments where possible to compare those answers. 4. Conduct a quasi-experiments when better designs are not possible. 5. Identify all good evidence on any one question in systematic reviews. 6. Synthesise that evidence, if possible, in single-outcome meta-analyses. 7. Present the research synthesis to committees of practitioners and scientists. 8. Develop succinct operational guidance based on evidence. 9. Communicate or promulgate the guidance, and 10. Test and practice methods for obtaining more compliance with that guidance (p. 22).

Welsh, Braga, et al. (2013) take a broader view than Sherman, who defines EC as "scientific knowledge about crime and justice discovered from random assignment of different conditions in large field tests" (2010, p. 399). They propose that experimenting with crime and social programs has a rich tradition dating from the 1970s with Farrington and Campbell in the UK, and in the concept of large-scale social programs of the Kennedy and Johnson administrations, and their need to identify valid and rigorous methods of evaluation, in the US. They continue by illustrating that the methodological adequacy of any test's causal hypotheses can be addressed on four major criteria of validity.

(NB. Lösel (1987) adds a fifth type – Descriptive Validity.)

Validity is of paramount importance as it is the basis of any experimental approach. In other words, one cannot test his or her hypotheses and their underlining causality without validity. There exist a plethora of types and subtypes of validity in social sciences, but it is common practice in EC to assess the methodological sufficiency of said causal hypotheses based on the five key validity criteria: internal, construct, external, descriptive and statistical conclusion validity (Campbell *et al.*, 1966; Cook *et al.*, 1979; Lösel *et al.*, 1987; and Shadish *et al.*, 2002).

Evidence-Based Policing

Sherman's proposals for what he called 'EBP' were first presented in a Police Foundation Lecture in Washington, D.C. in 1998. He originally defined EBP as 'the use of the best available research on the outcomes of police work to implement guidelines and evaluate agencies, units, and officers. Put more simply, EBP uses research to guide practice and evaluate practitioners. It uses the best evidence to shape the best practice. It is a systematic effort to parse out and codify unsystematic "experience" as the basis for police work, refining it by ongoing systematic testing of hypotheses'. (Sherman, 1998, pp. 3-4).

More recently, Sherman defines EBP as 'a method of making decisions about "what works" in policing: which practices and strategies accomplish police missions most cost-effectively. In contrast to basing decisions on theory, assumptions, tradition, or convention, an evidence-based approach continuously tests hypotheses with empirical research findings.' (Sherman, 2013, p. 1).

The core principle of evidence-based practice is that "we are all entitled to our own opinions but not to our own facts", as the late US senator Patrick Moynihan observed (Sherman, 2011, RSA Lecture Transcripts, p. 1). Sherman identifies the fact that EBP has a two-pronged approach on research, namely basic research (i.e. what works best when implemented properly under controlled conditions) and ongoing outcomes research (i.e. the results each unit is actually achieving by applying or ignoring basic research and practice) (Sherman, 1998, p. 4).

The convergence of the two creates a feedback loop, reminiscent of Argyris's Double Loop Learning Theory (DLLT), which pertains to learning to change, underlying values, and assumptions – much like EBP. The focus of DLLT is on solving problems that are complex and ill-structured and which change as problem-solving advances, based on facts being reassessed (cf. DLLT is based upon a "Theory of Action" perspective, outlined by Argyris & Schön (1974)).

Moreover, Sherman contrasts EBP to the three present paradigms, namely incident specific policing (911 responses), community policing, and problem-oriented policing (a source of EBP nonetheless), and deems them complementary (1998, pp. 5-6).

1. 3T description

The 3T strategy comprises three principles (rather than "kinds of decisions"), namely Targeting, Testing and Tracking. Specifically, according to Sherman (2013) Tracking requires a systematic ranking in comparison of the level of harm associated with places, times, people and situations policing can lawfully address. Testing is what police do with high-priority targets that helps ensure police neither increase crime nor waste money. Tracking finally is defined as whether the police are delivering on target what police leaders decide should be done (Testing may grow the most rapidly in coming years by the use of technology, i.e. GPS locators and body-worn video cameras).

This novel (cf. in 2012 according to Sherman, 2013) EBP strategy, goes beyond the tenant of RCTs of EBP, and ideally expects the police to dynamically adhere to the three Ts and hence incessantly allocate their limited resources, test their hypotheses, and track their accomplishments (and errors/shortcomings), thus updating and feeding their feedback knowledge loop. Additionally, scientific use of evidence short-circuits our 'System I' thinking (cf. Kahneman & Tversky), and forces all stakeholders in the criminal justice system, and especially police officers, to employ 'System II' thinking, and accept a marked systematic, analysis that follows strict rules of evidence (Kahneman, 2011).

Thus, 3T represents exactly the type of clarity, vigour, and intelli-

gence that criminologists (and policymakers) in the 21st century require globally, and yet rarely receive.

2. Targeting

In a world of dwindling budgets and scarce resources, the ability to focus on the most pernicious and/or predictable concentrations of crime and violence is a *sine qua non*, and of capital importance to modern policing, and by extension to modern liberal democracy. It resembles the *STP framework* of modern Marketing (Segment, Target, Position), which is strategically used in focusing campaigns addressed at large and heterogeneous populations. Moreover, I posit, it owes a vital part of its epistemological ancestry to the concept of "bounded rationality", and its two types, "costly rationality" (cf. Savage Paradigm, 1954) and "truly bounded rationality" (cf. going far beyond the Savage Paradigm), where focus is not dictated by limited resources, but in a rather humbling manner, decreed by limited, human, individual capacities – cf. Simon, March, Marschak, etc. (Radner, 1996).

3. Testing

The umbilical cord that connects targeting to testing is the need for a common, highly reliable measure of crime and harm, hence the creation of a commonly standardised crime harm index (CHI) is absolutely necessary (Sherman, 2013, p. 6). Furthermore, Sherman offers a clear-cut seven-step process for creating such a CHI that any agency around the globe can utilise.

The cynical mantra that "visceral anecdotes always trump data" was used by Sherman (IOC Lectures, 2013-14), to aptly illustrate the need for testing – the soul of EBP, in order to break the vicious cycle of the traditional 3Rs of policing, and in order to progress the 3T strategy, which will ensure that the police neither increase crime (inadvertently) nor waste money (Sherman, 2013, p. 1).

4. Tracking

The classic managerial, circumspective adage admonishes Methuselahs and neophytes alike by stating that "one cannot manage what one cannot measure!" It is of crucial import then to track the outputs and outcomes of the foregoing targeted testing accurately, reliably, and in a timely manner.

Indeed, tracking allows 3T practitioners to tackle risk-based policy conundrums (e.g. in a seriousness versus frequency, 2x2 decision matrix, offering fact-based judgements on which to prioritise, as a second and/or as a third 'priority to be addressed'; compared to the first and fourth priorities which are usually obvious) and forestall deleterious ramifications.

Given the aforementioned, the adept and frequent use of technology in the form of GPS locators and camcorders, compared to unreliable self-reporting, misleading crime rates, subjective definitions, and erroneous counts, etc., becomes a self-evident prerequisite (Sherman, 2013, p. 6).

Example of EBP – pre 3T (Minneapolis, Minnesota, USA, 1995)

This randomised controlled trial experiment took place in Minneapolis, Minnesota (Sherman 1987, and Sherman *et al.*, 1995, 1998, 2013) and aimed to determine the effect of police patrols on very small clusters of high-crime addresses in the city. This "hot spot" focused approach, indicated that police patrols of sufficient duration (cf. up to 15 minutes – *Koper Curve*, Sherman, 1990, Koper, 1995) have a deterrent effect.

In order to avoid statistical bias towards a null hypothesis and a measurement problem in determining the frequency of patrols for a specific area, in this experiment the selection of *loci* involved the examination of data files and the consequent taxonomy of address clusters with 20 or more "hard calls" (i.e. holdup alarms, auto theft, assault, and rape), and "soft calls" (i.e. public drunkenness, disturbances, or fights). Computer mapping, visual inspection, and screening for size, location, and proximity to other hot spots, resulted in the selection of 110 hot spots, which were randomly assigned to either the experimental or the control group. For the 55 hot spots assigned to the experimental group, officers increased patrol presence to a target dura-

tion. Patrol logs and independent observation were utilised (in lieu of high-tech devices – cf. Trinidad & Tobago experiment, hereafter) to validate the duration of patrol presence per day at each hot spot.

The impact of the increased patrol presence was measured by citizen calls concerning crime and by independent observations of crime at the selected hot spots (Sherman, 1987). The importance of this pioneering study is significant (not so much for its findings of "general deterrent effect/micro-deterrence" (Sherman *et al.*, 1995)), but as a seminal case in EBP resulting in tangible, tactical, and fact-based solutions for front-line officers.

Example of EBP - 3T (Trinidad & Tobago, 2013)

The following description of an unalloyed 3T experiment is constructed based on anecdotal evidence accrued and garnered during Professor Sherman's lectures at the Institute of Criminology University of Cambridge, in 2013 and 2014.

Policing in Trinidad and Tobago followed a colonial policing practice. This entailed officers spending all of their time in the police station without going on patrol (apparently quiet rooms with bunkers were also furnished to that end). The implementation of 3T involved an RCT in which all the island nation's police stations were divided into two groups with equal incidence of violent crime. The preliminary findings show an approximate 50% drop in homicides and fatal wounding/shootings.

The police *targeted* the most harmful types of violence, in the worst hot-spot locations at hot times (according to a graph presented, between 6 pm and 2 am). Specific practices were *tested* (e.g. stop and frisk policy for handguns, patrol time, and active visibility in hot spots, as well as respectful handling of suspects). Both crimes and police officers were *tracked*. In particular, police patrols were monitored using GPS and fed back to police in a report every two weeks. Team leaders were held accountable for their teams and patrol results were compared between teams. This use of 3T appears – according to Professor Sherman – to have reduced serious crime, as well as exposed cultural differences

and organisational and educational gaps in the police force of Trinidad and Tobago.

Moreover, this is a case-in point of how 'System II' responses, following modern EBP and the use of current technology (GPS), can have dramatic effects on police internal and external legitimacy, efficiency, cost-effectiveness, as well as in the reduction of harm and of the crimerelated suffering of citizens.

Challenges Facing EC, EBP and 3T

Given the intertwined and subsumed nature of EC, EBP and 3T, I shall try to offer discrete and succinct examples. Evidently, there is an expected overlap, which I see as an advantage in trying to holistically fathom, establish, and improve 3T-based policing globally.

It is clear by now that EC has for the most part moved past the first wave of RCT-focused criticisms, namely that it was not ethical to randomise treatment intervention or programs in criminal justice, and that randomised experiments could not be implemented in the real world (Braga *et. al.*, 2013, p. 277). However, a second wave of criticism has been increasingly articulated concerning the field of EC. These critiques share a common concern that EC blindly advocates the absolute superiority (cf. Maryland Scale, etc.) of RCTs over quasi-experiments and observational studies (Braga *et. al.*, 2013, p. 278).

Therefore, I claim that contemporary criticisms of EC become *de facto* challenges for EBP and 3T in particular. These are, according to Braga *et al.* (2013): 1. Evidence-based crime policy is experimental based crime policy, 2. EC stifles innovation, 3. Experiments have lower external validity and therefore limited policy relevance, 4. Experiments are oversold as the gold standard in establishing causation. Without delving into the associated debate (whereupon Weisburd (2010) argues that there is a "moral imperative to conduct randomised experiments", and Sampson (2010) retorts that "an ethos of 'RCT or bust', downgrades the value of well-designed observational analyses, and quasi-experimental evaluations"), I will instead accept the argument proposed, that RCTs represent a "bronze rather than a gold standard", in

that it makes good sense that experimental and observational methods be framed as complements, "parts of the same toolkit" rather than as competitors (p. 280). Certainly, the proposed "revised scale" that "would include design and executional parameters", as Braga *et. al.*, put forward (p. 293), finds me in agreement.

Further to the above discussion, I wish to address two common, characteristic, and 3T-specific challenges (NB. I am well aware of the nine issues, three for each category, discussed by Sherman, 2013 – notwithstanding, I opt to offer two actual challenges that arose during and/or after the lecturers/presentations).

The first advocates the equal distribution of police personnel/resources. Professor Sherman rebuffed this traditionalist argument by underlining the need for prevention ("it is preferable to spray the mire than to swat mosquitoes one by one"), and iterated that the aim for any modern police force ought to be that "of an equality of results rather than an equality of resources" (Sherman, 2013-14, IOC, Lectures). The second challenge, although typical, is geographicallyspecific, stems from the London Metropolitan police, and is in a nutshell that all "policy decisions are doomed to success". A combination that is, of confirmation bias and organisational top-down pressure for results. Such a culture and status quo obviously limit the ability of the strategy to augment and adapt, furtively and/or antagonistically obviating the feedback loop. My optimistic conjecture is that, given the requisite police leadership support, an increase in volume (of said experiments) resulting in the achievement of a threshold, which once passed, will act as an epidemiological tipping point, and as a result, 3T strategies will thenceforth become a de rigueur reality, in the MET and worldwide.

Greece

Daniel Kahneman, observes that a remarkable aspect of one's mental life is that one is rarely stumped. One often has answers to questions that one does not completely understand, relying on evidence that one can neither explain nor defend (Kahneman, 2011). This pithy

description of 'System I' thinking is concurrently a poignant summary of the mentality of the Greek national police (with notable exceptions) and most national policy makers. Therefore, it is not markedly different from most other national police departments (in Europe and elsewhere) based on my research thus far.

Nonetheless, Greece offers a multitude of country-specific challenges, pertaining to the wide adoption of EBP and 3T. Even so, I adduce that the following hurdles (a sample of three), are *ipso facto*, each and every one of them, the most convincing reasons and arguments for the implementation of EBP in Greece – thenceforth, transforming Greece into an internationally-promoted case-study/best practice for EBP.

Specifically, the barrier posed by the socio-economic crisis is exactly the reason for the existence and use of 3T. The enigma of daily resource allocation and pecuniary dilemmas, given the proper police leadership and political volition, will allow for efficient and effective policing, and will concurrently augment the dismal morale, as well as reconstitute the ebbing internal and external legitimacy of the Hellenic police force. A legitimacy of an institution no less, which is necessary to guard the liberal democracy, and by extent all its citizens, in the country that invented it.

Apart from mentality and leadership issues, given the potential for power that such a fact-based approach would produce and hold, it is of grave importance to follow Juvenal's sagacious admonition and be mindful of *sed quis custodiet ipsos custodes?*, especially during such a crisis. Which brings the issue of ethics at hand. According to Eisner (2012, pp. 419-20) in large-scale criminological field experiments, ethical questions need to be addressed on at least four levels: the selection of the intervention, the randomised allocation to treatment conditions, the collection and storage of data, and the analysis and publication of the findings. Moreover, it is imperative to pre-empt the pitfalls pertaining to the ethical cornerstones of confidentiality (Reiss, 1979), informed consent (Soble, 1978), and deception and accuracy (Erikson, 1967), if one is to suitably and ethically conduct EBP experiments in Greece.

Finally, the notorious Catch-22 of external validity in RCTs needs to be addressed in this context. Given the fact that it is improbable to expect external validity within one study (efforts at triangulation not-withstanding), it is common knowledge that validity can be established in a more convincing way, via systematic reviews and meta-analyses. But these two methods require an increased number of studies to produce results. Thus, achieving the prerequisite high volume of 3T experiments which would (once systematically reviewed and meta-analysed) produce convincing results for the police and political hierarchy, is incumbent upon the above-mentioned decision makers, being convinced by the first couple of experiments. A vicious cycle and quix-otic endeavour indeed, in a country where all police officers (even in the most tactical units) are charged for all ammunition used for their training purposes.

Conclusion

I have offered an all-inclusive exploration supported by the requisite bibliography, of the plethora of forces and intricate dynamics which led to the emergence of EBP. Further, I presented a terse description of the 3T strategy and a brief analysis of each of the three principles in more depth. I then critically elected to compare and contrast two indicative examples of EBP, a ground-breaking one and the most recent one. Given the aforementioned diversity of EBP issues and nuances covered, I was in good stead to assess the overarching and multifaceted challenges faced by EC, EBP, and 3T. Given the significance and potential of 3T, I offered two commonly-voiced challenges, as well as their counterarguments and solutions. Finally, via three local issues, exacerbated by the global socioeconomic crisis, I propound that I succinctly yet critically displayed the probable challenges of adopting 3T and an EB mind-set in Greece, and the opportunity – having overcome such a Herculean labour - this holds for the future of policing in Greece and by extension in Europe.

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