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Science cannot fix this: the limitations of evidence-based practice

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The use of evidence-based practice as a guide for correctional investment is widely lauded as a positive shift away from punitive approaches to criminal justice. The value-neutral language of science, however, supplants a more fundamental and necessary dialog about core principles of our justice system. We raise concern that the discourse of evidence-based practice serves to avoid accountability for the dominant correctional regime which remains overwhelmingly invested in the imposition of punishment. Furthermore, evidence-based practice privileges academic expertise and de-legitimizes the knowledge base within affected communities stifling grassroots innovation and creativity.

Keywords: community justice; restorative justice; evidence-based practice; criminal justice policy; alternatives to incarceration.

Introduction

Recently there is renewed political interest in the use of data as a source of policy guidance in criminal policy (Clear, 2009; Holder, 2009; Pew Center for the States, 2009). Referred to as ‘what works,’ ‘best practices,’ or most commonly, ‘evidence-based practice,’ the argument goes something like this: in the last 30 years we have built a massive but ineffective penal system by ignoring research and deriving policy from raw emotion and political expediency (Mooney, 2005). Meanwhile, social science has refined its methodology and gathered new findings to refute Martinson’s (1974) infamous claim that ‘nothing works’ to change offender behavior. Armed with new and improved ‘evidence’ we now know which interventions help which offenders and under what circumstances (Gendreau, 1996; Lipsey & Cullen, 2007). We stand on the cusp of a more rational, effective, and affordable era of scientifically based corrections.

So why are we disturbed by this narrative? We are certainly not opposed to the use of evidence or research. Quite the opposite: a commitment to evidence is essential to ethical practice and policy and key to genuine accountability. The scientific community is a critical partner in any honest effort to reform the justice system and we applaud the use of data to make informed public policy decisions and design programmatic interventions.

Yet the rightness and wrongness of a correctional intervention is not simply a question of whether or not it works. Evidence-based practice will never inform...
people about the right thing to do. It cannot tell us whether the criminal justice response should be punitive, rehabilitative, or restorative. This is a matter of values, our beliefs about human nature, our conception of community and the meaning of justice, all of which are questions that cannot be settled by scientific inquiry.

We express our sense of the urgent need to examine the direction of the evidence-based practice dialog and raise concerns we have about that direction. The field of corrections has a history of serious unintended consequences arising from the work of well-intentioned reformers (Cohen, 1985; Gaylin, Glasser, Marcus, & Rothman, 1978). We are concerned about the risk of unintended consequences related to the evidence-based practice movement because the discourse is too narrow and too disconnected from fundamental considerations and realities.

It seems to us that the demand for evidence-based practice is made only when we consider investing in non-punitive interventions. Evidence-based practice is a required standard of proof for alternatives to the dominant practice of punishment. As such we strongly object to the use of evidence-based discourse to avoid accountability for the dominant choices made in criminal justice policy. This discourse invites policy-makers to sidestep moral considerations by suggesting that the decision to invest in non-punitive responses is an empirical one contingent on whether or not it ‘works’ to change offender behavior.

We are also troubled by the privileging of expert knowledge in response to human misbehavior and suffering. There are many ways of knowing and as we work to engage victims, offenders, families, and neighborhoods as genuine partners in the justice process, there is a great deal to be gained by their creative co-participation in addressing the current crisis within our communities. It is our experience that when we over-value the role of science, we tend to under-value the wisdom we possess as competent and knowing human beings.

The amoral conversation

Evidence-based practice asks the question ‘Is a particular practice effective in changing behavior?’ Efficacy at changing offender behavior is the highest value in this framework. The discourse does not pose the question, ‘Is this practice the right thing to do on moral or ethical grounds?’ Science can provide us with a great deal of a certain kind of information, but it cannot in and of itself tell us how to use that information. It cannot sort out the moral dimensions of using that information. Evidence-based practice reduces a question of how we treat one another to a technical question of ‘what works’ which does not take into account our responsibility to conduct ourselves as moral agents in our community.

Feminist scholars, for example, have long argued that underlying specific criminal justice policies is an a priori interpretation about the meaning of justice rooted in fundamental beliefs about human nature and human relationships (Elliott, 2011; Gilligan, 1982; Harris, 2004). Aboriginal justice practices are also rooted in a coherent ethical world view that shapes appropriate responses to wrongdoing (Ross, 2000; Sawatsky, 2009). Many proponents of restorative justice argue that restorative justice is, above all, an approach which prioritizes a commitment to a set of values independent of its utility for outcomes such as reducing recidivism or incarceration (Braithwaite & Parker, 1999; Pranis, 2007; Zehr, 2002). Even some community justice advocates argue that the goals of mutuality, inclusion, equality, and stewardship represent core values which should guide a community justice response (Clear & Karp, 1999).
Underlying each of these ‘alternatives’ to the dominant penal system is a moral commitment to a set of values which is more foundational than the evidence that any given practice or program is able to achieve some desired end. The imposition of punishment is also a moral commitment to set of practices for ethical reasons quite apart from the efficacy of punishment in achieving specific outcomes (Von Hirsch, 1994). Regardless of the utility of punitive practices for changing behavior or preserving public safety, in our culture, punishment is generally viewed as a necessary moral response to wrongdoing (Breton & Lehman, 2001). As Elliott (2011, p. 24) observes, ‘punishment has been given a sacred status in our societies.’ To question either its utility or righteousness strikes many Americans as heresy.

It may be that many in the evidence-based practice movement believe that the moral grounding is implicit in their work but the evidence-based practice movement is not incorporating a values-based discourse in its extensive discussion of best practices. A moral discourse about the criminal justice system and society is an imperative component in determining what practices should be carried out and how these practices should be implemented. Without a conscious awareness and commitment to an alternative set of values, the dominance of punishment as the morally righteous response to crime is left unexamined and therefore unchallenged. In our current system, punishment is the default moral value when other responses are seen to ‘fail’ to produce desired results.

The question of values is more foundational than the question of what is effective. Science is treated as an objective value neutral enterprise which it is not, and even if it was, criminal justice interventions should never be a value neutral enterprise. The criminal justice system is intended to represent values of society. We define certain behaviors as crimes because they violate our sense of values – of how we are expected to treat one another. How we respond to crime and our idea of justice is also a question of values.

Science always addresses this dilemma: we can demonstrate that life can be prolonged on a machine – is it the right thing to do? We can prove that it is possible to destroy an enemy with a nuclear bomb – is it the right thing to do? To test the importance of asking the moral questions, first we need only ask what we would do if the evidence demonstrated that a particular practice, for example, physical torture, worked to change behavior in a desired direction. Would we then say we should use physical torture to change behavior?

As ethical human beings, we need to ask that question of ourselves so we can sleep at night. But as a community we need to be in dialog with one another to check our own response and to test our answer in a larger context than our personal point of view. The moral question is who we are as a society and what we hold as foundational values guiding how we treat one another. The question, ‘Is a practice consistent with those values?’ precedes the question of whether the practice is effective at changing behavior. Once we are clear about our moral compass then we can ask, ‘What is effective in achieving the vision our values define?’ (Pranis, 2004).

The limitations of science

Contemporary social science uses a model of learning that derives from a Newtonian view of the world (Clark, 2002; Wheatley, 2006). This model assumes that we can take things apart and study the parts without impacting the whole. It assumes that the whole is a simple sum of its parts. It assumes linear causality that can be determined
by looking at one variable at a time. It assumes that there is an objective point of view. It does not take into account that the systems understanding that is the contribution of modern biology or an understanding of quantum theory and chaos theory that account for non-linear phenomena and uncover the profound interconnectedness of the universe. The modern sciences do not say that the Newtonian understanding was incorrect but that it is only correct for a limited set of circumstances. It is not an absolute truth – it is a truth for certain limited conditions (Kuhn, 1962).

Consequently, the information we have based on social science research has many qualifications. Researchers who understand the limitations of the data are often dismayed when policy-makers ignore carefully stated qualifications by endorsing a program as the latest panacea (Merrington & Stanley, 2000). Programs are often claimed to be effective long before an adequate time frame has elapsed for conducting the necessary research (Tilley, 2001) and political pressure to fund new program initiatives frequently takes precedence over the need to conduct quality evaluation (Wilcox, 2003). The so-called ‘gold standard’ of programmatic research which seeks to isolate an effect through randomized assignment or some approximate quasi-experimental design is relatively rare for a host of practical and ethical reasons (Clear, 2009; Smith & Schorr, 2009). Even with a premium research design, much of the variation in the success of an intervention concerns the context in which the program is applied, the quality of implementation and the appropriateness for a specific setting and target population, none of which is likely to be subject to rigorous scientific scrutiny (Gendreau, Goggin, & Smith, 1999). Furthermore, repeated trials of even the best research design continuously yield mixed result for a variety of reasons not all of which are well understood by the researcher (Lehrer, 2010).

Even the best scientific knowledge cannot provide useful guidance on policy decisions. Consider the question of whether or not the enormous rise in incarceration is responsible for a corresponding reduction in crime rates. Researchers utilizing different but equally sound methodologies have arrived at varying estimates of what proportion of the decline in crime can be attributed to the use of incarceration (Clear 2007, pp. 41–45). These estimates range from a high of 25% to much smaller estimates of 10% or less and there is even data which suggest that, at a certain level, incarceration actually increases the level of crime.

Regardless of which studies policy-makers find persuasive, none offers guidance on the only question that really matters: namely how to determine if a specified gain in public safety is justified by a specified human, social, and economic cost. So even if we could agree on a precise scientific measure of that gain (which we cannot) we would still not know how to proceed without an examination of priorities and values.

What science knows is also limited by what scientists choose to study and the research questions which shapes the knowledge that will be generated. The leading textbook in American psychiatry, as recently as 2004, reviewed voluminous bodies of research on the emotions of shame, guilt, and hate, and the experience of depression and anxiety yet included almost no discussion of the emotions of love, faith, compassion, and forgiveness because these have barely been studied by the scientific community (Valliant, 2008, p. 22). Is assessing offender behavior a more important outcome of a justice response than victim satisfaction or psychological healing? Should we be measuring the impact of incarceration on the children of those incarcerated, or the economic well-being of the neighborhoods rather than...
the rate of reoffending? Posing questions for research is never a morally neutral endeavor.

Recent literature on diet provides a powerful example of how reductionist science can mislead us, harming our health and how science intended to contribute to the common good can be exploited by profit enterprises in ways that are extremely harmful for humans. The science of nutrition set out to learn about the critical components of a healthy diet and from that information prescribe what we should eat. The approach was based on the classic Newtonian, reductionist model of science. Isolate and learn about the parts and from that information make pronouncements about what people should do. In *Defense of Food* (Pollan, 2008) traces the history of the science of nutrition and its impact on the American diet. It is a sobering story of the inevitable shortcomings of scientific knowledge about nutrition, and of the political manipulation and corporate exploitation of that knowledge that has resulted in Americans eating the least healthy diet on the planet.

We would do well to learn from those missteps in using scientific knowledge to guide major decisions about how we should interfere in the lives of others. Human behavior is arguably even more complicated than questions of what we should eat for maximal health. If we have made mistakes of this magnitude regarding food through reductionist science, we are vulnerable to very serious missteps in relying primarily on science to guide us in how to work with human behavior.

**Privileging the experts**

Classic science is one way of knowing. It is neither the only way nor necessarily the best way of knowing. However, evidence-based practice privileges that kind of knowing giving it more status and legitimacy than other kinds of knowing. Inevitably, this creates a hierarchy in which those with other kinds of knowledge are less valued and lose confidence in the importance of their knowledge. Front line workers, family members and community members, are deskilled and undervalued in this very professionally oriented model.

McKnight (1995) writes about this dilemma with the example of a grief therapist entering a small community. Before the grief therapist came neighbors knew what to do when someone lost a loved one. They sat with them, cried with them, brought food, and checked on them over time. When the grief therapist came, they began to question their capacity to help because they were not ‘trained in grief therapy’ and they stayed away so as not to interfere with the work of the professional. It is not that we should not have grief therapists; but that we need to value both kinds of knowing. We need the neighbors’ intuitive and life-experience knowledge as well as the knowledge that might come from being trained in grief therapy. And we need to be clear that the knowledge from formal training is not more valuable. It is another piece of the puzzle, not the whole picture.

The restorative justice movement has been a practitioner-led movement (Pranis, 2007; Zehr, 2002). The vision, values and practices of the modern restorative justice movement has emerged from efforts by victims, offenders and those working with them to develop alternate ways to achieve a sense of justice, peace, and personal transformation in the aftermath of crime. Scholarship on the theory and empirical research on the effectiveness of practices by academics has followed in the footsteps of these developments. Social science methods can help assess the impact of these
interventions and refine the theory and methods to support and promote them. But these innovations do not tend to emerge solely from within the academy.

One of the unintended consequences of the evidence-based practice movement may be to close the door on innovation and experimentation. When governments pass legislation requiring the use of evidence-based practices, there is a tendency towards standardization and centralization which limits the discretion of front line staff in the selection of programming (Robinson, 2001). Because scientific evaluation of programs is so costly and time consuming, few programs are subject to rigorous evaluation that meets the standards for high-quality research (Smith & Schorr, 2009). Institutionalizing evidence-based research as the gatekeeper for which programs can be supported by the public and private funds might very well exclude innovative approaches emerging from within the affected communities. As Clear (2009, p. 6) observes in his presidential address to the American Society of Criminology, ‘the evidence-based policy paradigm is, at its core, extraordinarily conservative.’

The importance of other ways of knowing

While you and I have lips and voices which
are for kissing and to sing with
who cares if some one-eyed son of a bitch
invents an instrument to measure Spring with?
(e.e. cummings)

Luckily we do not rely on scientific knowledge in knowing how to live. We know a lot about how to love, cooperate, care for each other, raise children, and feed ourselves for healthy life. We know this because we are endowed with ways of knowing other than the enterprise of science (Breton & Lehman, 2001; Ruddick, 1995). Life is much wiser than science.

Science is just beginning to understand how sophisticated we are relationally as human beings. Pascal said, ‘Reason is the slow and tortuous method by which those who do not know the truth discover it.’ We scientifically study mothers and babies to learn more about the intricate ways that we as a species form attachments but mothers do not turn to science to teach them how to communicate with their infants (Lewis, Amini, & Lannon, 2000). We acquire all kinds of complicated knowledge – we talk, walk, and read – without science fully understanding how our brains learn these complex tasks.

Ironically, many social service endeavors are trying to move away from professionally driven models and incorporate knowledge and competence held within families and communities. The Signs of Safety approach to child welfare (Turnell & Edwards, 1999), for example, starts from the assumption that the family and those close to it know better than the child welfare professional what the relevant issues are and how to ensure safety for the children. When we promote the idea that experts know best, we close ourselves off from all kinds of wisdom and we disempower front line staff, communities, families and ordinary citizens.

The point is that as human beings we possess enormous skills and knowledge about how to relate to one another. As Ruddick (1995) argues, mothering, that is, the set of practices which are geared toward the preservation of vulnerable life, nurturing the young, and shaping them to be part of the social group, is a disciplined and
practical area of knowledge with its own way of ‘thinking.’ So-called maternal thinking which develops from the practice of raising children is one of many such bodies of knowledge within the realm of the community such as teaching, ministry, social support, organizing, or friendship which could help to shape a useful response in the wake of crime. Alcoholics Anonymous, for instance, is widely recognized as an effective program to help individuals overcome addiction (Valliant, 1995). It arose from the practical wisdom that acknowledges our need for structure and guidance in order to overcome intense physical and emotional adversity and the value to oneself in sustaining sobriety by helping others (Maruna, 2000). While it may now be validated by evidence-based research, as practice it did not originate within the scientific enterprise.

Similarly the coach who befriends a troubled youth and helps her/him make a change in her/his life; the neighbor who reaches out to the person whose home was broken into; the ex-convict who hangs out with a younger cousin playing ball or shooting pool meanwhile offering advice on how to avoid the kind of trouble that s/he ran into in her/his younger days are drawing on community-based knowledge that is implicit rather than explicit, reciprocal rather than commodified, mutual rather than professionalized (Block & McKnight, 2010). These are some of the countless ways that human beings act with sophisticated skill and knowledge about what makes a difference in other people’s lives as well as their own.

We don’t ask for proof that we should eat when we are hungry or that we should sleep when we are tired. Some people don’t need proof that, when harm happens, we should focus our response on repairing the harm. And many don’t need proof to know that bringing people together in a safe, respectful, reflective process to speak truth and listen deeply will make the community healthier and safer. (Pranis, 2004, p. 150)

We need to be sure that we do not place science and professional expertise in the driver’s seat in the development of approaches to address harm in our communities. We do not need to wait for science to tell us where to put our energies in addressing human problems. For this we need to become better at examining and acting on our own wisdom and values. Science should be a partner in this process but not in control of it.

**The monster in our midst**

Probably most troubling to us is the sense that the evidence-based practice narrative lets us off the hook for the system we have created in the last 30 years and for what we continue to do in the name of justice. Society has chosen to invest in punishment – harsh and cruel – as a way of dealing with the misconduct of poor people, mostly people of color. Restraint is distinct from punishment (Elliott, 2011): prisons are terrible places because they are intended as punishment delivery systems not as mechanisms of incapacitation. The destructive nature of the environment is not incidental but intentional. It is a consequence of a moral commitment to inflict suffering rather than a scientific commitment to achieve public safety.

The public has been sold punishment partly as a justified response to people who have violated our laws and partly as a means to an end – increased public safety through deterrence and incapacitation. There is considerable scientific evidence about the destructive impact of prison practices on the humans confined there (Haney, 2006). We have serious social science data that show prisons do not have the deterrent
effect people think they have (Cullen, Johnson, & Nagin, 2011) and data that ques-
tions whether we are lowering the crime rate through incarceration (Clear, 2007). We
have abundant evidence that the prosecution of a 30 years ‘war on drugs’ has neither
reduced the illegal drug market nor limited easy access to illegal drugs (Tonry, 2004).
And we have ample evidence that the practice of incarceration hurts unintended tar-
gets such as children, families, and communities which in turn is likely to exacerbate
the social conditions that give rise to crime (Braman, 2005; Mauer & Chesney-Lind,
2002).

Yet the moral commitment to punishment has a far greater influence on policy than
the scientific evidence of its effectiveness (or lack thereof) in achieving a host of soci-
etal goals and objectives. The question of whether or not the correctional practice of
punishment ‘works’ is not relevant in the policy arena. As Pranis, Stuart, and Wedge
(2003) argue, the stories we tell about ourselves are far more convincing to policy-
makers than scientific evidence. Daly (2002) refers to these stories as ‘myths’ versus
what she calls the ‘real’ story emerging from empirical research on restorative prac-
tices within the criminal justice system. Yet, she concedes that these so-called
‘myths,’ which express an idealized vision of what practices are trying to achieve, are
probably quite impactful in shaping the policies and politics of criminal justice.

Of course, the question of whether or not we are entitled to treat people who
violate the law in any particular manner is a question science cannot answer. The
fact is that the choice to punish is a moral choice, not a scientific one. We clearly
do not care very much whether or not it ‘works’ to reduce crime or perhaps we just
continue to believe it does regardless of what the scientific evidence might indicate.

If empirical evidence about what works is not influential in the debate about main-
stream correctional and penal policy, where is the evidence-based practice movement
actively applied? It seems to us that we apply evidence-based practices in a very lim-
ited arena, namely, to challenge any correctional reform or practice which is not based
on punishment. The vast majority of evidence-based research efforts are used to scru-
tinize small positive efforts within a sea of intentional harm. It is only here that evi-
dence-based practice is held up as the gold standard for public or private investment.
Every small program or non-profit organization must first meet this standard of proof
in its attempt to receive funding for any intervention or response other than punish-
ment. Despite the fact that only 11% of incarcerated individuals have access to pro-
gramming and only 8% are actually in a program at any given point in time (Clear,
2009, p. 8), the evidence-based practice movement advocates that enormous resources
be spent to demonstrate that these programs are effective, all supposedly in the name
of value-neutral science.

It seems that we demand evidence when people are proposing to use the power
of support, encouragement, care, and compassion, in response to criminal offending.
The demand is first, prove that it works. We demand that science show that positive
forces of respect and dignity will ‘work’ before we are willing to invest public
money. For those who have the misfortune of being bound up with our justice sys-
tem, we insist that evidence be produced that they will change their behavior before
we are willing to treat them with an ethic of care.

**Speaking truth to power**

Our goal is not to undermine the use of evidence in the search for a better way of
living together. We have experienced an era where scientific evidence and analysis
have been trumped by political considerations. It is objectionable when empirical
evidence is ignored in the assessment of programs whether these are based on the
values of restoration, punishment, or rehabilitation. The commitment to honesty is
an ethical choice (Harris, 2004), each of us needs to be aware of the possibility of
errors in our understandings and judgments and be willing to correct our course in
order to stay true to our espoused values. But the question of scientific accuracy
cannot take the place of an examination of competing values and a reasoned and
public commitment to those values.

An earlier generation of scholars critiqued the medical model of rehabilitation as
concealing the political use of power and control behind a façade of scientific neu-
trality (Kittrie, 1971; Szasz, 1970). The argument made here is similar: scientific
discourse cannot supplant a political discussion about the values we embrace when
we respond to conduct deemed to be criminal. In retrospect, the rejection of the
goal of rehabilitation coincided with a broad embrace of ‘just deserts’ values which
places a priority on the use of punishment for the purpose of social solidarity and
normative communication. The contemporary renaissance of the ‘what works’
approach to crime policy is a challenge to those priorities yet seems again to be
substituting the language and legitimacy of technical rationality in place of a critical
political dialog about competing values.

The goal here is to pull back the curtain of ‘evidence-based practice’ when it is
used as a shield by those in power – which ultimately includes all of us – to avoid
accountability for our choices and actions. Choosing to do the right thing is most sig-
ificant for the doer and not the receiver of the action. Accountability is about what
you choose to do, not about what someone else ‘made you do.’ The commitment to
treat people with respect, kindness and love should not be made conditional on their
response to that treatment. Yet we allow the discourse of evidence-based practice to
suggest that we make these choices only because they ‘work.’

We believe there is need for more dialog about the very nature of justice and
what it means for us as a community. Justice is not a spectator-sport. One of the
insights of restorative and community justice practices such as conferencing and cir-
cles is that participation by stakeholders in the actual determination of what justice
means is an essential part of what makes the process just.

It feels to us that the conversation about evidence-based practices is being con-
ducted in a vacuum disconnected from all our other knowledge about the grim real-
ity of our current situation. Evidence-based practice has a place in considering what
interventions we might use, but the consideration of evidence comes after the explo-
ration of the values we wish to base our society on. Scientific evidence is best com-
bined with other kinds of knowledge and wisdom to find the best way to influence
human behavior.

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