The future of Nordic criminal policy evaluation

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Nordic criminal policy evaluation has unique features, such as ones related to policy context, policy content, and the availability of excellent register data. This paper briefly lays out these features and argues that the future of Nordic criminal policy evaluation could well lie in exploiting these features even more. It is argued that we should aim to tie criminal policy evaluation to social policy evaluation more broadly. And that we should aim to use policy evaluations to study margins of behavior rather than “just” measure average effects of reforms or policies. These aims will be hard to reach unless we think of and search for even better data than we already have.

INTRODUCTION

Nordic criminal policy evaluation has many features that distinguish it from criminal policy evaluation more broadly. The features cover policy context (e.g., expansive welfare states and penal exceptionalism), policy content (e.g., noncustodial alternatives to imprisonment and resocialization programs), and data availability. Each feature may be able to draw in the attention of international criminologists; in combination, they characterize just how unique Nordic criminal policy evaluation is.

Access to information on policy context, policy content, and data, supported by a high degree of transparency in our bureaucracies, have paved the way for a growing number of studies published in scientific journals. As witness to this development, Figure 1 shows the trend in Google Scholar hits on keywords related to Nordic criminal policy evaluation. The figure shows a linear trend; what appears to be a quadrupling over the last 20 years! Of course, some of this trend could be driven by increased research production overall, and the quadrupling in Figure 1 is thus obviously an overstatement – but for now, let us leave evaluation standards aside and celebrate the increasing demand for Nordic criminal policy evaluation.

In this paper, I outline some of the reasons why I think Nordic criminal policy evaluation – or, more specifically, criminal policy evaluations from the Nordic countries – has become popular, and I point to directions which I think may represent the future of this type of policy evaluation. My focus is on data and research design, but I will also touch upon policy context and policy content.
POLICY CONTEXT AND POLICY CONTENT

The two most obvious features of the Nordic policy context and the content of our criminal policies concern extensive welfare states and penal exceptionalism. Our welfare states are known as generous and universal, providing social safety nets that successfully prevent (absolute) poverty and, in broad terms, aid and assist lesser fortunate citizens. Their focus on equality is strong, carried forth by economic redistribution.

Penal exceptionalism was coined by Pratt (2008) who focused on how the penal philosophies and penal policies of the, yes, Nordic countries differ from other contexts. As such, it is no surprise that the term offers a pretty good approximation of our penal environments. In brief, penal exceptionalism implies low incarceration rates, short sentences, humane prison conditions, the expanded use of noncustodial alternatives to imprisonment, and a focus on resocialization and rehabilitation over retaliation.

Recent developments in the Nordic countries diverge somewhat from the ideal typical penal exceptionalism, at least or perhaps especially in Denmark. Here, sentence lengths have increased, prisons’ capacity is now under severe pressure, mandatory control features (such as cell searches and drug tests) have been adopted into the daily schedule during imprisonment, and minimum sentences (e.g., solitary confinement in a punishment cell) have been introduced for in-prison illicit behavior (e.g., smoking or carrying contraband). And it has been shown that imprisonment rates in the Nordic countries may signal artificially low punitiveness because point-in-time measures of the number of imprisoned persons per 100,000 citizens (the imprisonment rate) captures only the stock of prisoners at that point in time, not the number of persons that flow in and out of prisons throughout the year (and which, because of short sentences, is larger in the Nordic countries than elsewhere; see Aebi & Tiago, 2020). Some scholars also correctly observe that underneath the ‘exceptional’ surface of penal policies in the Nordic countries, punitive practices speak against our adherence to penal exceptionalism, such as when we keep pretrial detainees in lengthy solitary confinement (e.g., Smith, 2012). Despite these divergences from the ideal typical penal exceptionalism, however, the penal policies and the sentencing regimes of the Nordic countries

Figure 1. Trend in Nordic criminal policy evaluation related keyword hits on Google Scholar, 2000-2020. Note: Keywords are crime, evaluation, Denmark, Finland, Norway, Sweden.
still overall represent more lenient regimes, with many measures aimed at resocialization.

**REGISTER DATA**

Another exceptional feature of the Nordic countries is register data (I again narrowly focused on Denmark, the context I know best). Basically, every interaction a citizen has with representatives of the system – healthcare, education, employment, taxes, the criminal justice system, to name just a handful – is recorded on the citizen’s unique identification number. Much of the resulting data is mandatorily reported to the national statistical agency, which then stores the data securely. Researchers can apply for access to anonymized versions of the data – which is still linkable across registries using individual identifiers – provided they and the research institution that employs them adhere to specific laws (in the case of Denmark, see [https://www.dst.dk/en/OmDS/lovgivning](https://www.dst.dk/en/OmDS/lovgivning)), including the GDPR.

Because the individual identifiers are unique both within and across time, it is, in practice, possible to track persons back and forth in time both within and across the registries. This essentially enables the description of a citizen’s life from before birth (e.g., prenatal measures of health and the mother’s reported smoking behavior during pregnancy in the Medical Birth Register) and until when and how the citizen passed away (Death Register) or emigrated (Database of Historical Migrations), including most system contact the citizen had during his or her lifetime – such as contact with the criminal justice system (the Central Crime Registers) – and which family members the citizen has. As certain types of system contact become relevant or obsolete, new registers are added or discontinued, making Nordic register data information organisms rather than datasets per se (see Andersen, 2018; Lyngstad & Skardhamar, 2011 for more detailed discussions of the nature of register data).

In terms of criminal policy evaluation (as well as policy evaluation in general), many features of register data are superior to what is found elsewhere. The chance to create datasets of relevant people around the introduction of a penal policy, for example, is a strong feature as it allows us to run policy evaluations as natural experiments. Natural experiments take many forms, but most straightforwardly relevant for policy evaluation is when, for example, the introduction of a new policy clearly demarcates a pre-policy regime and a post-policy regime while suppressing people’s ability to affect whether they are governed (typically sentenced) under one or the other regime; a policy evaluation strategy that often succeeds at overcoming problems of unobserved heterogeneity (Dunning, 2012).

As an example, consider the expansion of the use of home confinement under electronic monitoring in Denmark in 2008. Before the reform (which was approved on June 17, 2008 and in effect from July 1, 2008), only those convicted of traffic related offenses and offenders younger than 25 years of age serving a sentence shorter than three months could be considered for home confinement under electronic monitoring. Conversely, however, after the reform, offenders older than 25 years were folded into the electronic monitoring scheme. Figure 2 shows the consequences for the relevant offenders’ chance of serving their prison sentences at home under electronic monitoring, illustrating a clear and abrupt change.

Another strength of register data is the ability to merge individual-level data, such as that used to produce Figure 2, to the timing of sanctions. Several studies have exploited
such linkage to analyze the impact of noncustodial alternatives to imprisonment. Home confinement under electronic monitoring has been shown to, for example, decrease the risk of relationship dissolution (Fallesen & Andersen, 2017) for people over 25 years of age and to reduce dependence on social assistance (Andersen & Andersen, 2014) and improve educational outcomes of offenders under 25 years of age (Larsen, 2016), who have also been shown to have lower rates of criminal recidivism (Jørgensen, 2011 in Denmark, also see Marklund & Holmberg, 2009 in Sweden). Related studies have found the use of community service to reduce criminal recidivism and improve labor market outcomes (Andersen, 2015; Klement, 2015). And studies have found that children whose fathers did not have to serve a sentence in prison because community service became available as an alternative have lower risks of experiencing foster care placement (Andersen & Wildeman, 2014) and have lower risk of being criminally charged by young adulthood (Wildeman & Andersen, 2017).

**TRANSPARENCY IN POLICY AND IMPLEMENTATION**

Access to individual-level data that can be merged across many domains in a context of policy reform does not suffice to produce good policy evaluations. We also need information about both the content and implementation of the policy reforms under study; how, when, and why policies are implemented should not be ignored.

Again, the Nordic context offers great opportunities, as our bureaucracies offer high levels of transparency. In Denmark, for example, most relevant information concerning laws – political debates related to the different versions of law proposals (including the formulation of the proposals), public hearing responses, official commentaries, historical versions of the laws, and all dates of law proposals, passes, and enactments – is available through *Retsinformation* (www.retsinformation.dk). This database links documents related to laws and law proposals and links to related laws and documents, including parliamentary material.
Figure 3 represents an empirical example of why information related to all aspects of reform can be important in (criminal) policy evaluation. In 1994 in Denmark, increasing rates of violent crimes caused concern, leading the government to introduce a sanctioning reform aimed at both serious and repeat violent offenders, increasing sentence length in cases of aggravated assault and repeat instances of common assault. In addition, it was believed that time from the criminal act to adjudication was too long, which was believed to challenge people’s (and especially victims’) sense of justice. With the reform, caps were set on how long public prosecutors could spend on the different parts of a criminal case, and no more than 30 days should now separate the filing of the criminal charge and the beginning of court proceedings, for example.\(^1\)

The reform changed both sanction severity and time to adjudication for repeat violent offenders and for those convicted of common assault, effectively providing variation in two parameters. This makes it hard to distinguish the impact of each feature separately for these offenders, which again stresses the importance of meticulously knowing the details of the reform under study. But for first-time common assault offenders, the reform only targeted time to adjudication, enabling the analysis of the impact of time to adjudication on outcomes.\(^2\)

Figure 3 shows median time (in days) from charge to conviction (i.e., time to adjudication) in the relevant cases from before to after the reform and shows a clear decrease in time to adjudication. The reform was enacted on May 19, 1994, marked by the dashed vertical line. Importantly, time to adjudication obviously decreased prior to the reform, which challenges the reform’s relevance for providing variation in time to adjudication that is exogenous to the cases and offenders under study. Scrutinizing documents, however, and this is the point, revealed that specifically the time to adjudication reflects sanction celerity/swiftness, which according to deterrence theory, should matter for the criminal decision-making process. For more discussion, see Andersen (2020).

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\(^1\) For additional details on the reform and its implementation, see Appendix A2 in Andersen (2020).

\(^2\) From a policy perspective, such evaluation is useful as it represents a parameter that can in fact be manipulated; from a theoretical perspective, it is useful as...
caps on time to adjudication had already been sent from the Chief Public Prosecutor to the public prosecutors on January 11, 1994, about four months earlier than the official date of reform implementation would have one believe. In Figure 3, this true implementation is marked by the solid vertical line; this timing fits better with the decrease in time to adjudication arising from the policy implementation.  

Two studies have exploited the variation in time to adjudication for first-time common assault offenders that was the result of the January 11, 1994 change. Andersen (2020) shows that shorter time to adjudication leads to increased criminal recidivism over a five-year period for the youngest offenders (age 15-20), which is explained by the specific age-timing of imprisonment that coincides with the peak of the age/crime curve. Bacak, Andersen, and Schnittker (2019) increase the length of follow-up to 10 years and focus on different measures of mental health. They show that shorter time to adjudication leads to worsened mental health along dimensions such as seeking contact with mental health services, receiving treatment, and being charged with the possession of drugs.

It is worth noticing that the two studies that exploit the 1994 reform for causal inference were published more than 25 years after the policy was implemented. Without access to the records on reform implementation, it quite simply would not have been possible to undertake the evaluations. Again, the publicly available documentation of (historical) policy reform was essential.

### THE FUTURE OF NORDIC CRIMINAL POLICY EVALUATION

The future of Nordic criminal policy evaluation may well lie in exploiting the merits of policy context, policy content and transparency, and excellent data even further. What we have is unique if not exceptional, and we have every reason to keep producing criminal policy evaluations along the lines we have been for years. Such policy evaluations are invaluable to public policy.

But we also have reason to expand the scope of our evaluations. With linkable data on so many domains of people’s lives and a context of policy reform and transparency, we have the chance to move beyond criminal policy evaluation and in addition use criminal policies for behavior evaluation. What I mean by this is twofold. First, adding data that traditionally falls outside the criminological realm enables us to show that criminal policy evaluation is social policy evaluation. Quite simply, we should look beyond criminal recidivism and focus on several domains of life. Many studies already do so, and I will only here applaud the effort and invite more studies to follow. Second, if we can use detailed knowledge on which margins change in what manner with a given criminal policy reform, we may have the chance to tie these margins of change to behavioral changes. This effectively focuses more on the mechanisms that drive behavioral change than the fact that “policies as packages” may or may not matter. Doing so would isolate the active ingredients of the policies, knowledge of which could then be used in crime prevention even outside of criminal policy.

Moving from evaluating the behavioral effects of policies to studying the mechanisms that drive the behavioral effects is no easy task, however. This is because although the

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3 See Andersen (2020) and Bacak, Andersen, and Schnittker (2019) for more statistical tests of the exogeneity assumption.
implementation of policy reforms can – if well implemented – provide variation in pre and post policy regimes that can often be shown to be exogenous to individuals’ choices and characteristics, the same needs to be true for each margin the policy affects. Analyzing whether it is an income effect or simply avoiding going to prison that drives down recidivism rates among persons serving at prison sentence at home under electronic monitoring, for example, is not straightforward. At first, we might want to think about comparing criminal recidivism among those under electronic monitoring, split by whether the person holds a job or not, to similar persons before the reform, who would thus all have to serve the sentence in prison (because the alternative was just not possible at that point). But because employment or program participation is a prerequisite for this noncustodial alternative, the expansion of the policy might have employment effects, pushing marginal persons, who without the reform would not have a job. We now face a comparability challenge because whereas we wanted to compare those with a job after the reform to those with a job prior to the reform, the two groups are no longer comparable (unless we are willing to assume that marginal persons are in all relevant (observed as well as unobserved) ways identical to non-marginal persons; a quite strong assumption). In this way, reforms can produce compound effects along several margins (the reform effect) without offering the chance to analyze the mechanisms that drive the effects.

The chance to break down compound effects of policies thus hinges on the provision of exogenous variation in the various margins of behavior that the policies might affect. To reach this end, there are essentially two strategies that could make sense: exploiting existing data sources even better and actively engaging in the implementation of the policies.

Open the data treasuries even more

As was already discussed, access to high quality administrative data is a unique feature of Nordic criminal policy evaluation, and most international evaluators are likely to be envious of what we have. But this does not mean that we have access to all the relevant data that is being recorded. In fact, in my experience the various types of agencies and institutions that people encounter record much more data than what they are required to submit to the national statistical agencies. The Danish Prison and Probation Service, for example, records almost any thinkable type of information they can on people who are under the purview of the criminal justice system – and all it is mandated to report to Statistics Denmark concerns spells of incarceration (admission dates, transfer dates, release dates, type of facility, arrest / pretrial detainment / post-conviction sentence, and the like). Luckily, the Danish Prison and Probation Service knows the value of evaluation and is often willing to share specific information from their databases, pending formal approval and data safety precautions. Examples include detailed information on the use of disciplinary sanctions for in-prison behavior, which has led to two recent contributions to research on the consequences of conditions of confinement: one focusing on punishment cell placement and post-release mortality (Wildeman & Andersen, 2020a) and one focusing on punishment cell placement and trajectories of crime and employment (Wildeman & Andersen, 2020b). Indeed, organizational willingness to cooperate and share data obviously makes life as a policy evaluator easier, and we should do what we can to ease such cooperation.
Policy planners and implementors, give us a call!

Another and more proactive way of obtaining the type of data and variation at the margins of interest lies in direct collaboration with policy planners and implementors. If only they would reach out to us when designing and implementing new policies, our endeavors for pushing the evaluation frontier would be easier. Easier, but still not easy; sometimes it could be possible to assist the implementation of policies in ways that improve our chances of obtaining variation on margins we have an interest in. This, for example, could be obtained by not implementing every moving part of a policy at once, not implementing it for everyone at once, or – what we as evaluators would be the most appreciative of – provide explicitly random variation in the rollout of relevant features of the policies.

Deliberately providing variation in specific parameters of interest when developing or implementing policies can be controversial, and concern often arises over whether randomization implies the deliberate withholding of something good (the policy) from people, based not on the merits of those people or policies but simply on chance. The concern is reasonable if we are willing to assume that all new policies are always good for everyone. However, for most new policies, we have little to no empirical base to lean on, and we really have no way of knowing whether they are good, bad, or neither prior to their implementation. It is therefore our job as evaluators to explain how treatment allocation by chance is, by definition, fair from the individual’s point of view, and how random variation offers dramatic improvements to our chances of producing evaluations of the highest standards. At the end of the day, policy planners and implementors often do have an interest in increasing the evaluative potential of policies, they just may not necessarily know how to do so.

CONCLUSION

Nordic criminal policy evaluation is in a good place. We have access to excellent data, and we live in a context with many reforms that can be exploited for evaluation; reforms and policies that are well-documented because of the high degree of bureaucratic transparency in our countries. Increases in research from our context speak to this positive story. Meanwhile, to lay out an even brighter future for Nordic criminal policy evaluation, we (at least in my opinion) need to take on tasks that are not straightforward, such as aiming to tie behavioral mechanisms to policy effects to gain deeper understanding of why we observe the effects that we do, and tie criminal policy evaluation more directly to social policy evaluation. This task is not easy and requires meticulous attention to the details of data and reforms/policies. In some instances, we have what we need in existing data. In other instances, we can dig up the data from some of the data treasuries that organizations within our bureaucracies sit on. And in still other instances, we should consider collaborating directly with policy planners and implementors to obtain variation that can meaningfully be used to answer some of the more fundamental questions about the etiology of criminal behavior.

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