

**CELERITY AND DETERRENCE**

Forthcoming in:

*Deterrence, Choice, and Crime:*

*Contemporary Perspectives—Advances in Criminological Theory*

Edited by Daniel S. Nagin, Francis T. Cullen, and Cheryl Lero Jonson

Travis C. Pratt

University of Cincinnati

Jillian J. Turanovic

Florida State University

In criminology, few ideas are afforded as much simultaneous allegiance and skepticism as deterrence theory. After its genesis in the late 1700s, this perspective fell out of favor in the early to mid 20<sup>th</sup> century among criminologists who emphasized the roles of individual differences and social processes in crime causation (Lilly, Cullen, and Ball 2015; Pratt, Maahs, and Stehr 1998). But it was given new life by Becker (1968),<sup>1</sup> and since then it has enjoyed continued attention—both negative and positive—among scholars, particularly as the field of criminology has become more interdisciplinary (Loughran et al. 2016; Nagin 2007; Pratt 2008). And perhaps most notably, it has been widely embraced by policy makers, the citizenry, and punishment enthusiasts in general (Clear and Frost 2014; Pratt 2009; Tonry 2004). Part of the deterrence model’s appeal is that it has never strayed very far from its core theoretical principle: that criminal behavior should decline in the face of state-sanctioned punishments that are certain, swift, and severe (Matsueda, Kreager, and Huizinga 2006; Nagin, Solow, and Lum 2015; Piliavin et al. 1986; Tittle 1980).

Over the last several decades, criminologists have devoted most of their energy toward assessing the effects on criminal behavior of the certainty and severity of punishment (Apel and Nagin 2011; Paternoster 1987; Pratt et al. 2006). By comparison, the criminogenic consequences of how swift a punishment is implemented—what is known as “celerity”—has received far less scholarly attention over the years (Clark 1988; Kleck and Barnes 2013; Zettler et al. 2015). To be sure, it has long been common practice among deterrence scholars to acknowledge in their assessments and reviews of deterrence theory that we do not know a whole lot about the celerity

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<sup>1</sup> We make the same distinction here that others working in this tradition do (see, e.g., Loughran et al. 2016); namely, that the deterrence perspective—with its focus on punishments for crime (and therefore its costs)—falls within the broader rational choice tradition specified by Becker (1968) that emphasizes the full spectrum of costs/benefits and incentives/disincentives for behavior. Thus, our focus in this chapter is on deterrence theory and not necessarily the rational choice tradition writ large.

of punishment, yet at the same time there has not been a concerted effort to fill that gap in the literature (Gibbs 1975; Grogger 1991; Nagin 1998; Nagin et al. 2015). Even so, the apparent lack of knowledge about potential “celerity effects” of punishment is not necessarily viewed as undermining empirical support for deterrence theory overall (Nagin 2013).

It appears, then, that the issue of celerity has been treated like the neglected middle child of the deterrence family. Yet the idea that we know precious little about celerity of punishment may actually be more of a social construction than an empirical one. True, we might know less about it than we do about the certainty or severity of punishment (Apel 2013; Jacobs and Piquero 2013; Paternoster 2010). But that does not mean that we know nothing about it. Indeed, there is a literature on the effects of the timing of punishment—a literature that has been growing steadily since the 1960s (see, e.g., Azrin and Powers 1975; Lerman and Vorndran 2002; Moffitt 1983; Van Houten and Rolider 1988). The problem is that the bulk of this work has been produced outside of criminology in fields like applied and developmental psychology—places where criminologists coming out of either sociology or behavioral economics may not be inclined to look (see, e.g., the discussion by Bushway and Reuter 2008).

And the lack of attention paid by criminologists to the timing of punishment is particularly unfortunate since, even dating back to the writings of Bentham and Beccaria, celerity has always been a fundamental component in deterrence theory. Beccaria (1986[1764]:36), for example, explicitly noted that “the more promptly and the more closely punishment follows upon the commission of a crime, the more just and *useful* will it be” (emphasis added). It is therefore the swiftness of punishment that should cause a person to associate the penalty with their bad behavior—a sentiment echoed rather loudly a few centuries later by work in psychology and neuroscience (Abramowitz and O’Leary 1990; Blank et al. 2013; Grace, Thompson, and Fisher

1996). If too much time passes, the potential for the association to form in one's mind is lost and ultimately the punishment—regardless of how certain or severe it is—risks losing its bite (see also Deater-Deckard et al. 2003). This fact was recognized long ago by Watson (1924:183), who stated that “The idea that a child's future bad behavior will be prevented by giving him a licking in the evening for something he did in the morning is ridiculous.” Viewed in this way, celerity of punishment is every bit as important as the other components of deterrence theory.

Accordingly, in this chapter we review the empirical literature on the effects of the celerity of punishment. And in doing so, our discussion is organized into three main sections: (1) what the criminological literature has to say about the influence of the celerity of punishment on criminal behavior, (2) what the experimental work done in laboratories says about these same potential celerity effects, and (3) the criminological implications of the findings gleaned from both of these bodies of work. Our broader purpose in undertaking this review is place a spotlight on a key component of deterrence theory that we feel should be taken much more seriously by criminologists than it has been thus far.

## **CELERITY IN CRIMINOLOGICAL RESEARCH**

In what was really the first systematic effort to examine celerity effects in the criminological literature, scholars began assessing the relationship between the timing of state-based executions and aggregate homicide rates (Bailey 1980; Shepherd 2004; Wright 2009; see also Radelet and Borg 2000). Criminologists have long been interested in the potential effects of capital punishment (Archer, Gartner, and Beittel 1983; Radelet and Akers 1996; Sellin 1967; Sutherland 1925). Few, however, had actually examined whether faster executions serve as a

deterrent to future homicides and, conversely, whether a more drawn-out process between an offender's conviction and ultimate death sends a less scary message to would-be homicide offenders (e.g., compare Geerken and Gove 1975; Gibbs 1977; Jeffrey 1965). The collective results of this body of macro-level work are pretty clear in that there is no relationship between homicide rates and the timing of executions (Pratt and Cullen 2005).

But deterrence theory is arguably a perceptual theory—one that requires individual-level data on how punishments play out in people's minds (Paternoster et al. 1982; Piquero et al. 2012; Zimring and Hawkins 1973). And to that end, there is a small but growing roster of studies that have assessed the swiftness of punishment (e.g., arrest) on individuals' patterns of criminal behavior. This work has examined celerity effects with respect to general offending (Kleck et al. 2005; Nagin and Pogarsky 2004; Pestello 1984), as well as the effect of the timing of punishments on particular kinds of offenses like illegal substance use (O'Connell et al. 2011) and drunk driving (Loughran, Paternoster, and Weiss 2012; Nagin and Pogarsky 2001). While exceptions exist (Yu 1994; Zettler et al. 2015), the general pattern revealed in this body of work is that celerity effects of punishment are nonexistent, and that even when present it can be difficult to disentangle such effects from other potentially confounding influences, like the perceived (or actual) certainty or severity of punishment.<sup>2</sup> So again, the pattern is pretty clear that faster punishments appear to have little to no consistent, independent effect on one's future criminal behavior.

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<sup>2</sup> Aggregate-level studies of potential celerity effects on drunk driving outcomes, including traffic fatalities and accidents, generally reveal null results (Tavares, Mendes, and Costa 2008; Vingilis et al. 1988). And those that do indicate a non-zero celerity effect also suffer from the same problem of the inability to separate the effects of swiftness of punishment from the other elements of deterrence (Legge and Park 1994; Wagenaar and Maldonado-Molina 2007).

But there is still another place in the criminological literature where we can look for potential celerity effects: the work on the effectiveness of correctional interventions. Corrections—particularly in the United States—has long been a sympathetic home for deterrence theory’s principles (Blumstein, Cohen, and Nagin 1978; Clear 1994; Cullen and Jonson 2017). In embracing an almost childlike faith in the power of punishment, we have implemented *Scared Straight* programs modeled on the notion that delinquency can be cured by letting prison inmates threaten kids with bodily harm (Finckenauer 1982; Maahs and Pratt 2015); we have expanded the use of boot camp prisons where it is assumed that the key to desistance from crime is doing push-ups and making your bed, and being yelled at for not doing a good enough job at either (MacKenzie et al. 1995; MacKenzie and Farrington 2015; Welsh and Rocque 2014); and we have enacted baseball-themed “three strikes” laws aimed at incapacitating habitual offenders (Stolzenberg and D’Alessio 1997; Zimring, Hawkins, and Kamin 2001). Policies and programs like these contain heavy doses of the certainty and severity of punishment, but programs that incorporate celerity have been conspicuously absent from the correctional arena. That is, until Project HOPE.

Project HOPE (Hawaii Opportunity Probation with Enforcement) originated in the state of Hawaii as a new model for probation. It was began by a single influential judge who was fed up with a system of weak and delayed sanctions for behavioral transgressions that he thought enabled probationers to thumb their noses at the conditions of their supervision. The program entailed the imposition of graduated sanctions along with swift punishment—in the form of immediate jail time—for any administrative infraction, including flunking a urine test and failing to make it to a meeting with the probation officer (Alm 2011). In an initial evaluation, the use of quickly-enforced incarceration revealed the existence of significant celerity effects (Hawken and

Kleiman 2009)—findings that advocates of the program used to successfully trumpet its implementation elsewhere around the country (Bartels 2015; Hawken 2010a, 2010b).<sup>3</sup> Yet like many a punishment fad before it, subsequent evaluations of Project HOPE programs elsewhere (e.g., Washington, Alaska) failed to replicate such positive findings, and the case for significant celerity effects appears to be steadily dwindling with each new evaluation (Carns and Martin 2011; Duriez, Cullen, and Manchak 2014; Pearsall 2014). This reality recently led Cullen (2016) to declare Project HOPE to be “hopeless.”

Thus, the bottom line from the criminological literature is that there is no clear evidence of celerity effects in criminal justice processing. With few and isolated exceptions, this body of empirical work reveals a rather clear consensus that speeding up the time of arrest, prosecution, or incarceration appears to have no consistent effect on one’s future criminal behavior. But the case is not closed yet. There is a body of literature coming out of psychologists’ laboratories—one that has been steadily growing for decades—that might have something important to say about the potential for celerity effects of punishment.

### **CELERITY IN THE LABORATORY**

Manipulating the timing of punishment in the “real world” is hard, if not virtually impossible. Indeed, resistance to the implementation of experimental designs from criminal justice policy makers, administrators, and the rank-and-file has been well-documented (Farrington 2003; Sampson 2010; Weisburd 2000). But controlling the timing of punishment in a

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<sup>3</sup> In the spirit of reassuring policymakers around the country that Project HOPE was not merely a local success—one that may have been contingent upon a particular context—advocates of the HOPE program suggested changing the “H” in the acronym from “Hawaii” to “Honest” (see Duriez et al. 2014).

laboratory is, by comparison, a lot easier (Azrin and Powers 1975; Grace, Thompson, and Fisher 1996). And beginning in earnest in the 1960s,<sup>4</sup> researchers started doing just that. Using both rats and college students as research subjects, much of this work involved the use of a jolt of electric shock as punishment for a task failure. On the one hand, potential objections over treating rodents and young adults as interchangeable in a punishment context are understandable, and there are likely legitimate concerns regarding whether we can learn anything of importance about punishing criminals by shocking rats (or college kids, for that matter). Yet even so, on the other hand the results of studies based on the two groups of subjects ended up being rather similar: punishment is most effective when it is immediate, and even brief delays (10 to 20 seconds) can significantly compromise the effectiveness of the punishment (Abramowitz and O’Leary 1990; Banks and Vogel-Sprott 1965; Baron, Kaufman, and Fazzini 1969; Camp, Raymond, and Church 1967; Trenholme and Baron 1975).

The problem of the decaying effects of “delayed punishment” is so consistent and well-documented that a second generation of experimental research took hold that attempted to uncover the techniques that might help to compensate for such delays (Epstein 1984; Lerman and Vorndran 2002; Rodriguez and Logan 1980). Most of these methods involved a heavy educative component—one rooted more firmly in the broader social learning tradition (e.g., operant conditioning) than in more narrowly-focused deterrence principles (Bandura 1971; Baron and Galizio 1983; Skinner 1953). The gist of this work is that when punishment is delayed—even if only by a few minutes—in order for it to still be effective it must come with a clear

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<sup>4</sup> There were a handful of studies in psychology that addressed the timing of punishment prior to the 1960s, but these efforts were not really part of a broader research agenda (see, e.g., Bevan and Dukes 1955; Kamin 1959; Sidman 1954; Warden and Diamond 1931). As a result, they never really exerted much of a scholarly influence over research examining the consequences of punishment. Thus, the long-standing neglect of the celerity of punishment was certainly not confined to criminology.



verbal/cognitive component so that the person being punished can connect his/her behavior to the punishment (Cohen 1968; Rolider and Van Houten 1985; Van Houten and Rolider 1988).

As this work continued to develop, the evidence pouring in about potential celerity effects of punishment still remained mixed (Vogel-Sprott and Banks 1965; Tough et al. 1971; Walters, Parke, and Cane 1965). But even in being mixed, this body of work presents a slightly more positive picture of celerity effects relative to the criminological literature. In particular, many of these studies would at least find a bivariate relationship between celerity of punishment and problematic behavior—a finding that would be pretty rare in criminological studies (Clark 1988). Yet even in studies that revealed positive findings, the celerity effects were almost always mediated upon the inclusion of other cognitive and personality factors like verbal intelligence, decision-making skills, or capacity for self-regulation (Gray et al. 1982; Howe and Brandau 1988; Howe and Loftus 1996).

Of course, even in light of these results, we would be remiss if we did not give voice to those who have long been skeptical of the applicability of laboratory experiments to the study of criminal behavior in general. Some scholars are confident that the findings generated from inside of laboratories will translate just fine to the social reality outside of them (Chopra 1969; Singer 1970). Others, however, see the “perfect tyranny” of the laboratory—a place where conditions can be tightly controlled by the researcher—as fundamentally disconnected with the “haphazard” nature of punishment as it exists in the real world (Newman 1978; Zimring and Hawkins 1973). We cannot say either way which side of this debate is closer to the truth. But what we can say is that it appears as though empirical support for the existence of celerity effects for punishment becomes less and less likely the closer one gets to measuring actual criminal behavior as it occurs in real life.

The bottom line is that the empirical evidence in support of the existence of a meaningful celerity effect of punishment is, at best, scattered and inconsistent. But the one thing that is abundantly clear is that if there is going to be a significant celerity effect, it will pop up when people start to feel the punishment (the cost) while the benefits of their criminal behavior are still being enjoyed and are therefore still fresh in their minds. The next task, then, is to think carefully about what this all means for both the explanation criminal behavior and for its potential control through deterrence-based policy mechanisms.

### **CRIMINOLOGICAL IMPLICATIONS**

Given that the criminological literature has failed to detect any consistent effect of quick arrest, prosecution, or sentencing on people's future criminal behavior, and that the psychological literature indicates that the impact of punishment starts to fade if it is delivered even seconds too late, the core criminological implication of this reality is a sobering but simple one: *implementing celerity of punishment into the criminal justice system in a meaningful way is a practical impossibility*. The criminal justice system is not built for speed. And in the context of deterrence theory, there is long-standing debate concerning whether hurrying things up is even a good idea. Some have argued instead that the drawn out process of getting arrested and fingerprinted, having to hire a lawyer to help mount a defense, taking the time to travel to court (perhaps multiple times), and being forced to sit through lengthy legal proceedings is actually a more severe and impactful punishment in the long run (Feeley 1979). So if it is truly the case that "the process is the punishment," a focus on celerity in criminal justice processing may inadvertently undermine the effects of punishment in the long run.

Either way, the closest we are ever going to come to achieving real celerity of punishment is to catch someone in the act of committing a crime. There is some evidence in support of this idea with respect to focused deterrence practices (see Braga and Weisburd 2012). These strategies generally entail more aggressive and localized policing strategies for particular kinds of offenses (e.g., drug dealing, prostitution, auto theft, gun violence; see Braga, Apel, and Welsh 2013; Braga, Hureau, and Papachristos 2014; Tillyer, Engel, and Lovins 2012). Such strategies rely on the direct observation of criminal behavior in an effort to induce “restrictive deterrence”; that is, to get would-be offenders to stop (or at least change) their behavior in response to sanctions (Gibbs 1988; Jacobs 2010; Moeller, Copes, and Hochstetler 2016). There is also now a growing roster of studies demonstrating the effectiveness of these approaches in suppressing crime—at least in the short term (Braga and Weisburd 2015; McGarrell et al. 2006).

Yet arrest is but one form of punishment. And aside from the displeasure of being arrested (or of being interrupted in the pleasure of committing the offense), all of the rest of the punishment comes later—often far later—long after whatever celerity effects might have existed have worn off. Take, for example, even Project HOPE’s “immediate” incarceration for probationers who fail a urine test. Right at the outset it is important to note that failing a probationer on a urine test is not the same thing as catching them in the act—it is highly unlikely that an offender will partake in their drug of choice while sitting in the probation officer’s presence. Instead, the scenario is more likely to look like this: an offender smokes his stash of heroin on a Monday, tests positive for opiates on a Friday, and is incarcerated on the spot for his offense. In this instance, his punishment is only swift by criminal justice standards—a place where the bar is already set pretty low. Indeed, since the punishment (jail time) will inevitably

happen well after the actual offense occurred, there is little reason to expect any kind of celerity effect to play much of a role in shaping the offender's behavior.

The empirical evidence thus seems to suggest that, at least when it comes to celerity of punishment effects in criminal justice policy, we should just let it go and instead focus our efforts on other crime control approaches that have a better empirical track record. We can, for example, take a more therapeutic—as opposed to punitive—approach to juvenile justice (Evans-Chase and Zhou 2014; Koehler et al. 2013); we can integrate techniques into our policing practices that enhance citizens' perceptions of procedural justice and legal legitimacy (Tankebe, Reisig, and Wang 2016; Tyler 2006; Wolfe, McLean, and Pratt 2016); we can employ cognitive-behavioral treatment approaches in both community and institutional corrections (Dowden and Andrews 2000; Landenberger and Lipsey 2005); and we can structure prisoner re-entry services in ways that help them cope with what are often harsh economic and social realities (Holtfreter, Reisig, and Morash 2004; Petersilia 2003). Put simply, there are a lot of evidence-based practices that we can adopt to help reduce crime without getting distracted by the false hope that rushing offenders to jail as quickly as we can will somehow solve the crime problem.

But that does not mean celerity of punishment is wholly irrelevant. Instead, we argue here for our second criminological implication of the work reviewed above: *thinking about and studying celerity of punishment is likely to be most useful outside of the confines of the criminal justice system*. In particular, if celerity of punishment is to be delivered in a way that is consistent with the psychological literature on the subject, it will likely happen in the context of the direct supervision and early socialization of children. Put simply, celerity effects should be most closely tied to effective parenting.

The importance of the direct supervision of children—where their activities are monitored and their misbehavior is observed and corrected immediately—has long been noted across a wide array of academic disciplines. To be sure, the effects of direct control<sup>5</sup> and immediate reinforcement contingencies (including punishment) are well documented in the developmental psychology literature on the effects of parenting on children’s behavior (Conger et al. 1994; Patterson and Southamer-Loeber 1984; Surjadi et al. 2013). This work consistently demonstrates that delayed, inconsistent, or erratic parental discipline is associated with a range of psychoemotional and behavioral problems in children, including depression, anxiety, and aggression (Ge et al. 1994; Smith et al., 2014). The criminological literature echoes these findings, where studies show that effective parental supervision/monitoring tends to translate into higher levels of self-control and lower levels of delinquent behavior among children (Hay 2001; Perrone et al. 2004; Pratt, Turner, and Piquero 2004). The importance of direct control is even reflected in institutional and community settings, such as in schools and in interventions for high-risk kids and families (Henggeler et al. 2009; Turner, Piquero, and Pratt 2005). It is therefore clear from this literature that, when it comes to socializing children, direct control—and the swift punishments that come with it—matters.

It is nevertheless important to note that celerity of punishment—however important it may or not be—should not be viewed in isolation, as if it is divorced from all of the other factors that also contribute to effective parenting. Good parenting is a complex task, a task that entails

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<sup>5</sup> The notion of direct control that we are referring to here is probably most familiar to criminologists in the form of Gottfredson and Hirschi’s (1990) general theory of crime, where they essentially rejected Hirschi’s (1969) earlier work that emphasized the role of indirect control—where kids’ bonds to their parents, for example, would result in parents’ “psychological presence” as a control mechanism even when they were not there physically. Instead, Gottfredson and Hrschi (1990) stressed the importance of parents exerting direct control over their children—monitoring their behavior, recognizing deviance when it happens, and punishing their kids for it right away.

not just swift punishment for problematic behavior, but also warmth and support, a heavy dose of positive reinforcement when kids do things well, and the careful teaching of prosocial cognitions, thinking patterns, and coping skills (Baumrind 1996; Simons et al. 2005). And it is equally important to note that these parenting effects—whether they are tied to the celerity of punishment or not—will have diminishing returns over time, since the literature is clear that parenting effects are age-graded and become less important over the life course (Sampson and Laub 2005; Steinberg, Elmen, and Mounts 1989).

Viewed in this way, even at its best the celerity of punishment is but one potential part of a larger whole of what may ultimately contribute to healthy childhood socialization, which in turn may help adults to live healthy and productive lives later on. And what is more, that larger whole is likely to bear little resemblance to the simple sanction-based cost/benefit view of human behavior set forth by deterrence theory. Humans are not simple, nor is our behavior. Any effort to paint us otherwise is likely to be doomed from the start.

## **CONCLUSIONS**

In general, deterrence theory has not fared very well as an explanation of criminal behavior. Some scholars will most certainly disagree with this assessment (Apel and Nagin 2011; Cornish and Clarke 2014; Nagin 1998; Piquero and Tibbetts 2002), and we remain sympathetic to the notion that opinions can vary (see, e.g., Pratt, Turanovic, and Cullen 2016). Nevertheless, hundreds of studies at both the ecological and individual levels (Paternoster 1987; Pratt and Cullen 2005; Pratt et al. 2006), along with hundreds more on the lack of effectiveness of deterrence-based approaches in corrections (Andrews et al. 1990; Lipsey 1995; Petrosino,

Turpin-Petrosino, and Finkenauer 2000), all point to the same general conclusion: the variables specified by deterrence theory are, at best, only weakly associated with offending. This is not our opinion of what this literature reveals—it is what the *literature actually reveals*.<sup>6</sup> And in the present context, it seems as though the accumulated evidence on the effects of the celerity of punishment on criminal behavior—effects that in the current state of the literature appear to be modest at best—serves to reinforce that general conclusion.

Given the empirical status of the core elements specified by deterrence theory, we argue here that as a field we are now faced with pursuing one of two options as we move forward. First, the deterrence perspective can be modified or otherwise altered—an approach that would be wholly consistent with repeated efforts by criminologists over the years to rescue it by revising it in new and important ways. To be sure, these efforts have come in a variety of forms, including incorporating sanction-induced, non-legal costs of crime, such as anticipated shame and embarrassment, into the deterrence equation (Grasmick and Green 1980; Paternoster and Simpson 1996). Scholars have also developed contingency models where criminal sanctions are assumed to have nuanced effects on criminal behavior depending on certain personal characteristics and individual differences, like one’s level self-control and their bonds to prosocial institutions (Nagin and Paternoster 1993; Piquero et al. 2011; Sherman 1993). New

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<sup>6</sup> We make this statement based on the results provided by the meta-analyses and systematic reviews of the deterrence literature cited in this paragraph. We nonetheless recognize that not everyone is a fan of meta-analysis (Ferguson 2014; Logan and Gaes 1993). Some scholars might therefore prefer to gauge the empirical status of an idea based on a more selective reading of the literature and by singling out particular studies as evidence of an its empirical support—an approach that has proven to be problematic given the “replication crisis” currently plaguing the social sciences (Ioannidis 2005; Makel, Plucker, and Hegarty 2012; Open Science Collaboration 2015). So while a few studies can be plucked out that show strong deterrent effects, to avoid making what might end up being an inferential error, such studies have to be placed alongside the heaps of others that fail to show the same thing. And when that happens, deterrence theory does not hold up all that well empirically.

sources and methods of potential deterrence have also been specified, like the potential effects of vicarious punishment experiences (Stafford and Warr 1993), and how focused deterrence policing strategies can suppress particular crimes in particular places (Braga and Weisburd 2012; Engel, Tillyer, and Corsaro 2013; Moeller, Copes, and Hochstetler 2016). And some of the most recent revisions to the deterrence tradition are extremely sophisticated theoretically and analytically, including Bayesian updating (Anwar and Loughran 2011), and a more explicit focus on the potential benefits of crime (Loughran et al. 2016). These developments have been vital to the field, keeping it energized and sparking vigorous debates about some of our most important ideas (e.g., compare Braga and Apel 2016; Cullen and Pratt 2016; Kleck 2016; Nagin 2016; Pickett and Roche 2016).

We suspect that this is the route the field will take with respect to deterrence theory. We certainly take no issue with continuing to modify the deterrence perspective and, if done well, we absolutely welcome it. There is still plenty of additional theoretical territory that may be worthy of exploration. One avenue that might be particularly useful to focus on would be to shift our focus away from the criminological consequences of the cost/benefit analysis that happens in people's heads and to instead treat the components of that "rational calculus" as the key dependent variables of interest. We could thus ask the deterrence question in a different way: what are the important individual and contextual factors that shape why some people perceive the costs of criminal behavior to be too high to engage in it? Alternatively, what kinds of individual and contextual factors influence why some people perceive the benefits of criminal behavior to be so high that they outweigh the costs?

The literature looking at the elements of deterrence in this way has already begun, but it is still in its infancy and we know far less about it than we would like to (see, e.g., Kim, Wallace,



and Pratt 2014; McGloin and Thomas 2016; Piquero 2016; Piquero and Tibbetts 1996; Thomas, Loughran, and Piquero 2013). But if it were to continue, pursuing this line of thinking could bring back into the conversation the variables specified by so many other theories that deterrence currently seems to be pitted against (e.g., self-control, social learning, social disorganization perspectives). Doing so would also require viewing the variables from rival theories as theoretically relevant sources of influence that can shape and constrain one's perceived costs and benefits, as opposed to some collective nuisance that needs to be controlled statistically in order to isolate the effects of the factors we really care about. And perhaps most importantly, taking this route might help deterrence theory—and even the broader rational choice perspective it is housed within—to creep closer to the status of a “general theory” of criminal behavior.

But there is, however, another option available to us. Rather than tweak deterrence theory yet again, we could simply declare it to be a weak explanation of criminal behavior and leave it at that. Of course, any effort to hang the label of “weak” on an idea in criminology has always incurred the wrath of that idea's supporters. As but merely one example of this (albeit a rather vivid one), think of the recent statement that many of the findings concerning the well-established social and environmental influences on kids' delinquency (e.g., parenting, deviant peer influences, economic disadvantage) may be an artifact of failing to control for biological confounds (Beaver et al. 2015; Connolly and Beaver 2014; Wright et al. 2008). Pushback on this idea occurred immediately, with scholars coming to the defense of social and contextual effects and the debate escalated quickly from there (Burt and Simons 2014; Simons et al. 2016). And within the deterrence literature, efforts to describe the theory's empirical status as weak are met with the charge that such a conclusion is too “blunt” (Loughran et al. 2016: 107), and that the search should continue for the elusive nuanced condition under which deterrence variables

strongly predict offending. Blunt though it may be, the body of evidence pointing to deterrence theory's weak effects is large and consistent. So if scholars choose to call it weak they should expect to have their critics, but they will not have any trouble marshaling evidence to defend themselves.

In the end, the fact that a choice even needs to be made between these two options—whichever route we end up taking—might ultimately end up sparking a broader discussion that criminologists have historically avoided. In particular, how much negative (or at best weak) evidence has to accumulate before we decide that a theory has run its course and that our scholarly efforts are likely to be better spent elsewhere? In criminology, we get rid of nothing. We are theoretical hoarders, saving everything and piling up stacks of ideas whether they have the weight of empirical evidence behind them or not. Of course, we want to be clear that we are not necessarily advocating that we need to “clean house” theoretically and that deterrence theory should be swept into the criminological dustbin in the process. But maybe now is the time to at least start the conversation.

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