CORRECTIONAL THEORY

CONTEXT AND CONSEQUENCES

SECOND EDITION

FRANCIS T. CULLEN
CHERYL LERO JONSON

5

Incapacitation

Locking Up the Wicked

James Q. Wilson
Harvard University and
University of California at Los Angeles
Author of *Thinking About Crime*

In January of 2010, Arnold Schwarzenegger rose to give his final State of the State address as Governor of California. Arnold, as he was fondly known from his Terminator days, might have organized his speech around many topics, including the enduring recession that left the economy in shambles and the state facing record budget deficits. But he did not. Instead, Arnold chose to talk about the folly of mass incarceration—of making the policy choice to invest scarce resources in sturdy bars and walls rather than in people and human capital. He proposed a state constitutional amendment that would require allocating more of the public treasury to colleges than to prisons:

> Spending 45% more on prisons than universities is no way to proceed into the future. What does it say about a state that focuses more on prison uniforms than caps and gowns? It simply is not healthy. I will submit to you a constitutional amendment so that never again do we spend a greater percentage of our money on prisons than on higher education. (Schwarzenegger, 2010)

What was the reaction? Did Californians wonder if Arnold was suddenly juicing up on steroids and going a bit nuts? Was he thinking oddly because the Kennedy family connection through then-wife Maria Shriver had finally warped his mind? Were there calls to deport him to his native land of Austria where he could find comfort among European socialists? Had the Terminator become flabby on crime? Strangely, the answer to these questions is a resounding *no*. Indeed, the *Los Angeles Times* captured the response with its headline, "Arnold Schwarzenegger Hits the Right Note" (Skelton, 2010, p. 1).

Back in 1975, James Q. Wilson, a famous Harvard University political scientist, had resonated with a different national mood in the final words to his provocative book, *Thinking About Crime.* "Wicked people exist," said Wilson (1975), and "nothing avails except to set them apart from innocent people" (p. 235). At that time, crime rates had soared, and the state and federal prison population was still hovering "at only" around 240,000. Locking up wicked people did not seem like such a bad idea. Today, however, prison populations are more than six times higher. Paying for this mass incarceration is a daunting challenge. As Arnold notes, money spent on "prison uniforms" does mean money not spent on "caps and gowns"—or on mental health services, health care, elementary schools, or highways. Is this the choice we want to make?

As Arnold recognized, California corrections was in crisis (Petersilia, 2008). The system, Joan Petersilia wrote in 2008, "has deteriorated from being one of the best systems in the country to being dysfunctional" (p. 211). A state's inmate population that stood at just 23,264 in 1980 now came to exceed 174,000 (Cullen & Gilbert, 2013; West & Sabol, 2008). Once, California spent only 3% of its budget on prisons and 10% on higher education. Now corrections had jumped up to the 10% figure, and higher education had slipped to 7% of the budget. In raw numbers, the allocation to corrections exceeded $9 billion a year, or over $34,000 per adult inmate per year behind bars (Petersilia, 2008). For this investment, Californians saw about two thirds of released inmates returned to prison within three years. To use Reiman's (1984) words, this seemed like a system "designed to fail" (p. 9).

Alas, Arnold did not prove to be the Terminator of mass imprisonment in California. Few signs existed at the time of his farewell address that the state's prison population could be substantially rolled back or that prison conditions would markedly improve (Page, 2011; Simon, 2014). Not long before, California had been a bellwether state in using prisons as a central means of crime control, including passing three-strikes-and-you're-out legislation (Kruttschnitt & Gartner, 2005; Page, 2011; Simon, 2014; Zimring, Hawkins, & Kamin, 2001). Still, as the reception his remarks received indicated, there was a growing sense that mass imprisonment was not such a great idea after all. Indeed, across the nation, enthusiasm for incarceration showed signs of waning. In 2009, state prison populations did not rise for the first time since 1977 (West & Sabol, 2010). The number of inmates had grown a lot (77%) in the 1990s, but in the decade starting in 2000, the average yearly increase dipped to 1.3% per year (Matthews, 2014, p. 120). The deep financial crisis that started in 2008 further heightened concern about the associated mass imprisonment (Aviram, 2015). Political rhetoric about prisons being economically "unsustainable" became commonplace. The United States also was in the midst of a lengthy decline in crime, extending from the early 1990s into the present time (Tonry, 2014; Zimring, 2007). Law and order receded as a political issue, rarely being mentioned in elections (more generally, see Petersilia & Cullen, 2015). Meanwhile, scholars at this time wrote book after book decrying the stupidity of the nation's orgy on incarceration. The titles of their books give a powerful message. Here we will list only five of them:

- Sasha Abramsky (2007), *American Furies: Crime, Punishment, and Vengeance in the Age of Mass Imprisonment.*
- Todd R. Clear (2007), *Imprisoning Communities: How Mass Incarceration Makes Disadvantaged Neighborhoods Worse.*
- Michael J. Lynch (2007), *Big Prisons, Big Dreams: Crime and the Failure of America's Penal System.*
- Bert Useem and Anne Morrison Piehl (2008), *Prison State: The Challenge of Mass Incarceration.*
- Travis C. Pratt (2009), *Addicted to Incarceration: Corrections Policy and the Politics of Misinformation in the United States.*

Put another way, it was as though someone jammed on the brakes of the mass imprisonment train, slowing it to a crawl but not fully halting its momentum. Then something truly dramatic happened. The U.S. Supreme Court assumed Arnold's role as the Terminator of California's mass incarceration. In May of 2011, the Court issued a historic decision in *Brown v. Plata*. In a 5–4 decision, with Justice Kennedy writing the opinion, the justices "required California to bring its swollen prison population down to 137 percent of the capacity of its thirty-three prisons within two years by any means the state chose" (Simon, 2014, p. 133). Numerically, this meant reducing the prison population by about 35,000 inmates. As Justice Kennedy notes, conditions inside the state's prisons had deteriorated so much as to be unconstitutional: "A prison that deprives prisoners of basic sustenance, including adequate medical care, is incompatible with the concept of human dignity and has no place in a civilized society" (quoted in Simon, 2014, p. 133).

Later in 2011, Governor Jerry Brown signed the Public Safety Realignment Act. The goal of "realignment"—as it has become known—was to have more convicted offenders penalized in local counties than transferred to the state system (Petersilia & Cullen, 2015). The story of how this will all work out remains to be told. For our purposes, the critical impact of realignment is that "California has embarked on a prison downsizing experiment of historic proportions" (2015, p. 27). Or as Simon (2014, p. 135) notes, "California has instantly become the leading example of the shift away from state prison." As such, downsizing—moving away from mass imprisonment as the central correctional policy of our era—is now a viable option. As the California experience unfolds, downsizing will remain on the agenda across the nation (see Turner, David, et al., 2015). Indeed, what seemed impossible not long ago—not just the end of mass imprisonment but seeing prisons as a problematic response to offending—is now part of contemporary correctional discourse. Put another way, it is no longer taken for granted in policy circles that locking up the wayward is a prudent thing to do. To borrow the title of Simon's (2014) recent book, mass incarceration is now on trial.

All this does not mean that mass incarceration is ended—only the *movement* to keep prison populations endlessly rising seemingly has halted. With more than 1.5 million inmates in state and federal prisons and a couple of million behind bars as you read this book, it is not as though we have embarked on a mass deinstitutionalization movement. Mauer and Ghandnoosh (2013) put this matter in perspective. They note

approvingly that between 2011 and 2012, the U.S. prison population declined 1.8%. Then they calculate a sobering empirical fact: "Still, at this rate, it will take until 2101—88 years—for the prison population to return to its 1980 level."

But again, we cannot jump to conclusions. Reality can be complex. Take, for example, the field of medicine. Tens of millions of operations are undertaken in the United States every year, with 230 million surgeries occurring worldwide. Not only are the costs exorbitant, but each year these procedures leave 7 million people disabled and 1 million dead—"a level of harm that approaches that of malaria, tuberculosis, and other traditional public health concerns" (Gawande, 2009, p. 87). Are we addicted to surgery? Maybe. But, of course, the key consideration is how many people would have been disabled or died had the surgeries not been performed. That is, the surgical numbers seem high, but is the *health effect* worth it?

This same consideration must inform the debate over incarceration—mass or otherwise. Cullen and Jonson think we lock up way too many people in the United States. Nonetheless, we also are scientists who believe that the wisdom of mass incarceration ultimately must be decided on the basis of evidence. If the *incapacitation effect* is large—that is, if the amount of crime prevented by keeping offenders behind bars rather than on the street is large—then having more than 2.2 million criminals incarcerated on any given day might be a good thing. If there are 2.2 million wicked people out there, then maybe we should be locking them all up. Maybe we should be spending more on prisons than on universities. Maybe we should tell Arnold to shelve his constitutional amendment—that for California, it is better to have a state that is safe and stupid than a state that is dangerous and smart.

The key issue, then, is how much crime is saved by incapacitating people. Deciphering the size of the *incapacitation effect of imprisonment* is not easy. It involves complex statistical estimations, most of which involve using funny Greek letters (it is a good thing that Jonson married into a Greek family, because Cullen now assumes she can read and understand all the funny Greek symbols in the statistical equations). The other problem is that the numbers do not speak for themselves. Let's assume that locking up an offender for a year prevents four crimes that would have been committed had this person roamed free on the street. Would you say that *only* four crimes were saved or that *fully* four crimes were saved? Guess what? Liberals tend to use the word *only,* whereas conservatives tend to use the word *fully.*

But for now, we will give you the punch line of what we find when scrutinizing the evidence in the remainder of the chapter. It comes in three parts:

- There is an incapacitation effect, and it is meaningfully large. Prisons prevent crime. Letting people out of prison will increase criminal victimization.
- It is deceptive to compare the amount of crime saved by placing an offender in prison compared with *doing nothing* and allowing the offender to *roam free on the street.* The proper comparison, which is never done in incapacitation research, is how much crime would be saved if we used a similar amount of money and *invested it in alternative correctional interventions.*
- Prisons should be used judiciously and only as part of a comprehensive plan to intervene effectively with offenders.

In this chapter, we first discuss two issues that form the basis of a policy conundrum when it comes to incapacitation: We have too many prisoners, but also too many criminals who could easily be put into prison. Solving this problem—we lock up offenders excessively but there is no shortage of people to lock up—is not easy. Even the scholars who use Greek symbols do not help us much with this challenge. After this analysis, we spend some time on the concept of incapacitation, reminding the reader of the difference between selective and collective incapacitation. We then turn our attention to the core of the chapter: estimating the size of the incapacitation effect.

Too Many Prisoners

On any given day, America imprisons more than 2.2 million offenders. Already, we have cited this figure about 10 times. I think that, as readers, you get the point: There are a whole bunch of Americans behind bars. We do not really need to beat it into the ground, do we? Still, some perspective is needed to reinforce Cullen and Jonson's conclusion that the current use of imprisonment in the United States is exceptional. We make three observations.

- *First, other nations do not use prisons nearly as much as we do.*

This does not mean that the United States is an inordinately vindictive country. Still, when cross-national comparisons are conducted, America is especially harsh in its treatment of drug offenders (Bewley-Taylor, Hallam, & Allen, 2009). For most other crimes, the United States is at or near the top of the international list when it comes to handing out prison sentences. For example, Blumstein, Tonry, and Van Ness (2005) assessed eight advanced nations' punitiveness for the crimes of homicide, rape, robbery, residential burglary, assault, and motor vehicle theft. (In addition to the United States, the countries were Australia, Canada, England and Wales, the Netherlands, Scotland, Sweden, and Switzerland.) Blumstein et al. (2005) concluded that the "United States was the most punitive country for nearly all the crime types, especially when punitiveness is defined narrowly as expected time served per conviction" (p. 375). Cullen and Jonson put it this way: When in doubt, America incarcerates; other nations tend not to do so.

Table 5.1 presents some very telling numbers. We should note that these figures vary slightly year to year and by the source of the data. As we write this, some reports have the United States' incarceration figure as just north of 2.2 million. But regardless of slight variations in the details, the story is the same.

Now, as seen in Table 5.1, in terms of raw numbers, the United States incarcerates roughly 559,000 more individuals than China and roughly 1.5 million more than Russia (*World Prison Brief,* 2013). Such raw numbers can be deceiving because they do not standardize for population size. Of course, big countries will have lots of prisoners because they have lots of people to start with. To get around this statistical problem, scholars compute an *incarceration rate*—in this case, the number

of those locked up per 100,000 people in the population. No problem; the United States ranks first in the world with an incarceration rate per 100,000 of 698. (Actually, Seychelles ranks first with a rate of 799 per 100,000 people, but the country is so small that it only incarcerates 735 people—so it does not make too much sense to put them into the rankings here.) Notably, Russia lags behind the United States with an incarceration rate of 455. In Europe, after Russia, the highest imprisonment rate is found in Belarus with a rate of 335, followed by Lithuania with a rate of 315, and Georgia with a rate of 281. These rates are all less than one half of the rate found in the United States (*World Prison Brief,* 2013). So, let's all chant: "We're number 1; we're number 1."

Indeed, we are. Although accounting for only 5% of the world's population, the United States houses almost 22% of the over 10 million people incarcerated worldwide. Thus, more than one in five people incarcerated in the world are locked up in the United States (*World Prison Brief,* 2013). With four times America's population, China houses only 16% of the world's incarcerated offenders. Together, China and the United States are cornering the prison market. They control roughly 40% of the world's imprisoned population, with the remaining 193 countries accounting for the other 60%.

As we have noted and will do again shortly, the rise in America's prison population over the past 40 years has been remarkable. But the majority of nations worldwide have not followed our example (Tonry, 2007). In Europe, the Scandinavian countries of Denmark, Norway, and Sweden have had stable imprisonment rates of between 40 to 71 prisoners per 100,000 population for the last half century (Lappi-Seppala, 2007; *World Prison Brief,* 2013). Germany also has had stable imprisonment rates for the last 25 years; it has hovered around 90 inmates per 100,000 population and has lowered in recent years (Weigend, 2001; *World Prison Brief,* 2013). Imprisonment rates in Finland actually decreased substantially from 1965 to 1990 and now have stabilized around 60 inmates per 100,000 population (Lappi-Seppala, 2007; Tonry, 2007; *World Prison Brief,* 2013).

Admittedly, the United States is not the only nation to have increasing incarceration rates. But what makes America exceptional is the length and the enormity of its prison expansion. For example, although England and Wales and New Zealand have shown substantial increases in their imprisonment rates, this has occurred only since the 1990s (Newburn, 2007; Pratt, 2007; Tonry, 2007). Similarly, after approximately three decades of falling or stable prison populations, the number of inmates in Japan increased 15% between 1990 and 2005 (Johnson, 2007). The key fact, however, is that even with these changes, other nations' use of prisons remains substantially below the United States'. Thus, as of 2013, the imprisonment rate per 100,000 population for England and Wales stood at 148, New Zealand at 190, and Japan at 49 (see Table 5.1) (*World Prison Brief,* 2013). One other telling fact: The United States still has an incarceration rate roughly 3 to 14 times higher than these nations.

What about Canada, our friendly neighbor to the north? Cullen, in particular, likes Canadians because they are serious about ice hockey, a sport Cullen played in college. Cullen was a fairly inept goaltender, which meant he spent a lot of time on

Table 5.1 The Prison Population Rate and the Raw Number of People Incarcerated for Various Countries Around the World, 2013

Country	*Prison Population Rate per 100,000 National Population*	*Raw Number Incarcerated (including pre-trial detainees/ remand prisoners)*
United States	698	2,217,000
Russia	455	656,618
Mexico	214	256,941
New Zealand	190	8,641
Australia	151	35,804
England and Wales	148	85,743
Spain	141	65,581
China	119	1,657,812
Canada	106	37,864
France	100	66,761
Germany	76	61,872
Netherlands	75	12,638
Norway	71	3,710
Japan	49	61,794

SOURCE: *World Prison Brief* (2013).

the bench. Cullen was not very good at stopping pucks shot at the "five hole," which is between the goalie's legs (holes one to four are at the corners of the net). Discussing his prowess in the nets, Cullen made the mistake one day of telling his teammates that he was "weakest between his legs." This comment was repeated to him the rest of the season.

Cullen likes Canada not only for its ice hockey but also because it sits to the north of us and presents a good case for comparison. Americans feel superior to Canadians, but Cullen and Jonson notice that our northern neighbors tend to do things that we do not. They succeeded in getting health care for all their citizens put into place, whereas we are still struggling to do so. Want to see Niagara Falls? Go to the Canadian side. Canada also has a lower crime rate. However, its crime rate tends to follow the United States'—though at a much lower level. If our crime goes up, so does Canada's. This is important because it means that Canada's incarceration rate also should track ours. Of course, it does not.

In his cross-cultural comparison, Brodeur (2007) demonstrates that countries that cluster together geographically and culturally seem to incarcerate people at roughly the same rate. Specifically, he found that within five clusters (e.g., Nordic Council countries, Central European countries, the Baltic countries, the Caribbean, and the Indian subcontinent), the countries had remarkably similar imprisonment rates. The United States and Canada share one of the world's longest common borders, second only to the border shared between Russia and China (Brodeur, 2007).

Due to this geographic proximity, one would expect Canada to be similar to the United States in terms of its incarceration rates (Brodeur, 2007). Again, this is not the case; the cluster rule does not apply. While the United States' incarceration rate has skyrocketed since the 1970s, the rate in Canada has remained relatively stable at around 100 inmates per 100,000 population (Ouimet, 2002; Webster & Doob, 2007). The latest figures place the rate at 106. Despite the cultural, economic, and geographic similarities between the two countries, America's rate of imprisonment is about 6.5 times higher than that of Canada (*World Prison Brief,* 2013).

- *Second, the United States' incarceration rate is high because we want it that way.*

To be sure, a bunch of factors have contributed to America's exceptionally high use of prisons. These factors include, for example, the growth from 1970 to today in the nation's population from around 200 million to about 320 million and increases in the total number of arrests. More inputs result in higher prison populations. Still, over the past four decades, politicians have promised us that they would get tough on crime. They have urged that more offenders be arrested and that more be convicted. They have instructed community corrections officials to watch offenders more closely and to return them to prison not just for new criminal acts but for a host of infractions that have little to do with the supervisees' dangerousness. They have participated in a virtual orgy of legislative punitiveness, passing law after law that sought to put more offenders behind bars for longer periods of time. Unless our elected officials were inept, they have succeeded in what they intended: They have made the United States the leading prison industry in the world. Again, why did this happen? "In the most literal sense," notes Michael Tonry (2004), "the explanation is that American politicians adopted unduly harsh policies and the public let them do it" (p. 11).

Another way to understand this issue is to envision the *counterfactual.* That is, what would America's incarceration rate look like today if elected officials had not spouted get tough rhetoric for nearly 40 years and had been deeply concerned about the possible over-use of imprisonment? To be sure, prisons would still exist and house hundreds of thousands of offenders. But we also might have had the political will to create a vast system of high-quality community corrections agencies that might have intervened earlier and more effectively in the lives of offenders. Even if some form of *mass corrections* was difficult to avoid, *mass incarceration* was not inevitable.

- *Third, because the size of the prison population is a choice, Americans could decide to use imprisonment more judiciously.*

Anyone at all familiar with imprisonment in America is likely to assume that prison populations have *always* been rising in the United States. Why is this so? Well, because for the last four decades—the better part of many of our lives—this certainly has been the case. Indeed, prison populations have risen so much that, on any given day, there are more than *2.2 million* offenders behind bars—oops, there

is that darn figure again! A study by the Pew Charitable Trusts in 2008 made a lot of headlines by reporting that this big figure means that, on any given day, 1 in 100 Americans is behind bars. Today, the gap has widened a bit to 1 in 110 (Glaze & Kaeble, 2014). But you get the point: Whether the statistic is 1 in 100 or 1 in 110, the ratio is astounding and makes us pay closer attention to the real human costs of mass imprisonment.

Furthermore, until the last few years, inmate populations in the United States had been steadily rising. Between 1990 and 1999—the space of a decade—the federal prison population increased over 100%, from 65,526 to 135,246. The state prison population rose from 708,393 to 1,231,475—an increase of about 74%. The rise thereafter has been slower, but still is pushing forward. By yearend 2008, the federal prison population had jumped more than 60,000 to 198,414, whereas the state prison population stood at 1,320,145 (Sabol et al., 2009). The latest available figures—for yearend 2013—place the count at 195,098 federal inmates and 1,321,781 state inmates (Carson, 2014). But let's go back even further in time. Let's start, again, in 1990, where the total number of inmates in state and federal prisons was 773,919. In 1980, the total was less than half this number: *315,974.* Now, get this: In 1970, the total in state and federal prisons was *under 200,000* (196,429). Thus, in the last four decades, prison populations have increased more than *seven-fold.*

Right now, then, the size of America's prison population seems on an unstoppable march upward. But, again, it was not always the case. There was a time when the country was not ensnared in this upward spiral of imprisonment. Different choices were made about how much to use prisons as a possible solution to crime.

In fact, in 1973, two well-known criminologists—Alfred Blumstein and Jacqueline Cohen—wrote a theoretical article to explain why America's prison populations always seemed to be *stable!* They called it "A Theory of the Stability of Punishment." Blumstein and Cohen (1973) were amazed to discover that there had been relative stability in punishment in the United States between 1925 and the early 1970s. In the half century following 1925, the imprisonment rate per 100,000 Americans averaged under 108, and the number of inmates rose mainly in proportion to the growth of the general population.

Take a look at Figure 5.1. This is what Blumstein and Cohen saw. If you were in their shoes in 1973, you would have been wearing bell-bottom pants! And you would have authored a theory of stability and assumed that this pattern would have continued. Why? Because we always assume that what has existed in the past will exist in the future. Unfortunately for Blumstein and Cohen, the past was not to be the future. Talk about bad timing to write a theory prognosticating the stability of punishment!

So, take a look at Figure 5.2. What happened after 1970? The incarceration rate per 100,000 did not remain stable. Instead, it started on a four-decade steep upward trajectory. Again, there are complex reasons for this dramatic shift in the use of prisons. But as we have said, a key sustaining force nurturing the mass imprisonment movement was that a whole bunch of politicians were telling American voters that they were going to lock up offenders and passed a host of laws to see that this happened. Put another way, being number one in the world in imprisonment is not an Act of God but a policy choice. In the time ahead, we could choose a different path.

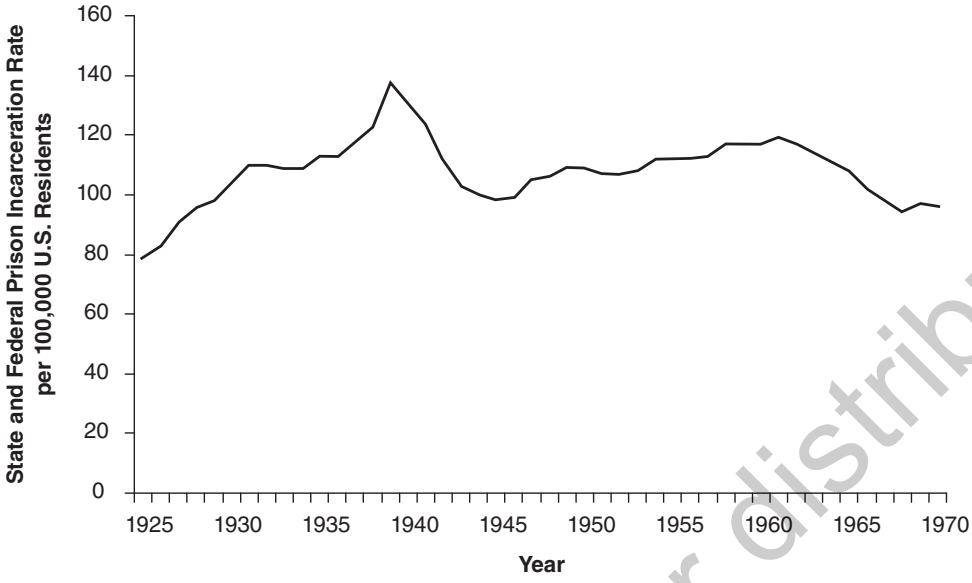

Figure 5.1 State and Federal Prison Incarceration Rates, 1925–1970

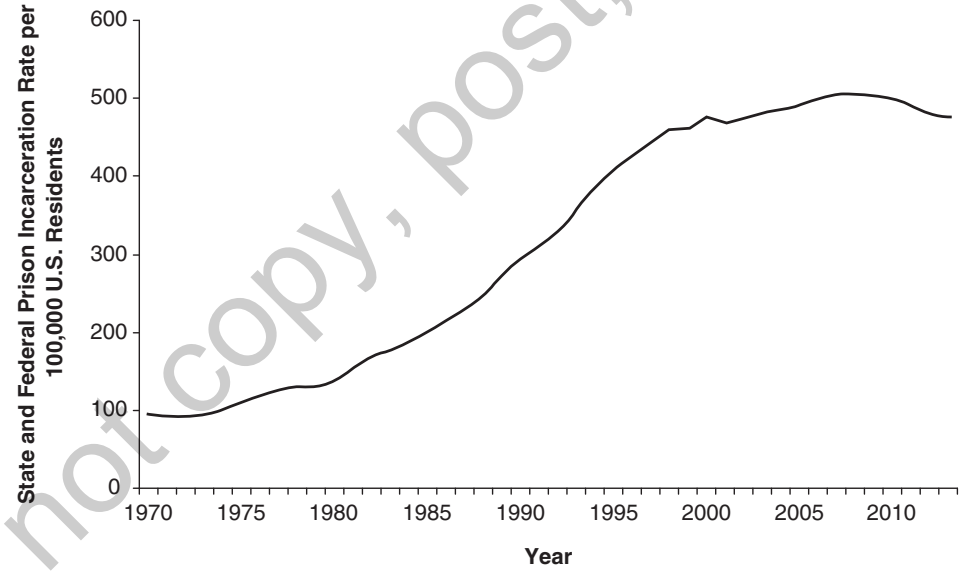

Figure 5.2 State and Federal Prison Incarceration Rates, 1970–2013

Importantly, the issue arises as to *why we wished to lock up so many Americans.* What did policy makers hope to accomplish? They favored lengthy prison sentences in part out of a desire for retribution—to exact just deserts on offenders for the harms they caused—and for deterrence—to teach folks that crime does not pay (see Chapters 3 and 4). But the logic behind many laws aimed at increasing the use of imprisonment was simply to *get offenders off the street.* That is, to *incapacitate* offenders.

This view is built on the premise that if offenders are not in society, then they cannot victimize innocent citizens (apart from correctional staff and each other). The beauty of this approach is that it can promise to reduce crime *without ever having to change offenders.* Whereas rehabilitation wants to change who offenders are and deterrence has the task of making offenders worry about getting punished, incapacitation can ignore the offender altogether. It merely has to put offenders in a cage to stop their ability to commit crime.

The logic is much like that of a zoo in which dangerous predators—like lions—are placed behind sturdy bars. To be safe from victimization, we do not need to tame the lion ("rehabilitate the lion") or make the lion afraid of us with a whip and a chair ("deter the lion"), but rather to stay on the other side of the bars. And if we just lock up enough offenders, then the population of active criminals loose in society will dwindle to the point that crime rates will bottom out. We can, in short, incapacitate ourselves out of the crime problem!

The power of incapacitation, then, is its appeal to our *common sense.* But as with other policies in corrections, the issues surrounding incapacitation are complex and cannot be adequately assessed merely by appealing to common sense. In general, there are two considerations that are intimately involved in any assessment of the merits of incapacitation as correctional philosophy:

- Imprisoning offenders is expensive; it costs a lot of money. In most state budgets, money spent on prisons cannot be spent on other needs. At issue, then, is how much incapacitation we can afford.
- As we will see, it is indisputable (in our view, at least) that prisons reduce crime rates. The key issue, however, is: *How much?* Further, we must ask whether crime saved due to incapacitation exceeds that saved due to other interventions with offenders. That is, the issue is: *Compared to what?*

As might be anticipated, the financial costs of prisons and how much crime is saved by prisons are often interrelated in policy discussions on imprisonment. Thus, the more crime that prisons prevent from occurring through incapacitation, the more "cost effective" they will be. That is, if a substantial amount of crime is saved by locking up offenders, then the money spent on massive imprisonment might well be a prudent investment. If the crime savings are minimal, then devoting immense sums of money to building and maintaining prisons would be difficult to justify.

More Than Enough Criminals

As a nation, we like to speak of *American exceptionalism.* This means that the United States is different. By *different,* we really mean *better*—as in, for example, that we, as a people, value freedom and accept others from all over the globe to become Americans.

But in corrections, American exceptionalism is more a source of national embarrassment than pride. It entails using prisons more than any of the other 194 nations on the planet. With over 170,000 residents locked up, California and Texas have a *state* prison population that exceeds that of all but six *nations* worldwide, not counting America (*World Prison Brief,* 2013). We also seem to have lost our way. Once, American corrections was the exemplar for the world. We used our prisons judiciously and led the way in efforts at offender treatment. Now, we have prisons filled to the brim, well over capacity. Many inmates sit idle and return to society unprepared for reentry. As John Irwin (2005) calls it, we have created the *warehouse prison.*

Cullen and Jonson thus think we have lost our way and have too many prisoners. This troubles us because our research shows—as reviewed in Chapter 4 on deterrence—that imprisonment either has no effect on, or increases, recidivism. Does it make sense to keep cramming offenders into warehouses when the result is that they come out no better or even worse?

This way of putting things is, of course, a loaded question meant to elicit the answer "no." But because Cullen and Jonson are honest scientists, we have to admit that there is a way to respond to this question with a "yes." Thus, if there is a large *incapacitation effect,* then the crime saved *while the offenders are behind bars* might make this nasty business worth it. Prisons might have become warehouses, but if they function to lock up truly wicked people, then so be it. As Americans, we may not be proud of our prison warehouses, but they will make us safer in our neighborhoods. Better to be safe than sorry.

The conundrum for bleeding hearts such as Cullen and Jonson is that incapacitation advocates among us have a point: *At any given moment, there are more than enough criminals available that most of us would like to see locked up.* So, we have too many prisoners but more than enough criminals to be prisoners. Let's probe this conundrum a bit further.

What this debate hinges on is this: *Who is in prison? How criminal are inmates? Are they mostly low-risk losers or wicked super-predators? If released, will they mostly use and sell drugs, take property if left unguarded, and get into stupid fights (the losers)? Or will they rape, rob, and shoot (the predators)?* To be honest, despite more than 2.2 million inmates sitting behind bars every day of the year, neither criminologists nor policy makers can tell you with any precision the level of criminality among the nation's prison population. This is an amazing oversight—an incredible gap in our basic knowledge when so much money and human lives are at stake. But if ignorance and corrections are two circles in a Venn diagram, the unfortunate reality is that they overlap a great deal.

Most criminologists ascribe to the view that prisons are filled with low-level chronic property offenders and a whole bunch of drug offenders needlessly incarcerated in the nation's ill-conceived war on drugs (see, e.g., Irwin & Austin, 1994; cf. Matthews, 2009). The gist of this educated guess is that about half the people in prison now are low-risk offenders who we could release without increasing the crime rate in any serious way (for an informed analysis, see Sabol & Lynch, 1997).

The alternative view is that offenders have to work hard to earn their way into prison. One study of persistent offenders (based on self-reported crime) found that only 63% are ever arrested (Barnes, 2014). Even for those brought into the system, they often repeatedly break the law and escape imprisonment until a frustrated judge sees no option except to lock them up. Most have lengthy criminal records not only as adults but also as juveniles. Many will have engaged in hundreds of crimes never detected (Farrington, Jolliffe, Loeber, & Homish, 2007). Indeed, over half of state prison inmates were sentenced for a violent crime. When those sentenced to prison for property and drug offenses are examined closely, it is discovered that they often have committed a range of other criminal acts—the kind of victimizations none of us would define as unserious (Bennett, DiIulio, & Walters, 1996; see also Matthews, 2009). Recidivism rates of released inmates also paint a discouraging picture. Depending on the state and how recidivism is measured, upwards of two thirds of offenders end up back in prison. And this is only for what they were caught doing. We explore this issue in Chapter 8 on prisoner reentry.

The scary thing is that there is also a whole bunch of people not in prison who the average citizen would think should be. Remember, there are more than 4.7 million offenders on probation (3.9 million) or parole (more than 853,200)—1 in every 51 adults in the United States. Let's just look at the probationers (Herberman & Bonczar, 2014). About one in five (19%) is on probation for a violent offense. Hmm, that's a touch disconcerting. If there are 3.9 million offenders on probation and one fifth committed a violent crime, then this means that there are well over 700,000 violent criminals not behind bars. Half of those on probation, in fact, were convicted of a felony—and this is after plea bargaining reducing their charges had taken place for most of them (Herberman & Bonczar, 2014). Nationally, the number of felony offenders not sentenced to prison was 30% for robbery, 41% for sexual assault, 53% for burglary, and 59% for aggravated assault (Petersilia, 2008). Although their 1991 data are a bit old now, Bennett et al. (1996) put the matter in stark terms that remain true today:

> Based only on the latest conviction offenses that brought them to prison, the 162,000 probation violators committed at least 6,400 murders, 7,400 rapes, 10,400 assaults, and 17,000 robberies while "under supervision" in the community an average of 17 months. (p. 185)

So, again, there is the policy conundrum we face: The United States has too many prisoners but also more than enough criminals who are excellent candidates for being locked up. Whether we should keep or place all these offenders in prison is a tough question to answer. It depends on two considerations. First, how much crime do we really save if we imprison offenders? What is the size of the *incapacitation effect?* We deal with this crucial empirical issue shortly. Second, what else might we do with these offenders that is as effective as incapacitation but that involves more than warehousing them? We address this matter in later chapters.

The Concept of Incapacitation

To reiterate, incapacitation is the use of a criminal sanction to physically prevent—or make impossible—the commission of a crime by an offender. It is possible to do this through sanctions such as home confinement or capital punishment (which is pretty damn preventative!). But to be realistic, when we talk about incapacitation, we are talking about putting offenders in prison. Also to reiterate, the *incapacitation effect* is the *amount of crime that is saved—or does not occur—as a result of an offender being physically unable to commit a crime.* Finally, there are two types of incapacitation. These really are different ways or strategies for how to do incapacitation. These are *collective incapacitation* and *selective incapacitation.* We discuss each of these below.

COLLECTIVE INCAPACITATION

Christy Visher (1987) defines *collective incapacitation* as "crime reduction accomplished through traditional offense-based sentencing and imprisonment policies or changes in those policies, such as imposing mandatory minimum sentences" (pp. 514–515). What the heck does that mean? Well, essentially, it means two things:

- First, we take *everybody* who falls into a certain category. This might be *everybody* who commits a crime carrying a gun; or everybody who commits a third serious felony; or everybody who sells drugs over a certain limit. Now, the notion of *everybody* is important because it is this feature that makes the incapacitation *collective.*
- Second, we then take everybody in this *category* and we put them in prison—we *incapacitate* the collective.

As we will see in more detail below, any *category of offenders* is made up of people who commit crimes at different rates—that is, there are high-rate offenders and low-rate offenders (and others in between!). Thus, when a third felony in a three-strikes-and-you're-out law causes an offender to receive a mandatory life sentence, it may be that a lot of crime will be prevented because a high-rate offender is off the streets. But some three-strikes offenders commit crimes at low rates. Imprisoning them for life makes little sense.

The main *benefit* of collective incapacitation is that it does not care if low-rate offenders are kept in prison for lengthy periods of time. That cost is worth it, because in casting the net wide, all high-rate offenders in the group are put behind bars. However, the main *problem* of collective incapacitation is—*surprise, surprise!*—the same thing: It does not care if low-rate offenders are kept in prison for lengthy periods of time. But the long-term incarceration of low-risk offenders is an inefficient crime control strategy. When low-rate offenders remain endlessly

behind bars, we must spend enormous sums of money to pay for prison cells that are not giving us much crime savings. Of course, there is also the issue of *justice.* We are imprisoning these low-risk offenders for what they *might do in the future—even though they would never have committed these prognosticated criminal acts.*

Now, do you see where this discussion is headed? How might we make incapacitation more efficient (and just)? The answer is that we should not lock up everyone in a category. Instead, we should *select out* the high-rate offenders and give them the lengthy prison terms. This is, of course, the notion of *selective incapacitation.* We will return to this issue shortly. Before doing so, however, we wanted to note that most policies using imprisonment in America have been based mainly on the idea of *collective incapacitation.* This means that many high-rate offenders are taken off the streets, but it also means that the cost of this policy has been inflated prison populations that have drained tax monies. This is a trade-off. Whether this trade-off is worth it—whether this money has been wisely spent—is a policy decision for you to consider as we proceed through this chapter.

SELECTIVE INCAPACITATION

Criminologists note that when it comes to how much people offend, there are *individual differences* or *heterogeneity in criminal propensities.* One possibility is that when people break the law, they all commit the same number of offenses. In this case, there would be homogeneity, rather than heterogeneity in offending. But this is generally not how human behavior "works." In most types of behavior—whether it is crime, playing sports, or drinking alcohol—some people do not do it at all, many people do it a little (or in moderation), and a few people do it a lot. Again, this is what we mean by individual differences or heterogeneity.

What are the implications of the heterogeneity insight for criminology? It is that a relatively small group of people tend to commit a high proportion of the crimes, especially serious crimes. Where did we get this idea? A number of studies have shown this pattern in offending, but one of the earliest—and the most famous—is a now-classic study conducted by Marvin Wolfgang, Robert Figlio, and Thorsten Sellin. This study was published in 1972 in the book *Delinquency in a Birth Cohort.*

Wolfgang et al. studied the criminal records of a "cohort" of nearly 10,000 boys born in 1945 who had lived in Philadelphia from the age of 10 to 18. A cohort means all the kids born in a single year. By age 18, almost 35% of their sample had a criminal record. But most of this group had only one or two police contacts. Among the cohort, however, 627 youths had five or more offenses. The researchers called this group *chronic offenders.* And despite constituting only *6% of the cohort,* these chronic offenders accounted for over half the crimes committed: 69% of all aggravated assaults, 71% of all homicides, 73% of all rapes, and 82% of all robberies! What an amazing finding!!!

Now, we want to call your attention to the *6%* figure. This figure is often cited in news reports on crime. It is the most *incorrectly* cited figure in the history of criminology—maybe in the history of all social sciences! You probably think

Cullen and Jonson are kidding, but we are not. Almost always, this figure is cited in this way: "6% of the *offenders* accounted for over half the crime." Is this what we said above about the study? The answer is, "No." Instead, we said "6% of the *entire cohort* accounted for over half the crime."

You are probably sitting there wondering why we are going into this criminological minutia. You might be thinking that we preparing you for *Jeopardy.* "Well, Alex, I'll take irrelevant criminological facts for $200." But we are not. What is the difference between (1) 6% of a cohort and (2) 6% of the group of kids in the cohort who were offenders? Well, one refers to 6% of all the kids studied—offenders and non-offenders alike. And the other refers to 6% of those kids in the cohort who broke the law. These numbers are *not the same.* Why? Because 6% of the cohort actually means about *18% of the offenders in the sample.*

We are getting closer to the punch line here: Why was the 6% figure so important—the figure that is repeated over and over again? How does this help to make the practice of "selective" incapacitation possible? Well, think of it this way: If *only* 6% of the offenders account for most of the serious crime, all we have to do in order to reduce crime is to incapacitate this *small group of offenders.* That is, select out the chronic offenders for imprisonment and put the less serious offenders in the community (or give them short prison sentences). This also will be *cost effective* because we will be using just a little prison space to save a bunch of crime!

But what if the figure is not 6% but *18% of the offenders* who are *chronic.* You may still want to selectively incapacitate high-rate offenders, but the figure in question is now *three times higher* than that quoted in article after article! It is not going to be such an easy task to imprison only the chronic offenders because it is not that small of a group. Again, you still may want to do it, but the challenge would be more daunting.

Just to show you what we mean by the 6% figure being the source of much misunderstanding, let us cite a passage from a story in the *Los Angeles Times* that was published on August 23, 2001. Here California's Secretary of State was justifying the use of three-strikes laws: "So when you are talking about affecting the crime rate, we decided with three strikes to go after the 6% or so of criminals who do 60% of the crime" (Krikorian, 2001).

In the Wolfgang et al. study, the authors also noted that the chronic offenders were disproportionately non-White and poor, had low school achievement and IQ scores, and belonged to families that frequently changed residences. By implication, officials might have targeted these risk factors for intervention. We are digressing a bit here, but with a point. Just because a group of chronic offenders exists does not mean that the *only* policy implication is that they should be locked up. We can also identify their *root causes*—that is, the conditions that produce chronic offenders—and attack them. Thus, the Wolfgang et al. Philadelphia cohort study could have led to a policy agenda that stressed not locking people up but fundamental social reform.

The scholar who did most to link the Wolfgang et al. study—and its 6% finding—to incapacitation was James Q. Wilson. You might recall Wilson from the first part of this chapter. He is that one who said in his classic *Thinking About Crime* (1975)

that "wicked people exist" and that "nothing avails except to set them apart from innocent people" (p. 235). What he meant more precisely is that 6% of us are wicked and we should set these folks apart. Wilson (1975) put it this way:

> Out of the ten thousand boys, however, there were six hundred and twenty-seven—*only* 6 per cent—who committed five or more offenses before they were eighteen. Yet these *few* chronic offenders accounted for over half of all recorded delinquencies and about two-thirds of all the violent crimes committed by the entire cohort. (p. 224; emphasis added)

Again, few among us would argue with the general point that prison space should be reserved for serious, chronic offenders. But the cleverness of Wilson's argument was that he made incapacitation seem easy. Note his use of the words *only* and *few* in the above quote. There is just a small group of wicked people out there. Let's just select them out and incapacitate them. But what if Wilson had been more forthcoming and had not used the 6% statistic? What if he had said that 18% of the offenders in the cohort were chronic criminals, which would have been more accurate? This percentage would not have seemed so tiny and so easily managed. Imprisonment might not have seemed like the only or the best option.

As a Harvard political scientist, Wilson gave considerable credibility to the idea that we could substantially reduce crime by *selectively incapacitating* the wicked 6%. Whereas most criminologists at that time were calling for broader social reform, Wilson's policy prescription seemed easily within reach. In short, he legitimized imprisonment as the central tool for controlling crime in the United States. His analysis also placed the 6% figure into the public policy culture where, again, it has been misused in the defense of imprisonment for more than four decades.

Throughout this discussion, we have largely assumed that the definition of *selective incapacitation* was understood. But let us turn again to Visher (1987) for a formal definition of this concept:

> Selective incapacitation is an attempt to improve the efficiency of imprisonment as a crime control strategy by tailoring the sentencing decisions to individual offenders. A collective incapacitation strategy would require similar sentences for offenders convicted of the same offense. . . . when a selective incapacitation strategy is at work, however, offenders who are thought to pose the greatest risk of future crimes become the prime candidates for incarceration and for longer prison sentences. (p. 515)

What this means, of course, is that if 100 robbers are standing before the court, a collective incapacitation approach would be to imprison *everybody.* A selective incapacitation approach would be to imprison *only* the subgroup of robbers who will turn out to be *chronic offenders.* Importantly, as Visher (1987) notes, the "key to reducing crime through selective incapacitation policies is the ability to identify offenders who will commit serious crimes at high rates in the future" (p. 525). This leads us into the quagmire of prediction. That is, can we predict which of the offenders about to be sentenced by the court will be the chronic offenders, especially if they have similar criminal records?

There are *three* problems that prediction—as used for selective incapacitation at the time of sentencing—faces:

- *Can we do better than judges already are doing?* Judges already make predictions about who will be a recidivist and who will not. To improve on what prisons are already accomplishing, the instrument would have to out-predict the judge. Of course, this assumes that even if an accurate instrument were available, judges would use it in place of their own judgment. Remember that legal training is not scientific; judges are not required during or after law school to take a single course in criminology or corrections. They sentence based on the law and predict future criminality based on personal experience—not hard data. No evidence-based sentencing for them. I think you can guess what Cullen and Jonson think about this!
- *The prediction instrument can include only certain factors.* Let us assume that factors such as race, age, and gender predicted recidivism. If we wanted to predict future criminality, we would want to include these factors in our prediction instrument. Why couldn't we do this? Ever hear about *discrimination*? Would it be fair, for example, to give an *individual* man a longer sentence just because, *as a group,* men are more criminal than women? Our point is that some predictors of recidivism just cannot be included in a prediction instrument used by the courts.
- *The prediction instrument is likely to rely only on static factors, not dynamic factors.* A static factor is something such as a person's criminal record. It is static because an offender can never change it (i.e., can never reduce it). A dynamic factor is something such as *antisocial attitudes.* Those can change; an offender can reduce antisocial attitudes and replace them with prosocial attitudes, which does, in fact, lower his or her chance of recidivating. Notably, the best prediction instruments used in corrections (mainly for treatment) combine static and dynamic predictors (Andrews & Bonta, 2010; Smith, Cullen, & Latessa, 2009). At the time of sentencing, however, the prediction instruments tend to use only static factors; this is a one-time assessment and thus they do not follow offenders to see if dynamic factors do actually change. As a result, these prediction instruments are often not very predictive.

This is not to say that some prediction is not possible. Even so, being able to build an instrument to predict accurately—with only certain information available and doing so *at the time of sentencing*—is very difficult. Later in the process, where one can collect and use more information about an offender, prediction becomes more accurate. But at sentencing, the ability to predict with accuracy is not easy.

This leads us, finally, to another problem that is inherent in selective incapacitation: the problem of *false positives.* False positives are offenders that an instrument predicts (falsely) will become recidivists who, in fact, do not. As an analogy, think of a drug test: These offenders come up positive in the test (i.e., on the prediction instrument). But the problem is that they are not actually positives—they actually will not reoffend. As such, the *positive* result is *false.*

The prediction instruments developed for selective incapacitation are so limited that they often do not predict much better than chance. In the best cases, they still have a large number of false positives. This raises two issues:

- When the proportion of false positives is large, the efficiency of selective incapacitation is low. Selective incapacitation is cost effective only if it picks out the high-rate offenders. But if the prediction instrument falsely identifies low-rate offenders as being in the high-rate category, a lot of offenders end up sitting in prison—and costing money—who should not be there.
- There is the issue, again, of justice: Is it fair to lock up someone for many years on the basis of a prediction instrument that cannot tell who is and is not a false positive? A false positive is sort of like a false conviction. To be sure, the offender is not innocent. But he or she is innocent, so to speak, of being a chronic offender. Even so, the offender may be given a prison sentence that covers most of his or her life.

Estimating the Incapacitation Effect: Studying Individual Offenders

As we probe the relative merits of competing correctional theories, it is clear that readers who suffered through those boring social science courses on *methods* will now see that their suffering was not wasted! We constantly have to think carefully about what *methodology* needs to be employed to measure accurately the *effects* of various correctional policies. In most cases, trying to show what actually exists out there in reality is a significant challenge. We often have to use different strategies, conduct multiple studies, and overcome biases in the data to estimate these policy effects.

What really aggravates Cullen and Jonson is when policy makers (*who often don't know any better*) and criminologists (*who should know better*) make pronouncements about the effects of policies in which they fully ignore the many methodological factors that might make their pronouncements either misleading or just plain wrong. In the end, we have to make policy decisions as to what to do with offenders. But make no mistake about it. Knowing what the evidence says on these issues takes considerable analysis of the data or, in the least, listening to those scholars who have actually done considerable analysis of the data.

This discussion is a prelude to our attempt to assess the size of the incapacitation effect. As we embark on this task, it is important to appreciate *three* things:

- Making an estimate of incapacitation involves very complex methodological issues.
- Despite the methodological challenges, we probably have a general sense of what the incapacitation effect might be.
- Whether this effect is large enough and/or can be specified precisely enough to be the basis of an effective correctional policy remains to be seen. In fact, it is something that cannot be settled definitively.

Finally, as we explain shortly, there are two strategies for estimating the incapacitation effect. First, the *top-down approach* involves a macro-level analysis of punishment and crime. Remember, when we study macro-level data, *think of circles!* The unit of analysis is some ecological area, such as a state (which can be represented as a circle!). As in macro-level deterrence studies, this strategy examines how levels of incarceration across states predict crime rates. A negative correlation—higher incarceration leads to lower crime rates—would suggest the existence of an incapacitation effect. We review this approach in the section after this one.

Second, the *bottom-up approach* involves studying individual offenders and trying to use their offending patterns to estimate how much crime would be prevented if they were locked up. Remember, when we study individuals, *think of stick figures—not circles!* The unit of analysis is the individual, and thus we collect data on individuals, usually through surveys that ask them questions. We review this approach in this section. This discussion is divided into two parts. One focuses on *inmate self-report surveys*; the other focuses on *longitudinal studies.*

INMATE SELF-REPORT STUDIES

Do you know what a *self-report survey* is? Well, it is when members of a sample—it could be students in a high school, people drawn from the community, or prison inmates—are given a list of questions that ask them to report how many crimes they have committed. They are usually asked about their participation in criminal activity for a specific period of time (e.g., in the last month, over the last year, in their lifetime). Most often, they are asked about crime in the past year. This period is called the *reference period* for the survey. Each question on the self-report survey would correspond to a particular kind of offense. Here are some examples:

In the last year (before being imprisoned), how many times did you do any of the following:

- Armed robbery—threatened someone with a weapon in order to get money or something else.
- Beat up or physically hurt someone badly.
- Cut someone with a knife.
- Burglary—broke into a home or business in order to take something.
- Got into a fistfight.
- Forced someone to have sex with you.
- Threatened to hurt someone with a gun, knife, or other weapon.
- Sold hard drugs.
- Forged a check or other paper.
- Stole a car.

The list of offenses on a self-report survey could be short or could be long (e.g., 50 or more questions). Now, here is a methodological question for you: Do you think that the number and types of offenses listed on the self-report survey could affect one's findings on how much crime people commit? Yes! Depending on what offenses are listed, the study could come up with differing counts of how many crimes people in the sample commit. So, in any self-report study, be aware that how questions are asked can affect what the study finds.

There are, of course, other potential problems with self-report surveys (e.g., people not telling the truth when asked to report the amount of their offending). Criminologists have studied these issues in detail, and we are not going to go into the issues here (or we might never finish this chapter!). But let us offer this general conclusion: Although some biases exist, self-report surveys are a pretty good way of measuring participation of the *crimes listed on the survey.* Obviously, they cannot measure crimes that are not listed on the survey.

With this as a background, think of yourself as a criminologist who is asked to find out *how many crimes per year are saved simply by taking offenders off the street and imprisoning them.* What, in short, is the *incapacitation effect*? How would you find this out?

As has been discussed, one way is to ask offenders how many crimes they commit in a given period, such as a year. That is, we could give offenders a self-report survey and ask them to disclose how many crimes they committed the previous 12 months. If the survey were constructed well—such as to cover the crimes that most concern us (e.g., robbery, burglary, violence, drug offenses)—we might be able to estimate how many of these specific crimes offenders commit each year. And once we had this information, we could take the number of crimes the offenders reported committing each year and compute how much crime would be prevented by locking up each of these offenders.

One problem we would confront is finding enough offenders to fill out our survey. Can you think of a place where a bunch of criminals are located and are sitting around all day with nothing to do but fill out some criminologist's survey? Right—we have the researcher's dream: *the prison!* So, as noted, one way criminologists have used to estimate how much crime is saved through incapacitation is a *self-report survey of offenders who are in prison.* Ideally, this survey would be conducted as soon as inmates arrived in prison. In that way, their memories would be fairly fresh about the offenses committed over the survey's reference period (e.g., past 12 months).

Again, the empirical goal is to calculate the number of offenses the entering inmates committed over the past year. In this way, it is possible to estimate how much crime would be saved by taking them off the street and locking them up. The assumption is that offenders' criminality is stable: that the number of crimes in the past year would equal the number of crimes the offenders would have committed if not arrested and incarcerated.

Finally, criminologists use a fancy Greek term to label the rate of offending per offender per year: *lambda.* There is a funny symbol (sort of like an inverted "Y") that is used to indicate *lambda*—λ.

A number of inmate studies have been conducted to try to calculate λ (Visher, 1987). We will discuss but one here, a study by John DiIulio and Ann Morrison Piehl (1991), with the knowledge that the findings from this research are fairly consistent. In 1990, DiIulio and Piehl took a random sample of 7% of the male inmate population in Wisconsin. They then gave the inmates a self-report survey that asked mainly about theft, robbery, burglary, assaults, and drug offenses. What did they find?

DiIulio and Piehl report both (1) the average or mean number of offenses and (2) the *median* number of offenses. The problem with mean scores is that a few outliers—respondents who report an enormous number of crimes—can inflate the mean score. This can give a misleading portrait of what the criminality is for the typical offender. As you may recall from your statistics class, another statistical measure of central tendency is the *median.* The median is the *midpoint* in the distribution of cases (which in our study is the distribution of how many crimes offenders report committing in the past year, which might range from zero to several hundred or more). The median is the point at which half the cases fall below and half fall above. (For example, let's say that five offenders were surveyed and they reported committing this many crimes: 2, 3, 8, 15, and 39. The median or midpoint of this distribution of offending would be 8. There are two cases below 8 and two above.)

Here is the punch line. When DiIulio and Piehl use the median as their measure, the typical yearly crime rate per offender is 12. This number excludes drug offenses. When drug offenses are included, the median rises to 26. We can debate whether or not we want to include drug offenses when computing *crimes saved.* In a way, this depends on what kind of incapacitation effect you wish to compute and what you hope prisons to accomplish from a policy perspective. The value in having both figures is that it allows you to say how many regular crimes prisons save and how many drug offenses prisons save. This information may be relevant to different policy discussions.

But let's just take the *median* number of *crimes* saved: 12. This means that if a typical offender remains on the street, this individual will commit, on average, a *dozen* crimes or *one per month.* Cullen and Jonson certainly would not want this offender living in our neighborhoods! From this vantage point, the *incapacitation effect* thus seems pretty meaningful. For advocates of prison, this is good news. For bleeding-heart liberal criminologists, this empirical reality is disconcerting and cannot be ignored. But there is more to this story, as readers might have already imagined.

LONGITUDINAL STUDIES

As noted in Chapter 4 on deterrence, it is critical to examine different *types of evidence* when trying to calculate the effects of a criminal sanction. In this regard, the use of prison inmates is a potential problem because they are a select group of offenders and they are being asked to recall what might have occurred over the

previous year. Put another way, the inmate self-report studies are valuable, but we would have more confidence in their findings if similar results were produced by using an alternative method.

This is where longitudinal studies become relevant. This methodological approach follows a group of people—ideally a random sample of some population—for a number of years. Innovative researchers figured out that these data sets might allow them to investigate incapacitation. Why? Because some members of the sample would end up in prison at some point during the study. It might then become possible to estimate how many crimes they would have committed if they had not been locked up (see, e.g., Bhati, 2007; Blokland & Nieuwbeerta, 2007; Owens, 2009; Sweeten & Apel, 2007; see also Bushway & Paternoster, 2009).

Gary Sweeten and Robert Apel (2007) give an excellent example of this type of research. They decided to reanalyze the National Longitudinal Study of Youth (NLSY) data set. They were able to come up with 262 usable cases of sample members incarcerated between the ages of 16 and 19 in a jail, juvenile institution, or prison. What makes Sweeten and Apel's approach pretty neat is that it used a fancy statistical technique called *propensity-score matching*. Read their article if you are high on statistical prowess or statistical masochism, but we can explain their approach simply.

- First, take the 262 incarcerated youths.
- Second, based on a host of variables, match this group to youths in the sample fortunate enough not to have been incarcerated. The key issue is to make the two groups as similar as possible in their criminal propensity (which is why this is called propensity-score matching).
- Third, then look at how many offenses the matched sample of non-incarcerated offenders committed while the incarcerated group was locked up.
- Fourth, if the two groups—those locked up and those not locked up—are the same in their propensity to offend, then the number of crimes committed by the matched sample should be an excellent proxy for what those who were incarcerated would have committed. This is the *incapacitation effect*—the number of crimes saved.

From the National Longitudinal Survey of Youth, Sweeten and Apel used self-reported offenses to calculate criminal participation in:

- Intentional destruction of property.
- Petty theft (under 50 dollars).
- Major theft (over 50 dollars, including automobile theft).
- Other property crimes (e.g., fencing stolen goods).
- Attacking someone with the intent to commit serious harm.
- Selling illegal drugs.

The selection of these offenses is potentially problematic in two ways. First, it excludes a range of other kinds of crimes (e.g., robbery, burglary). Second, it includes offenses that are relatively non-serious and, as such, may not be of much concern to us when talking about putting offenders in prison (e.g., petty theft). Be that as it may, what did Sweeten and Apel find?

Although their lambda (λ) is lower than that found for the inmates, they too report a meaningful incapacitation effect of between 4.9 and 14.1 offenses. Specifically:

- For juveniles ages 16 and 17, the annual incapacitation effect is between 6.2 and 14.1 offenses saved.
- For adults ages 18 and 19, the annual incapacitation effect is between 4.9 and 8.4 offenses saved.

NOT SO QUICK: DON'T LOCK UP EVERYONE YET

So, studying incapacitation may seem simple. We do a self-report study and then calculate how many crimes per offender per year we save. The results seem straightforward. We are ready to tell what the incapacitation effect is and ready to make correctional policy. Right? Well, *not so quick!*

The problem is that we are assuming several things that may not be totally true. For example, we are assuming that each year an offender stays in prison, his or her lambda—his or her rate of offending—remains constant. That is, we get the same crime savings the first year an offender is locked up as we do the last year an offender is locked up. But this may not be true. There are a bunch of fine points like this that suggest that the incapacitation effect reported by these self-report surveys—such as that conducted by DiIulio and Piehl—is *inflated.* There are three issues to consider.

- *First, let us consider the issue just mentioned, which criminologists call the aging effect.*

We know that participation in crime declines with age (this is sometimes called the age–crime curve). The older people get, the less crime they commit. Can you figure out what implications this has for estimating the incapacitation effect? Well, it means that on a self-report survey, an offender—we will call him James—tells how many crimes he committed in the last year he was free in society. But how old was James at this time? Say he was 25. Now, as this inmate ages—gets older—what would his yearly crime rate (lambda) have been if he were still in the community? Say he was 35 or 45 years of age?

What this means, of course, is that putting James in prison might have saved 12 crimes a year at age 25, maybe 5 crimes a year at age 35, and 0 crimes a year at age 45. So, the incapacitation effect may well decline with age. Studies that do not take this into account, like the one by DiIulio and Piehl, mislead us as to how much

crime will be saved. They do not figure into their calculations the aging effect. To be sure, Sweeten and Apel's (2007) research did examine two age groups, but note that the estimated incapacitation effect for one year declined markedly from the 16- to 17-year-old group (between 6.2 and 14.1 offenses prevented) to the 18- to 19-year-old group (between 4.9 and 8.4 offenses prevented). This suggests that as offenders age in prison, the incapacitation effect diminishes.

- *Second, there is also something called the replacement effect.*

These studies assume that when offenders are in prison, the crimes they committed will no longer be committed. This assumes, however, that no offender's place will be taken by another person. But, in fact, it is possible that the crime position vacated by the offender might be filled—and filled by someone who might not have committed any crime had not this crime position become open (sort of like filling a job position after someone leaves; the same amount of work continues to be done by the person's replacement).

We do not really know what the size of the replacement effect is. Most obviously, the replacement effect is probably high for drug-selling offenses. When one offender is locked up, there is a supply of others willing to take his or her place. For homicide or rape, the replacement effect may be low and hover near zero. For crimes committed in groups—like, say, burglary or robbery—unless all members of the group are imprisoned, some replacement is likely to occur. Group members are likely to recruit a replacement and keep committing the same number of crimes as they did before one of their members was sent to prison. The upshot of all this is that locking up a single offender does not always prevent as much crime as advocates of incapacitation suggest.

- *Third, there is something called the labeling effect.*

This idea comes from labeling theory and was discussed in the last chapter. We do not know for certain that imprisonment is criminogenic, but there is a likelihood that the prison experience has an overall effect of increasing reoffending (Nagin et al., 2009). If so, then any incapacitation effect is eroded by this labeling effect.

Another consideration is the effect that incarcerating lots of people from one community has on that area's crime rate, such as when a high percentage of African American, inner-city males are locked up. Clear (2007, p. 5) calls this *concentrated incarceration*. The data on the racial divide in incarceration are disquieting. In their lifetimes, about one third of African American males will serve time in prison compared to about 6% of Whites (Nagin et al., 2009). On any given day in the United States, 11.9% of Blacks are behind bars—a rate that is "5 to 7 times greater than those for white males in the same age groups" (Harrison & Beck, 2006, p. 10). Most instructive in terms of inner-city communities are the statistics for men ages 20 to 40 who are high school dropouts. For Whites, 6.7% are in prison or jail on any given day. For African Americans in this category, the figure is a whopping 32.4% (Western, 2006). As Wacquant (2009) summarizes the issue:

> An astonishing 60 percent of African Americans born between 1965 and 1969 who did not complete high school had been convicted of a felony and had served time in a state penitentiary by 1999. This nationwide rate suggests that the vast majority of black men from the core of the ghetto pass through the prison at the beginning of the twenty-first century. (p. 207)

There are basically two views on this matter:

- *Mass incarceration lowers crime in poor neighborhoods.* This is the view of John DiIulio (1994). When many African American offenders are incarcerated, the primary beneficiaries are their likely victims: Residents of minority, inner-city communities. DiIulio sees incarceration as a form of government investment in the inner cities. It costs money, but predators—each of whom commits 12 or more crimes a year—are off the streets. Imprisoning Black super-predators saves Black lives.
- *Mass incarceration increases crime in poor neighborhoods.* This is the view of Todd Clear and Dina Rose (Clear, 2007; Rose & Clear, 1998). In their view, the policy of incarcerating large numbers of young minority males ultimately backfires. No community can survive, let alone thrive, when a high proportion of its male population—generation after generation—spends critical parts of their lives in prison. Job markets fall apart, families do not form, and the community must constantly try to reintegrate men who have been in prison. In the long run, whatever benefits one gets from incapacitation are overwhelmed by the breakdown of the very fabric of communities.

To be honest, we do not know for certain which of these views is correct. It seems certain that incarcerating African American offenders has an incapacitation effect that should reduce crime in local communities where they are most likely to victimize others. Even so, it also seems plausible that, as described by Clear and Rose, a simultaneous community-level effect exists that is criminogenic (see also Lynch & Sabol, 2000). If so, then the incapacitation effect depicted in self-report surveys overestimates the amount of crime that is saved through mass imprisonment, at least in inner-city neighborhoods.

So, there is an important point that we want you to take from this discussion: *Computing the incapacitation effect based on self-report surveys is complex.* Thus, we start out computing an incapacitation estimate based on a self-report survey. But before settling on this estimate, we have to take into account aging, replacement, and labeling effects. Wow! That's a lot! And that is also why we really do not know what the incapacitation effect is, based on self-report surveys. We have an idea, but precise estimates are difficult.

Cullen and Jonson do not deny that there is an incapacitation effect. Even if it is at the lower end of the estimates—say somewhere between 4 and 12 offenses a year—that is a lot of crime saved. Again, if you were the judge and you knew that the offender standing before you would commit four crimes if released into the

community, what would you say? Would you say: "Well, because you will break the law only four times in the next year, I am happy to let you roam free in my community. Have a nice day." Or would you say: "Well, because you will break the law four times in the next year, I am going to put your stupid rear end in jail. See you in a year." Of course, there is more to it than this—an issue we return to at the chapter's end.

Estimating the Incapacitation Effect: Macro-Level Studies

SPELMAN'S RESEARCH

As noted, in studying incapacitation, scholars distinguish between *bottom-up* and *top-down* approaches. A *bottom-up* approach is the one described above in the self-report survey. It is called *bottom-up* because it starts out by surveying individual offenders and then tries to estimate from these data how much crime offenders commit and, in turn, how much crime prisons save. A *top-down* approach never talks with or surveys individual offenders. Rather, it infers from *macro-level data* what the incapacitation effect is.

Macro-level incapacitation studies are identical to macro-level deterrence studies: Both try to see how the level of incarceration is related to the level of crime. If crime is lower where prison use is higher, they both have an effect. It is just that some scholars claim a deterrence effect (which is why they are called deterrence scholars), whereas others claim an incapacitation effect (which is why they are called incapacitation scholars).

As alluded to in Chapter 4, top-down macro-level studies cannot tell us whether there is lower crime because (1) people are being scared straight or (2) offenders are locked up and thus not committing crimes. Politicians really do not care whether crime reductions are due to deterrence or incapacitation. Lower crime, after all, is lower crime. But criminologists do care because the effects are analytically different and may have different implications for policy. Although nobody knows for sure, most scholars think that when imprisonment and crime rates are inversely related—prisons ↑ and crime rates ↓—it is really an incapacitation effect (largely because other measures of deterrence do not seem to have strong effects).

A number of really good top-down, macro-level analyses of incapacitation exist (for a listing, see Spelman, 2000a, p. 102). Nonetheless, the best is a complex and comprehensive essay by William Spelman (2000b). So, how much crime do prisons actually save? One way of talking about this issue is to use the term *elasticity.* Spelman (2000b) defines elasticity as "the percentage change in the crime rate associated with a 1 percent change in the prison population" (p. 421). That is, if we increase the prison population by 1%, how much does the crime rate change? After much analysis, Spelman provides his best estimate—based on the most rigorous macro-level studies available.

- He states that a 1% increase in the prison population decreases crime between 0.16% and 0.31%.
- If we calculate this out to some larger numbers, it may be more understandable. Thus, a 10% increase in the prison population would reduce the crime rate by between 1.6% and 3.1%. A 100% increase—a doubling of the prison population—might reduce crime between 16% and 31%.

What Spelman's research shows, therefore, is that there is an incapacitation effect and that it can be large if we decide to have large increases in the size of our prisons. For example, in another analysis, Spelman (2000a) examined the impact of imprisonment on what has been called "the great American crime drop" (Blumstein & Wallman, 2000; Rosenfeld, 2009). Crime rates had shot up in the early 1990s and then, suddenly and largely inexplicably, declined rapidly over the next decade. They have stayed at low levels since that time (Rosenfeld, 2009). Why did this occur? Did mass imprisonment play a role? The answer is "yes."

According to Spelman (2000a), however, this is a qualified "yes," not a resounding call for more prison expansion. As he notes, even without a prison boom, violent crime would have declined markedly. Incarceration was but a contributing factor—not unimportant but not all-powerful. Thus, Spelman (2000a) argues that the "crime drop would have been 27 percent smaller than it actually was, had the prison buildup never taken place" (p. 123). He reminds us of the trade-off for this crime savings:

> Over the past twenty years, the fifty American states have engaged in one of the great policy experiments of modern times. In an attempt to reduce intolerably high levels of reported crime, the states have doubled their prison populations, then doubled them again, increasing their costs by more than $20 billion per year. . . . That $20 billion could provide child care for every family that cannot afford it, or a college education to every high school graduate, or a living-wage job to every unemployed youth. (p. 97)

Whether the trade-off was worth it, of course, is what policy makers and voters must decide.

COMPLICATING MATTERS: TWO OTHER STUDIES

As good as Spelman's research is, it is but one study. As other research has appeared, the incapacitation waters have become muddied a bit. We review two studies that complicate matters—making it harder to have a clear view of the incapacitation effect.

First, as Spelman (2000b) realizes, one problem with most top-down studies is that they use the same data set: 50 states in which imprisonment rates and crime rates are analyzed either at one given time (a cross-sectional study) or over time (a longitudinal or time-series study). This approach makes sense because each

state has a prison system and a crime rate. Still, if the incapacitation effect is real or at least stable, then it should be found when other kinds of data are collected and analyzed.

In this regard, Kovandzic and Vieraitis (2006) argue that there is a need to examine the incapacitation effects of imprisonment using smaller units of analysis where measurement error might not be as pronounced. Using state-level data may result in something called *aggregation bias* and in the inability to control for relevant factors. As an alternative, they examine 58 Florida counties from 1980 to 2000. Somewhat astoundingly, they conclude that in contrast to previous studies, there was "no evidence that increases in prison population growth covary with decreases in crime rates" (p. 213).

To be sure, this is only one study in one state. It needs to be replicated. But if the same results were produced over multiple jurisdictions, it would call into question the finding that locking offenders up always leads to reductions in crime.

Second, Liedka, Piehl, and Useem (2006) explored whether elasticity or the amount of crime saved from each percentage growth in incarceration was stable or changed depending on the size of the prison population. They discovered that over the past 30 years, the expansion of prisons saved crime in the early years. However, as prison populations have grown, their effects have reached a point of *diminishing returns*.

That is, when prison populations are low, locking people up has a high elasticity—it saves crime. When prison populations are high, locking people up has a low elasticity—it does not save much crime. Their findings thus call into question the wisdom of further prison expansion. As Liedka et al. (2006) conclude:

> Prison expansion is expensive in the costs it imposes on both those who serve time behind bars and in absorbing tax dollars. Policy discussion should be informed by the limitation of the fact that prison expansion, beyond a certain point, will no longer serve any reasonable purpose. It seems that that point has been reached. (p. 272)

Conclusion: Compared to What?

Looking back, Cullen and Jonson understand that traveling through this chapter has been more like climbing a mountain, scaling flat walls, trudging through rugged terrain, and gasping for air as the peak was in sight. Now that you are standing on the peak, what do you see?

Well, the view of incapacitation is a bit cloudy. Still, when all the evidence is stacked together, it is clear that locking offenders up prevents crime. Because most people who enter prison are in the middle of a criminal career, sending them to prison interrupts their illegal activities and saves society a bunch of crime. This conclusion is supported by individual-level bottom-up studies and macro-level top-down studies. When different types of data reach the same conclusion, the finding must be seen as reliable. Prisons have a meaningful incapacitation effect. Even

bleeding-heart criminologists such as Cullen and Jonson can see that. The evidence is, after all, the evidence.

We do not know precisely how large the incapacitation effect is. Criminologists, who as we have admitted do not like imprisonment, do their best to explain why prisons do not prevent crime by highlighting a bunch of effects that counteract incapacitation: aging, replacement, labeling, and so on. These are important, as we have discussed. Still, it is likely that putting someone behind bars prevents somewhere between 4 and 10 crimes a year, depending on how crime is measured. If an average of about 2.2 million offenders are in prison over the course of a year, the annual savings in crime would rise into the millions. Do the math: 2.2×4 or 2.2×10. That is a multiplication problem that might make you a strong advocate of prisons!

But before running out to campaign for new prison construction, realize that all incapacitation studies have a major assumption hidden within them that makes them *fundamentally flawed.* After all this, are Cullen and Jonson saying that incapacitation studies are misleading? The answer is "yes." Why? Because these studies *compare imprisonment to doing nothing with the offender* (Spelman, 2000b). Huh? Believe it! Cullen and Jonson are telling the truth! When scholars compute the incapacitation effect, they assume that if offenders are not in prison, the alternative would be *allowing the offender to roam free on the street.*

Of course, this is a ridiculous comparison that wildly inflates the incapacitation effect *relative to some other sanction.* If offenders are not sent to prison, the judge does not say: "Go ye forth and victimize, young chap!" Rather, some form of supervision is enacted. Thus, the proper comparison ought to be *how much crime is saved by locking someone up as opposed to using an alternative correctional intervention.*

What else might be done with an offender? In the least, one might expect that an offender would be placed under some form of community supervision. Although limited, research suggests that criminal activity declines when offenders are placed on probation versus no intervention at all (MacKenzie, Browning, Skroban, & Smith, 1999). But let's go one step further: How about placing the offender in a high-quality, intensive rehabilitation program?

Thus, the problem with current studies is that in estimating whether incapacitation works—is a prudent crime control policy—they *ignore the key policy question: Does incapacitation work better than what might be used in its place?* Could the money spent on prisons be used to purchase more crime savings through other means? Elliott Currie (1998) captures this point nicely in his book when he asks whether a prison sentence:

> "works" better for an addicted burglar than a course of drug treatment outside prison walls. . . . If the question is whether marginal increases in incarceration of repeat nonviolent offenders "work" better than investment in high-quality prevention programs for at-risk adolescents, it is increasingly clear that the answer is "no." And if the question is whether an overall national strategy of sinking more and more resources into the prisons while slighting other crucial public investments can effectively protect us from violent crime, then history would seem to offer a particularly compelling negative. (p. 55)

In a like vein, Joan Petersilia (1992) makes a similar assessment when she notes that "every additional prison guard may mean one less teacher employed, and every prison cell constructed may mean a gang-prevention program unfunded" (p. 33).

In short, we have seen by the research reviewed in this chapter that prisons do have an incapacitation effect. Even so, taken by itself, this research is virtually meaningless. In formulating correctional policy, we must consider whether the crime savings from prisons outweigh what might be achieved through (1) other correctional sanctions or programs and/or (2) other social programs that might attack the root causes of crime (i.e., early intervention programs). In the chapters to follow, we consider what some of these alternative approaches to saving crime might entail.

Let us close with one cautionary remark. A powerful attraction of prisons is that they can achieve an incapacitation effect without much effort. Yes, they cost a lot of money. But they also exist and we can cram a lot of people into them. Unless the anti-prison crowd can develop effective alternatives to warehousing offenders, then warehousing it might well be (Petersilia & Cullen, 2015).