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James M. Byrne, April Pattavina & Faye S. Taxman

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# International Trends in Prison Upsizing and Downsizing: In Search of Evidence of a Global Rehabilitation Revolution

James M. Byrne

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School of Criminology and Justice Studies, University of Massachusetts, Lowell, Lowell, Massachusetts, USA

April Pattavina

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School of Criminology and Justice Studies, University of Massachusetts, Lowell, Lowell, Massachusetts, USA; Wellesley Centers for Women, Wellesley College, Wellesley, Massachusetts, USA

Faye S. Taxman

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George Mason University, Fairfax, Virginia, USA

**Abstract:** Our review of global trends in the use of incarceration reveals that both the number of people incarcerated worldwide and the global rate of incarceration continue to increase in every global region. In addition, there have been sizable global increases in the use of pretrial detention, the proportion of female prisoners, the proportion of foreign prisoners, prison privatization, and prison crowding. After reviewing these global trends, we examine the available data on correctional performance, focusing on global crime trends in the subgroup of countries ( $n = 20$ ) where three-quarters of the world's prison population is currently located. While most (17/20) of these countries continued to increase their prison population despite decreases in most crime categories, three countries—the Russian Federation, South Africa, and Pakistan—have reduced their reliance on incarceration (number and rate) while also reducing their crime rates. Compared to other countries with large prison populations, the United States' overall increase in both the prison population (+14.4% since 2000) and incarceration rate (+2.2) can be described as modest. Our review of global trends in corrections and sentencing policy reforms revealed an emerging focus on offender rehabilitation

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Address correspondence to James M. Byrne, School of Criminology and Justice Studies, University of Massachusetts, Lowell, 1 University Ave, Lowell, MA 01854. E-mail: [profbyrne7@gmail.com](mailto:profbyrne7@gmail.com)

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in both prison and community corrections settings and a growing recognition of the link between community development and crime. Focusing on the potential impact of rehabilitation-rich policy reforms in the United States, we highlight the results of a recent simulation modeling study (Taxman & Pattavina, 2013) designed to estimate the impact of expanding our institutional corrections treatment infrastructure. This study reported significant, but relatively small, long-term reductions in prison populations when treatment capacity and treatment quality are increased. These findings suggest that even major improvement in the quantity and quality of prison programming—by itself—will not fundamentally change the life course of prisoners, resulting in continued high return-to-prison rates for these offenders. We conclude that for the United States to significantly reduce its reliance on incarceration, we will need to rethink our approach to crime and punishment. Our global review of corrections and sentencing strategies identified a number of possibilities. Using the global incarceration rate and the global crime rate as benchmark performance “tipping points,” we call for the development of corrections and sentencing policies—and the hiring of corrections personnel—based on the *new* goal of corrections: individual and community rehabilitation.

**Keywords:** correctional policy, international corrections, prison downsizing, rehabilitation

To gain a better understanding of the nature and extent of crime, criminologists have studied global crime patterns using country-level data as the unit of analysis. This body of research has identified a set of factors (e.g., income inequality, poverty/economic development) that distinguish high-crime from low-crime countries, and leaders in several countries have designed crime reduction initiatives utilizing this information (Commission on Crime Prevention and Criminal Justice, 2014; United Nations Office of Drugs and Crime, 2014). A similar effort is now underway to understand the global *response* to crime, focusing on the utilization of prison and alternatives to incarceration (Allen, 2015; Walmsley, 2015). While every country’s crime problem—and each country’s criminal justice response—is unique, there is value in the examination of global variations in corrections and sentencing practices and attempts to identify (and rank) both high-performance and low-performance countries, based on the evidence of the effectiveness of their corrections systems and sentencing strategies. Unfortunately, the global performance measurement data base needed to systematically review and rank the performance of countries’ corrections and sentencing strategies does not currently exist, but it is possible—due largely to the work of Walmsley (2015) and Allen (2015)—to provide a global snapshot of recent corrections and sentencing trends and developments<sup>1</sup> and to review the available country-specific evaluation research on the effectiveness of these strategies (Byrne, 2016, 2015).

The following review highlights recent global trends in the use of prison internationally (2000 to 2015) and then examines the changes in prison populations in the subgroup of countries (20) that currently house over 75% of

the world's prison population.<sup>2</sup> Seventeen of these 20 countries increased their prison populations between 2000 and 2015. Prison populations have continued to rise globally at a rate slightly higher than world population growth during this period; at the same time, declines have been reported in every major crime category (except drugs). There are exceptions to the global upsizing trends identified here. Three of the 20 countries with the largest prison populations—the Russian Federation, South Africa, and Pakistan—reported declines in their prison populations, with the Russian Federation's prison population decline particularly noteworthy (a 37% reduction in the total prison population between 2000 and 2015). While a detailed review of the reasons for the Russian Federation's prison decline was beyond the scope of our review,<sup>3</sup> we have identified the most commonly used prison downsizing strategies globally. Strategies designed to reduce the rate of incarceration include new sentencing legislation (e.g., federal and state sentencing guideline reform), the expansion of alternative sanctions, and a renewed focus on offender treatment in both prisons and community corrections. Evidence to support these strategic initiatives can be found in several recent systematic evidence-based reviews (Byrne, 2016, 2015).

Using the results of a recent simulation modeling study conducted in the United States (Taxman & Pattavina, 2013), we consider the potential impact of policy reforms designed to simultaneously downsize prisons and upsize the treatment infrastructure of our institutional and community corrections system in the United States. These analyses reveal that while long-term reductions in prison populations are possible, only incremental changes in our prison population are likely unless we consider the need for fundamental (some might say revolutionary) changes in policies, programs, and personnel. The following three recommendations are offered for consideration:

1. New corrections and sentencing policies that result in rates of incarceration at or below the average global incarceration rate.
2. A new commitment to the provision of high-quality treatment programs in the institutional and community corrections system.
3. The recruitment, training, and retention of a new generation of corrections personnel with skills in counseling, mentoring, and advocacy similar to corrections personnel in countries with a pronounced rehabilitation orientation (e.g., Australia, Norway, Sweden, and the United Kingdom). Changes in each of these areas will require a new commitment to an old strategy: rehabilitation at the individual and community level.

## GLOBAL PRISON POPULATION TRENDS: UPSIZING VERSUS DOWNSIZING

It is estimated by the International Center for Prison Studies (ICPS) that there are currently over 10.2 million prisoners living in prisons around the world today, and if the reports on the number of offenders in pretrial or administrative detention in China and North Korea are accurate, the world prison population total is actually over 11 million (see the 2013 population estimate included in the *World Population List* by Walmsley, 2015). Based on data compiled by ICPS on current prison populations, we have examined the prison population data for the countries with the 20 highest prison populations globally. Seventy-five percent of the world's prisoners (7,689,884) reside in these 20 countries, including 8 countries from Asia, 5 from the Americas, 4 from Europe, and 3 from Africa. Table 1 presents changes in the prison populations in these 20 countries since 2000. In 17 of 20 countries, the prison population has increased at a rate slightly greater than the rate of increase in the world's population. According to the recent review by Walmsley, "Prison populations are growing in all five continents. In the 15 years since the first edition of the *World Population List* the estimated world prison population has increased by some 20% to 25% but at the same time the world population has risen by over 20%. The world's prison population rate has risen by about 6% from 136 per 100,000 of the world population to the current rate of 144 [per 100,000]" (2015, p. 1). Despite the calls for reform and for the downsizing of our global prison population (see, e.g., Allen, 2015; Cullen, 2013), correctional populations continue to be upsized in every global region.

When examining recent trends in our global prison population, it is worth considering the fact that almost half of the world's prison population is held in only three countries: the United States, China, and the Russian Federation. About 20% of the world population currently resides in these three countries. Two of these countries (United States, China) have continued to increase their prison/pretrial detention populations—and their incarceration rate—since 2000. By contrast, the Russian Federation has significantly decreased both the number of prisoners and the rate of incarceration without increased reported crime rates. Some observers will be quick to dismiss these findings for the Russian Federation with glib reference to potential bad data, while pointing to the notable, documented deficiencies in prison conditions and prison labor in the Russian Federation (Amesty International, 2015; Moran, Pallot, & Piacentini, 2011; U.S. Department of State, 2013). However, there certainly appears to be significant prison downsizing movement in the Russian Federation, and further investigation is needed on whether—and if so, how—this large-scale downsizing strategy was accomplished.

**Table 1:** World prison population (PP) trends for countries with the largest prison populations: 2000–2015\*.

Ranking	Title	Region	Prison Pop Rate (Rank)	2015 Prison Pop	2000 PP	PP Change	% Change
1	United States of America (2013)	Northern America	698 (2)	2,217,000	1,937,482	+279,518	+14.4%
2	China (2014)	Asia	119 (123)	1,657,812	1,427,407	+230,405	+16.1%
3	Russian Federation	Europe	463 (9)	667,546	1,060,404	-392,858	-37.0%
4	Brazil (2014)	South America	301 (34)	607,730	232,755	+374,975	+161.1%
5	India (2013)	Asia	33 (212)	411,992	272,079	+139,913	+51.4%
6	Thailand	Asia	452 (10)	304,916	223,406	+81,510	+36.5%
7	Mexico	Central America	214 (64)	256,941	154,765	+102,176	+66.0
8	Iran (2014)	Asia	290 (36)	225,624	158,000**	+67,624	+42.8%
9	Indonesia (2014)	Asia	179 (66)	167,163	53,399	+113,764	+213.1%
10	Turkey	Europe	212 (65)	165,033	49,512	+115,521	+233.3%
11	South Africa	Africa	292 (35)	159,241	171,462	-12,221	-7.1%
12	Vietnam (2014)	Asia	154 (94)	142,636	88,414***	+54,222	+61.3%
13	Colombia	South America	242 (50)	119,378	51,518	+67,860	+131.7%
14	Philippines (2013)	Asia	113 (131)	110,925	79,299	+31,626	+39.9%
15	Ethiopia (2011)	Africa	111 (134)	93,044	55,209	+37,835	+68.5%
16	United Kingdom: England and Wales	Europe	148 (99)	85,743	64,602	+21,141	+32.7%
17	Poland	Europe	198 (68)	76,145	70,544	+5,601	+7.9%
18	Pakistan (2012 data)	Asia	41 (206)	74,944	78,938	-3,994	-5.1%
19	Peru	South America	236 (53)	73,255	27,734	+45,521	+164.1%
20	Morocco (2013 data)	Africa	221 (60)	72,816	54,288	+18,528	+34.1%

\*2015 data unless noted above; includes pretrial detention population. For details, go to <http://www.prisonstudies.org/world-prison-brief>. Data included above retrieved July 14, 2015.

\*\*2001 data.

\*\*\*2005 data.

Note: "Prison populations are growing in all five continents. In the 15 years since the first edition of the *World Prison Population List* the estimated world prison population has increased by some 25% to 30% but at the same time the world population has risen by over 20%" (Wainmsley, 2015, p. 1).



**Figure 1:** Global incarceration rates.

Source: Byrne (2014), available at <http://www.gcecs.edu.au>.

## GLOBAL INCARCERATION RATES

Despite the limitations inherent in the sentencing and corrections data bases available globally today (see Walmsley, 2010), it is still worthwhile to take a look at how incarceration rates vary globally (see Figure 1 above). When we focus on prison population trends outside the United States we see much variation globally, both within regions (in particular Europe) and across regions. Walmsley's recent review highlights these intra- and inter-regional variations:

Prison population rates vary considerably between different regions of the world, and between different parts of the same continent. For example: in Africa the median rate for western African countries is 46 whereas for southern African countries it is 205; in the Americas the median rate for south American countries is 202 whereas for Caribbean countries it is 376; in Asia the median rate for south central Asian countries (mainly the Indian subcontinent) is 62 whereas for eastern Asian countries it is 159.5; in Europe the median rate for western European countries is 98 whereas for the countries spanning Europe and Asia (e.g., Russia and Turkey) it is 225; and in Oceania (including Australia and New Zealand) the median rate is 151. (2015, p. 1)

These variations are likely the product of political decisions made regarding the how crime is defined, how and when laws are enforced, and how a particular country views the utilization of prison-based versus community-based sanctions for drug-related crimes. For example, in some countries (such as Thailand and China), drug addiction may be viewed as a moral failure,

which elicits a different criminal justice system response than in countries (such as Norway), where addiction is viewed as a disease (Li, 2014; Pratt & Eriksson, 2014). In a recent review of the percentage of the prison population who were convicted for drug crimes, Allen (2015) noted that in Thailand, 65% of the prison population comprised individuals convicted of drug crimes (typically possession). The comparable percentages in the United States are 16.8% for our state prison population and 49% for our federal prison population.

In addition to identifying the top 20 countries with the highest current prison population, we also examined the 20 countries with the highest *rates* of incarceration, using the ICPS database. Table 2 presents the rates of incarceration for these top 20 countries. Only three of the countries with the largest prison populations also had the highest reported incarceration rates: the United States (ranked second overall with a rate of 698 per 100,000), the Russian Federation (ranked ninth, with a rate of 463), and Thailand (ranked tenth, with a rate of 452). The top 20 countries (ranked by incarceration rate) include 9 countries from the Caribbean, 5 from the Americas, 2 from Asia, 2 from Africa, 1 from Europe, and 1 from Oceania. Only 4 of the 20 countries with the highest prison population rates have reduced their prison population rate since 2000: the Russian Federation (36.5% reduction), Guam (4.1% reduction), Bermuda (13.1% reduction), and the Bahamas (19.4% reduction). The remaining 16 countries have significantly increased their incarceration rates since 2000. Compared to these other high prison population–rate countries, the rate of increase in the United States prison population rate (a 2.2% increase since 2000) has been modest, with increases of 40% or more in 8 of the top 20 countries.

## GLOBAL PRISONER PROFILE

The types of offenders placed in prisons will vary both within and across global regions. In general, however, the global prison population currently comprises individuals who are likely to be poor; who lack adequate jobs, education, and health care; and who are disproportionately members of the minority in the countries where they reside. Although the typical prisoner is male, the proportion of female prisoners globally is increasing, with the female incarceration rate rising at a faster pace than the male rate. According to a recent United Nations Office on Drugs and Crime (UNDOC) review, “Of all persons held in prisons, penal institutions, or correctional institutions in 2012, over 90% were male, with only slight variations by region, ranging from 92% in the Americas to 95% in Africa. Over time, however, the total number of female prisoners (who constitute 5 to 8% of the prison population) grew by 26% between 2004 and 2012—an increase far higher than that recorded for men (11%)” (UNDOC, 2014, p. 22).

**Table 2:** World prison population rate trends.

Ranking	Title	Region	2000 Prison Population Rate	2015 Prison Population Rate*	% Change
1	Seychelles (2014)	Africa	205	868	+323.4%
2	United States of America (2013)	North America	683	698	+2.2%
3	St. Kitts and Nevis (2013)	Caribbean	300**	611	+103.7%
4	Virgin Islands (USA)	Caribbean	NA	542	NA
5	Turkmenistan (2010)	Asia	488	522	+7.0%
6	Cuba (2012)	Caribbean	487***	510	+4.7%
7	Rwanda (2012)	Africa	102****	492	+382.4%
8	El Salvador	Central America	130	465	+257.7%
9	Russian Federation	Europe	729	463	-36.5%
10	Thailand	Asia	357	452	+26.6%
11	Belize	Central America	320	449	+40.3%
12	Grenada	Caribbean	291*****	430	+47.8%
13	Virgin Islands (United Kingdom)	Caribbean	NA	425	NA
14	Guam (USA) (2013)	Oceania	440	422	-4.1%
15	Bermuda (United Kingdom) (2013)	North America	473	411	-13.1%
16	Anguilla (United Kingdom) (2014)	Caribbean	342*****	407	+19.0%
17	Sint Maarten (Netherlands) (2013)	Caribbean	396*****	396	0.0%
18	Panama	Central America	280	392	+40.0%
19	Antigua and Barbuda (2014)	Caribbean	218	389	+78.4%
20	Bahamas (2013)	Caribbean	470	379	-19.4%

\*2015 prison population rates unless noted above.

\*\*1999 data.

\*\*\*2003 data.

\*\*\*\*2002 data do not include prisoners held for genocide-related offenses; these offenders included since 2011 in rate estimation.

\*\*\*\*\*2002 data.

\*\*\*\*\*2004 data.

Source: Retrieved from ICPS website on July 14, 2015: [http://www.prisonstudies.org/highest-to-lowest/prison\\_population\\_rate?field\\_region\\_taxonomy\\_tid=All](http://www.prisonstudies.org/highest-to-lowest/prison_population_rate?field_region_taxonomy_tid=All).

While a number of these individuals have been incarcerated because they have been convicted of violent crimes (for example, in the United States about half of all offenders in our state prisons have been convicted of a violent crime), there are a significant number of prisoners who are in prison because of their substance abuse, which has either led to their arrest for possession or has led them to rob, steal, and/or deal drugs to support their drug habits. Regional variation in the crime type mix of prisoner populations globally has

been documented in a recent UNDOC review: “There are notable regional differences in the share of sentenced prisoners by crime type. In the Americas, almost half of all sentenced prisoners were convicted for violent offenses (10% for homicide and 36% for other violent offenses), compared with 40% in Europe (10% and 30%, respectively) and 20% in Asia (6% and 15%, respectively). Prisoners convicted for drug offenses account for 21% of all sentenced prisoners in the Americas, 35% in Asia, and 13% in Europe” (UNDOC, 2014, p. 20).

It is generally recognized that there are also significant numbers of prisoners in prison as a direct or indirect consequence of their untreated mental health problems, but global estimates of country-specific variations in the extent of mental health problems among prisoners are not available. One final broad-brush feature of the global prison population can be identified: The majority of the offenders leaving prison each year will be classified as “failures” based on standard recidivism measures and follow-up periods. One recent review of the global prison population estimated that about 30% of the current global prison population had been incarcerated previously (UNDOC, 2014). It is the cost associated with the correctional control of these “churners” that appears to drive the call for corrections and sentencing reform in the United States and several other countries; but appearances can be deceiving. It is possible that the impetus for reform is based on a mounting body of empirical evidence that supports the development of strategies that attempt to change both high-risk offenders and the high-risk communities in which they reside (Byrne, 2013a). It is also possible that the global identification of countries with low incarceration rates (e.g., Japan) and low recidivism rates (e.g., Finland) has resonated with policy makers in those countries with both high incarceration rates and high recidivism rates (Larson, 2014).

## SENTENCING OFFENDERS: A GLOBAL VIEW OF THE LINK BETWEEN CRIME AND PUNISHMENT

While it would seem plausible to suggest that crime rates would be linked directly to incarceration rates—both within and across countries—the reality is that incarceration rates are not usually a response to a country’s crime problem. A more likely link is found between fear of crime, the size of the minority/immigrant population, and incarceration rates. This assessment is supported by recent research on the crime–incarceration link in Europe (Illescas & Frerich, 2014). Nonetheless, it is certainly true that how a country *defines* its crime problem will be related to decisions made regarding the sentencing of those individuals who are arrested and convicted of breaking the laws of a particular country. As Tonry recently observed, “countries have different criminal justice policies and practices for reasons of political culture

and history, not because of crime levels, crime trends, or larger social and economic forces” (2013, p. 185). In the United States, there has been much talk about the country’s war on drugs and crime, which has resulted in an unprecedented incarceration boon over the past several decades. When compared to other countries around the world, the United States is a leader in both the number and rate of incarceration. As Weiss and MacKenzie (2010) documented in a recent comparison of sentencing policies in the United States, Germany, Finland, England and Wales, and Scotland, the United States overuses incarceration and underuses fines, which represent the sanction of choice in these other countries. However, this high global ranking is primarily a function of the country’s focus on the incarceration of drug offenders and, by extension, property offenders who steal to support their addiction, because it is these offenders who fail when released to the community and return to prison as technical violators of the conditions of community supervision (Byrne, 2009).

The United States sentences violent offenders to prison at approximately the same rate as many European countries; these violent offenders (murderers, rapists, robbers, and those convicted of felony assault) receive prison sentences at approximately the same type as their violent criminal counterparts in several other countries (Lynch & Pridemore, 2011). Comparison between the United States and selected European countries reveal that “where the United States differs markedly is in the *length* of sentences imposed and the *average time served* by offense ” (Byrne & Hummer, 2005, p. 81, emphasis in original). Allen (2015) has summarized the findings of a 35-country review completed by the United Nations Social and Economic Council in 2012, which revealed regional differences in the use of long sentences (more than 10 years): “In 2012, more than two-thirds had received prison sentences of up to five years, while, at the other end of the spectrum, 6.5% had received sentences of more than 20 years, including life sentences, and 0.2% had been given death sentences. Available data on the distribution of prisoners by the length of sentence shows a similar distribution for countries in Asia and Europe, but with a lower share of prisoners sentenced to 10 years or more in Asian countries than in European countries. Available data on a limited number of countries in Africa, the Americas, and Oceania indicate a share of prisoners sentenced to 10 years or more that is significantly above the global average”(Allen, 2015, p. 10). Unfortunately, we do not have a global database with country-level data on time served and sentence length that could be used to make a definitive assessment.

An examination of the available global data on the rate of violent crime, and global trends in violence, reveals both intra- and inter-regional variations in crime, but there was a continued downward trend in the rate of crime with one notable exception: drug crime:

Data on police-recorded offences for violent crime, property-related crime, and drug-related crime from 2003–2012 broadly indicate a continuation of trends that have continued since the mid-1990s. Over the past decade, levels of property-related crime (burglary and motor vehicle theft) decreased, while violent crime (rape, homicide, robbery) on average declined only slightly, with diverging regional patterns. Drug-related crime trends fall into two categories: recorded levels of drug trafficking, which increased by 11% from 2003 to 2012, and recorded levels of crimes related to drug possession, which increased by 18% over that period (Commission on Crime Prevention and Criminal Justice, 2014, p. 5).

To understand global crime trends in the context of global prison expansion, we examined and compared the crime rates for the subgroup of 20 countries with the largest prison populations. Table 3 includes available data from the UNODC (2015) for the 20 countries with the highest prison populations. The homicide rate in the United States in 2013 (3.8 per 100,000) ranked thirteenth out of these 20 countries, the assault rate in 2013 was fourth highest (226.3 per 100,000), the rape rate was third highest (24.9 per 100,000), and the robbery rate ranked fourth overall (107.8 per 100,000) among these 20 countries. Overall, the homicide rate reported in these 20 countries went down during the review period (typically 2003 to 2013, with some country-specific variation in review periods noted) for 11 of the 18 countries with data available for review, including the United States, China, and the Russian Federation. Examination of trends for assault, rape, and robbery revealed crime-specific variations, but followed the same pattern. For robbery, data were available for 14 of the 20 countries with the highest global prison populations, and reductions in the robbery rate were reported in 7 of these 14 countries. For the crime of rape, data were available for 14 countries, with reductions in the rape rates during the review period for 7 countries. For the crime of assault, data were available for 13 countries, with 8 countries reporting decreases in the assault rate. In these 20 countries, our review revealed that there was no clear link between crime and punishment. While both the general and specific deterrent effects of imprisonment continue to be researched and debated (see, e.g., Byrne, 2013b; Nagin, 2013; Cullen, Johnson, & Nagin, 2011; Tonry, 2013), our review provides no evidence to support the global upsizing of our prison population based on a deterrence calculus (Byrne, 2013b).

Examination of crime and punishment patterns in the United States supports this global view. In the United States, the prison population increased by 279,518 between 2000 and 2013, while the rate of every major violent crime dropped. The homicide rate in the United States was 3.8 per 100,000 in 2013, as compared to 5.5 in 2000 (a decline of 30.9%). During this same period, significant reduction in the rate of assault, rape, and robbery were also reported in the United States. In the Russian Federation, the country with the most

**Table 3:** Recent violent crime trends for the 20 countries with the highest current prison populations (PP).

Ranking	Title	Region	PP Rate	Murder Rate		Assault Rate		Rape Rate		Robbery Rate			
				2003	% Change	2003	% Change	2003	% Change	2003	% Change	2003	% Change
1	United States of America (2013)	Northern America	698 (2)	5.5	3.8	293.3	226.3	32.1	24.9	141.4	107.8	na	na
2	China (2014)	Asia	119 (123)	2.0	0.8	na	na	na	na	na	na	na	na
3	Russian Federation	Europe	463 (9)	11.6	9.0	39.8	24.4	38.7	na	50.8	174.2	64.5	-109.7
4	Brazil (2014)	South America	301 (34)	23.5	26.5	347.0	330.1	-4.9	12.6	+97.6	457.7	505.3	+10.4
5	India (2013)	Asia	33 (212)	4.5	3.3	24.9	26.7	+7.2	1.6	+68.8	1.7	2.9	+70.6
6	Thailand	Asia	452 (10)	8.2	4.9	43.1	24.7	-42.7	7.7	-9.1	1.4	0.8	-42.9
7	Mexico	Central America	214 (64)	10.3	18.9	225.2	173.1	-23.1	12.5	+8.0	470.8	595.7	+26.5
8	Iran (2014)	Asia	290 (36)	NA	4.8	NA	NA	na	na	na	na	na	na
9	Indonesia (2014)	Asia	179 (66)	1.1	0.6	14.2	14.1	-0.7	1.2	-41.7	4.2	4.8	+14.3
10	Turkey	Europe	212 (65)	4.3	4.3	139.5	354.2	+153.9	2.4	-37.5	25.3	13.9	-45.1
11	South Africa	Africa	292 (35)	48.5	31.9	na	na	na	na	na	na	na	na
12	Vietnam (2014)	Asia	154 (94)	1.2	1.5	na	na	na	na	na	na	na	na
13	Colombia	South America	242 (50)	66.5	31.8	76.5	171.6	+124.3	2.8	+296.4	129.5	194.0	+49.8
14	Philippines (2013)	Asia	113 (131)	7.4	9.3	NA	NA	NA	3.7	+143.2	9.1	50.1	+450.6
15	Ethiopia (2011)	Africa	111 (134)	NA	8.1	NA	NA	NA	NA	na	na	na	na
16	United Kingdom: England and Wales	Europe	148 (99)	1.7	1.0	861.7	564.3	-34.5	25.1	+45.0	196.2	101.5	-48.3
17	Poland	Europe	198 (68)	2.2	0.8	1.4	1.2	-14.3	6.1	-41.0	135.1	32.4	-76.0
18	Pakistan (2012 data)	Asia	41 (206)	6.2	7.8	NA	NA	NA	NA	na	na	na	na
19	Peru	South America	236 (53)	5.0	6.7	54.8	203.0	+270.4	22.1	+28.0	142.5	263.0	+84.6
20	Morocco (2013 data)	Africa	221 (60)	1.6	1.3	164.5	205.3	+24.8	2.1	+242.9	55.1	45.0	-18.3

Source: UNDOC, 2015, retrieved July 20, 2015: <https://data.unodc.org/#state/47>.

Note: The three countries in bold have decreased their prison populations between 2000 and 2015 (Pakistan comparison is for 2000–2012; Thailand is 2003–2011; Iran data is 2012; Vietnam homicide data is 2003–2012).

pronounced drop in the number of prisoners between 2000 and 2015, significant declines were also reported in the rates of homicide, assault, rape, and robbery. China reported reductions in the rate of homicide during this same review period, but data were not available to assess changes in the rates of rape, robbery, and assault.

## PRETRIAL DETENTION IN GLOBAL CONTEXT

It has been well documented that the rates of pretrial detention vary both within and across global regions (Byrne, 2015b). Countries with the highest and lowest pretrial detention rates are identified in Figure 2. The harm caused by the overuse of pretrial detention has been documented in several recent reviews (see, e.g., Albrecht, 2010; Allen, 2015; U.S. Department of State, 2014). It appears that a particular country's approach to individuals who have been charged with a criminal offense is a reflection of that country's view of the relative importance of individual liberty and community protection. Countries

High Pretrial Detention Rates		Low Pretrial Detention Rates*	
Comoros	91.7	Czech Republic	10.3
Libya	90.0	Kuwait	10.0
Bolivia	83.2	Egypt	9.9
Liberia	83.0	Isle of Man (United Kingdom)	9.8
Monaco	82.8	Bermuda (United Kingdom)	9.6
Congo (formerly Zaire)	82.0	Brunei Darussalam	8.9
Lebanon	75.3	Iceland	8.4
Congo (Brazzaville)	75.0	Romania	8.0
Benin	74.9	Poland	7.5
Bangladesh	73.8	Kiribati	7.5
Haiti	72.8	Rwanda	7.1
Paraguay	72.3	Namibia	6.6
Central African Republic	70.2	Algeria	6.2
Yemen	70.1	Oman	5.6
Cameroon	70.0	Marshall Islands	5.6
Nigeria	69.3	Tonga	4.4
India	67.6	Palau	4.1
Pakistan	66.2	Cook Islands (New Zealand)	4.0
Republic of Guinea	65.0	Taiwan	3.6
Uruguay	64.5	Laos	1.0

\*Two countries (San Marino and Tuvalu) reported 0.0 pre-trial detention rates.

**Figure 2:** Global variation in pretrial detention rates.

Source: ICPS website, data retrieved July 20, 2015: [http://www.prisonstudies.org/highest-to-lowest/pre-trial-detainees?field\\_region\\_taxonomy\\_tid=All](http://www.prisonstudies.org/highest-to-lowest/pre-trial-detainees?field_region_taxonomy_tid=All).

with high pretrial detention rates can be described as risk averse, while countries with low pretrial detention rates can be described as liberty/due process focused. Among the 20 countries with the highest prison populations (see Table 4), there was wide variation in the rate of pretrial detention, from a low of 7.5% (Poland) to a high of 67.6% (India). High rates of pretrial detention (see Table 4) do not appear to predict either high incarceration rates or high prison populations globally, but several high-prison population countries also have very high pretrial detention rates, including India (67.6%), Pakistan (66.2%), and the Phillipines (63.1%).

## CONDITIONS OF CONFINEMENT AROUND THE GLOBE

It should come as no surprise that prisons systems vary from country to country—and from region to region—in such basic areas as the purpose of incarceration, prison design and conditions, length of sentence, access to treatment and health care, extent of crowding, and levels of prison violence (Byrne & Hummer, 2008). While there is no universal metric that can be used to distinguish high-performance from low-performance prisons, a number of researchers have suggested that such global performance measures can and should be developed, and the resulting rankings of the globe's best and worst prison systems should be published, debated, and utilized to improve the system (Byrne, 2014). In the interim, we must rely on case studies and research reviews of prison conditions in several countries (Allen, 2015; Pratt & Eriksson, 2014). Here, the recent work of the United Nations (2013 *Report on International Prison Conditions*), Albrecht's global review of prison crowding, the reviews of prison conditions by Amnesty International, as well as Pratt and Eriksson's recent case study of Norway's unique approach to incarceration are particularly noteworthy. According to the United Nations report, several countries in each global region have severe crowding problems that exacerbate already poor prison conditions, while corruption is rampant in the corrections systems of several Central American countries, due in part to the use of the military and/or local/national police forces to manage prisons in this global region. Given the conditions of confinement described in the recent United Nations global review, it is not surprising that offenders leaving prison and reentering the community are failing at very high rates. To the extent that we can view individual offender recidivism (typically measured as rearrest during a set period of time) as a key indicator of correctional system performance, it would be helpful to identify and rank the best and worst corrections system using a standardized recidivism measure. Researchers have been arguing for the systematic collection of global recidivism data for several years (Byrne & Hummer, 2005), and it appears that we are finally moving toward the development of global corrections performance indicators.

**Table 4:** World prison population (PP) characteristics for countries with the largest prison populations: 2000–2015\*.

Ranking	Title	Region	PP Rate	2015 PP	% Change	Occupancy	% Foreign	% Female	% Pretrial	% Juvenile
1	United States of America (2013)	Northern America	698 (2)	2,217,000	+14.4%	102.7	5.5	9.3	20.4	0.3
2	China (2014)	Asia	119 (123)	1,657,812	+16.1%	NA	0.4	6.3	NA	0.8
3	Russian Federation	Europe	463 (9)	667,546	-37.0%	94.2	4.6	8.1	18.2	0.3
4	Brazil (2014)	South America	301 (34)	607,730	+161.1%	161.3	0.6	6.1	38.8	0.0
5	India (2013)	Asia	33 (212)	411,992	+51.4%	118.4	1.6	4.4	67.6	0.0
6	Thailand	Asia	452 (10)	304,916	+36.5%	133.9	4.0	14.5	21.5	—
7	Mexico	Central America	214 (64)	256,941	+66.0%	126.3	0.9	5.2	42.3	14.0
8	Iran (2014)	Asia	290 (36)	225,624	+42.8%	161.2	2.9	3.1	25.1	0.5
9	Indonesia (2014)	Asia	179 (66)	167,163	+213.1%	153.0	0.5	5.1	31.9	3.2
10	Turkey	Europe	212 (65)	165,033	+233.3%	101.2	1.8	3.6	13.9	1.3
11	South Africa	Africa	292 (35)	159,241	-7.1%	132.7	6.3	2.5	26.9	0.2
12	Vietnam (2014)	Asia	154 (94)	142,636	+61.3%	NA	0.2	14.4	12.8	NA
13	Colombia	South America	242 (50)	119,378	+131.7%	153.3	0.6	7.0	37.1	—
14	Philippines (2013)	Asia	113 (131)	110,925	+39.9%	316.0	0.6	8.4	63.1	0.4
15	Ethiopia (2011)	Africa	111 (134)	93,044	+68.5%	NA	NA	2.8	14.0	NA
16	United Kingdom: England and Wales	Europe	148 (99)	85,743	+32.7%	111.1	12.8	4.5	13.8	0.8
17	Poland	Europe	(68)	76,145	+7.9%	88.5	0.7	3.4	7.5	0.4
18	Pakistan (2012 data)	Asia	41 (206)	74,944	-5.1%	177.4	1.2	1.5	66.2	1.7
19	Peru	South America	236 (53)	73,255	+164.1%	227.1	2.5	6.0	49.9	0.0
20	Morocco (2013 data)	Africa	221 (60)	72,816	+34.1%	157.8	1.8	2.4	46.2	1.6

\*2015 data unless noted above (next to country name); includes pretrial detention population. For details, go to <http://www.prisonstudies.org/world-prison-brief>. Data included above retrieved July 14, 2015. For China, it is estimated (but not confirmed) that there are 250,000 pretrial detainees. — = Juveniles are the responsibility of another authority.

Table 4 highlights some relevant prison population characteristics for the 20 largest prison systems globally, including occupancy rates, percentage of foreign prisoners, percentage of females, and percentage of juveniles in prison. While each of these indicators provides important information about the prison populations of these 20 countries, it is the level of prison crowding that is perhaps the most revealing. Using occupancy rates as an indicator of prison crowding, we found that occupancy rates exceeded 100% in 15 of the 17 countries that reported this information to the ICPS (China, Vietnam, and Ethiopia did not report). Two countries had occupancy rates under 100%: the Russian Federation (94.2% occupancy and a 37% reduction in prison population) and Poland (88.5% occupancy and 7.9% increase in prison population). There is no evidence that prison crowding is a driver for reduced prison populations in these 20 countries. To the contrary, prison populations continue to rise globally despite the capacity limits of the current prison systems of these countries. Rather than expand capacity further, it appears that corrections leaders in these countries have attempted to manage prisoners utilizing existing resources, which has resulted in a wide range of problems (high inmate–staff ratios, violence, disorder, mental and physical health crises, and inadequate access to treatment services, and programming) according to several recent reviews (Albrecht, 2010; Allen, 2015; Commission on Crime Prevention and Criminal Justice, 2014; U.S. Department of State, 2013).

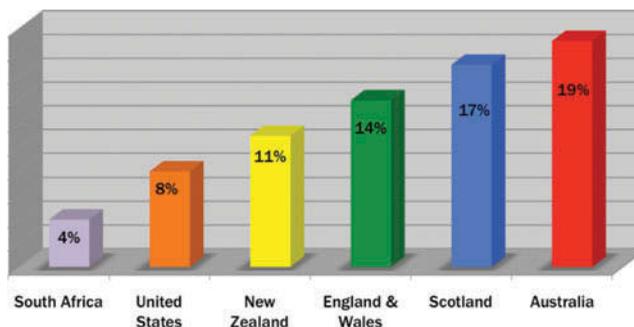
### Global Utilization of Alternative Sanctions

According to the recent review by Allen (2015), there appears to be considerable variation in the use of alternative sanctions within and across global regions. Alternative sanctions include fines (and day fines), community service, probation, intensive supervision/electronic monitoring, residential community corrections, boot camps, and split sentencing. The use of drug courts to manage certain categories of drug offenders could also be included as an alternative sanction. Once again, however, there is no global data base detailing the use of alternative sanctions in each country, so an assessment of the links between the availability of various community based strategies and a country's use of incarceration can not be offered here. For example, it has been reported that fines and community service are used much more frequently in selected European countries than the United States (Weiss & MacKenzie, 2010), but we do not know about their use in other global regions. Allen (2015) reported that the use of electronic monitoring is increasing across Europe and South America, while Byrne (2015a) reported that less than 5% of the community supervision population in the United States has been supervised via electronic monitoring, which is about the same rate as in 1990. In addition to the expansion of the use of electronic monitoring in Europe

and South America (for pretrial detainees), Allen (2015) also identified two other important developments: (1) the increased use of cognitive behavioral treatment programming in community corrections systems across Europe and (2) the increased use of desistance-focused community supervision strategies. According to Allen (2015, p. 36) “A desistance paradigm which emphasises the processes through which offenders change their lives around and the relationships needed to sustain the changes is gaining greater acceptance among probation experts.” Examination of the evaluation research on the effectiveness of probation and each of the other alternative sanctions mentioned here supports their expansion, especially when their effects are compared directly to prison and jail-based sanctions (Villetez, Gillieron, & Killias, 2015; Byrne, 2015b).

### PRISON PRIVATIZATION IN GLOBAL CONTEXT

Another emerging global corrections trend that needs to be considered is prison and community corrections privatization (Mason, 2013). Private for-profit prisons have expanded significantly in recent years, and they offer public officials an alternative to public sector management and control of prisons and prisoners. Three of the 20 largest prison systems globally were included in a recent review of international privatization trends conducted by the Sentencing Project (Mason, 2013): the United States, the United Kingdom, and South Africa. In terms of the proportion of its prison population managed by private corporations, Australia leads the field, with 19% of all prisoners housed in private prisons, followed closely by Scotland (17%), England and Wales (14%), and New Zealand (11%). The United States houses approximately 8% of its federal and state prisoners in private for-profit prisons, while South Africa has approximately 4% in private for-profit prisons (see Figure 3, below). No data were available for the remaining countries we



**Figure 3:** Global trends in the utilization of private prisons.

Source: Mason, Cody, The Sentencing Project (2013).

are focusing on in this review. The bottom line for many observers of this trend will be on the comparative effectiveness (including cost-effectiveness) of public versus private-sector prison management. The private sector has also moved into the community corrections management in the United Kingdom, a strategy that is being also considered by state governments throughout Australia (Byrne, 2015b). In addition, the private sector has been one of the driving forces behind the expansion of electronic monitoring globally (Allen, 2015).

### **Global Performance Measures and Research Reviews**

There has been recent interest in the development and dissemination of global measures of the performance of our institutional and community corrections system (Byrne, 2013a). However, we currently do not have a global database that includes the necessary information to assess the performance of our institutional and community corrections system. With a few notable exceptions (e.g., Australia), countries do not collect and analyze the data needed to assess the impact of sentencing and correctional strategies. Without these data, we will continue to rely on country-specific case studies (e.g., Japan, Finland, Australia) and comparisons of reported recidivism rates across a small number of countries<sup>4</sup> (Deady, 2014; Pratt & Eriksson, 2014). For the small number of countries with available recidivism data, it is difficult to identify a prison system that would be classified as a success, using a standard measure of prison performance (e.g., reincarceration during a three-year release follow-up period). Scandinavian countries (Norway, Sweden, Finland, and Denmark) have recently been touted as examples of successful prison systems (Larson, 2014), but detailed evaluations of the performance of these corrections systems have not been completed to date (Pratt & Eriksson, 2014).

One recent advance worth noting is the development of global research reviews highlighting the available evaluation research on the effectiveness of corrections and sentencing strategies conducted by the Campbell Collaborative.<sup>5</sup> However, an examination of this body of global research (see Table 5) underscores a critical limitation of current systematic, evidence-based reviews: The vast majority of studies included in these reviews are from the United States. In order for policy makers in the United States and elsewhere to look globally for effective corrections programs and sentencing strategies, there needs to be a global body of comparative research available for review. At present, this is not the case.<sup>6</sup> Nonetheless, the results of the systematic, evidence-based reviews available from the Campbell Collaborative do offer support for the development of alternative sanctions and for the provision of treatment in both prison and community-based corrections, with

**Table 5:** Adult corrections and sentencing studies by country: Campbell Collaboration studies.

	USA	Canada	UK	Australia	Other	Total
Feder, L., Austin, S., & Wilson, D. (2008). Court-mandated interventions for individuals convicted of domestic violence	10	0	0	0	0	10
Killias, M., Villettaz, P., & Zoder, I. (2010). The effects of custodial vs. non-custodial sentences on re-offending: A systematic review of the state of knowledge	13	2	0	2	6	23
Lipsey, M., Landenberger, N. A., & Wilson, S. J. (2007). Effects of cognitive-behavioral programs for criminal offenders: a systematic review	42	10	5	0	1	58
McDougall, C., Cohen, M., Swaray, R., & Perry, A. (2008). Benefit-cost analyses of sentencing	18	0	0	2	0	20
Mitchell, O., Wilson, D. B., & MacKenzie, D. L. (2012). The effectiveness of incarceration-based drug treatment on criminal behavior: A systematic review	65	4	1	3	1	74
Visher, C. A., Coggeshall, M. B., & Winterfield, L. (2006). Systematic review of non-custodial employment programs: impact on recidivism rates of ex-offenders	8	0	0	0	0	8
Wilson, D., MacKenzie, D. L., & Mitchell, F. N. (2005). Effects of Correctional Boot Camps on Offending: A systematic review. Campbell Systematic Reviews of Intervention and Policy Evaluations.	40	1	2	0	0	43

Source: Byrne (2013a, Table 1).

better results identified for treatment programs operating in the community (Byrne, 2016). In terms of the impact of individual treatment, there is considerable evidence that participation in various individual treatment programs—in both institutional and community settings—results in small, but statistically significant, changes in the subsequent criminal behavior of adult offenders. For example, Landenberger and Lipsey (2005) reported a .10 absolute difference in recidivism (one-year follow-up, .40 vs. .30) between experimental and control groups in their meta-analysis of 58 studies (41 targeted adults) of cognitive behavioral treatment (including 13 using random assignment designs and 6 “real world” cognitive behavioral therapy studies) conducted between 1965 and 2005.

## NEW DIRECTIONS: THE ELUSIVE SEARCH FOR EVIDENCE OF A GLOBAL REHABILITATION REVOLUTION

Over the last several decades, politicians in the United States and in several other countries have waged wars on drugs and wars on crime that have relied on a punishment-based response to these problems, with a focus on the crime, rather than the individual and community context that shapes the life course of offenders before and after prison. Given the documented failure of this crime-centered and punishment-focused response in these countries to change the post-release criminal behavior of those offenders sent to prison, it is not surprising that corrections policy makers have begun to look more closely at how leaders in other countries have approached—and attempted to solve—these same problems. While beyond the scope of this review, it certainly makes sense to look closely at those countries that have managed to keep their incarceration rates low in the face of global prison upsizing trends (see Figure 4). It appears that the low-incarceration rate countries are disproportionately from two global regions: Africa and Asia.<sup>7</sup> Examination of the homicide rates in these countries does not indicate that low levels of violence are linked to low incarceration rates in these 20 countries. Two of the countries in our “top 20” listing of high global prison populations—India and Pakistan—are also included on the list of countries with the lowest incarceration rate. Further investigation of how these countries have kept their incarceration rates so low is needed.

We have focused on those countries with the *highest* prison populations in order to gain a better understanding of why global prison populations continue to rise, despite the high cost—economic, social, political, and personal—of prison. It is not the crime rate that drives prison populations in these countries; in fact, the rate of violent crime is actually dropping in the majority of countries with the highest prison populations. Why do global prison populations continue to rise? With Occam’s Razor in mind, we offer the following assessment. The likely answer to this question—and it is a sad one, to be sure—is that it is far simpler to marginalize individuals living in at-risk, poverty pocket communities and to respond punitively to their criminal behavior when it occurs than it is to address the underlying problems—poverty, inequality, lack of resources/opportunity, no procedural justice—that are the primary drivers of crime rates in our communities. However, there is some evidence that policy makers are slowly coming to the realization that we need to rethink our current corrections policies and sentencing practices. Whether this emerging view is evidence of support for the notion that you cannot change offenders (into nonoffenders) unless you simultaneously change the communities in which they reside, or simply economic pragmatism, is beside the point. Regardless of how we got here, we are at a watershed moment in the history

Rank	Country (2013 Homicide Rate)	2013 Incarceration Rate per 100,000
198	<a href="#">Japan</a> (0.3)	49
200	<a href="#">Gambia</a> (9.6)	48
201	<a href="#">Iceland</a> (0.3)	45
201	<a href="#">Bangladesh</a> (2.8)	45
203	<a href="#">Liberia</a> (3.3)	43
203	<a href="#">Mauritania</a> (11.4)	43
203	<a href="#">Cote d'Ivoire</a> (12.4)	43
206	<a href="#">Pakistan</a> (7.8)	41
207	<a href="#">Niger</a> (4.7)	40
208	<a href="#">Chad</a> (9.4)	39
209	<a href="#">Timor-Leste (formerly East Timor)</a> (3.6)	38
210	<a href="#">Oman</a> (1.2)	36
211	<a href="#">Democratic Republic of Congo</a> (13.5)	35
212	<a href="#">India</a> (3.3)	33
212	<a href="#">Burkina Faso</a> (3.3)	33
212	<a href="#">Congo (Brazzaville)</a> (10.5)	33
215	<a href="#">Mali</a> (11.2)	32
215	<a href="#">Nigeria</a> (10.3)	32
217	<a href="#">Comoros</a> (8.0)	28
218	<a href="#">Republic of Guinea</a> (19.5)	22
219	<a href="#">Liechtenstein</a> (0.0)	19
219	<a href="#">Faeroe Islands (Denmark)</a> NA	19
219	<a href="#">Central African Republic</a> (13.6)	19
222	<a href="#">San Marino</a> (0.0)	6

**Figure 4:** Homicide rates in countries with lowest incarceration rates.

Source: ICPS prison population rate data, retrieved July 20, 2015: [http://www.prisonstudies.org/highest-to-lowest/prison\\_population\\_rate?field\\_region\\_taxonomy\\_tid=All](http://www.prisonstudies.org/highest-to-lowest/prison_population_rate?field_region_taxonomy_tid=All). UNDOC homicide rate data, retrieved July 27, 2015, (note, 2013 or most recent year listed) at <http://www.theatlantic.com/international/archive/2013/09/why-scandinavian-prisons-are-superior/279949/>.

of corrections and sentencing reform. Cullen (2013, p. 361) offers the following assessment of the current situation:

Rehabilitation has weathered a sustained attack and is now increasingly guiding correctional policy and practice. Again, this is a time to avoid hubris and to be sober about what it will take to move beyond the “nothing works” era. It is not sufficient to decry the wastefulness of mass incarceration or to show that punitively oriented programs do not work. The special challenge is to create evidence-based treatment programs on a wide basis and to implement them with integrity. In short, it is time to take the task of rehabilitating offenders seriously.

There are certainly a number of emerging strategies in the international corrections and sentencing area that will be proposed, debated, and evaluated

in the coming years, including the impact of justice reinvestment strategies on community safety (Homel, 2014), the ongoing debate over the use of incarceration for drug users, and recent discussion of the need to build treatment-focused prisons designed to maximize the impact of the prison experience on the mental health and physical health of prisoners. We discuss each of these global developments briefly here and provide our assessment of the likely impact of reforms in three broad areas: (1) new sentencing and revocation policies, (2) new corrections system emphasis on the provision of treatment, and (3) the need for a new generation of corrections workers that support individual efforts to desist from crime and recognize the importance of community in the change process.

### **Strategy 1: New Sentencing and Revocation Policies**

Any serious discussion of sentencing reform in the United States begins with a review of who is in prison and how long they stay before release. Slightly over 73% of new prison admissions in 2013 were offenders convicted of crimes and sentenced to one year or more in state prisons. Among sentenced offenders in prison, about half of the state prison population can be described as violent offenders, due to their conviction offense; the remaining sentenced offenders in our state prison system include individuals convicted of drug (16.0%), property (18.8%), or public order (10.7%) offenses (Carsen, 2014). Actual time served varied based on crime type, with violent offenders serving an average of 28 months in state prison, property offenders serving 12 months, and drug offenders serving 13 to 14 months (Carsen, 2014). However, a significant proportion of new prison admissions each year includes technical violators of parole or probation release conditions (26.7% of all new admissions in 2013). These individuals were in prison for much shorter periods, typically 6 to 9 months.

When compared to other countries globally, it has been found that the United States is—with a few notable exceptions—more aggressive in the enforcement of existing laws prohibiting drug use and property crime and also more punitive in the sentencing of convicted drug and property offenders (Lynch & Pridemore, 2011). For this reason, most recommendations on how to reduce the U.S. prison population begin with a call for drug law sentencing reform, the expansion of alternative sentencing options, and shorter sentences for those drug and property offenders sent to prison. In addition, new approaches to revocation that do not involve prison have also been proposed. Given the proportion of drug and property offenders in the nation's prison system, it seems realistic to expect that the United States' current incarceration rate could be reduced by close to 50% by developing alternates to incarceration for most of these offenders, while responding to technical violations in creative ways that do not involve reincarceration (Jacobson, 2005). Even then, the U.S.

incarceration rate (which would drop from 698 to 349) would still be about 2.5 times higher than the average global rate (144), which would rank nation in the top 20 globally in prison population rates.

In the United States, advocates for changes in sentencing and correctional control policies have argued that money currently invested in imprisonment should be *reinvested* in justice policies with greater comparative crime reduction effects. Not surprisingly, there is much debate on how money saved by downsizing our prison system should be reallocated (e.g., more police, more crime prevention, more community treatment programming, more community development), but there seems to be an emerging consensus that we need to target our strategy on the poverty-pocket, high-crime concentration neighborhoods, where most offenders reside before and after prison. There is no guarantee that the implementation of justice reinvestment strategies will significantly reduce the size of our prison system and/or improve community safety in the targeted communities, but we will not know unless we try (by “try” we mean develop, implement, and evaluate a full range of justice reinvestment strategies linked directly to prison downsizing).

A related corrections and sentencing policy reform issue is the need to look critically at the global war on drugs, focusing specifically on the use of prison as the sanction of choice for convicted substance users. Allen (2015, p. 3) has documented regional variations in our response to the drug problem, including the use of life sentences and the death penalty for individuals convicted of drug crimes: “Although the death penalty for drug offences is noncompliant with international law, it is retained by 33 countries. Around 1,000 people are executed every year as a result. In 2013, the death penalty was used for drug-related offences in a number of countries, including China, Indonesia, Iran, Laos, Malaysia, Pakistan, Qatar, Saudi Arabia, Singapore, Thailand, UAE, Vietnam, and Yemen”.

An examination of global trends in drug arrests reveals that arrests for drug use and trafficking continue to rise. Failure rates (recidivism/continued drug use) for drug-involved offenders leaving prison are higher than for all other offender groups. This has been an ongoing problem across corrections systems globally, and it has led to a variety of initiatives targeting the needs of offenders when they leave prison and reenter communities (Byrne & Hummer, 2005). As we noted earlier in this review, there are over 10.2 million offenders in our prison system globally. The majority of these offenders had either been convicted of a drug crime or were using drugs at the time of their offense. Government leaders in the United States and several other countries are rethinking their approach to the criminalization, control, and treatment of drug users and looking at how countries that do not rely on incarceration (e.g., Norway, Finland) address the problem. While it appears that the decarceration of drug users is the likely outcome of this reassessment process in many

countries (Pratt & Eriksson, 2014), there is also a movement to decriminalize many categories of drugs.

In the United States, drug courts and community-based drug treatment have emerged as an alternative to incarceration for offenders with drug problems. Similarly, China has recently initiated a major reform of its previous strategy of sending known drug users to mandatory two-year terms in prison labor camps (Li, 2014). Over the last decade, community-based alternatives to prison have been developed in China to address the needs of drug users in community rather than institutional settings. The challenge for corrections leaders in China will be to develop a drug treatment infrastructure that can meet the needs of this population. China is not alone in terms of the need for an enhanced treatment infrastructure. A recent national survey of drug treatment availability in both the institutional and community corrections system in the United States found that only 10% of the offender population with substance abuse problems received appropriate treatment (Taxman, Perdoni, & Harrison, 2007).

## **Strategy 2: Treatment-Focused Prisons and Community Corrections**

A second global corrections strategy is to reform prison in ways that will minimize harm (physical, mental health, social) while supporting individuals in their attempts to change. Prison reform strategies include the development of minimum standards of care in prisons (United Nations, 2014), the expansion of assessment, treatment, and support services in prisons and jails, and a focus on continuity of treatment and support services during reentry to the community. Recent efforts by researchers to measure prison quality and performance globally (e.g., Liebling, 2008) support this strategy. The goal is to restructure the prison experience in ways that facilitate individual growth and change (attitudes, beliefs, skills, behaviors). The rationale for monitoring and measuring the implementation of this dimension of prison performance is straightforward: What gets measured, gets done (Byrne & Hummer, 2008).

There is certainly ample evidence that prisons—both public-sector and private for-profit prisons—have failed to do more than warehouse offenders in conditions that maximize short-term offender control but minimize the likelihood of long-term offender change. Reports on prison abuse in several countries in each global region have been completed by both the United Nations and by Amnesty International in recent years. In the United States, the use of solitary confinement (and supermax prisons) has been identified as a form of torture by Amnesty International (2015), while a recent United Nations report on prison conditions highlighted severe crowding, violence, and inadequate health care in several countries in each global region. According to this United Nations review, “For many countries, overcrowded facilities are

symptomatic of broader issues, such as overwhelmed and inefficient justice systems, untrained and corrupt law enforcement officials, or mismanaged and underpaid prison staffing” (United Nations Report on International Prison Conditions, 2013, p. 1). When considered in this context, it seems logical to suggest that any initiative to reform prisons must be developed within the broader framework of criminal justice reform, while also focusing on improving conditions in the small number of at-risk communities where most offenders live before and after they go to prison.

While there are certainly a number of unique features that can—and have—been imagined in a model prison (Toch, 2005), one feature that deserves careful consideration is treatment on demand. Reviews of the availability and quality of treatment provided in institutional settings in the United States have consistently found that the vast majority of offenders in prison today are not receiving the treatment they need (see, e.g., Taxman et al., 2007). If we are serious about developing corrections strategies that attempt to not only control but also change offenders (into nonoffenders) then it certainly makes sense to invest in treatment for mental health and substance abuse, along with programming designed to improve offenders prospects for meaningful employment upon reentry to the community.

What impact would increasing access to treatment likely have on the prison population? According to a recent analysis by Pattavina and Taxman (2013), significant, albeit modest, long-term reductions in the U.S. prison population—reductions of over 5.5% over 9 years—are associated with a 50% increase in treatment capacity in our prison system. Pattavina and Taxman emphasize that the current base capacity rate for treatment in the U.S. prison system is low (for many treatment options, they estimated that only 10% of the offenders needing a particular treatment modality receive the appropriate treatment), so a 50% increase in treatment capacity—which certainly sounds like a major investment—would actually only *marginally* increase the prison system’s overall treatment capacity.

Pattavina and Taxman (2013) also found that improvements in treatment quality—even without increases in current treatment capacity—would have a slightly higher overall impact (6.7% reduction) on corrections populations long term. When these results were examined by offender risk profiles, it was found that increasing treatment/service capacity (by 50%) had a greater impact on high-risk offenders (6.1% reduction) than on either medium-risk (5.4% reduction) or low-risk offenders (1.5% reduction). When the likely impact of increasing service quality (while keeping service capacity constant) was examined, the overall impact was greater (−6.7 vs. −5.5), but the same pattern of variation by risk level was identified for high- (−7.1), medium- (−6.8), and low-risk (−2.8) offenders.

Pattavina and Taxman have also simulated the likely impact of increasing treatment capacity to 100%, with high overall program quality, and they

estimate that if such a treatment on demand prison system was developed in the United States, we would see (over 9 years) a reduction in reincarceration from a baseline of .32 to .28, an 11% reduction.<sup>8</sup> These findings are consistent with the results of evidence-based reviews of the long-term impact of prison treatment programs: Even the provision of high-quality treatment programs in prison settings will only have a marginal impact on offender desistance, because there is more to the process of individual offender change than program participation. Treatment programs in prison need to be linked to community treatment and accompanied by the provision of resources and social support in the community (Byrne, 2008).

If our goal is to develop strategies that result in long-term desistance from drug use and associated criminal behavior, we need to consider the findings from the Taxman and Pattavina simulation modeling study carefully regarding the impact of improvements in both treatment capacity and treatment quality on corrections outcomes. In our view, the development of a treatment-focused prison system dedicated to providing quality care to all offenders in a safe, secure setting would represent a watershed point in the history of prisons. We certainly need to downsize prisons, but in the process, we also need to reestablish offender rehabilitation as the primary purpose of both our institutional and community corrections system. However, we need to recognize that programs (or strategies) alone are not the answer: We also need to develop community-based change strategies that address the underlying problems that generate crime in high-risk communities, while supporting individual efforts toward desistance from crime in these communities. Morenoff and Harding (2011) have argued that resistance to lifestyle change by individual offenders may be affected by community level influences operating in high-risk communities:

- Moral cynicism among residents
- Increased opportunities for crime and deviance
- Increased motivation to deviate
- Diminished social control

Unless we develop strategies to address these community-level influences, the provision of individual treatment will continue to have only a modest impact on program participants.

### **Strategy 3: Treatment-Focused Corrections Line Staff and Management**

One final observation on the difference between the U.S. corrections system and corrections systems in other countries is worth considering here.

In the United States, we have attempted to manage our institutional and community corrections populations with a management team focus on short-term offender control and the mitigation of risk; and a line staff with the educational background, skill set, and training to support this short-term control agenda. High inmate–staff ratios exacerbate the problem because our reliance on control technology impedes relationship development, mentoring opportunities, and the provision of support. However, if management decides to embrace the rehabilitation-focused prison-based and community-based strategies/programs utilized in several other countries, then they will need to recruit a new generation of treatment-oriented corrections workers with not only the educational background needed (e.g., social work, psychology, community social psychology, sociology) but also an attitude and mindset that will allow them to develop meaningful relationships with offenders.<sup>9</sup> In Scandinavian prisons, for example, a recent review by Larson (2014) revealed that “the most profound difference is that correctional officers fill both rehabilitative and security roles. Each prisoner has a “contact officer” who monitors and helps advance progress toward return to the world outside—a practice introduced to help *officers* avoid the damage experienced by performing purely punitive functions: stress, hypertension, alcoholism, suicide, and other job-related hazards that today plague American corrections officers, who have an average life expectancy of 59” (emphasis in original). In community corrections, there will need to be an emphasis on both community resource development and on the potential mentoring role of probation and parole officers. The informal social control—and mentoring—role of the probation and parole officer is a key feature of desistance-based community supervision strategies that needs to be evaluated in terms of its impact on intermediate (lifestyle change) and long-term (desistance) outcomes. If a rehabilitation revolution occurs in the United States, it will be led by a new generation of line staff (and management) who recognize that both offender change and community change are possible.

## NOTES

1. A small number of international working groups have been focused on global corrections and sentencing issues in recent years, including CREDOS, directed by Fergus McNeill (go to <http://www.sccjr.ac.uk/projects/collaboration-of-researchers-for-the-effective-development-of-offender-supervision-credos/>), Prison Reform International (see Allen, 2015), the International Centre for Prison Studies (see Walmsley, 2015), the United Nations Office of Drugs and Crime (see UNODC, 2015), Amnesty International (2015), and the Global Centre for Evidence-Based Corrections and Sentencing (go to <http://www.gcecs.edu.au>).

2. The analyses presented here are based on prison population data collected by the International Centre for Prison Studies (ICPS) for 224 countries and retrieved at [http://www.prisonstudies.org/highest-to-lowest/prison-population-total?field\\_region\\_taxonomy\\_tid=All](http://www.prisonstudies.org/highest-to-lowest/prison-population-total?field_region_taxonomy_tid=All). Data for some countries were missing, resulting in the following: pretrial detainees and remand prisoners ( $n = 210$ ); female prisoners ( $n = 214$ ); foreign

prisoners ( $n = 181$ ); and occupancy level ( $n = 201$ ). It should be noted that changes in the number and rates of incarceration have been calculated using the year 2000 as the base year, unless otherwise noted. In addition, the most recent available prison population rates and numbers were used for each country; these variations are also noted in the tables included here, but for further details and definitions of key terms, see the ICPS website. The annual crime data used in this review were collected by the United Nations Office on Drugs and Crime and retrieved at <https://data.unodc.org/#state:5>. The country-specific global crime database only includes homicide data for 219 countries, but there is variation in the availability of the other crime categories included in this country-specific database. Both the base year and the most recent year used for crime rate change calculations varied from country to country. These variations are noted in the tables included here. For a review of challenges and limitations inherent in conducting global comparisons of country-specific data on either crime or corrections, see Alvazzi del Frate (2010) and Walmsley (2010).

3. For a discussion of the nature and scope of recent corrections reform in the Russian Federation, see Moran et al. (2011). They offer the following assessment (2011, p. 80): “The underlying purpose of the reform is to reduce the size of the prison population and, in those cases where offenders receive custodial sentences, to enable the Russian Federation to meet international standards for the humane treatment of prisoners. But, inevitably, there are more immediate and prosaic aims driving the new ‘conception,’ including the penal service’s need to reduce costs and to break the gang culture currently plaguing Russian penal colonies that has its roots in the *vory v zakone* (thieves-in-law) of the Stalinist Gulag (Antonyan & Kolyshshnitsyna, 2009; Kramer, 2010; Oleinik, 2003; Varese, 2001)”.

4. See Deady (2014) for an attempted comparison of the recidivism rates of the following countries, using data from different base years and with varying outcome measures: Japan (43%), Australia (39%), Ireland (62%), Scotland (50%), United Kingdom (46%), and the United States (52%). According to Deady, “Looking at recidivism in a sample of other countries, the U.S. rate does not appear exceptional. It should be noted that comparing international recidivism rates can be tricky. Countries track them differently, often using different terms (reconviction, rearrest, relapse, reimprisonment) and varied lengths of time for studies (1 year, 3 years, 10 years)” (2014, p. 2). Report available at [http://www.salve.edu/sites/default/files/filesfield/documents/Incarceration\\_and\\_Recidivism.pdf](http://www.salve.edu/sites/default/files/filesfield/documents/Incarceration_and_Recidivism.pdf).

5. In addition to the Campbell Collaborative website, systematic reviews of research from countries outside the United States can be found on the CrimeSolutions.gov website and on the website of the Global Centre for Evidence-Based Corrections and Sentencing at <http://www.gcecs.edu.au>.

6. One additional caveat about the utilization of evidence-based reviews should be mentioned at this point: They focus exclusively on program effects. According to a recent review by Byrne (2014): “Another facet of the problem that needs to be considered is the exclusive focus on programs as the change strategy of choice, when in fact it is likely that offender change is a product of a variety of dynamic factors, not just successful completion of a correctional program. Although the term *evidence-based* has been defined narrowly in many circles to only include the results of high quality *program* evaluations, there is a recent movement to expand the discussion to include not only evaluations of individual corrections programs (e.g., therapeutic communities, intensive probation supervision, boot camps) but also assessments of broader correctional *strategies* (e.g., reduced caseload size, mentoring). The best example of this recent change is found on the NIJ Crime Solutions webpage, <http://www.crimesolutions.gov/TopicDetails.aspx?ID=28#practice>. It is also possible that when we focus on either program effects or strategy effects exclusively, we are ignoring other factors that might

be related to individual desistance from crime, including both the individual and community context of offender transformation/change. For this reason, it makes sense to consider carefully the need to include research on both individual context (e.g., the work of desistance researchers) and the work of researchers focused on the community context of crime prevention and control.”

7. According to a recent review by Larson (2014), one possible explanation for low incarceration rates is high population homogeneity: “In 1993, Norwegian criminologist Nils Christie (a major influence on Scandinavian penal policy) had already unpacked this phenomenon. In *Crime Control as Industry*, Christie concluded that the more unlike oneself the imagined perpetrator of crime, the harsher the conditions one will agree to impose upon convicted criminals and the greater the range of acts one will agree should be designated as crimes. More homogeneous nations institutionalize mercy, which is to say they attend more closely to the circumstances surrounding individual criminal acts. The opposite tendency, expressed in mandatory sentencing and indiscriminate “three strikes” laws, not only results from, but widens social distance. The harshness of the punishment that fearful voters are convinced is the only thing that works on people who don’t think or act like them becomes a measure of the moral distance between these voters and people identified as criminals.” <http://www.theatlantic.com/international/archive/2013/09/why-scandinavian-prisons-are-superior/279949/>.

8. Pattavina and Taxman (2013) provide a detailed description of simulation model assumptions and analytic techniques, in chapter 10 (pp. 267–284). The specific recidivism reduction effects associated with participation in prison treatment programs varied by program category/type (see Table 10.2 for a summary).

9. In the United States, our line staff are likely to have degrees in criminal justice, while in the United Kingdom and Australia, line staff are more likely to have degrees in social work and/or psychology. Another difference worth noting is inmate-officer and offender-community corrections staff ratios. Unfortunately, no global database including these data are available for review. UNDOC does provide country-specific data on the number of corrections workers.

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