Bad Data: How government agencies distort statistics on sex-crime recidivism



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Abstract

Data on the recidivism rates of individuals convicted of sex crimes varies considerably across studies. Both academic papers and government reports have assessed various forms of recidivism for this group, with different findings. The vast majority of the public believes that people convicted of sex crimes will inevitably reoffend and this is the premise upon which most related legislation is based. However, this premise is based on false and misleading information contained in numerous published reports. After a review of 287 studies of recidivism statistics, we selected seven that exhibit the most egregious misinformation and that have been the most influential in shaping governmental policy. We examine these seven studies thoroughly to better understand their definitions, interpretation, and presentation of recidivism data. We then seek to resolve discrepancies and to determine what can legitimately be said about sex-crime recidivism. We then discuss new revelations about recidivism and sex crimes vis-a-vis our analysis and we offer suggestions for future research.

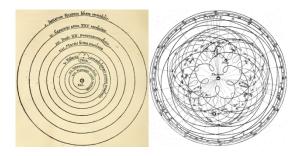
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Introduction

In ancient times, the Earth was believed by most people to be motionless at the center of the universe. Astronomers could easily describe the motions of the sun, moon, and stars through the sky, but the planets were a challenge, requiring complicated loop-de-loop curves. As more planets were discovered, the curves got more elaborate, more complicated, and more prone to error. The greatest scientists of the day struggled hard to fit the observed world to the reality they understood, with a motionless Earth at the center. The complicated curves that resulted, called "epicycles." were not false, but they were not a helpful way to look at the world. This geocentric model could easily lead to misunderstandings and errors in prediction. We get a simpler and more useful picture of the world when we think of it in terms of the Earth traveling in an orbit around the sun, a heliocentric model of planetary motion (See Figure 1).

Figure 1. Heliocentric (left) and geocentric (right) models of planetary motion. The complex "epicycles" on the right resulted from pre-Copernican astronomers doing their best to fit their data to the world as they understood it. We propose that similar preconceived notions about sex-crime recidivism resulted in the misleading "BJS recidivism rate" illustrated in Figure 2 below.



Why are we talking about astronomy in a paper on sex crime statistics? We do this because we have found a similar phenomenon in the publication of statistics on sex-crime recidivism. We found that a complex mathematical transformation was applied to recidivism statistics in an official US Department of Justice report in a way that contorts the data to fit with common beliefs about recidivism, while the data themselves, without the transformation, tell a very different story. This transformation, which is illustrated in Figure 2 below, results in what we call the "BJS recidivism rate." This rate is comparable to the pre-Copernican epicycles in that it is not false but distorts reality in a way that causes

misunderstandings and errors in prediction. We quote a number of legislators making statements founded on the BJS recidivism rate, thereby propagating these misunderstandings and prediction errors.

It is a common belief that individuals convicted of sexual crimes have high rates of recidivism. In a study of public perceptions of sex crimes and the individuals who commit them, Katz-Schiavone, Levenson, and Ackerman, (2008) found that 98% of respondents believed that individuals convicted of sex crimes would inevitably repeat them. Mancini and Mears found similar results in their 2010 study. Here, 93% of the public believed in the inevitability of sexual recidivism no matter the amount of punishment or intervention. This popular, false belief is also found expressed in official pronouncements of the people who write our laws. In a study of policymakers' views of this population, Sample and Kadleck (2008) found that the common view of a person convicted of a sex crime is that of someone who is sick and cannot control his urge to act out sexually.

Sample and Bray (2003; 2006) note that high recidivism rates are often cited as a reason for increasingly broad legislation aimed at combating sexual violence. While there is certainly a legitimate need for effective policies to reduce the occurrence of sexual violence, several reports, including government reports and peer-reviewed studies have found that sex-crime recidivism rates are actually much lower than commonly believed (Bureau of Justice Statistics, 2003; Hanson & Bussiere, 1996; 1998; Hanson & Morton-Bourgon, 2004; Hanson & Morton-Bourgon, 2005; Harris & Hanson, 2004). This is not new information, but has been known since at least the 1950s (Tappan, 1950).

The common, though empirically unsubstantiated, belief that individuals convicted of sex crimes will repeat them is perpetuated largely by media accounts of random crimes against children involving strangers who abduct and murder them (Quinn, Forsyth, & Mullen-Quinn, 2004; Sample & Kadleck, 2008). However, the myth is also furthered by lawmakers in public settings and the very reports that often show low recidivism rates for individuals convicted of sex crimes, but twist that information to make it look like it shows the opposite.

Recidivism means the repetition of illegal behavior after one has been punished for a crime. A fairly simple concept, it is complicated by a variety of factors in how it is measured. Some studies define recidivism as repetition of the original crime while others utilize a definition far more inclusive of any new criminal action. Similarly, researchers often set varying time periods to assess recidivism; while one study might utilize a three-year follow up period, another might choose a five- or ten-year follow up period, or longer. Despite these differing definitions and uses of the term recidivism, it is the premise upon which both sex-crime registries and sex-crime civil commitment are based.

This paper stems from an evaluation of 287 recidivism studies from 39 U.S. states, the federal government, Canada, the Netherlands, and Sweden. From this analysis, we chose seven official government reports that provide the most misleading information and which have been most utilized to guide government policy. We address each of these seven reports on their definitions of recidivism. We then seek to resolve discrepancies and determine what can legitimately be said about sex-crime recidivism. To meet these aims we first explore the issues surrounding defining recidivism. Next we summarize the available research on sexual recidivism rates. Finally, we discuss new revelations about recidivism and sex crimes vis-a-vis our analysis and we offer suggestions for future research.

Note that a number of important issues related to recidivism, such as the effect of under-reporting on recidivism statistics and the effectiveness of treatment programs at reducing recidivism, are outside the scope of this paper.

Recidivism and sex crimes

A great deal has been written and spoken about recidivism of people convicted of sex crimes. Statements on the subject exhibit the widest imaginable range of claims, that such people have either the highest rates of repeating their crimes as compared to other criminals (Foley, 2005), or the lowest rates (Tewksbury, Jennings, & Zgoba, 2011). Surprisingly, statements exist to support claims at both ends of the spectrum.

In 1988, a report to the California State Legislature explained that, "the more recidivistic a group the greater the need for monitoring their activities. Recidivism thus addresses the issue of appropriateness for registration" (Lewis, 1988). Since that time there have been several high profile cases involving individuals with previous sex crimes on their records who committed heinous new crimes against children they did not know. In part because of media representation of these cases, it has been assumed by many that all people who are convicted of sex crimes are representative of a highly recidivistic group (Katz-Shiavone, Levenson, & Ackerman, 2008; Levenson, Brannon, Fortney, & Backer, 2007; Sample & Kadleck, 2008) and therefore should be subject to registration, community notification, and in some instances, civil commitment. There are several sources of data that analyze sex-crime recidivism. For the purpose of this paper we focused on government reports and we determined that the findings are mixed, but that the data are often presented in a distorted fashion.

Government reports, and in particular the seven reports analyzed for this paper, are key because they present the very data upon which laws and policies are based. Lawmakers are on the record citing these reports as evidence that the United States must act swiftly to protect its children from a group of individuals who will inevitably repeat their crimes. One example is the testimony of US Senator Kay Bailey Hutchison (R-Texas), who, in 1996, spoke on the floor of the Senate and cited the BJS recidivism rate (explained below) in the following statement: "We do know several unpleasant facts about sexual predators who prey on children, like Amber, in communities across this country. ... The repeat crime rate

for sex offenders is estimated to be as much as ten times higher than the recidivism rate of other criminals. Mr. President, we know that more than 40 percent of convicted sex offenders will repeat their crimes. We must begin to act on the information that we have."

That statement is completely false, but it and others like it provided the impetus for harsh legislation that ignores sound research on the recidivism rates of individuals convicted of sexual offenses. Other similar statements by numerous lawmakers (examples cited below) based on the recidivism reports discussed in this paper were made in support of the Jacob Wetterling Act (1994), Megan's Law (1996), the Pam Lychner Act (1996), the PROTECT Act (2003), and the Adam Walsh Act (2006). Thus these reports are directly related to current policy and procedure and are the foundation for a quarter-century of legislation based on faulty claims.

Before considering the findings of recidivism studies, it is important to discuss some definitional issues regarding repeat crime rates. How recidivism is defined ultimately influences how findings are interpreted. There are three major definitional issues worth noting concerning calculating recidivism. First, it is important to understand some basic terminology:

- General recidivism means that a person convicted of a crime subsequently commits another crime of any kind.
- <u>Specialized recidivism</u> means that a person convicted of a crime subsequently commits another crime of the same kind, such as a person convicted of robbery committing another robbery.
- <u>Sexual recidivism</u> means that a person convicted of a crime subsequently commits a sex crime. (Note that for a person whose previous crime was sexual, specialized recidivism is the same as sexual recidivism.)

The follow-up period utilized in a given study ultimately affects the findings of the study. For example, if the authors of a study chose a three year follow up period and the authors of another study utilize the same sample of people convicted of sex crimes but opt for a five year follow up period, the results will be different. Another issue is the type of event that is used to indicate recidivism. While some researchers use reconviction as a measure of recidivism, others use rearrest. Both types of data have their problems. Rearrest tends to over-count because of people who are arrested and later found not guilty, while reconviction tends to undercount because of administrative or legal reasons that a guilty person may be acquitted. Maltz (1984) took the position that, in general, arrest data provide a better measure of recidivism, but found that sex crimes are an exception: "[A] person convicted of child molesting ... may be subject (and subjected) to arrest frequently, whenever a child is molested anywhere nearby. An arrest of this type should not be an indicator of recidivism." Finally, the sample of people and their associated documented risk levels influences findings. For instance, Prentky, Knight, and Lee (1997) conducted a recidivism study on people who were classified as sexually dangerous persons. The scholars were very clear that the sample was not representative of the more general population of people convicted of sex crimes; nonetheless, the study has been widely cited as if it were generalizable. These definitional issues, coupled with the popular notion that anyone convicted of a sex crime will "do it again," makes it difficult to say with any certainty how many people convicted of sexual crimes actually repeat.

Recidivism studies

While it remains a widely accepted belief that people who commit sex crimes will inevitably repeat (Fortney, Levenson, Brannon, & Baker, 2007; Mancini & Mears, 2010), the academic literature, for the most part, does not support this claim. Overwhelmingly, recidivism studies conducted over the last sixty-five years find that the vast majority of individuals convicted of sex crimes will not repeat. For instance, in a report issued by the federal government in 1989, Beck and Shipley found that the recidivism rate for forcible rape was 7.7%. One of the best known studies on recidivism was conducted by Sample and Bray (2003). The researchers analyzed data on (n=146,918) individuals in Illinois and found that only 6.5% of individuals who were convicted of a sex crime were rearrested for a new sex crime within 5 years. In another study, Harris and Hanson (2004) studied (n=4,724) people convicted of sex crimes. The finding that people convicted of sex crimes had low levels of recidivism held true for individuals with adult or child victims. The overall recidivism rates for the combined group were 14%, 20%, and 24% after 5, 10, and 15 years, respectively. Individuals who had been convicted of incest had the lowest recidivism rates 6%, 9%, and 13% after 5, 10, and 15 year periods. Hanson & Morton-Bourgon (2004) found that 14% of individuals with previous convictions for sex crimes were convicted of a new sex crime, whereas 36% were convicted for any crime within five years.

Yet, our knowledge is clouded by misinformation about sex-crime recidivism, in part because of the very definitions utilized by published reports on recidivism, and there is little clear or accurate information available to take the place of that misinformation. While there are myriad publicly available reports on sexual recidivism, this analysis focuses on reports from the US federal government and two agencies of the California government. In addition to the fact that the studies chosen for review represent those with the most egregious claims, we focus on all federal government reports because they are the primary source of information for federal agencies and legislators and are also used by state agencies across the United States. The California reports are influential because this state represents the oldest and largest registry in the nation. Many states look to California for guidance on policy and practice.

In the following list, the prefix "G" indicates studies of prisoner recidivism in general; "S" indicates the data are specific to sex-crime recidivism.

- Bureau of Justice Statistics (BJS, a unit of the US Department of Justice):
 - o G 1989: Recidivism of Prisoners Released in 1983 (Beck and Shipley, 1989)
 - o S 1997: Sex Offenses and Offenders: An Analysis of Data on Rape and Sexual Assault (section, Recidivism of violent sex offenders) (Greenfeld, 1997)
 - o G 2002: Recidivism of Prisoners Released in 1994 (Langan and Levin, 2002)
 - o S 2003: Recidivism of Sex Offenders Released from Prison in 1994 (Langan, et al., 2003)
 - o G 2014: Recidivism of Prisoners Released in 30 States in 2005: Patterns from 2005 to 2010 (Durose, et al., 2014)
- California Department of Justice:
 - S 1988: Effectiveness of Statutory Requirements for the Registration of Sex Offenders (section, Recidivism of Sex Offenders) (Lewis, 1988)
- California Department of Corrections and Rehabilitation:
 - o G 2010..15: Outcome Evaluation Report (CDCR, 2010) (published approximately annually since 2010)

Turning recidivism inside out

The 1989 BJS report, Recidivism of Prisoners Released in 1983, was based on the records of 16,000 people who had been released from prisons in 11 states in 1983. The data were extrapolated to represent an estimated 106,000 individuals released from prison in the entire United States. The report included the following table (Table 1) which represents the percentage of prisoners rearrested within three years of release whose most serious crime at time of release was one of ten specific crimes.

Table 1. Cross-tabulation of initial and recidivate crimes, as reported by the US Bureau of Justice Statistics (1989)

distree statisties (1903)													
		ercent of prisoners rearrested within 3 years of release whose most serious crime at time of											
Rearrest	release was:												
charge	Total	Violent crime				Property crime				Drugs	Disord		
		Total	Murd	Rape	Rob	Aslt	Total	Burg	Theft	Car	Fraud	Diugs	Distriu
# (k):	106.2	36.8	3.3	2.2	19.8	6.8	51.3	27.4	11.9	2.8	5.8	10.1	6.8
All	62.5%	59.6%	42.1%	51.5%	66.0%	60.2%	68.1%	69.5%	67.3%	78.4%	60.9%	50.4%	54.6%
Violent	22.7%	30.4%	21.6%	27.5%	33.3%	31.5%	19.7%	20.9%	19.5%	23.0%	11.5%	12.2%	19.3%
Homicide	1.6	2.8	6.6	2.8	2.9	1.7	1.1	1.1	0.8	1.4	1.1	0.3	0.9
Rape	0.9	1.7	0.8	7.7	1.4	1.2	0.5	0.7	0.4	0.1	0.4	0.4	0.8
Robbery	9.9	14.1	7.0	8.5	19.6	9.1	8.4	9.1	8.7	12.8	3.5	4.2	5.9
Assault	12.6	15.7	10.5	10.7	15.8	21.9	11.1	11.9	10.8	13.1	6.9	7.8	13.4
Property	39.7%	32.1%	16.8%	25.0%	38.9%	28.9%	49.8%	50.4%	50.3%	54.7%	47.4%	22.9%	28.2%
Burglary	18.4	12.6	6.4	12.7	15.4	10.7	25.2	31.9	17.5	23.7	16.2	8.2	10.3
Theft	21.2	16.3	7.4	7.4	21.0	14.4	27.2	25.3	33.5	26.3	26.0	12.2	14.9
Car theft	5.5	4.0	2.5	0.7	5.0	3.7	7.2	6.0	8.2	18.6	5.1	2.3	3.7
Fraud	6.5	4.2	2.3	1.8	5.5	2.9	8.6	6.0	8.7	8.5	21.6	4.3	5.7
Drugs	16.6%	14.8%	9.1%	11.3%	18.0%	13.8%	16.2%	17.7%	15.1%	17.1%	14.8%	24.8%	14.0%
Disorder	29.9%	29.0%	19.2%	22.3%	32.0%	30.9%	31.0%	32.1%	30.5%	39.0%	24.3%	23.0%	33.7%

This table corresponds to Table 9 (page 6) of the US Bureau of Justice Statistics report (Beck and Shipley, 1989). Italics indicate data on rape. Specialized recidivism rates are given in the diagonal of the table, which is shown in bold.

From this table we learn several important points. First, the lowest general recidivism rates were for people who had been imprisoned for, in this order, murder (42.1%), drug crimes (50.4%), and rape (51.5%). These contrast with rates as high as 78.4% and 69.5% for the non-violent property crimes of car theft and burglary, and 66.0% for violent robbery. The lowest specialized recidivism rates by far (diagonal line of table, in bold) were for people who had been imprisoned for murder (6.6%) and rape (7.7%). For all other types of crime in this table, the specialized rates were over 18%. Unfortunately, since this table only gives us data on one kind of sex crime, rape, we do not have enough information to know the overall sexual recidivism rates.

Next, the BJS calculates a new recidivism rate, which it calls the "relative likelihood of rearrest for a charge similar to (versus different from) the release charge." This sounds at first like the specialized recidivism rate, but it's subtly different. We will call it here the BJS recidivism rate. This new type of rate starts with the specialized rate (percentage of people who were convicted of a certain crime and then committed another crime of the same type) and then divides that by the percentage of people who were convicted of a different crime and then committed a subsequent crime that was of this type. The results of this intriguing calculation are shown in Table 10 of the report. Table 2 of this paper includes the table from the report with additional columns giving the steps in the calculation. Data that are not shown in the report, but that are calculated from data that are, are provided in italics.

Table 2. Derivation of "BJS recidivism rate" as reported in the US Bureau of Justice Statistics Report (1989)

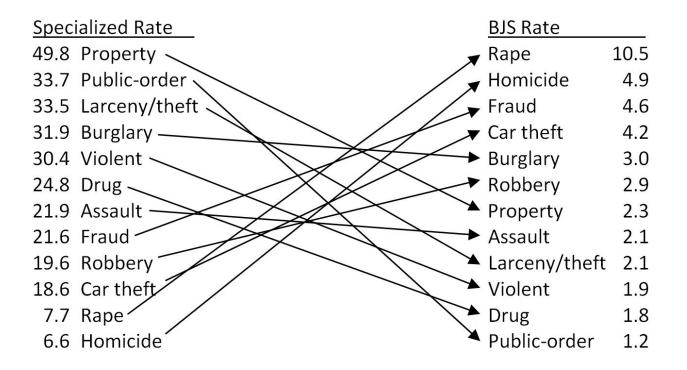
A	В	С	D	E	F	G	н
Rearrest charge	Persons rearrested with this charge	Persons whose prior crime was this	Percent arrested for same charge (specialized recidivism rate)	Persons arrested for same charge	Persons with different prior crime arrested for this charge	Percent of persons with different prior crime who were arrested for this charge	Ratio of percentages (BJS recidivism rate)
Source	Calculated	BJS Table 9	BJS Table 9	Calculated	Calculated	Calculated	BJS Table 10
Violent	24,111	36,769	30.4%	11,178	12,933	18.6%	1.9
Homicide	1,699	3,258	6.6%	215	1,484	1.4%	4.9
Rape	956	2,214	7.7%	170	<i>785</i>	0.8%	10.5
O. sex aslt			(No data on th	is in Table 9.)			7.5
Robbery	10,515	19,815	19.6%	3,884	6,632	7.7%	2.9
Assault	13,383	6,756	21.9%	1,480	11,904	12.0%	2.1
Property	42,168	51,332	49.8%	25,563	16,604	30.3%	2.3
Burglary	19,544	27,416	31.9%	8,746	10,798	13.7%	3.0
Theft	22,518	11,896	33.5%	3,985	18,533	19.6%	2.1
Car theft	5,842	2,785	18.6%	518	5,324	5.1%	4.2
Fraud	6,904	5,809	21.6%	1,255	5,649	5.6%	4.6
Stln prop.							2.4
Drugs	17,632	10,104	24.8%	2,506	15,126	15.7%	1.8
Disorder	31,759	6,826	33.7%	2,300	29,458	29.6%	1.2

This table corresponds to Table 10 (page 6) and selected columns from Table 9 (page 6) of the US Bureau of Justice Statistics report (Beck and Shipley, 1989). Italics indicate numbers calculated from data provided in Table 9 of that report.

We now describe the crafty manipulation of data behind the BJS recidivism rate.

The numbers in Column G represent the relative popularity of the listed crimes among people who went to prison for something else. We see that property crimes, especially theft, are crimes that people who went to prison for something else are prone to commit once they get out, to the tune of 30 percent. On the other hand, rape is a very unpopular crime. Less than one percent of people who went to prison for something else come out and commit rape. Murder is also an unpopular crime among people who went to prison for something else. The BJS rate in Column H is obtained by taking the specialized recidivism rate of Column D and dividing it by this crime popularity measure of Column G. This is a breathtaking sleight-of-hand that turns the world of recidivism inside out. Under this mathematical transformation, crimes with high specialized recidivism rates tend to have low BJS rates and vice versa. This is illustrated in Figure 2:

Figure 2. The "BJS recidivism rate" turns recidivism statistics inside out, making people with the best recidivism rates look the worst, and vice versa. This rate was reported in two major recidivism reports from the US federal government (Beck and Shipley, 1989, Langan and Levin, 2002) and was widely quoted by politicians in support of legislation that established and enhanced sex-crime registries across the country.



Because of the name the BJS gives its new recidivism rate, "relative likelihood of rearrest for a charge similar to (versus different from) the release charge," it appears to be intended to serve a purpose similar to the that of the specialized recidivism rate, that is, to measure the tendency of a person convicted of a crime to commit not just any crime, but another crime of the same type. One would therefore hope that either the new rate affirms what is learned from the specialized rate or, if it doesn't, that the BJS would explain why it doesn't and how to reconcile the two. The specialized recidivism rate is an established measure that has been used and reported on in hundreds of studies for many decades. Far from affirming it, the BJS rate completely contradicts it. No explanation is given and nothing at all is said about why the proposed new rate should be accepted as a scientifically or mathematically valid measure of recidivism.

The discrepancy with the specialized rate does not mean that the BJS rate is false. Like the geocentric model of planetary motion discussed at the beginning of this paper, the BJS recidivism rate is not false, but the information it conveys is distorted and misleading.

Problems of Definition

The BJS reports suffer from several definitional problems that exacerbate the misunderstanding of sexual recidivism. These problems are not overtly visible in the data, but are hidden in the data definitions. In the BJS recidivism reports, the only coverage of sex crimes is in the category of violent crimes: rape and "other sexual assault." Crime definitions are given in the 2002 and 2014 reports, where we find two problems:

First, "other sexual assault" is defined to include several types of non-forcible sexual acts, including anything with a person below the age of consent. This means that when a teenager has a consensual relationship with an older teenager and the latter is sent to prison for it, the crime is falsely categorized as being violent.

Second, nonviolent sex crimes are included under "other public order offenses" in three subcategories: nonviolent sex offenses, commercialized vice (which includes pornography charges), and contributing to the delinquency of a minor. No separate data are given in any of the BJS reports on any of these categories of crime. The number of releasees who had been in prison for these crimes is likely fairly small, but possibly not much smaller than the number who had been in prison for rape (which is the smallest category among all listed crimes), and so possibly significant in an analysis focused on sex crimes.

These two problems are of greatest concern in the 2003 BJS report on sex-crime recidivism. Throughout its 46 pages and 43 data tables, the terms "sex offenders" and "sex offenses" are used in a generic way, with only a brief caveat stated once that "the terms 'sex crimes' and 'sex offenders' refer exclusively to violent sex offenders." Even this statement, while important, ignores the fact that the term "violent" is often used to define crimes that involve no violence at all. But worse than that, the rest of the report, including its title, makes no mention that all data related to sex crimes defined as nonviolent are specifically excluded.

A third problem is with the very notion of "crime" and how it relates to people who are on the sex-crime registry. All of the BJS reports are specifically about people who are released after being sentenced to one year or more in prison. These reports specifically exclude people who are sentenced to less than one year, sentenced to local jails, or given a suspended sentence, community service, home detention, or a fine. There is no information given, even in the reports specific to sex crimes, about the relationship between the number of people covered by the data presented and the total number of people convicted of sex crimes. Thus, there is no way for readers to assess the applicability of these data in general to people on the registry, a great many of whom never served prison time. The likely result of this is that readers infer — incorrectly — that the statistics given in the reports apply to all registered people.

False and Misleading Statements about the Data

In 1985, 38 years after establishing the first statewide sex-crime registry in California, and when still only a handful of other states had one, the California legislature asked the California Department of Justice to perform a study on the effectiveness of the registry. Part of the resulting study was on recidivism and was conducted using a 15-year follow-up period. Table 3 below consists of five columns, A, B, G, H, I, of data that are provided in the original report, along with four additional columns, C, D, E, and F (in italics) whose data are calculated from those provided. Several important points are worth noting regarding the table and the information provided in the original report. First, for people whose initial convictions were for sex crimes, the overall recidivism rate is tied for second lowest, 49.4%. The only group with a lower overall recidivism rate was those whose convictions were for property crimes. Next, the number of subsequent sex crimes by the people whose initial convictions were for sex crimes was the second lowest, 268, which was 13% of the total subsequent sex crimes by the people in this study. The only group with fewer subsequent sex crimes was those whose initial convictions were for drug crimes. For the people whose initial convictions were for sex crimes, the rate of recidivating with a sex crime was highest, almost 20%.

Table 3. 15-year recidivism rates, as reported to California Legislature by California Department of Justice (1988).

Α	В	С	D	E	F	G	Н	I
Initial	Persons	Not	Recidiv	rated	% of sex	% not	% recidivated	
crime		recidivated	Any crime	Sex crime	crimes	recidivated	Any crime	Sex crime
Source:	DoJ Table 2	Calculated	Calculated	Calculated	Calculated	DoJ Table 2	DoJ Table 2	DoJ Table 2
Property	22,417	11,433	10.984	605	28%	51.0%	49.0%	2.7%
Drugs	11,324	5,730	5,594	181	8%	50.6%	49.4%	1.6%
Violent	9,394	3,870	5,524	348	16%	41.2%	58.8%	3.7%
Sex	1,362	689	673	268	13%	50.6%	49.4%	19.7%
All other	24,484	8,325	16,159	<i>735</i>	34%	34.0%	66.0%	3.0%
Total	68,981	30,047	38,934	2,137	100%	43.6%	56.4%	3.1%

The original report states, "In conclusion, sex offenders do not differ significantly in terms of overall recidivism from most other types of offenders" (California Department of Justice, 1988, pg. 8). From our review of the report, this statement is simply not true. As one can see from column H, this group had the second lowest overall recidivism rate, 7% lower than the overall general recidivism rate and 16% lower than the "all other" category. Within this category there are likely subcategories of different sizes with still higher overall recidivism rates, but this information is not provided.

In addition to recidivism, the report also looked at the usefulness of the registry in investigation of sex crimes. The method for measuring this was not any kind of statistical analysis of crimes and criminal apprehension, but a survey of law enforcement agencies. One of the primary findings was that "83 percent believe that the sex registration process aids in the apprehension of suspected sex crime offenders." But the data in the report suggest that that belief was wrong. The statistic (not stated in the report) that 87% of recidivate sex crimes were committed by people whose initial crimes were not sexual suggests that using the registry as a source of suspects for sex crimes may be more of a distraction than an aid in finding the actual perpetrators.

The data indicate a significant degree of specialized recidivism for people convicted of sex crimes, almost 20 percent. The report does not say what number of subsequent crimes were property, drug, or violent crimes, but it does state that "the analysis revealed a particular amount of specialization in the offender groupings," suggesting that we would see similar behavior in the other categories if the data were provided. Similarly, the report states, "Sex offenders who recidivated were approximately 5 to 12 times more likely to recidivate with a subsequent sex offense than were other types of offenders." The key words there are "who recidivated." Just over half of the people who had been convicted of sex crimes did not recidivate at all.

Withholding Information

In 2008, the California Sex Offender Management Board (SOMB) asked the California Department of Corrections and Rehabilitation (CDCR) for data on sex-crime recidivism. The CDCR presented the SOMB with a report on Recidivism of Paroled Sex Offenders, which included data with both a five- and ten-year follow-up period. The data indicated very low rates of recidivism, such as 3.8% being convicted of any crime within ten years, with 3.4% being convicted of a sex crime in that period.

There was a serious flaw in these data, which was that it only included information on convictions of people who were still on parole during the follow-up period. Thus people who were convicted of a crime during the follow-up period but after completing parole were not included. It is therefore likely that the correct recidivism rates are higher than indicated by these data. In October 2008, the CDCR prepared a revised report for the SOMB that explained these problems in the data.

Mysteriously, there is no record of any of the above in the 2008 SOMB meeting minutes.² The above account of events is from Explanation of Five and Ten Year Recidivism Study, September 17, 2009.³ That document states, "The minutes of the [October 2008] meeting reflect that the data sets as presented were not acceptable to the Board," but that is not true. The entire SOMB minutes for 2008 do not mention any report on recidivism ever being presented to the board.

The SOMB is an official body of the California government and all documents discussed at its meetings are required to be publicly available. The CDCR recidivism reports were posted for a period of time on the SOMB website, but were later removed. The SOMB rejected repeated requests by the authors of this paper for copies of the original report, but did provide a copy of the October 2008 revised report. Alongside "cautionary statements about the interpretation and use of these data," the report states, "The data provided here and the conclusions that may be drawn from them are consistent with other studies of sex offender recidivism. Repeated studies have resulted in similar findings: the recidivism rate of convicted sex offenders is considerably lower than is often believed and most sex offenders are not ever convicted of a subsequent sexual offense." The SOMB does not provide this report on its website, despite the legal requirement that it be available to the public.⁴

Two years later, California published its first official report on recidivism, 2010 Adult Institutions Outcome Evaluation Report. (It has since published an Outcome Evaluation Report annually.) There are two interesting things about the numbers on sex-crime recidivism in this report. First, the three-year recidivism rates reported for people imprisoned for sex crimes are quite high, ranging from 46% for lewd act with a child to 73% for "other sex" (Fig. 10 and Table 10 of the report), with an average of 64.6% (Fig. 11 and Table 11). Second, the vast majority, 86%, of the recidivism included in those rates consists of parole violations, not new crimes (Fig. 12 and Table 12). When the data of Fig. and Table 11 are combined with those of Fig. and Table 12, the recidivism rates for new crimes are seen to be quite small, as shown in Table 4 of this paper.

Table 4. Sex-crime recidivism, as reported by the California Department of Corrections and Rehabilitation (2010)

CDCR 2010 Outcome Report								
		Table 12 data times 64.6% from Table						
Table 11		Table 12		11				
Sex Registration		Reason for		Reason for				
Flag	Recidivism Rate	Recidivism	Percent	Recidivism	Recidivism Rate			
Yes	64.6%	New Sex Crime	5.0	New Sex Crime	3.2%			
		New Non-Sex		New Non-Sex				
No	67.7%	Crime	8.9	Crime	5.7%			
Total	67.5%	Parole Violation	86.0	Parole Violation	55.6%			
		Total	99.9	Total	64.5%			

The box on the left contains data from Tables 11 (page 24) and 12 (page 25) of the California Department of Corrections And Rehabilitation report (CDCR, 2010). The right-hand column provides data calculated from the data in the report.

Table 4 shows that the vast majority of what is identified in that report as sex-crime recidivism consists of parole violations. How significant is recidivism by parole violation? A CDCR official who asked to remain nameless wrote to the authors of this paper, "The information is still somewhat skewed. Recidivism is defined as any arrest, conviction, or reincarceration for a parole revocation for either a law violation or a technical violation. Therefore, many sex offender parolees have been being returned to custody due to having a low battery on their GPS unit [and] are showing up in the recidivism rates. That being said, sex offenders still show one of the lowest rates of recidivism of any other type of offender."

The authors asked the CDCR for additional data in order to better understand those provided in the Outcome Reports. The CDCR responded with a cross-tabulation spreadsheet which at first appeared to be helpful, but it turned out to provide data on sex crimes in six categories, of which "other" accounted for 48% of the total by crime of imprisonment and 79% of the total by crime of recidivism. Such a large "other" category makes meaningful analysis impossible.

When we asked for the data that would provide the detail inside the "other" category, we were at first told that our collaboration in helping them analyze their data would be appreciated. But the next day, the researcher who told us that would no longer talk with us and we were told to submit a formal proposal for the data. We did so and the proposal brought a response from the deputy director of research for the CDCR, who told us that, although the proposal was "well-organized and strong methodologically" and the "CDCR supports your research objectives," they did not have time to provide these data ("your research imposes a significant impact on limited staff resources that cannot be justified as 'mission critical' at this point in time").

Prior to publication, the authors of this paper sent a copy of this section to senior research and administrative officials of the CDCR and the CA SOMB, asking if they had any comment or refutation of our information. No reply was received.

The authors have hesitated to include this dramatic tale of conflict in an academic paper, but have concluded that it is important for others to know about the roadblocks erected to meaningful analysis of government data on recidivism. It is disingenuous for the CDCR to claim they were withholding the data because of limited resources after its staff had told us that our assistance in analyzing the data would be helpful.

The CDCR has partially addressed the issue of the high proportion of parole violations in its recidivism statistics by adding a new table to the Outcome reports after 2010. This table provides the numbers and percentages of released prisoners who are returned to prison for a new sex crime (0.8% in the 2015 report), a new fail-to-register crime (2.0%), a new non-sex crime (5.3%), and a parole violation (91.9%). However, one has to look for that table at the end of the section of the report on sex registrants, which begins with a large

graph showing high recidivism rates, leaving until later to point out that this is mostly due to parole violations. The obfuscation of data with a very large "other sex crimes" category remains.

Recidivism as a Measure of Dangerousness

Recidivism data is not generally presented as an academic, criminological statistic, but is usually interpreted to indicate the relative dangerousness of different groups of criminals. We see this from the California report quoted above, "the more recidivistic a group the greater the need for monitoring their activities. Recidivism thus addresses the issue of appropriateness for registration" (Lewis, 1988).

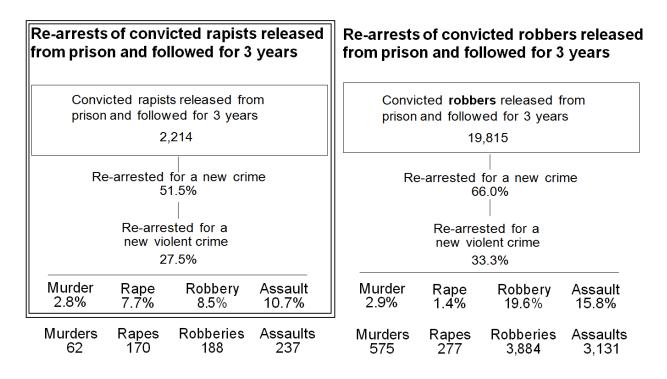
However, this interpretation overlooks the significance of the sizes of populations of the groups of criminals compared.

For example, a number of politicians have cited the BJS rate described above to indicate that people who have been to prison for rape are the most dangerous criminals that we need to be most concerned about committing future rapes. But another look at Table 2 above shows that this is not so. We see in Columns E and F for the "Rape" row of that table that the people who went to prison for rape were arrested for 170 rapes, while the people who had gone to prison for something else were charged with 785 rapes. Rape was 4.6 times more likely (785 / 170) to be committed by someone who had been to prison for something else than by someone who had been to prison for rape. It comes out that way because there are so many more people who went to prison for something else than those who went to prison for rape. This is related to the reason that dividing the specialized recidivism rate by the crime popularity measure (Column G of Table 2 above) creates a distorted view of reality.

This problem of interpretation is not unique to the BJS rate, but applies to all recidivism data where the sizes of the populations of criminal groups are very different.

In the 1997 BJS report of sex-crime statistics (Greenfeld, 1997), the section on Recidivism of violent sex offenders includes the chart shown in the double box at the upper-left of Figure 3. The data used in this figure were compiled from Table 9 of the 1989 BJS report discussed above. We have added a row below that with the numbers of crimes represented by the percentages given in the BJS chart. For comparison, we have also added on the right a chart with the same data for people convicted of robbery instead of rape.

Figure 3. Relative dangerousness of rapists and robbers. The figure in the double box on the left is reproduced from a major US federal report on sex-crime statistics (Greenfeld, 1997), Fig. 27 (page 26). On the right, we provide the corresponding data for robbers from the same data source. Released robbers have higher recidivism and are responsible for a far greater number of violent crimes, including rapes. No government has ever published a report on recidivism of robbers.



On all measures except rape, the robbers had a higher recidivism rate than the rapists. We learn about the relative dangerousness of the two groups by looking at the numbers of crimes committed by each in the bottom row of the chart. Although the percentage who were arrested for rape after release was lower for robbers than rapists (1.4% vs. 7.7%), the much larger number of robbers (19,815 vs. 2,214) means that the robbers were arrested for far more rapes than the rapists were (277 vs. 170). The difference for other violent crimes is far more stark. The released robbers were arrested for almost ten times as many murders (575 vs. 62) and 13 times as many assaults (3,131 vs. 237).

In comparing data on rape and robbery, it is important to recognize that robbery is a violent crime against a person, not just a property crime, like burglary. The definition of robbery used in the BJS reports is "the unlawful taking of property that is in the immediate possession of another, by force or the threat of force." Crimes classified as robbery range from purse snatching to armed robbery and to a violent mugging that results in serious, permanent injury.

This issue also arises in the 1988 report of the California Department of Justice discussed above. The original table in the report does not include columns E and F of our Table 3 and without those columns, one has to perform a calculation to find out that the second smallest number of subsequent sex crimes was by the people whose initial convictions were for sex crimes, and these people accounted for only 13% of the subsequent sex crimes. Overall, 87% of recidivate sex crimes were committed by people whose initial crimes were not sexual. The consequence of this information that is not revealed in the report is that for any given sex crime in California between 1973 and 1988, it was seven times more likely to have been committed by someone who had been previously convicted of anything except a sex crime as by someone who had been previously been convicted of a sex crime ((2,137 - 268) / 268 = 7).

The report does not discuss how many sex crimes were committed in total during the period of the report. But that information is important to understanding the significance of recidivism in the commission of sex crimes (or any sort of crime). It is important to address the total number of sex crimes committed in a particular period and how many of those were committed by people who had previously been convicted of a crime, including how many had previously been convicted of a sex crime. For example, if there were 20,000 sex crimes in California between 1973 and 1988, then the crimes of the people covered in this report were not a significant part of the problem.

Discussion

As the risk of recidivism of a certain group increases, so too should the vigor with which said group is monitored. Perhaps this belief has come to fruition in actual policy related to individuals convicted of sex crimes because the general public (Levenson, Brannon, Fortney, & Baker, 2007; Mancini & Meers, 2010) and U.S. policy makers (Meloy & Curtis, 2013; Sample & Kadleck, 2008) "know" that the vast majority of individuals convicted of sex crimes will inevitably repeat them despite ample evidence to the contrary.

Each report analyzed for this study found recidivism rates for individuals convicted of sex crimes to be quite low, but reported the statistics in ways that conveyed the opposite impression. This is where the analogy to pre-Copernican, heliocentric astronomy can be instructive. It appears that data analysts at the BJS and the California DoJ "knew" in advance that individuals convicted of sex crimes had high rates of recidivism and therefore found it necessary to adjust their reports to fit that "knowledge."

One may wonder why we have had nothing to say about the new BJS recidivism report issued in 2014 (Durose, et al., 2014), and whether things have improved since the earlier reports. Unfortunately, the reason that report is not discussed above is that it has very little data on sex crimes. Sex crimes appear in five tables in each of the 1989 and 2002 reports, but only in two in 2014. (One of the tables that disappeared is the one that gives what we

refer to above as the "BJS recidivism rate.") In the 1989 and 2002 reports, data on rape and other sexual assaults are presented separately, but in 2014, they are combined into a single category. Without explanation, the first major federal report on recidivism in twelve years is almost silent on sex crimes.

The BJS has never acknowledged that the BJS recidivism rate was flawed, nor offered any explanation of what meaningful information it was intended to convey in contrast to the specialized recidivism rates that it contradicts. The rate simply disappeared without comment from all BJS publications after 2002.

Untrue or unsubstantiated "knowledge" can have deleterious effects. For instance, the data contained within the 1988 California DoJ report was utilized by the California Senate Committee on Criminal Procedure to propose that people in custody or on parole or probation should be statutorily ineligible to seek certificates of rehabilitation relieving them from the requirement to register. Similarly, data in the BJS reports have been utilized in legislative proposals and in amicus briefs to the United States Supreme Court. The statement of Senator Hutchison quoted above is one example. In 2002, an amicus brief was submitted by the attorneys general of 43 states in support of the State of Alaska in its appeal to the US Supreme Court to allow registration of people with convictions for sex crimes that occurred before the registry existed. Parroting the misleading BJS recidivism rate, the brief stated, "Convicted sex offenders are 10.5 times more likely to be arrested for a rape than non-rapist offenders" (Brief for the United States as Amicus Curiae in Support of Petitioners, 2002).

The misinformation issued by U.S. lawmakers goes beyond what is found in government reports. Sometimes they just make things up out of nowhere. For example, on the floor of the U.S. House of Representatives in 1993, Representative David Hobson said, "According to the National Institute of Mental Health, the typical child sexual offender acquires multiple child abuse convictions. Seventy-four percent of all convicted child abusers are repeat offenders. In addition, the average child sex offender will molest an average of 117 youngsters in his or her lifetime." An inquiry about this by the authors of this paper to the NIMH brought the reply, "The NIMH cannot find a record of the statistics accredited to us by Rep. David Hobson in 1993." The stated number of 74% is off by a factor of ten. The 2003 BJS report states that 7.3% of child molesters had a previous conviction for a sex crime against a child (Table 6, page 12). However, this grossly inflated statistic of 74% was echoed in the House on that same day by Reps. James Ramstad and Hamilton Fish. For example, Rep. Ramstad said, "We know that child sex offenders are repeat offenders. They are probably the most difficult classes of criminals, in addition, to rehabilitate. A study of imprisoned child sex offenders found that 74 percent had a previous conviction for another child sex offense. Child sex offenders repeat their crimes again and again and again to the point of compulsion." In 1996, Representative Charles Schumer stated "I think what people

have to understand is one thing, and that's become clear for the years that I've looked into this problem, and that is that sexual offenders are different. ... Even after long, long years in prison and many, many attempts to rehabilitate, when these folks come out of prison, the odds are extremely high that they will commit the same or a similar crime again. Long prison terms don't deter them and all too often, special rehabilitation programs don't cure them. No matter what we do, the minute they get back on the street, many of them resume their hunt for victims, beginning a restless and unrelenting prowl for children, innocent children to molest, abuse, and in the worst cases, to kill." Then in 2005 Representative Mark Foley (who resigned a year later when it was revealed he'd been sending sexually explicit text messages to teenage boys serving as Congressional pages) stated that, "I'm embarrassed beyond belief that these type of people could be wandering the street. Ninety percent likelihood of recidivism of sexual crimes against children. Ninety percent. That is the standard. That is their record. That is the likelihood. Ninety percent." Although these Congressional pronouncements are fanciful fabrications with no foundation in anything, they are made believable by false and misleading presentations of data in government reports such as those discussed above.

As quoted above, the 1988 report to the California Legislature stated, "the more recidivistic a group the greater the need for monitoring their activities. Recidivism thus addresses the issue of appropriateness for registration" (Lewis, 1988). The sentiments of U.S. lawmakers and the general public is that people convicted of sexual crimes are highly recidivistic and not amenable to treatment or change. The vast majority of research, including the government reports analyzed in this paper, provides a strikingly different view of recidivism, but because of definitional problems and misleading representations of data, they allow the opposite impression of what the data actually mean. While our society needs to find ways to effectively reduce any type of victimization, calling out fires where they do not exist not only does not address the problem, but distracts attention from real, potential solutions.

Like ancient astronomers who "knew" that the sun revolves around the Earth, our scientific analysis can become distorted when we fit our data to the picture we believe they should paint. In the case of sex-crime recidivism, we have created laws and policies based on the "knowledge" that people convicted of sex crimes belong at the top of our list of most dangerous people, despite substantial evidence to the contrary.

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Marshall Burns is a physicist and technology entrepreneur who pioneered in the development of personal computers in the 1980s and 3D printers in the '90s. His career forte is the analysis and interpretation of complex data. His PhD research was published in Physical Review A and featured on the cover of Computers in Physics. He is the author of the first major book on 3D printers (Automated Fabrication, Prentice Hall, 1993). In 2007, Burns' focus shifted from technology to human issues, which led to the formation of SOL Research to investigate sex laws and their effects on people and society. The results of that research are published at SOLresearch.org. E-mail is: MBurns@SOLresearch.org

Notes

¹ Information regarding this evaluation is available upon request.

² Archived at <u>www.casomb.org/index.cfm?pid=236</u>

³ Posted on the SOMB Reports page at www.casomb.org/index.cfm?pid=231.

⁴ The authors of this paper have therefore made it available at www.SOLresearch.org/ref/200810-CASOMB-Recid.