Journal of Criminal Law and Criminology

Volume 76 | Issue 3 Article 3

1986

Racism on Trial: New Evidence to Explain the Racial Composition of Prisons in the United States

Patrick A. Langan

0091-4169/85/7603-666
THE JOURNAL OF CRIMINAL LAW & CRIMINOLOGY
Vol. 76, No. 3

Printed in U.S.A.

CRIMINOLOGY

RACISM ON TRIAL: NEW EVIDENCE TO EXPLAIN THE RACIAL COMPOSITION OF PRISONS IN THE UNITED STATES*

PATRICK A. LANGAN**

I. INTRODUCTION

In 1926, the federal government began keeping annual records of the number of admissions to state prisons.[1] That year, about one in four persons entering state prisons was black while only one in every eleven persons in the United States was black (Table 1). Since then, the gap between the percentage of blacks in the United States and the percentage of blacks entering state prisons has grown. In 1982, the most recent year for which national data on prison admissions is available, nearly one in every two persons entering adult state prisons was black while one in every nine persons in the United States was black.

This continuing trend raises an old but still important question. The question is whether the overrepresentation of blacks in prison admissions is the result of proportionately more blacks than whites committing serious crimes ("differential involvement") or whether

* Points of view or opinions expressed herein are those of the author and do not necessarily represent the official position or policies of the United States Department of Justice. The author gratefully acknowledges the helpful advice and criticism offered by reviewers of drafts of this paper, including in particular Charles Alexander, Allen Beck, Alfred Blumstein, David Farrington, Robert Gordon, and Lawrence Greenfeld.

** Director, Adjudication Unit, Bureau of Justice Statistics, Washington D.C. Ph.D., University of Maryland, 1978; M.A., University of Maryland, 1974; B.A., University of Maryland, 1968.

[1] The federal government's first successful census of admissions to state prisons was in 1904. Censuses in 1910 and 1923 succeeded the 1904 census. In 1926, the federal government launched its first in a long series of annual censuses. Since 1926, the government has conducted an admissions census each year.

TABLE 1

RACIAL DISTRIBUTION OF UNITED STATES POPULATION VERSUS RACIAL DISTRIBUTION OF ADMISSIONS TO STATE PRISONS IN THE UNITED STATES, 1926-1982.

	PERCENTAGE BLACK				
Year	U.S. pop.	Prison admissions	Year	U.S. pop.	Prison admissions
1926	9.2%	23.1%	1943	9.0%	34.3%
1927	9.2	22.7	1944	9.0	33.8
1929	9.2	22.9	1945	9.1	33.1
1930	9.2	24.3	1946	9.1	35.6
1931	9.2	23.7	1947	9.1	31.7
1932	9.1	23.7	1948	9.1	31.3
1933	9.1	25.2	1949	9.2	30.2
1934	9.1	26.4	1950	9.2	30.5
1935	9.1	27.5	1960	9.4	34.3
1936	9.0	27.5	1964	9.6	35.9
1937	9.0	27.6	1977	10.6	40.1
1938	9.0	27.5	1978	10.7	42.6
1939	8.9	27.0	1979	10.8	42.1
1940	8.9	29.4	1980	10.8	42.7
1941	8.9	30.6	1981	11.0	43.9
1942	9.0	34.0	1982	11.1	45.8

Note: Table was constructed from NATIONAL PRISONER STATISTICS reports of the national census of state prison admissions conducted in the United States each year from 1926 to 1982 (inclusive). The years not covered in the table lacked comparable data. All table figures were calculated from data on white adults and black adults only. "Admissions" refers to court admissions almost exclusively. U.S. population percentages are from U.S. Census Bureau publications: for 1920 and 1930, U.S. CENSUS BUREAU, NEGROES IN THE UNITED STATES 1920-32 (1935); for 1940 and 1950, 2 U.S. CENSUS OF POPULATION: 1960, CHARACTERISTICS OF THE POPULATION-PART I, UNITED STATES SUMMARY (1953); for 1960 1 U.S. CENSUS OF POPULATION: 1960, CHARACTERISTICS OF THE POPULATION — PART I, UNITED STATES SUMMARY PC(1)-1D (1964); for 1970, 1980 CENSUS OF POPULATION PC80-1-B1 (1983); for 1977 through 1980, PRELIMINARY ESTIMATES OF THE POPULATION OF THE UNITED STATES, BY AGE, SEX, AND RACE: 1970 TO 1981 (1982); for 1981 and 1982, ESTIMATES OF THE POPULATION OF THE UNITED STATES, BY AGE, SEX, AND RACE: 1980 TO 1983 P-25 No. 949 (1984); for all other intercensal years, percentages were interpolated from census year counts.

it is the result of racial discrimination in the administration of justice ("racial discrimination"). This Article presents new research findings on the question.

II. PRIOR RESEARCH

No study has yet investigated the racial composition of state prison admissions as observed in national statistics. The closest any comes to such a national study is Blumstein's *On the Racial Disproportionality of United States' Prison Populations*.[2] Blumstein's ground breaking study focused on the racial composition of state prison in-

[2] Blumstein, *On the Racial Disproportionality of United States' Prison Populations*, 73 J. CRIM. L. & CRIMINOLOGY 1259 (1982).

mates on a given day as opposed to prison admissions during a given year.[3] To find out whether differential involvement or racial discrimination explained prison racial composition, Blumstein needed a measure of the racial distribution of prisoners and a separate measure of criminal activity by race and crime-type. National data from two inmate surveys sponsored by the Bureau of Justice Statistics (United States Department of Justice) provided a measure of the racial distribution of state prisoners on a day in both 1974 and 1979.[4] Police arrest statistics published in the FBI's *Uniform Crime Reports (UCR)*[5] for the years 1974 and 1978 provided a measure of criminal activity. Blumstein used the *UCR* arrest statistics to show the racial composition of offenders who committed crimes punishable by imprisonment and used the inmate survey data to show the racial composition of those among them who were actually punished with imprisonment.[6]

Blumstein sought to understand why the black percentage of one-day prison populations (48.3% in 1974, and 49.1% in 1979)[7] far exceeded the 11% black representation of the United States adult population.[8] He hypothesized that if the percentage of black arrests were as high as that of the prison population, differential involvement alone might fully explain the racial composition of prisons;[9] if the percentage of black arrests were lower than that of the prison population, racial discrimination in the administration of justice might account for the high percentage of prisoners who are black.[10]

The evidence Blumstein uncovered offered strong support for the differential involvement hypothesis: although high percentages of inmates were black, so were high percentages of offenders arrested by the police. The percentages were not identical: specifically, the percentage of arrestees who were black was 42.7% in 1974 and 43.5% in 1978, while blacks made up 48.3% of the prison pop-

---

[3] *Id.* at 1260.

[4] *Id.* at 1270.

[5] *Id.* at 1265, 1273.

[6] Blumstein, *supra* note 2, at 1278.

[7] *Id.* at 1267 (48.3%), 1275 (49.1%).

[8] The 11% figure was obtained by dividing the number of black adults (defined throughout this study as 18 years of age and older) by the combined number of black and white adults in the United States. For 1974, the precise figure is 10.3% black; for 1979, 10.8% black. U.S. CENSUS BUREAU, CURRENT POPULATION REPORTS, Series P-25, No. 917, PRELIMINARY ESTIMATES OF THE POPULATION OF THE UNITED STATES, BY AGE, SEX, AND RACE: 1970 TO 1981, table 1 (1982).

[9] Blumstein, *supra* note 2, at 1264.

[10] *Id.* at 1270.

ulation in 1974 and 49.1% in 1979.[11] But they were close enough for Blumstein to conclude that "racial differences in arrests alone account for the bulk of the racial differences in incarceration."[12]

The use of arrest data as a measure of criminal activity raises questions of whether and to what extent racial percentages in police statistics might be the product of racially discriminatory practices in the administration of justice. Using statistics supplied by the police as a measure of criminal activity could prove misleading if, as some observers suggest, police over-arrest blacks.[13]

Blumstein recognized that arrest is potentially subject to discriminatory processes but argued that available evidence strongly suggested that arrest data reasonably reflect the racial distribution of criminal offending for the most serious crimes that comprise the bulk of prison populations.[14] That evidence, examined next, consists of two major studies by Hindelang that compared the racial distribution of offenders as reported by crime victims to the racial distribution of arrestees as reported by the police.[15]

A. THE HINDELANG STUDIES

Hindelang examined whether "selection bias" (his expression for racial discrimination in the administration of justice) or "differential involvement" explained the high percentages of blacks that appear in *UCR* arrest statistics on rape, robbery, and assault.[16] He compared arrest data with research data generated independently of the criminal justice system. His independently generated data were from National Crime Survey (NCS) victimization surveys sponsored by the Bureau of Justice Statistics.[17] As Hindelang explained:

> Victimization surveys, in which representative samples from the general population are asked to report on victimizations they may have suffered during a specific reference period, provide data on the relationship between race and common law crime that are independent of criminal justice system selection biases. In these surveys respondents are asked to tell interviewers about victimizations, regardless of

---

11 *Id.* at 1267 (42.7% & 48.3%), 1275 (43.5% & 49.1%).

12 *Id.* at 1268.

13 *See, e.g.*, Geis, *Statistics Concerning Race and Crime*, 11 CRIME & DELINQ. 146 (1965).

14 Blumstein, *supra* note 2, at 1278.

15 M. HINDELANG, CRIMINAL VICTIMIZATION IN EIGHT AMERICAN CITIES: A DESCRIPTIVE ANALYSIS OF COMMON THEFT AND ASSAULT (1976) [hereinafter referred to as M. HINDELANG, CRIMINAL VICTIMIZATION]; Hindelang, *Race and Involvement in Common Law Personal Crimes*, 43 AM. SOC. REV. 93 (1978) [hereinafter referred to as Hindelang, *Race and Involvement*].

16 Hindelang, *Race and Involvement*, *supra* note 15, at 104.

17 *Id.* at 97.

whether or not they reported them to the police.[18]

. . .

> If the victimization data . . . are taken as a measure of involvement in rape, robbery, and assault and the UCR arrest data are taken as a measure of involvement in these crimes *plus* selection biases, then the discrepancy between the two data sources can be taken as a measure of selection bias.[19]

The first of his two studies compared aggregate *UCR* arrest data and aggregate NCS data from household victimization surveys for eight American cities.[20] The study covered the common law crimes of rape, robbery and aggravated assault. He compared crime victims' descriptions of the race of their assailants with arrest record descriptions.[21] He found no evidence of bias against blacks but rather, a very close correspondence between the racial distributions described in arrest statistics and the racial distributions described by crime victims.[22] He concluded: "Overall, the correspondence between the victim survey and UCR percentages is striking."[23]

The second of his two studies used NCS household and business victimization surveys covering the nation.[24] The study investigated rape, robbery, and aggravated and simple assaults. Hindelang compared *UCR* arrest descriptions and crime victims' descriptions of the race of their assailants for 1974.[25] He found that arrest descriptions and victims' descriptions of robbers were identical.[26] Arrest records, however, contained slightly larger percentages of blacks than did victims' accounts of rapists, aggravated assaulters, and simple assaulters.[27] He concluded: "This indicates that for these crimes some of the arrest percentage can be attributed to selection bias but, by far, most of the arrest percentage appears to be attributable to the substantially greater involvement of blacks than whites in these crimes."[28]

While the Hindelang studies offer support for Blumstein's use of arrest to reflect involvement in crime, the studies have some limitations. The first study pertained to eight cities rather than the en-

---

18 *Id.*

19 *Id.* at 104 (emphasis in original).

20 M. HINDELANG, CRIMINAL VICTIMIZATION, *supra* note 15, at 197.

21 *Id.* at 196.

22 *Id.* at 197.

23 *Id.* at 196-97.

24 Hindelang, *Race and Involvement*, *supra* note 15, at 97-98.

25 *Id.* at 99.

26 *Id.* at 100.

27 *Id.*

28 *Id.* at 104.

tire nation.[29] In addition, it used incomplete data for robbery by ignoring results from the business victimization surveys conducted in each of the cities.[30] Although the second study was national in scope, it used data for only a single year.[31] Both studies published results based on a combination of both juveniles and adults rather than on adults alone.[32] Also, the two studies made comparisons for no more than four of the seven common law crimes covered in both victimization surveys and police arrest records.[33] These four offenses (rape, robbery, aggravated assault, simple assault) account for only about 30% of the admissions to state prisons whereas all seven offenses (including burglary, larceny, and auto theft) account for at least 60% of admissions (Table 2).

III. THE PRESENT STUDY

This study extends and complements the work done by Blumstein and Hindelang. NCS household and business victimization surveys provide measures of criminal activity by race. The inmate surveys and an admissions census provide measures of the racial distribution of offenders admitted to state prisons in the United States.[34]

A. VICTIMIZATION SURVEYS

NCS household surveys used here cover the nation for the years 1973 through 1982. The NCS business surveys cover the nation for the years 1973 through the early part of 1977. Survey incident data were incident-weighted. They were then weighted by the number of offenders involved as reported by the victim.[35] The analysis in-

---

29 M. HINDELANG, CRIMINAL VICTIMIZATION, *supra* note 15, at 197.

30 *See id.* at n.6.

31 Hindelang, *Race and Involvement*, *supra* note 15, at 97-98.

32 Although Hindelang did not present results controlling for age (under 18 vs. 18 or older) in the second study, he did state that unpublished results controlling for age "closely" paralleled published ones. *Id.* at 101.

33 *See* M. HINDELANG, CRIMINAL VICTIMIZATION, *supra* note 15, at 197; Hindelang, *Race and Involvement*, *supra* note 15, at 100.

34 This study uses NCS and inmate survey data obtained from the Criminal Justice Archive sponsored by the Bureau of Justice Statistics (BJS) and located at the University of Michigan. Technical documentation for the NCS data is provided in a series of annual final report publications by BJS entitled CRIMINAL VICTIMIZATION IN THE UNITED STATES. BUREAU OF JUSTICE STATISTICS, CRIMINAL VICTIMIZATION IN THE UNITED STATES (annual, 1976-1984). Documentation for the inmate surveys is contained in two survey data codebooks published by the Criminal Justice Archive. CRIMINAL JUSTICE ARCHIVE, ICPSR 7811 (1983); CRIMINAL JUSTICE ARCHIVE, ICPSR 7856 (1981) [both hereinafter referred to as ICPSR].

35 Each incident had a weight that was the reciprocal of the probability that the incident would appear in the sample. Multiplying this incident weight by the number of

TABLE 2

OFFENSE DISTRIBUTION AMONG ADMISSIONS TO THE NATION'S STATE PRISONS BY SECTOR AND TYPE OF OFFENSE

SECTOR AND TYPE OF CRIME ADMITTED FOR	SENTENCED INMATES ADMITTED TO PRISON IN: 1973* number	1973* % of seven crimes	1973* % of all crimes	1979* number	1979* % of seven crimes	1979* % of all crimes	1982** number	1982** % of seven crimes	1982** % of all crimes
Total	67,121	...	100%	90,855	...	100%	99,910	...	100%
Seven Crimes	40,812	100%	61	56,540	100%	62	66,139	100%	66
Four Violent Crimes	19,703	48	29	25,873	46	28	26,699	40	27
rape	2,384	6	4	2,160	4	2	2,640	4	3
robbery	13,128	32	20	17,655	31	19	17,565	26	18
aggravated assault	3,553	9	5	5,498	10	6	6,494	10	6
simple assault	638	1	1	560	1	1	...	...	...
Three Property Crimes	21,109	52	32	30,667	54	34	39,440	60	39
burglary	13,643	33	20	21,633	38	24	27,188	41	27
larceny	5,996	15	9	6,508	12	7	10,485	16	10
auto theft	1,470	4	4	2,526	4	3	1,767	3	2
All Other Crime Types	26,309	...	39	34,315	...	38	33,771	...	34

Note: Table figures were calculated from data on white adults and black adults only.

* Numbers and percentages are estimates based on the 1974 and 1979 national surveys of inmates of the nation's state prisons, sponsored by the Bureau of Justice Statistics. Based on samples rather than complete enumerations, the estimates are subject to errors resulting from sampling variability.

**Numbers and percentages are census enumerations based on the 1982 census of admissions to state prisons, sponsored by the Bureau of Justice Statistics. Offense data from the 1982 census do not show aggravated assault separate from simple assault.

cluded series victimizations.[36] Where an incident involved more than ten offenders, the number of offenders arbitrarily was recoded to ten. Where an incident involved multiple offenders and the respondent reported the age of the youngest or the oldest, but not both, the missing age was imputed to be the same as the reported age. Thus, if the respondent reported that the youngest offender was a juvenile and the age of the oldest was unknown, the age of the oldest was imputed to be under eighteen. If the age of the youngest was unknown and the oldest was an adult (age eighteen or older), the youngest was imputed to be an adult.[37]

The analysis eliminated an incident if it involved (1) an unknown number of offenders, (2) a single offender of unknown age or race, (3) a single offender who was neither white nor black, (4) multiple offenders of mixed or unknown races, (5) multiple offenders all of whom were neither white nor black, (6) a single offender reported to be a juvenile (under age eighteen), (7) multiple offenders all or some of whom were juveniles, or (8) multiple offenders none of whose ages were known. These exclusions restrict the analysis to the two groups that constitute the vast majority of the nation's state prison populations: white adults and black adults.

B. THE INMATE SURVEYS AND A PRISON ADMISSIONS CENSUS

Measures of the racial distribution of prison admissions are taken from inmate surveys and a prison admissions census sponsored by the Bureau of Justice Statistics and conducted by the

---

offenders in the incident produced estimates for the nation of the number and demographic characteristics of offenders involved in seven common law crimes: rape, robbery, aggravated and simple assaults, burglary, larceny and auto theft.

[36] When a victim experiences three or more similar crimes but cannot recall the details of the crimes in the series well enough to report on the circumstances of each separately, the survey interviewer prepares an incident report for only the last crime in the series. This last crime is referred to as a series victimization.

[37] The following, based on 1982 NCS sample data, provides an indication of the percentage of survey respondents that could describe the age, race and number of their assailants:

Type of crime	Number of victims	Number describing assailants	Percentage describing assailants
rape	111	104	94%
robbery	862	794	92
assault			
aggravated	1,224	1,147	94
simple	2,489	2,409	97
burglary	4,870	248	5
larceny	17,798	900	5
auto theft	960	33	3

United States Census Bureau.[38] The inmate surveys were conducted in 1974 and 1979. The surveys randomly sampled 10,040 and 11,397 state prison inmates respectively, stratified by type of facility, geographic location, and size of facility. Inmates admitted to prison in 1973 and still in prison at the time of the 1974 survey (around January 31, 1974) form the basis for a measure of the racial distribution of prison admissions for 1973. Inmates admitted in 1979 and still in prison at the time of the 1979 survey (around October 31, 1979) form the basis for a measure of the 1979 racial distribution of prison admissions. Data from a 1982 admissions census provide a measure of the racial distribution of state prison admissions for the year 1982.[39]

IV. RESULTS

The present study compares the racial descriptions of assailants given by crime victims to the racial distribution of admissions to prison in 1973, 1979 and 1982. Table 3 presents crime victims' descriptions of their assailants. The table contains two subheadings under each of the seven crimes, "all" and "reported." The heading "all" pertains to all incidents experienced by crime victims, whether or not they reported them to the police. The subheading "reported" pertains to incidents the victims said they reported to the police. Table 4 compares the racial descriptions given by crime victims to the racial distributions given in prison admissions statistics.

A. DIFFERENTIAL INVOLVEMENT

Before examining whether differential involvement explains prison admissions, statistics must show that blacks are disproportionately involved in crimes. Attention is drawn, therefore, to the crime victims' descriptions of their assailants (Table 3).

Differential involvement can be demonstrated if more than 11% of the adult offenders described by crime victims are black; that is, more than their representation in the United States white and

[38] The surveys are described in ICPSR, *supra* note 34, at I-III (7811); I-II (7856). The census is described in Minor-Harper & Greenfeld, *Prison Admissions and Releases, 1982*, in REPORT NO. NCJ-97995, BUREAU OF JUSTICE STATISTICS 10 (1985) [hereinafter referred to as Minor-Harper & Greenfeld, *Prison Admissions*].

[39] Technical documentation for the 1982 census is provided in Minor-Harper & Greenfeld, *Prison Admissions*, *supra* note 38, at 10. Note that admissions census data and inmate survey data are comparable although the two measure slightly different things. The census counts admissions, not people. The two surveys count people, not admissions. An admissions census could double count the same person while an inmate survey could not. Assuming that instances of such double counts are unrelated to race, they would not complicate the analyses of this study.

TABLE 3

CRIME VICTIMS' DESCRIPTIONS OF THEIR ASSAILANTS' RACE: PERCENTAGE OF BLACK ADULT OFFENDERS IN ALL INCIDENTS EXPERIENCED BY VICTIMS, AND PERCENTAGE OF BLACK ADULT OFFENDERS IN INCIDENTS REPORTED TO THE POLICE

	PERCENTAGE OF BLACK ADULT OFFENDERS													
	Rape		Robbery		Aggravated Assault		Simple Assault		Burglary		Larceny		Auto Theft	
Year	all	reported	all	reported	all	reported	all	reported	all	reported	all	reported	all	reported
1973[a,b]	39%	50%	67%	67%	30%	29%	23%	21%	42%	40%	40%	36%	34%	25%
1974[a]	40	42	63	66	26	21	28	22	36	33	43	50	32	22
1975[a]	34	34	66	66	32	30	23	21	31	35	44	42	18	10
1976[a]	42	45	65	64	28	25	23	22	33	39	44	49	12	5
1977[a,b]	29	25	57[d]	60[e]	25	27	21	21	23	15	43	47	32	33
1978[c]	43	51	51[d]	55[e]	26	25	18	16	35	38	44	45	7	11
1979[c]	30	32	61[d]	60[e]	26	28	20	17	29	34	43	49	24	19
1980[c]	30	16	62[d]	64[e]	19	19	19	20	31	34	45	48	25	33
1981[c]	42	56	61[d]	64[e]	29	30	21	21	37	35	47	53	18	16
1982[c]	22	24	63[d]	63[e]	28	24	20	21	34	34	45	53	14	12

Note: Table data are based on NCS victimization surveys sponsored by the Bureau of Justice Statistics. Table figures were calculated from data on white adults and black adults only.

[a] Based on NCS household and business victimization surveys.

[b] Data from the NCS business victimization survey are incomplete; i.e., in the case of reference year 1973 data, a small portion (18%) were lost by the Census Bureau; in the case of reference year 1977 data, a large portion (64%) were never collected.

[c] Based on NCS household victimization survey only.

[d] Figure was increased 3 percentage points to adjust for the absence of results from a business victimization survey. The adjustment was arrived at as follows: Relatively complete household survey and business survey data were available for the period 1973 through 1976. Comparisons for each of these years were made between the black percentage including and excluding the business survey. The inclusion of the business survey data raised the black percentage an average of 3 points.

[e] Figure was increased 4 percentage points to adjust for the absence of results from a business victimization survey. The adjustment was arrived at as described above, except that the analysis was restricted to only those incidents victims claimed to have reported to the police. The inclusion of the business survey data raised the black percentage an average of 4 points.

black adult population. As the estimates in Table 3 reveal, throughout the ten-year period, more than 11% of the offenders described by crime victims were black.

Because the survey estimates are subject to sampling error, the overrepresentation of blacks might stem from sampling variability. To test the possibility, a 95% confidence interval was constructed around each of the 70 estimates shown under the heading "all" in Table 3 to examine whether the interval included the 11% population figure.[40] Of the 70 confidence intervals around the estimated percentages of black offenders, only eight included the 11% figure: 1982 rapists and 1975, '76, '77, '78, '79, '81 and '82 auto thieves. Estimates for auto theft and rape rest on the smallest sample sizes. These sample sizes may account for these particular results rather than the absence of real differences.

These otherwise highly consistent test results document the existence of differential involvement. Blacks were relatively more involved than whites in the seven common law crimes throughout the ten-year period studied. The question remains whether their differential involvement can explain their overrepresentation in state prisons in the United States.

B. DIFFERENTIAL INVOLVEMENT VS. RACIAL DISCRIMINATION

Racial differences in criminal involvement can be related to racial differences in prison admissions by comparing victims' accounts of their assailant's race with racial distributions of prison admissions. The analysis aims to investigate the possibility of racism in the criminal justice system. The analysis uses victims' descriptions of their assailants only for crimes reported to the police because the administration of criminal justice begins when a crime is brought to police attention.[41]

Table 4 compares victims' descriptions with admissions distributions for the years for which prison admissions data are available. In thirteen out of the twenty comparisons, the percentage of black

[40] The estimates under the "all" heading are based on an analysis of all incidents experienced by crime victims, which includes both reported and unreported crimes.

[41] If victims reported to the police crimes committed by blacks more often than similar crimes committed by whites, such behavior would be discriminatory. This possibility was investigated with the data from 1973 through 1982 provided in table 3. A count was kept of the number of times the black percentage in incidents reported to the police exceeded the black percentage in all incidents. The percentage was higher 33 out of 70 times. On a sign test, 35 out of 70 were expected by chance alone. The fact that less than 35 occurred suggests that victims were not more likely to report crimes committed by blacks than similar crimes committed by whites.

TABLE 4

BLACK OFFENDERS ACCORDING TO VICTIMS AND PRISON POPULATION: PERCENTAGE OF BLACK ADULT OFFENDERS ACCORDING TO CRIME VICTIMS (VICTIM SURVEY) COMPARED WITH THE PERCENTAGE OF BLACK ADMISSIONS TO STATE PRISONS ACCORDING TO NATIONAL PRISONER STATISTICS (PRISON DATA).

	PERCENTAGE OF BLACK ADULT OFFENDERS													
	Rape		Robbery		Aggravated Assault		Simple Assault		Burglary		Larceny		Auto Theft	
Year	victim survey	prison data	victim survey	prison data	victim survey	prison data	victim survey	prison data	victim survey	prison data	victim survey	prison data	victim survey	prison data
1973	50%	48%	67%	65%	29%	52%	21%	44%	40%	36%	36%	45%	25%	30%
1979	32	46	60	58	28	47	17	49	34	41	49	49	19	39
1982	24	54	63	60	22	50	—	—	34	42	53	48	12	33

Note: "Victim survey" data are based on NCS victimization surveys sponsored by the Bureau of Justice Statistics. "Prison data" for 1973 and 1979 are based on 1974 and 1979 inmate suveys (respectively) sponsored by the Bureau of Justice Statistics; "prison data" for 1982 are based on a 1982 census of state prison admissions sponsored by the Bureau. Table figures were calculated from data on white adults and black adults only. Victim survey estimates are based on incidents reported to the police. Available prison data for 1982 did not show aggravated assault separate from simple assault; for comparison purposes, victim survey data on aggravated and simple assaults were therefore combined.

prison admissions exceeded the percentage of black assailants described by victims.

Victim and inmate survey estimates are each subject to sampling error, a possible source for the differences between the estimates. To check the possibility, significance tests were run at the .05 level (two-tailed) on the differences in black percentages between victims' descriptions and prison admissions. Most differences were not significant. Only five were statistically significant: 1979 auto theft; 1973, '79, and '82 aggravated assault; and 1982 rape. In each of these five, the black percentage in prison admissions statistics substantially exceeded that percentage in victims' descriptions.

Nevertheless, test results generally support the differential involvement hypothesis. In fifteen out of twenty comparisons, there were no statistically significant differences between the racial profiles of victims' descriptions and the racial profiles of prison admissions.

To test how well differential involvement might explain prison admissions, several calculations were made as shown in Table 5. Mathematically defined terms used in these calculations, discussed next, also are shown in Table 5. First, the probability c of a white offender going to prison for crime type i was calculated by dividing the number b_i of white offenders admitted to prison by the number a_i of white offenders. Next, the number e_i of black offenders expected to enter prison was calculated. This was done by multiplying the number d_i of black offenders by the crime-specific probability c_i of a white offender going to prison. If the criminal justice system actually handles blacks and whites alike, the expected total number of blacks admitted to prison (that is, $\sum_{i=1}^{I} e_i$, where I = number of crime types) would equal the observed total (that is, $\sum_{i=1}^{I} f_i$). If the system discriminates against blacks, however, the observed total number of blacks entering prison would be higher than the expected total number. Moreover, the observed black percentage of all prison admissions, or $\sum_{i=1}^{I} f_i/(\sum_{i=1}^{I} b_i + \sum_{i=1}^{I} f_i)$, would exceed the expected black percentage, or $\sum_{i=1}^{I} e_i/(\sum_{i=1}^{I} b_i + \sum_{i=1}^{I} e_i)$.

Total expected and observed numbers of black prison admissions are compared below. In each year, the observed number of black prison inmates was higher than the expected. Significance tests (.05 level, two-tailed) of the difference between total expected and total observed reveal that the difference was not significant for 1973, but was significant for the two other years. These results imply that differential involvement alone might fully explain the ob-

served 48.9% black percentage of 1973 prison admissions, but only partially explain the percentages of 48.1% and 48.9% for the years 1979 and 1982 respectively.[42]

	Total number of blacks admitted to prison:			
Year	Expected	Observed	Difference	Is difference statistically significant?
1973	19,344	19,953	609	no
1979	22,847	27,196	4,349	yes
1982	27,550	32,322	4,772	yes

The extent to which differential involvement might explain the 1979 and 1982 black percentages can be determined by dividing the total expected number of blacks ($\sum_{i=1}^{I} e_i$) by the total observed number ($\sum_{i=1}^{I} f_i$). The results, shown below, indicate that differential involvement could account for 84% of the blacks admitted in 1979, and 85% of those admitted in 1982.

Year	Explained black	percentage
1979	22,847 / 27,196	= 84%
1982	27,550 / 32,322	= 85%

The complement of these percentages is the percentage that differential involvement alone cannot explain. Differential involvement alone cannot account for 16% of the blacks admitted to prison in 1979 (4,349 prisoners) and 15% of those admitted in 1982 (4,772 prisoners). Racial discrimination might explain these percentages. There may also be legitimate explanations for these percentages such as differences among regions in imposing sanctions and differences among defendants in criminal records.[43]

Regardless of the explanation, the 4,349 prisoners in 1979 and the 4,772 prisoners in 1982 account for only a small part of the gap

---

[42] Observed black percentages are based on Table 5 data and are calculated as follows: for 1973, 19,953/(20,859 + 19,953) = 48.9%; for 1979, 27,196/(29,344 + 27,196) = 48.1%; for 1982, 32,322/(33,817 + 32,322) = 48.9%. These percentages are not the same as those shown in table 1 for corresponding years. The major reason for the discrepancies is that table 1 percentages pertain to admissions for any crime whereas these percentages only pertain to admissions for the seven common law crimes.

[43] Regional differences in the imposition of sanctions may account for these differences since blacks may be concentrated in regions of the country where prison sentences are relatively common among convicted offenders (blacks and whites alike). If that is the case, statistics for the nation could indicate that the probability of imprisonment is higher for blacks than whites even in the absence of racial discrimination in justice administration. Another explanation is that blacks may have on average slightly longer criminal records than whites, thereby increasing their chances of receiving a prison sentence. Other legitimate explanations of these percentages are discussed by Blumstein, *supra* note 2, at 1268-70.

between the black representation in the United States adult population of 11% and the black representation among persons entering prison each year of nearly 50%.[44] This is shown by comparing the 11% figure with both expected and observed black percentages of all admissions. The expected black percentage is the black percentage of prison inmates if the 4,349 prisoners in 1979 and the 4,772 prisoners in 1982 had not been imprisoned. The expected and observed black percentages, shown below, indicate that had the 4,349 black prisoners in 1979 not been imprisoned, the black percentage of persons admitted to prison that year would have been 43.8%, instead of 48.1%. This percentage is still much higher than the 11% black representation in the United States adult population. Similarly, had 4,772 fewer blacks been imprisoned in 1982, the black percentage that year would have been 44.9%, instead of 48.9%.

Year	Expected versus Observed Black	Percentage
1979		
Expected	= 22,847 / (29,344 + 22,847)	= 43.8%
Observed	= 27,196 / (29,344 + 27,196)	= 48.1%
1982		
Expected	= 27,550 / (33,817 + 27,550)	= 44.9%
Observed	= 32,322 / (33,817 + 32,322)	= 48.9%

The results for the three years for which national data are available suggest the following conclusion: the overrepresentation of blacks among offenders admitted to state prisons occurs because blacks commit a disproportionate number of imprisonable crimes.[45]

---

[44] The 11% figure is an approximation of the black percentage of the white and black adult population. The precise figures are: for 1979, 10.8%; for 1982, 11.1%. Population data for 1979 are from U.S. CENSUS BUREAU, CURRENT POPULATION REPORTS, SERIES P-25, NO. 917, PRELIMINARY ESTIMATES OF THE POPULATION OF THE UNITED STATES, BY AGE, SEX, AND RACE: 1970 TO 1981, table 1 (1982). Population data for 1982 are from U.S. CENSUS BUREAU, CURRENT POPULATION REPORTS, SERIES P-25, NO. 949, ESTIMATES OF THE POPULATION OF THE UNITED STATES, BY AGE, SEX, AND RACE: 1980 TO 1983, table 1 (1984).

[45] Sensitivity analyses were run to see if different test conditions would lead to the same conclusion. Results indicated that they would. In one analysis, one-year lagged comparisons were made between expected and observed black percentages. Typically, a number of months pass from the time a crime occurs to the time the offender enters prison. Victims' descriptions one year might therefore be more comparable to prison racial distributions the next year. Lagged and unlagged results, however, did not differ much. In a second analysis, expected percentages were computed from NCS data on all incidents, not just those reported to the police. Once again, the procedural change did not produce very different results.

TABLE 5

BLACK OFFENDERS AND PRISON POPULATION:

EXPECTED VERSUS OBSERVED NUMBER OF BLACK OFFENDERS ADMITTED TO THE NATION'S STATE PRISONS

(i) TYPE OF CRIME	(a) NUMBER OF WHITE OFFENDERS	(b) NUMBER OF WHITE OFFENDERS ADMITTED TO PRISON	(c=b/a) PROBABILITY OF A WHITE GOING TO PRISON	(d) NUMBER OF BLACK OFFENDERS	(e=c x d) EXPECTED NUMBER OF BLACK OFFENDERS ADMITTED TO PRISON	(f) OBSERVED NUMBER OF BLACK OFFENDERS ADMITTED TO PRISON
	Year: 1973					
Rape	31,539	1,248	.0396	31,938	1,265	1,136
Robbery	383,047	4,540	.0119	781,050	9,294	8,588
Aggravated assault	486,821	1,716	.0035	195,540	684	1,837
Simple assault	647,963	360	.0006	172,405	103	278
Burglary	90,232	8,690	.0963	59,965	5,775	4,953
Larceny	166,291	3,277	.0197	95,439	1,880	2,719
Auto theft	29,766	1,028	.0345	29,932	343	442
Total	1,835,659	20,859	.0114	1,346,269	19,344	19,953
	Year: 1979					
Rape	60,992	1,164	.0191	28,555	545	996
Robbery	209,319	7,450	.0356	313,979	11,178	10,205
Aggravated assault	539,690	2,901	.0054	205,756	1,111	2,597
Simple assault	884,567	283	.0003	177,637	53	277
Burglary	95,595	12,712	.1330	48,614	6,466	8,921
Larceny	168,988	3,293	.0195	161,075	3,141	3,215
Auto theft	31,906	1,541	.0483	7,318	353	985
Total	1,991,057	29,344	.0147	942,934	22,847	27,196
	Year: 1982					
Rape	65,765	1,213	.0184	20,287	373	1,427
Robbery	237,772	7,000	.0294	404,856	11,903	10,565
Assault	1,736,275	3,266	.0019	492,684	936	3,228
Burglary	134,964	15,671	.1161	69,213	8,036	11,517
Larceny	169,531	5,490	.0324	189,658	6,145	4,995
Auto theft	30,798	1,177	.0382	4,118	550	590
Total	2,375,105	33,817	.0142	1,180,816	27,550	32,322

Note: Table figures were calculated from data on white adults and black adults only. Column "a" and column "d" estimates are based on NCS victimization surveys sponsored by the Bureau of Justice Statistics and pertain to survey data on incidents that victims claimed to have reported to the police. Column "b" and column "f" estimates for 1973 and 1979 are based on 1974 and 1979 inmate surveys (respectively) sponsored by the Bureau; counts for 1982 are based on a prison admissions census sponsored by the Bureau. Available prison census data for 1982 did not show aggravated assault separate from simple assault; for comparison purposes, victim survey data on aggravated and simple assaults were therefore combined.

V. SUMMARY

This Article presents the results of a study that tested two competing and controversial explanations of the relatively large numbers of blacks in state prisons. The one—the differential involvement hypothesis—attributes the high percentage of blacks in prison to their more frequent criminal involvement. The other explanation—the racial discrimination hypothesis—attributes it to pervasive racial discrimination against blacks in the administration of criminal justice.

The findings much more strongly supported differential involvement than racial discrimination. At the rate that blacks committed crimes in 1973, blacks would have constituted at least 48.9% of prison admissions that year under a perfectly nondiscriminatory justice system. The fact that blacks did not constitute more than 48.9% suggests that discrimination was not the reason for their overrepresentation in prison admissions in 1973. In 1979, 43.8% of prison admissions would have been black under a nondiscriminatory justice system. Since blacks made up only 48.1% of admissions, discrimination, if it existed, accounted for very little of the overrepresentation of blacks in prison admissions in 1979. Similarly, in 1982, a nondiscriminatory system would have resulted in a black percentage of admissions of 44.9% while the actual percentage was 48.9%. These findings confirm those of Blumstein who, in a pioneering study using police arrest statistics to investigate one-day prison populations, also concluded that differential involvement, not racial discrimination, largely explained the racial composition of prisons in the United States.[46]

This study neither proves nor disproves the existence of racial discrimination in the justice system. But the study does demonstrate that even if racism exists, it might explain only a small part of the gap between the 11% black representation in the United States adult population and the now nearly 50% black representation among persons entering state prisons each year in the United States.[47]

---

[46] Blumstein, *supra* note 2, at 1268.

[47] While blacks may not be discriminated against by receiving prison sentences more often than whites, they may be discriminated against by receiving longer prison sentences or being made to serve longer time in prison. These two possibilities were investigated by Minor-Harper and Greenfeld using national data on 1982 state prison admissions and releases. They found little evidence that blacks admitted to state prisons in 1982 had received longer sentences than whites or that blacks released from state prisons in 1982 had served more time than whites. Minor-Harper & Greenfeld, *Prison Admissions*, *supra* note 38, at 6 and 9.

Because of the limits of current knowledge, studies of this kind necessarily proceed on the basis of numerous untested assumptions. For example, this study assumed that the accounts of crime victims were accurate and that the inmate surveys and the admissions census provide representative data on the races. Also, this study assumed that victim surveys provide sufficient information about racial differences in criminal activity even though they provide no comparative data on the criminal records of black and white offenders.[48] Regarding the latter, the absence of such comparative data may not be critical if the major difference between the races is prevalence (the proportion of persons who are offenders) rather than incidence (the rate of offending by offenders). Studies show that the races differ more in prevalence than incidence, but a firm conclusion must await further research.[49] If, contrary to what was assumed here, a major difference between the races is incidence, then large numbers of crime victims might describe their assailants as black even when nearly equal proportions of blacks and whites commit crimes. These observations underscore the need for further study of race and crime.

[48] Sentencing studies consistently show that, compared with other factors, an offender's prior criminal record is a key determinant in the imprisonment decision. RESEARCH ON SENTENCING: THE SEARCH FOR REFORM (A. Blumstein ed. 1983). Moreover, sentencing studies report a relationship between race and prior record. *Id.* at 97-101. Given this, the question arises whether the absence of comparative information about the criminal histories of black and white offenders is a disadvantage of using victimization surveys in a study concerned with race and prison sentences. Clearly, the disadvantage exists, but it may not be criticial if the relationship between prior record and race is relatively weak compared to that between prevalence and race.

[49] Findings from the 1958 Philadelphia birth cohort study indicate that the prevalence of index offenders was 2.7 times greater among blacks than whites (26% vs. 9%), while the incidence of index offending was only 1.3 times greater among blacks than whites (2.70 vs. 2.12). M. Wolfgang, Delinquency in a Birth Cohort II: Some Preliminary Findings, table 7 (July 9, 1981) (unpublished manuscript prepared for U.S. Senate Committee on the Judiciary, Subcommittee on Juvenile Justice, "Hearings on Violent Juvenile Crime").