

Arrest Probabilities for Marijuana Users as Indicators of Selective Law Enforcement¹

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This paper estimates arrest probabilities for marijuana users by combining detailed arrest statistics for three metropolitan areas (Cook County, Ill. ; Douglas County (Omaha), Nebr., and the Washington, D.C., metropolitan area) with marijuana user rate estimates from questionnaire surveys in those three jurisdictions. The analysis involves a comparison of arrest probabilities for several sociodemographic categories of marijuana users in these jurisdictions. The baseline model for these comparisons is the equiprobability hypothesis that seems implicit in much criminal justice research: relative to violation rates, the likelihood of sanctions ought to be equal. The data show that arrest probabilities for marijuana users vary by gender and occupation in all three jurisdictions; variations by age and race are more jurisdictionally specific. These arrest probabilities are then examined by introducing additional data pertaining to the circumstances of detection and arrest. The observed differences in arrest probabilities are interpreted to be compatible with two alternative explanations which have rather different implications for understanding selective law enforcement.

It is generally recognized that most instances of deviance are not sanctioned. In this sense, the relationship between deviant actions and social reactions, because it is incomplete, is probabilistic rather than deterministic. This observation implies that in accounting for the likelihood of sanctioning, the deviant act is to be regarded as only one relevant factor; other factors that influence the probability of sanctioning include certain characteristics of the actor, the sanctioning agency, and the community within which social control occurs. Attention to the differential but organized processes of recognition, sanctioning, and labeling encourages a sensitivity to how reactions to deviance may be themselves normatively

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regulated. Presumably, these reactions are not random because there are rules for identifying, sanctioning and labeling deviance (Cohen 1965 ; Gibbs 1966; Katz 1972). The issue of selectivity in law enforcement directly implicates this normative element.

In the context of reactions to crime, the specific standard which is ostensibly violated by selective enforcement-selective detection, arrest, prosecution, conviction, and **sentencing**—is the constitutional prescription of “equal protection” specified in the Fourteenth Amendment. This standard suggests that the elements of criminal law are to be viewed as generally applicable rules of conduct and ought to be applied equally to all. In broader terms, there seems to be at least partial identity between the ideas of “justice” and “equality of treatment” (e.g., see Brandt 1962). “Whatever meanings are assigned the concept ‘justice,’ it appears that there may be general agreement that the concept ‘equity’ is an included but not synonymous concept” (Pepinsky 1975, p. 56). This suggests one essential meaning of “equal justice under law”: if the distribution of enforcement outcomes (arrests, convictions, incarcerations, etc.) across relevant social groups is not equal, the standard of equal protection has been violated.

But an adequate test for selectivity in this context presumes a basic analytical framework. It requires, first of all, conceptual specification of what is meant by “selectivity” in enforcement. Further, it requires an operational identification of the appropriate null model—that is, a specification of what things would look like if selectivity were absent. On the surface, the equal protection prescription may be interpreted as a “no difference” or equal outcomes null model: all persons or groups should have equal frequencies of being apprehended, sanctioned, and labeled; *any* difference indicates something anomalous. While basic, this model is too simplistic in its assumption that the likelihood of apprehension or sanction should be directly and solely determined by the direction or magnitude of deviance control reactions. Sanctioning outcomes are clearly dependent on a variety of factors in addition to the actions of deviance control, factors such as the nature of the offensive behavior, the manner in which it is enacted, its visibility, the setting in which it occurs, the extent to which it is viewed as “offensive,” the kind of publicity needed to prosecute offenses formally, and the cooperation of the community in detecting or prosecuting the offense.

A more appropriate alternative to the null model is an “explicable differences” model, involving the explicit recognition that differences in reactions to deviance may occur for a number of reasons-appropriate as well as inappropriate according to specified normative standards. Thus, differences per se cannot automatically be regarded as indicators of selec-

tive enforcement but those differences which cannot be reasonably accounted for can be so regarded. Here, the analytic implication is to explain observed enforcement outcome differences by considering extraneous but relevant variables which may have produced such differences? These variables may involve certain characteristics of acts or actors which also affect legitimately the probability of detection, apprehension, and prosecution.

Recently, several studies have invoked, at least implicitly, explicable difference models (Black and Reiss 1970; Chiricos, Jackson, and Waldo 1972; Ferdinand and Luchterhaud 1970; Weiner and Willie 1971). The research reported here explores the question of explicable differences in an analysis of variations in estimated arrest probabilities according to certain social characteristics of suspected offenders and features of the jurisdictions in which those arrests occurred. Attention is directed toward one criminal offense where the disparity between the occurrence of an initial act and an enforcement reaction-and hence the opportunity for selective enforcement-is generally thought to be extreme: illicit use of marijuana.

DATA AND METHODS

The data utilized here were collected for the National Commission on Marihuana and Drug Abuse in two separate but related studies of the characteristics of marijuana users and arrestees. In the first study, marijuana use data were collected-by Response Analysis Corporation as part of a national survey of licit and illicit drug use in 1971. The survey involved face-to-face interviews, a self-administered questionnaire, and a national probability sample of noninstitutionalized adults age 21 and older. The use data we analyzed involved three subsamples-corresponding to three jurisdictions which differed in the statutory penalties for conviction of marijuana offenses at this time. In anticipation of the analysis reported here, three jurisdictions were oversampled within the larger national survey: a high-penalty area (Cook County, Ill.) ,³ a low-penalty area (Douglas County [Omaha], Nebr.) ,⁴ and an intermediate penalty area (Wash-

² An analysis of this kind is, of course, open to the criticism that not all appropriate variables are included or that irrelevant variables are included (i.e., variables which do not constitute "reasonable" factors for explaining differences) ; see, e.g., the discussion in Arnold (1971). This is simply an alternative expression for the usual caveats concerning specification errors (Duncan 1975, chap. 8).

³ The marijuana laws for Illinois stipulated the following penalties for possession during the survey period: first offense-less than 2.5 grams, not more than one year and/or not more than \$1,500 fine ; more than 2.5 grams, two to 10 years and not more than \$5,000; subsequent offense-less than 2.5 grams, two to 10 years and not more than \$5,000; over 2.5 grams, five years to life and not more than \$5,000 (38 Illinois Revised Statutes 22-40, PA 76-241981).

⁴ The marijuana laws for Nebraska stipulated the following penalties for possession during the survey period: first offense-fewer than 25 cigarettes or under 1/2 pound,

ington, D.C., metropolitan area).⁵ The oversampling produced a total sample of 637 (Cook, $N = 216$; Omaha, $N = 206$; Washington, $N = 215$). A technical discussion of sampling, field, and weighting procedures is provided by Abelson et al. (1972).

Arrest data were retrieved from police files in a second study conducted for the commission (Johnson and Bogomolny 1972). The data analyzed here pertain to the three jurisdictions that were oversampled in the use survey. In these three jurisdictions, the total marijuana arrestee population was first defined by an enumeration of police log entries between July 1 and December 31, 1970. From this enumeration, all cases involving at least one marijuana offense charged by the police at custody were included in the sample (except in Cook County where one-in-10 cases was sampled due to the volume of total cases). These procedures produced the following (unweighted) subsample sizes: Cook County ($N = 431$), Douglas County ($N = 113$), and Washington metropolitan area ($N = 678$).

Estimating outcome probabilities.—Estimation of arrest probabilities involved aggregate-level computations, yielding ratios rather than actual proportions to estimate the jurisdiction-specific probabilities. Rates of both marijuana use and marijuana arrest (each expressed per 100,000 persons, 18 years or older) were computed from the two data files for each jurisdiction overall and for selected demographic subgroups within each jurisdiction. These separate estimated user and observed arrestee rates were then combined computationally to estimate the proportion of persons having used marijuana who have also been arrested for such use.⁶ Specifically, the “risk of arrest” was computed by the *ratio* of the arrest rate to the estimated user rate (the value of the ratio expressed per 100,000 mari-

not more than seven days and/or not more than \$1,000 fine; 25 or more cigarettes or 1/2 pound or more, one to five years; subsequent offense—under 25 cigarettes or under 1/2 pound, not more than seven days and/or \$1,000; 25 or more cigarettes or 1/2 pound or more, one to five years (Ch. 197 [1969], Nebraska Acts; Sec. 28-472.03 et seq. [1969]).

⁵ The marijuana laws for the District of Columbia stipulated the following penalties for possession during the survey period: first offense—not more than one year and/or \$100 to \$1,000; subsequent offense—not more than ten years and/or \$500–\$5,000 fine (D.C. Code Ann. Sec. 33-401-425 [1968]).

⁶ The referent in discussions of sanctioning differentials is often deviant *behavior*, although this study uses *persons* rather than acts as the measurement and analytic unit. We do not have estimates of the number of times that the legally liable behavioral event (marijuana use) occurs within a social group but rather estimates of the number of persons within the group total for whom it occurred at least once. Consequently this analysis pertains to the *prevalence* of marijuana users and arrestees rather than the *incidence* of marijuana use and arrest. In this regard, the probabilistic framework for comparative analysis of deviant outcomes can be applied either to deviant acts or to deviant actors (see Johnson and Wells, forthcoming). However, analyses of the latter may not deal with important group differences in the frequency of the deviant or legally liable behavior. We have attempted to deal with this problem by estimating alternative marijuana use rates which include this frequency dimension.

juana users, 18 years or older).⁷ Two marijuana user rates were computed for this analysis. In addition to computing user rates for those persons who reported use of marijuana at least once (ever users), we also estimated rates for persons who reported present use of marijuana in the month of the interviews (current users).⁸

An arrest rate for these same jurisdictions was estimated by establishing the number of marijuana arrests for the area and computing the ratio of this quantity to the population and specified subpopulations of that jurisdiction as given in the 1970 census. The arrest rate used here pertains only to arrests in which possession of marijuana was the only offense charged by the arresting officer(s).⁹

⁷ We recognize the potential problems associated with an aggregate-level estimation procedure. Compared to an individual-level procedure (where information on both action and sanction is available for the same individuals), the aggregate approach, in a sense, provides "an estimate of an estimate." What is problematic is the plausibility of the assumption that the elements in the numerator of the ratio estimator represent a meaningful and fully included subset of the elements in the denominator even though somewhat different samples or observations are used. The problem involves achieving or assuring an appropriate "match" between the operationalizations of these two quantities and involves several operational issues, including logical/conceptual, sampling, and measurement considerations. The fundamental question is whether the two different measurements pertain to the same kind of events or entities such that there is an interpretively consistent connection between the two sets of events.

⁸ Although reported marijuana use is not uncommon overall (13.8% of the total survey sample in three metropolitan areas), it is rare in certain sociodemographic groups (e.g., older females) and for some categories of use (e.g., persons reporting current or continued use of marijuana beyond rare experimentation). This latter estimated rate seemed to us the most appropriate indicator of the population-at-risk for recent marijuana-use arrests; however, consideration of cell size for frequency tabulations involving this indicator discouraged its employment as the only user rate indicator. The current-use estimate is sometimes less useful than the ever-use one because reports of current use by some groups in the survey sample were comparatively rare, and many comparisons of interest involve insufficient cell sizes. As a result, we employed both user rate estimates-ever-use and current-use-in our analysis.

⁹ In constructing the ratio of the arrest rate to the estimated user rate, we encountered some problems associated with the possible "sampling" biases of each data file. Our concern was that, if the sample biases of the two surveys differed substantially, the ratio of the arrest/use rates would be complicated and obviously difficult to interpret. Particularly, the "population" from which the arrestees were drawn may be systematically different from the population sampled in the user survey because of the greater mobility of the arrestee population. This problem partially involves the adequacy of the household sampling unit in the use survey where highly mobile or transient persons or persons whose dwelling unit is not a "household," as conventionally defined, cannot appear in the drug-use sample (but may be a significant part of the arrestee population). Examination of the distribution of "transient" persons in the arrest data showed that the overall frequency of transients in the arrest sample was sufficient to possibly bias the absolute values of the arrestee/user ratios to some unknown degree. However, the distribution of transients generally did not vary in a substantial or consistent manner across jurisdictions or across demographic (gender, age, race, occupation) groups within jurisdictions, so whatever bias occurs probably has little effect on the comparative values of these ratios.

Calculation of arrest probabilities involved certain measurement considerations. Here it was necessary to establish roughly comparable category systems or operationalizations of variables in two data files. The compatibility of the two data files generally was not problematic for the measurement of these variables.¹⁰ Gender was coded dichotomously, as was race-black and nonblack.¹¹ Age was dichotomized into less than or equal to 25 and greater than 25 years, the approximate split at the median for the various samples (i.e., users, arrestees, and the jurisdictional populations). Occupation, originally treated as a nine-category code, was coded as blue collar, white collar, and student.¹²

Comparing outcome probabilities.-The logic of our analysis of arrest probabilities is implied by the equation specifying the relationship between arrest rates and rates of self-reported marijuana use (ostensibly the violation rates) :

$$\frac{\text{Arrestees}}{\text{Users}} \times \frac{\text{Users}}{\text{Population}} = \frac{\text{Arrestees}}{\text{Population}}$$

(A)
(B)
(C)

(Arrest Probability)
(Violation Rate)
(Arrest Rate)

As suggested by its position in the equation, the arrest rate (term C) is the phenomenon ultimately to be explained: it represents the social control

¹⁰ The jurisdictional boundaries of the Washington metropolitan area presented a small problem because of a change in definition of the standard metropolitan statistical area; however, computational adjustments were made so that correspondence between jurisdictional definitions was assured. The operationalizations of age and occupation required minor adjustments for comparability. Age was operationalized as number of birthdays in the arrest survey; in the use survey, however, age was aggregated into six categories. Comparability required disaggregation of one category, based on the single year distribution for urbanized areas in 1970. Occupation was treated as nine major Census categories which merged exactly, with the following exceptions. For the Census, 12 major categories were merged into nine. With trivial exceptions the fit is quite close and judged more than adequate for our purposes.

¹¹ This operationalization is often justified by the contention that on a great variety of relevant characteristics, nonblack nonwhite persons are more similar to whites than to blacks. Orientals, for example, have an educational attainment closer to whites. Spanish-speaking persons also may appear more like whites (Rubin 1972). In our analysis, *color*, or reactions to color, is the most relevant variable. We therefore compared non-black nonwhite respondents with both blacks and whites on a variety of variables. We also found nonblack nonwhites to be generally much more like whites than blacks, and never dissimilar. A second argument involves the sampling distribution where most data files have far fewer blacks than whites. Therefore, grouping the residual category with whites produces less distortion than grouping it with blacks.

¹² The nine categories were: farmer, operative, service, laborer, craftsman-foreman, professional-technical, manager-proprietor-official, clerical, and sale. This decision was, again, the result of a compromise required by the use of the three data sets-the user survey, the arrest data, and the 1970 Census. For the dichotomy the first five categories were aggregated into "blue collar" and the last four into "white collar."

outcome. More specifically, the analytic task is to account for the distributions of such outcomes across different sociodemographic categories. In the analysis that follows, we focus first on the arrest *probability* (term A) as that portion of the outcome rate which is distinguishable from variation in the distribution of sanctionable behavior and which reflects the contribution of the enforcement context other than, or in addition to, variations in sanctionable behavior. In this sense, our estimation of term A (by construction of the arrest/use ratios) is an attempt to “peel apart” arrest rates and focus on that component of these rates which reflects more substantially on the input of law enforcement systems.

Supplementary data.—In addition to the basic data used to estimate total and group-specific arrest probabilities, the analysis ultimately required additional data concerning the arrest encounter itself. That is, the explication of differences in arrest/use ratios directed our attention to the circumstances of detection and arrest. From the arrest data file, we retrieved police reports on the circumstances of the arrest, as well as the antecedents of the encounter. These supplementary data included information about the number of persons included in an arrest (group vs. solo), the spatial location of the arrest (a private area, a public off-street area, a public street area, a vehicle), the type of police officer involved, the occurrence of a prior drug-related investigation, the type of enforcement activity leading to detection and arrest (e.g., proactive, reactive, routine patrol), and prior arrests.

FINDINGS

Tables 1-3 show arrest rates and user rates as well as the arrest/use ratios for gender, occupation, race, and age within and across jurisdictions. Small cell size precluded the simultaneous breakdown by occupation and any second variable. Thus, although age, race, and gender were analyzed not only singly, but also with each other variable two at a time, and all three variables simultaneously, occupation was treated singly. This process was repeated for each of the three jurisdictions and their aggregate total, although the results of these analyses are not shown.

The tables include component rates (marijuana use and marijuana possession arrest) as well as their computed ratios, so that the contributions of components to differences in arrest/use ratios can be examined. These tables also show the estimated “range of plausible variation” for each ratio.¹³ The relevant comparisons are discussed in turn.

¹³ In comparing specific arrest/user ratios, we encountered the substantive and statistical dilemma of determining when a ratio difference should be regarded as important. The substantive problem involves a value judgment about what magnitude of difference should be taken seriously. It is not possible to specify an arbitrary standard for such

TABLE 1
ARREST/USER RATIOS, USER RATES, AND ARREST RATES BY FOUR
SOCIODEMOGRAPHIC GROUPS FOR COOK COUNTY

SOCIODEMOGRAPHIC GROUP	ARREST /USER RATIOS (per 100,000 Users)		USER RATES (per 100,000 Persons)		ARREST RATES (per 100,000 Persons)
	Possession: Ever Use	Possession: Current Use	Ever Use	Current Use	Possession
Gender:					
Male.	653 (542-816)	1,864 (1,398-2,815)	17,670	6,190	115
Female.	107 (90-132)	238 (179-359)	11,470	5,160	12
Employment status:					
White collar.	123 (101-156)	...	26,777	...	33
Blue collar.	1,055 (802-1,551)	...	8,903	...	94
Student.	294 (200-553)	...	47,300	...	139
Race:					
Black.	665 (519-918)	1,686 (1,146-3,203)	22,980	9,060	153
Nonblack.	298 (259-352)	723 (564-998)	12,200	5,030	36
Age:					
25 or less.	632 (556-733)	1,368 (1,081-l) 888)	44,070	20,370	279
26 or more.	123 (98-164)	377 (245-675)	8,140	2,650	10
Overall total.	277 (244-321)	694 (562-909)	14,500	5,790	40

NOTE.—The range specified in parentheses with each arrest/user estimate in this and other tables is the “range of plausible variation” in the estimate, described in the text. This range indexes the variability of the ratio estimate resulting from sampling variability in the user rate estimates. The width of the interval reflects the relative stability of each ratio estimate. In comparing observed ratios for different social units, the overlap, or near overlap, of the intervals for the two ratio values indicates that any observed difference may not be reproducible with different samplings.

judgments since they will be a function of the particular interpretive model applied. The statistical problem involves determining that such differences are consistent and repeatable across different samplings of data points. Our procedure for determining “significant differences” among comparisons is restricted to this latter issue of statistical regularity. Because conventional procedures for establishing statistical significance are inapplicable to our ratio indices, our approach was to generate a confidence interval specific to the computed arrest/user ratios (based on their most likely source of variability—the survey sample of users). For each ratio, we computed a “range of plausible variation” to indicate the stability of each ratio value with repeated samplings in the user survey. This measure expresses the range of variation in the ratio which would result from a variation of “plus or minus one standard error” in the unweighted number of reported marijuana users. The range of variation for reported users was computed by assuming a binomial distribution of marijuana-users within a general population sample. The variability of user estimates is then a function of the proportion of the sample who report marijuana use and the size of the sample. Such a measure presumes that the only source of variation in the computed ratios is sampling variation in the estimates of users. This is a rule-of-thumb procedure that indicates the overlap or near overlap of the ranges associated with the compared ratios; it is not a significance test for point estimations.

TABLE 2

ARREST/USER RATIOS, USER RATES, AND ARREST RATES BY FOUR SOCIO-
DEMOGRAPHIC GROUPS FOR WASHINGTON, D.C., METROPOLITAN AREA

SOCIODEMOGRAPHIC GROUP	ARREST/USER RATIOS (per 100,000 Users)		USER RATES (per 100,000 Persons)			ARREST RATES (per 100,000 Persons)
	Possession: Ever Use	Possession: Current Use	Ever	Use	Current Use	Possession
Gender:						
Male.	229 (190-289)	393 (307-546)	15,340		8,940	35
Female. ..	48 (39-62)	120 (88-191)	11,110		4,410	5
Employment status:						
White collar.	32 (26-42)	...	20,381		...	7
Blue collar.	487 (33 1-901)	...	6,471		...	32
Student.	61 (45-93)	...	61,630		...	37
Race:						
Black.	120 (88-190)	247 (146-823)	13,420		6,540	16
Nonblack.	148 (127-178)	291 (236-381)	13,400		6,820	20
Age:						
25 or less.	152 (134-176)	264 (219-335)	46,790		27,020	71
26 or more.	112 (V-200)	1,152 (576-1 15,520)	2,680		260	3
Overall total.	96 (84-1 13)	192 (156-248)	13,190		6,630	13

Interjurisdictional patterns.—Tables 1-3 show that both arrest/use ratios are higher in Cook County and lower in Washington; Douglas County is intermediate. That is, the probability of arrest for marijuana users is higher in Cook County than in Douglas County and lowest in Washington. The relationship of the magnitude of the arrest/use ratios for these jurisdictions is approximately: $2\frac{1}{2} : 1\frac{1}{2} : 1$. When each jurisdiction's arrest rates and estimated user rates are examined separately, the basis for the observed ordering of ratios becomes apparent. Cook County has the highest arrest rates; the arrest rates in Washington, D.C., and Douglas County are about one-third as large. In estimated drug use, Washington and Cook County are similar and have higher user rates than Douglas County. Thus, the difference in ratios is produced by a substantially higher arrest rate in Cook County. In this respect, a question that is raised by these data is why arrest rates are so much higher in Cook County than in Washington or Douglas County.

Effects of gender.—Tables 1-3 also show the relevant arrest/use comparisons by gender. Overall, larger gender differences appear in Cook County than in Washington; gender differences are smallest in Douglas County. The relationship between gender and the arrest/use ratios is con-

TABLE 3

ARREST/USER RATIOS, USER RATES, AND ARREST RATES BY FOUR
SOCIODEMOGRAPHIC GROUPS FOR DOUGLAS COUNTY

SOCIODEMOGRAPHIC GROUP	ARREST/USER RATIOS (per 100,000 Users)		USER RATES (per 100,000 persons)		ARREST RATES (per 100,000 Persons)
	Possession: Ever Use	Possession: Current Use	Ever Use	Current Use	Possession
Gender:					
Male.	255 (207-332)	754 (558-1,176)	15,950	5,400	41
Female.	87 (66-129)	304 (179-1,012)	4,280	1,230	4
Employment status:					
White collar.	83 (63-120)	...	15,303	...	13
Blue collar.	419 (277-884)	..	9,086	...	38
Student.	214 (143-428)	...	16,350	..	35
Race:					
Black.	195 (131-390)	325 (198-930)	24,730	14,840	48
Nonblack.	214 (178-270)	791 (577-1,258)	8,710	2,360	19
Age:					
25 or less.	268 (220-343)	591 (443-W)	31,000	14,050	84
26 or more.	89 (67-134)	1,429 (715-142,900)	4,010	250	4
Overall total.	137 (102-170)	420 (319-622)	9,740	3,180	13

sistent across all three jurisdictions: males have substantially higher arrest/use ratios than females; overall, male ratios are about five times larger although this varies across jurisdictions. The gender differences in arrest/use ratios are attributable primarily to **arrest rate** differentials.

Effects of occupation.—Tables 1-3 also show that arrest/use ratios vary by occupational status, and these relationships are sizable and consistent across jurisdictions. Of all occupational groups, the blue-collar group has the highest arrest/use ratios; student ratios come next, and the white-collar group has the lowest ratios. This pattern is apparent in each of the three jurisdictions, although intrajurisdiction differences are less striking because of small sample sizes and, hence, less stable estimates.¹⁴

The large arrest/use ratios for blue-collar persons are produced by this

¹⁴ These occupational comparisons are affected by possible underestimation of blue-collar user rates. While underestimation is plausible for all groups, our impression is that it is more marked for respondents in the blue-collar occupational group. As a result, analysis is possible only for those arrest/use ratios involving ever-use denominators because there are so many empty cells for current-user estimates. If, in fact, the user rates for the blue-collar group have been underestimated, its ratios may be inflated to a significant but unknown degree. However, we suspect that the arrest/use ratios for the blue-collar group would still be the highest even after a correction for use underestimation.

group's high arrest rates coupled with relatively low estimated user rates. The student group also has a high arrest rate but the arrest/use ratios are lower than those for the blue-collar group because student user rates are the highest of the three occupational categories. The white-collar group has a moderately high user rate but it is coupled with the lowest arrest rates.

Effects of race.-In contrast to the arrest/use ratio differences associated with gender and occupation, the effect of race is not consistent across jurisdictions. Tables 1-3 show arrest/use comparisons by race. Racial differences are largest in Cook County and relatively small in Washington and Douglas County (except for current users). In Cook County, blacks have substantially higher arrest/use ratios than nonblacks-at least twice as large. These differences are attributable to a striking difference in arrest rates (black rates are about four times larger than those for nonblacks) which offsets small differences in estimated user rates. In contrast, Washington and Douglas County show no appreciable racial differences.¹⁵

Effects of age.-Arrest/use comparisons by age are also shown in tables 1-3. Like the racial comparisons reported above, the effect of age is not consistent across jurisdictions. The largest age differences are again found in Cook County; the differences in Douglas and Washington are generally smaller.¹⁶ In Cook County, the age effect is consistent across both ratio indices and is substantial. In this jurisdiction, persons 25 and under have higher arrest/use ratios than do persons over 25. Although the rates of both marijuana use and arrest are higher for the younger group, the age differential is greater for arrest rates than for use rates, and the younger group has correspondingly higher arrest/use ratios.

EXPLICATING ARREST DIFFERENTIALS

The data presented above show that the probability of arrest for marijuana users varies by certain sociodemographic categories across and within jurisdictions. One general pattern of apprehension risk is a gender effect: males have substantially higher arrest probabilities than do females. This

¹⁵ We regard the Washington data as inconclusive for females because of the empty estimated user rate cells for black females. Similarly, Douglas County data show small ratio differences for males (with nonblack ratios generally higher than those for blacks) ; again, the data for females are sufficiently incomplete to preclude confident comparisons.

¹⁶ Probably not much should be made of the patterns for current-use ratios in Washington and Douglas County because the current-use rates in these jurisdictions are based upon a single reported user in each. Consequently, the current-user rates are unstable and undoubtedly underestimated in these two jurisdictions. Despite the age variability in arrest/use ratios between jurisdictions, the patterns for the component rates separately are similar. The under-25 is higher than the over-25 group in both arrest rate and estimated user rate and, in general, the differential in arrest rates is greater than the differential in user rates, except for current-user estimates in Washington and Douglas County.

pattern is clear and consistent across all jurisdictions. A second general pattern of apprehension risk is an occupational group effect: the probability of arrest is generally higher for blue-collar persons than for others; students show higher arrest probabilities than do white-collar persons. Third, age patterns of apprehension risk are more clearly jurisdiction specific. The age effects observed in Washington, D.C., and Douglas County arrest/use ratios differ visibly from those of Cook County. Finally, the effect of race on arrest probability involves one of this study's more interesting findings: a race effect is apparent only in Cook County where blacks have higher arrest/use ratios.

As indicated earlier, such differences do not necessarily constitute evidence of selectivity. The general question they raise, however, pertains to their explicability: What can be made, sociologically, of these differences? The question of explicability directs attention to three possible components of the sanctioning episode: (1) the distribution and characteristics of sanctionable acts-or actors ; here, differential sanctioning is explained in terms of "differential violations," including the kind or number or seriousness of those violations ;(2) the organization and focus of sanctioning agents; here, differential sanctioning is explained in terms of "differential enforcement," including the harassment of, or discrimination against, certain presumed offenders. It is assumed that the sanctionable acts, both kind and number, are constant across sociodemographic groups; and (3) the intersect or interaction of sanctionable acts or actors and the organization or focus of sanctioning; this latter approach explains differential sanctioning in terms of "differential visibility."

In exploring these alternative explanations, we reject a *simple* differential violation interpretation of the arrest rate differentials for marijuana possession. The data show that the most frequently arrested groups also have generally higher estimated user rates. At the same time, the differences in the violation rates are insufficient to account for the arrest rate differences (which are typically much greater in magnitude) ; indeed, this differential between the arrest differences and the marijuana-use differences is sufficiently large and robust to preclude possible effects of measurement or sampling errors in our estimation procedure. The explanation we wish to explore is the third-differential visibility. Our analysis focuses on the conditions under which violations come to be "suspected," that is, come to the attention of enforcement agents and prompt a response from them.

Prior research indicates that, for most criminal offenses, the likelihood of detection is affected to a great extent by the behavior of citizen complainants and victims who decide whether or not to contact the police (Black 1970 ; Reiss 197 1) . However, except for a small percentage of drug offenses which are reported by nonparticipant third parties, citizens

play a relatively small role in determining whether or not drug violations are detected. In contrast to most other crimes, the detection of drug offenses—which do not produce victims or complainants—virtually always arises from police-initiated contacts with the violator.

In *drug* law enforcement, virtually all criminal arrests are produced by one of two policing styles. First is the police-initiated investigation in which police actively seek out violations of drug laws, especially those involving commercial distribution. This style involves the use of undercover agents, drug buys, stakeouts, and informants. A second drug law enforcement style encompasses residual police activity: drug violations are “spontaneously” detected in the course of preventive patrol, traffic control, or general “peace keeping” activity. Here, the primary determinant affecting the detection of drug violators is whether the police conduct a search during the citizen encounter (see Johnson and Bogomolny **1972, 1973** ; Bonnie and Johnson, forthcoming).

In marijuana arrests generally, it is estimated that about two-thirds of all arrestees are apprehended spontaneously without any prior investigative activity; furthermore, these arrests usually are made by general patrolmen in the course of the routine policing of public areas, often after a seizure involving less than one ounce of marijuana (see Morton et al. 1968; Johnson and Bogomolny 1972). We attempted to further illuminate the observed arrest probability differences by examining data pertaining to the circumstances of detection and arrest for the various demographic groups within and across jurisdictions. Supplemental analyses of additional data in the arrest files involved reported information about the number of persons included in an arrest, the location of the arrest, the type of police officer involved, the occurrence of prior drug-related investigation, and the type of enforcement activity leading to detection and arrest.

In examining these data, we found the following patterns: (1) males, compared to females, were more often arrested by general patrolmen, often in vehicles, more often arrested alone, and more often had prior records. Conversely, arrest of females more often involved investigative or proactive policing where the apprehension occurs in an indoor nonpublic location. (2) Student arrestees in all jurisdictions were less often targets of prior investigation than other persons. Arrests involving students appear to involve spontaneous or routine general patrol-citizen encounters, often in connection with a vehicle stop. Similarly, arrests of blue-collar persons (in Cook County and Washington), compared to arrests of white-collar persons, were somewhat more likely to result from spontaneous police contact and to involve persons with prior arrest records. (3) In all jurisdictions younger persons (25 and under) were generally more often arrested in vehicles or groups than older arrestees, while the older group more

often involved persons with prior records and arrests in an indoor context. (4) Racial differences are evident in the circumstances of detection only in Cook County. In this jurisdiction, the apprehension of blacks, compared to arrests of nonblacks, was less often the result of prior drug-related investigations, and more often occurred in a “street” context as a result of either spontaneous police contact or the detection or suspicion of simultaneous nondrug events or offenses.

To further scrutinize the relationship between arrest probability and certain arrest circumstances, we dichotomized the arrest sample into high and low arrest probability groups. The high probability group includes nonblack males 25 and under, black males 25 and under, and black males over 25. The low probability group includes all females and nonblack males over 25. The two groups were compared, for each jurisdiction, with respect to a prior arrest record, an investigation prior to the arrest, the prevalence of group arrests, the public or private arrest location, and the recorded cause of police presence.

These comparisons are summarized in table 4. The data show that in each jurisdiction arrests of persons in the high arrest probability group, compared with those in the low probability group (1) more frequently involved persons with a prior arrest record; (2) less often resulted from a prior investigation, except in Douglas County; (3) more often involved apprehension of a single suspect (rather than a group “bust”); (4) more often occurred in a public (“street”) location; (5) more often involved spontaneous contact with police (rather than either reactive or proactive

TABLE 4
DIMENSIONS OF DETECTION AND APPREHENSION BY HIGH AND LOW ARREST
PROBABILITY GROUPS FOR THREE JURISDICTIONS (%) (PARTIAL TABLE)

	N	Prior Arrest	Investi- gation	Single Arres tee	Public Area	Spon- taneous	General Patrol
Cook County...	(3,813)	54.42	21.32	29.35	72.36	50.38	86.81
High..	(3,091)	56.84	15.95	30.93	80.69	55.61	89.52
Low.	(653)	45.02	47.01	19.14	32.62	23.74	74.27
Missing.	(69)	(168)	(101)	(24)	(21)	(625)	(81)
Douglas County	(108)	47.22	34.26	22.22	54.63	19.44	41.67
High.	(89)	49.44	34.83	23.60	58.43	21.35	41.57
Low.	(18)	33.33	33.33	16.67	33.33	11.11	38.89
Missing.	(1)	(0)	(1)	(5)	(0)	(15)	(0)
Washington, D.C.	(712)	25.70	35.25	31.32	67.70	42.13	42.28
High.	(547)	29.43	33.27	35.28	71.66	43.88	45.16
Low.	(135)	14.07	40.74	19.26	51.85	35.56	29.63
Missing.	(30)	(147)	(3)	(41)	(7)	(30)	(7)

NOTE.—This is a partial table insofar as percentage distributions are shown for only the variable category of interest, i.e., the proportion of the arrest group with a prior arrest record, apprehended after an investigation, apprehended alone, apprehended in a public place, apprehended spontaneously, apprehended by a general patrolman. The rows designated as “missing” display the number of cases for which arrest circumstance data were unrecorded or unknown.

policing), especially in Cook and Douglas Counties ; and (6) more often were carried out by general patrolmen than by officers with a limited or specialized jurisdiction, especially in Cook County and Washington.

These relationships between arrestee characteristics and arrest circumstances suggest to us two considerations for explaining the observed differences in marijuana arrest probabilities. First, the data indicate that the number and kind of marijuana users who enter the criminal justice system depend largely on the nature and scope of police detection activity. In particular, the substantial role played by general patrol officers in generating "spontaneous" arrests is remarkable. Our characterization of these arrests as spontaneous and resulting from fortuitous police contact is consistent with Black's (1970) description of typical proactive police activity, that "in the average case proactive detection involves a simultaneous detection of the violative acts and of the violative person" (Black 1970, p. 73 5). The discovery of drug offenses may vary from a proactive but **noninvestigatory** search for drug crime to an essentially reactive style associated with the ordinary patrolman who routinely encounters "suspicious behavior," "suspicious circumstances," and traffic violations in which drugs are serendipitously discovered.

The second consideration pertains to how behavior or circumstances come to the awareness of police as suspected violations. Although the data presented are not sufficient to determine unequivocally what specifically triggered the police attention or suspicion that preceded these arrests, several explanations are plausible. The first is the importance of the social Location of suspects and suspected activity. The data analyzed here suggest that the context and manner in which marijuana is used render it more or less susceptible to detection. The sociodemographic groups examined may differ in the extent to which marijuana was used in publicly accessible settings and this difference may in turn lead to differences in detectability. Stinchcombe (1963) notes the importance of police access to private (vs. public) places including those situations or settings whose penetration by law enforcement agents is formally limited by statutory or constitutional specifications. Stinchcombe suggests that private places are differentially distributed across various social groupings and that arrests dependent upon public discovery are correlated with the distribution of private places. Similarly, Chambliss and Seidman (19 7 1) have speculated about the legal consequences of differential access of social classes to the "institution of privacy." The public context of marijuana law enforcement (where general patrol officers play a major role in generating spontaneous arrests during routine patrol activity) implies that variations in detection and apprehension should correlate with the distribution of access to private places (and corresponding use of public places for otherwise private activi-

ties), The data examined here are consistent with this interpretation. The groups most liable to arrest were also those groups with least access to privacy and whose arrests most frequently involved discovery in a public context (i.e., in vehicles, in the street, or in off-street, on-view settings).

The social location of suspects and suspected activity also directs attention to the sociological importance of "territoriality" (e.g., see Lyman and Scott 1967). Aside from the question of differential access to privacy, the location of sanctionable actors may determine the kind of social reaction they prompt, Werthman and Piliavin (1967) conclude that areas regarded by some persons as "home space" (suitable for activities that might otherwise violate the public order if enacted in public places) may be regarded by others, such as police officers, as public areas subject to maintenance of public order. In this regard, we note that in Washington, D.C., arrests of young blacks frequently occurred in an urban street setting while arrests of young whites often occurred in parks. One implication of this finding is that public territories frequently provided the "testing ground" of challenges to authorities (Lyman and Scott 1967). In these contexts, a behavior whose propriety or whose relationship to the public order is in dispute may be enacted openly in public to generate confrontation; and, indeed, the marijuana controversy seems to have involved this kind of symbolic interaction (see Kaplan 1970; Bonnie and Whitebread 1974). The large number of arrests of young nonblack persons in Washington, D.C., may reflect precisely this phenomenon: a substantial number of these arrests were made in park areas where, it may be recalled, the protest rallies of 1970 and 1971 were also located. Many of the arrests associated with these events involved drug charges.

Beyond accessibility to public view, the visibility of deviant activity also involves the coding of behaviors and persons into "suspected" categories. This interpretive component implicates a second explanation—the potential significance of *cues* in the apprehension of suspects (Piliavin and Briar 1964). In this regard, the general overrepresentation of young, blue-collar males may reflect either a greater visibility of these persons and their marijuana use to the police or a police predisposition to search persons with these characteristics. Matza's (1969) discussion of the role of categorical resemblance within the "method of suspicion" indicates that not all social categories of persons and activities are equally "suspect." Organizational pressures for efficient policing inevitably encourage police reliance on resemblance to "known" categories of suspected persons. Suspicion is neither randomly directed nor incidental, but rather methodical and involves the application of existing category systems of suspects. Certain characteristics of actors and action may signify such categories and, therefore, serve as cues that affect police perception, focus police attention,

and direct police investigation. Although we are without direct observational data concerning these dimensions of police activity, the available data do suggest certain patterns of police suspicion. As we have indicated, the most frequently arrested groups—young males, often black—more often involve general patrol officers and a police-citizen encounter where the marijuana violation was not initially or directly seen. Instead, arrests of these groups often result from police stops for other purposes, often “suspicious circumstances” after which a search produced marijuana evidence. Many of these arrests imply a methodical application of suspicion to persons with reputations for “making trouble.”

Finally, we note that although the police harassment hypothesis is often associated with drug law enforcement, it is also apparent that the context of much marijuana use is one where such activity is visible. In these circumstances, the probability of police-offender contact is greatly increased, a condition that is largely determined by marijuana users. The data presented here are compatible with both interpretations—differential enforcement or differential visibility—and, therefore, with either inappropriate or appropriate selectivity. We wish to emphasize, however, that an empirically based choice among them requires observational data concerning the arrest event, including the detection process by which citizens are linked to a violation.

SUMMARY

The preceding analysis estimated arrest probabilities for marijuana users by combining arrest data with marijuana user estimates for three jurisdictions. Sociodemographic variations in the estimated arrest probabilities show two general effects: arrest probabilities are higher for males than for females and higher for blue-collar persons than others in all three jurisdictions. Other effects are more clearly jurisdictionally specific: in two jurisdictions, persons under 25 have higher arrest probabilities than older persons; in one jurisdiction, arrest probabilities are higher for blacks than nonblacks.

Because a simple differential violation explanation for these differences can be ruled out, alternative interpretations were explored. This subsequent analysis involved examining additional data pertaining to the circumstances of marijuana arrests and certain characteristics of the law enforcement activity that preceded the arrests in these three jurisdictions. Here, we explored the plausibility of both “differential enforcement” and “differential visibility” explanations for the observed arrest probability differences. It was concluded that **both** interpretations are consistent with the available data; that is, the social Location of much marijuana use as

well as the suspicion cued by certain sociodemographic characteristics of marijuana users are equally tenable explanations of these arrest probability differentials.

Despite the common assumptions concerning the prevalence of inappropriate selectivity in policing, it appears that its documentation is more difficult than imagined. There are some alternative explanations for selectivity in law enforcement.

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