

Rap Sheets in Criminological Research: Considerations and Caveats

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The types of errors found in official criminal history records are not completely understood by many researchers, and this lack of understanding can lead to serious misinterpretations. Analyses of a recently developed database of New Orleans offenders indicate that the use of rap sheets with a limited catchment area can lead to gross distortions of the effects of variables related to geographic mobility, such as race and age. Evidence from a number of sources indicates that false-negative error is a serious problem, particularly in fingerprint-based record systems. In addition, arrest records lend themselves to a variety of common misinterpretations by researchers in the coding process, including failing to identify multievent arrests, misclassifying arrests, and treating arrest or custody process events as crimes indicating criminal activity of the individual while free. Solutions to some of these problems are suggested.

KEY WORDS: rap sheet; criminal history; arrest record; false-negative error.

1. INTRODUCTION

Official records of individuals' arrests, convictions, and custody have always held and will continue to hold an important place in criminological research. These records are traditionally used in research on recidivism and, most recently, among researchers developing the "criminal career" model. Though many researchers have wrestled with the methodological issues involved in assembling and interpreting rap sheets, the problems have never been systematically addressed in the published literature. Substantial attention has been paid by criminologists to Uniform Crime Reports data and the construction of criminal statistics by officials. Studies focus on the determinants of citizen reporting of crimes to police and on police recording or nonrecording of these alleged offenses. The records of arrests found in individual criminal histories maintained by local and state agencies and the

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FBI, however, are generated by very different processes involving a different set of issues. The errors common in these records, which are the result primarily of processes within and among criminal justice agencies where citizen reporting is not an issue, have not been systematically explored in terms of their potential effect on research results.

Rap sheets are sometimes accepted at face value by researchers. Indeed, with rare exceptions (see, e.g., Widom, 1989), the source and scope of rap sheet data (FBI database, state fingerprint depository, or local rap sheet) are not clearly identified. Even when the source is clearly identified, the only problems recognized are (1) missing rap sheets, (2) conflicts between rap sheets from different sources, and (3) the absence of final disposition or incarceration data.

The most pernicious forms of error found in rap sheet data arise from local police department booking and fingerprint procedures and state and FBI criminal history system policies and actual procedures. Detailed knowledge of such matters is limited to a small group of criminal justice professionals directly involved in maintaining these databases or in policy-making in certain narrow areas, such as the SEARCH Group.² They are familiar with many problems that have important implications for criminological research but are not primarily concerned with their implications for such research.

This paper outlines the methodological problems that rap sheet data present to criminologists, with a primary focus on the adequacy of official criminal history data for estimating an offender's criminal activity. This study should help to sensitize both researchers who use rap sheets and consumers of this research to biases that might, at the least, suggest alternative explanations of findings. A criminal history database recently assembled for the New Orleans Offender Study is used to test the effects of rap sheet source and scope on research results and to develop preliminary estimates of the nature, extent, and importance of some sources of rap sheet error for criminological research.

2. CRIMINAL HISTORY DATABASES IN THE UNITED STATES

There are well over 200 million criminal history records in the United States, 45 million maintained by state governments [Bureau of Justice Statistics (BJS), 1991], about 27 million of which are automated, 25 million by the FBI, and an estimated 135 million by local law enforcement agencies (Laudon, 1986, p. 11). Forty-two states have computerized at least part of

²This is an offshoot of the LEAA, which is now a private consulting group for state and federal criminal justice agencies.

their criminal history records and about 12.5 million of the criminal fingerprint files maintained by the FBI have been placed on computer. There is no estimate available of the extent to which local law enforcement agencies have automated their criminal records, although most large metropolitan jurisdictions do have computerized criminal history systems.

In some ways rap sheet problems are simply the result of the severely decentralized nature of the American criminal justice system. Most law enforcement, including the arrest and booking of offenders, takes place at the local level, and state governments often do a poor job of regulating and systematizing the record keeping of these arrests. The history of the development of computerized criminal record systems shows not only that the states are often unwilling to conform to federal guidelines, but also that Washington cannot formulate a consistent approach of its own.

A history of the development of a criminal records policy in the United States is outside the scope of this paper (see Marchand, 1980; Laudon, 1986), but certain consistent themes in that history have important implications for problems in offenders' rap sheets. Since the mid-1960's, it has been recognized that there are vast deficiencies in the completeness, consistency, and accuracy of criminal justice data and that modern computer technology has the potential for remedying these deficiencies (President's Commission on Law Enforcement and the Administration of Justice, 1967). Through Title I of the Omnibus Crime Control and Safe Streets Act of 1968, Congress created a federal agency, the Law Enforcement Assistance Administration (LEAA), responsible for funding reform and modernization of the criminal justice system. Through its power to fund the development of state computerized criminal justice information systems,³ the LEAA during the decade of the 1970s fostered a tremendous expansion of state systems. From the beginning, however, this program was intended to promote a decentralized, federated system, an example of President Nixon's "New Federalism."

The early 1970s saw a struggle among the LEAA, the FBI, and Congress both to define the nature of a national computerized criminal history system (CCH) and to control it. The FBI's early plans to develop a national, computerized criminal history database was gradually modified into the current system, in which the FBI maintains criminal history records for 26 states but only an identification system for the others. The 24 states that participate in the Interstate Identification Index (III) maintain their own criminal history databases: arrests in these states are not submitted to the FBI database. Instead, the FBI maintains an offender index for these states. Inquiries on

³From 1972 to 1978, the LEAA spent more than \$68 million through the CDS program to fund the development of state criminal justice information systems. This does not include LEAA block fund expenditures for the development of these systems (Marchand, 1980, p. 73).

an offender result in a request for information sent by the FBI to that state if the FBI's index indicates that the offender has an arrest there. The state can then respond with its information over one of two communications networks (NCIC or NLETS). Eventually, all states are expected to participate in the III. The FBI will then maintain arrest histories only on federal offenders.

This decentralized, state-based approach to the maintenance of criminal history systems has important implications for research. Even when working properly, the system is designed for one-at-a-time inquiries by a law enforcement agency about an individual offender. If the offender has been active in many states, the inquiry will generate separate responses from each state, which the agency must then collate and interpret. Even if a researcher were to obtain access to the system to make inquiries, the assembly of a comprehensive national database of a large number of offenders using such an approach would be extremely and, in most cases, prohibitively expensive. This will force most researchers to rely on one local or state database for rap sheets. As we shall see, this limitation can have important ramifications.

3. RAP SHEET SCOPE

The difficulty involved in getting access to and assembling rap sheets leads many researchers to rely on local or single state information systems, with the implicit assumption that arrests from other jurisdictions are randomly distributed over variables of interest. This is not, however, necessarily the case. To determine if the jurisdictional scope or arrest catchment area of the rap sheet can affect research results, the criminal history database recently assembled for the New Orleans Offender Study (NOOS) was used.

The NOOS database is a data set created by merging five criminal justice databases. This analysis focuses on two arrest history databases; the New Orleans Police Department's arrest history system (MOTION), years 1973-1986, and the Louisiana criminal history system (FINDEX) maintained by the Louisiana Department of Public Safety, years 1974-1986. The FINDEX database includes all arrests submitted on fingerprint cards and accepted by the Louisiana State Police. FINDEX also includes arrests outside Louisiana maintained by the FBI. FBI-maintained arrests are added when fingerprint cards on arrestees are submitted either by the State Police or by local jurisdictions to the FBI. FBI rap sheets are then forwarded to the State Police and added to FINDEX. The NOOS database, then, includes

Table I. Percentage of New Orleans Burglary and Armed Robbery Offenders Born Out of State by Race and Age in 1985

Age in 1985	Race					
	Black	(N)	White	(N)	All	(N)
<17	5.7	(1,513)	26.7	(140)	7.5	(1,653)
17-25	8.9	(6,713)	36.1	(1,095)	12.7	(7,808)
26-35	14.3	(6,424)	51.5	(1,174)	20.0	(7,598)
36+	20.7	(2,105)	67.8	(323)	27.0	(2,428)
All	12.2	(16,755)	46.0	(2,732)	16.9	(19,487)

arrests maintained by the local information system, by the state, and by the FBI.⁴

The criminal histories developed in the NOOS were the result of extensive matching procedures on a variety of identifiers that searched for all arrest records for an individual (for a description of the process, see Geerken *et al.*, 1993). The NOOS focuses on the effect of the criminal justice system on the crimes of burglary and armed robbery committed in New Orleans and, specifically, on the incapacitative effect of incarceration. The study population is all offenders arrested at least once for burglary or armed robbery in New Orleans during the 14-year period 1973-1986.

The scope of rap sheet data will affect research results to the extent that geographic mobility is correlated with race, sex, age, employment, and other demographic factors. In particular, the correlation of arrest-based measures with these demographic variables will not be accurately estimated if the rap sheet is limited in geographic scope.

Table I shows the potential distortion geographic mobility can introduce into race and age comparisons. There are large racial differences in the mobility of both burglars and armed robbers, and these differences persist within age categories. Whites and older offenders who commit crime in New Orleans are much more likely to have moved there from outside Louisiana. This suggests that a larger percentage of their arrests would be available to researchers only from other state or FBI rap sheets. Comparisons in number of arrests based on local data only, then, might seriously exaggerate the criminality of blacks relative to whites and younger offenders relative to older offenders.

These conclusions are supported by arrest data from the NOOS official record database. To assess directly the effect rap sheet scope has on research,

⁴Since FBI rap sheets are forwarded to the State Police only when a Louisiana fingerprint card is received, non-Louisiana arrests are included in the NOOS database only prior to the last recorded Louisiana arrest. Therefore the following analysis focuses on periods prior to a Louisiana arrest or as early in the 1974-1986 measurement period as possible.

Table II. Race Effects by Rap Sheet Type

Rap sheet type	Race		Ratio
	Black	White	
	Prior index arrests ^a		
New Orleans only	3.04	1.62	1.89
MOTION system	3.08	2.44	1.26
Louisiana	3.46	2.92	1.18
All arrests	3.73	3.52	1.06
(N)	(1,565)	(339)	
	Index rearrest rate ^b		
New Orleans only	2.09	0.91	2.30
MOTION system	2.18	1.19	1.83
Louisiana	2.26	1.28	1.77
All arrests	2.34	1.50	1.56
(N)	(2,118)	(616)	

^aFor criterion arrest (burglary or armed robbery) in 1985.

^bYears 1974-1979 after criterion arrest in 1974.

two samples were selected from the NOOS database: those with criterion (burglary or armed robbery) arrests in 1985 and those with criterion arrests in 1974. For the 1985 sample, the number of prior index arrests was calculated by rap sheet source and type. For the 1974 sample, the number of index arrests for the subsequent 5-year period was calculated, again by rap sheet source and type.⁵

Prior index arrests and post arrest 5-year rates were separately calculated for (1) New Orleans arrests only (any database), (2) the local arrest history system (MOTION) only, which includes New Orleans and a number of surrounding parishes, (3) Louisiana arrests only (MOTION and FINDEX databases), and (4) all arrests.

Table II shows the dependence of race-crime effects on rap sheet scope. It is clear that a large racial effect appears for both arrests and postarrest 5-year rate when only local arrests are considered. Rates for blacks are about twice those for whites. When all arrests are considered, however, the racial effect is substantially reduced and, in the case of prior index arrest rate, virtually eliminated.

⁵The samples were selected in this way for the following two reasons: (a) Prior arrest and post arrest years are marked only from years when criterion arrests occurred to simulate typical research analyses, where prior arrests are used to predict the disposition of a current arrest or conviction (pretrial release, sentence, etc) and post arrests are used to measure recidivism after some criminal justice contact; and (b) 1985 is chosen as the prior arrest criterion year and 1974 as the post arrest year to ensure that as much time as possible in the measurement period is covered by all the study databases.

Table III. Age Effects by Rap Sheet Type

Rap sheet type	Age			
	<17	17-25	26-35	36+
		Prior index arrests ^a		
New Orleans only	1.01	2.56	3.59	4.09
MOTION system	1.09	2.89	3.91	3.13
Louisiana	1.09	3.00	4.45	5.38
All arrests	1.09	3.08	4.93	7.22
(N)	(277)	(994)	(501)	(169)
		Index rearrest rate ^b		
New Orleans only	3.38	1.46	1.03	0.91
MOTION system	3.44	1.63	1.16	0.93
Louisiana	3.50	1.74	1.23	0.99
All arrests	3.53	1.86	1.41	1.15
(N)	(678)	(1,401)	(492)	(165)

^aFor criterion arrest (burglary or armed robbery) in 1985.

^bYears 1974-1979 after criterion arrest in 1974.

Rap sheet scope has a significant effect on the age-crime relationship as well (see Table III). In this case the local rap sheet presents an exaggerated estimate of the age-crime relationship for the postarrest index rate and an underestimate for the prior arrest measure.

These distortions will not be consistent from city to city, as patterns of geographic mobility by race and age will differ from one area to another. In some cities, for example, more blacks might be recent migrants or have their residences outside county limits, so that local rap sheets would underestimate their arrests relative to whites. Other variables that may be correlated with geographic mobility, including employment, occupation, education, nationality, and military service, will have their relationship to rap sheet-based criminality indicators distorted by the use of local rap sheets. The nature of the distortion will vary from area to area for these variables as well. Similar distortions are likely in studies that use reconvictions or new charges in a single court system to measure recidivism.

Even rap sheets drawn from statewide systems will lead to distortion related to geographic mobility if the state has a relatively large proportion of interstate migrants and if these migration patterns vary by demographic variables of interest.

The distortions and the unpredictability of the distortion effects lead to the conclusion that local rap sheets alone should never be used in criminological research and that statewide rap sheets should be used with great caution and sensitivity to the geographic mobility issue.

4. SOURCES OF RAP SHEET ERROR

4.1. Lack of Dispositions

In state, federal, and most local record systems, rap sheets are designed to be records of arrests and the disposition of those arrests (conviction and sentence or dismissal). Sometimes incarceration records (date of entry and release) are also linked to the arrest.

Even if the researcher is able to assemble a rap sheet from a number of nonlocal sources, he/she is still faced with error in the state and FBI fingerprint-based systems. It is widely known that many of these arrest records are, in fact, "incomplete" in the sense that court dispositions and incarceration records are often not available in the same database. Blumstein and Cohen (1979) found, in a sample of Washington, DC, offenders for whom the FBI supplied rap sheets, that there was no recorded disposition beyond arrest in 59% of the cases. Data on the time served by offenders were even less complete. In a more recent study of FBI and state criminal history systems by Laudon (1986, p. 140) FBI arrest records were very conservatively estimated to be from 28.5 to 43.2% incomplete, and state records from 29 to 70% incomplete. A recent survey of state criminal history systems indicates that half of the states willing to respond report that 50% or less of final arrest dispositions are recorded (BJS, 1991).

Even if recorded, dispositions are sometimes difficult to connect reliably with arrests. Since the disposition is a separate entry and may indicate a charge different from that on the original arrest, it may be impossible to connect with the original arrest entry if the two are intertwined with other arrests and dispositions. Finally, some disposition abbreviations are so cryptic as to be indecipherable outside the local jurisdiction.

4.2. False-Negative Error in Arrest Records

"Completeness," as the term is used by both researchers and criminal justice professionals responsible for maintaining these databases, usually refers to the presence of final disposition data. The term is almost never used to refer to the comprehensiveness of the list of arrests. This focus on dispositions is a symptom of a bias toward eliminating false-positive error common among criminal justice officials and elected policymakers. The entire weight of legal process and statutory mandates seek to ensure that an individual is not tagged with an arrest or conviction that is not properly his. The consequences of false-positive error include the setting aside of arrests or searches, the setting aside of sentences, money relief under Section 1983 of the Civil Rights Act, and relief under tort law theories. [see Belair (1984, pp. 31-57) for a discussion of legal remedies.] There are, however, no nega-

tive legal consequences of false-negative error. From a human rights perspective, such an emphasis is understandable and necessary. From a research perspective, however, lack of attention to false-negative error—the failure to record all arrests—can lead to serious underestimates of an offender's criminal justice system contacts.

False-negative error on rap sheets is caused primarily by the misidentification of offenders and by the failure of local agencies to submit usable reports of arrests (generally, fingerprint cards) to state repositories and the FBI. Identification of an offender is made by a local law enforcement agency at the time of booking through verbal responses of the arrestee to questions and through documents (driver's license, etc.) carried by the arrestee. In the largest agencies, the offender's prints will be checked against a local fingerprint file as well. This check sometimes reveals deception on the part of the arrestee. For example, of 111,879 individuals in custody on state statute charges in New Orleans during the period 1985–1991, 1284, or about 1.1%, lied about their names at booking and were discovered during a local fingerprint check. The deception was caught only in cases in which the individual had been previously arrested and fingerprinted in New Orleans and the fingerprint clerk was sufficiently diligent in searching for matches.⁶ Deception is much more likely to succeed for the highly mobile offender. In general, most jurisdictions rely on state and FBI repositories to confirm the identity of arrestees, but this confirmation is usually received long after the offender has been released. When misidentifications are discovered, and the offender is still in custody, the original records of arrest are changed. However, a long chain of paperwork in prosecutor's and court files, which carry the original name, will no longer match the booking or arrest record. Since these records are not within the booking agency's control, they may not be altered to match the corrected booking record. Some larger jurisdictions have computerized record-keeping systems which can keep track of multiple names (aliases) of offenders, but many small local jurisdictions do not. Even when multiple names or aliases can be properly associated in local arrest history systems, court systems in the same jurisdictions often cannot make the same associations.

At the most basic level, it is generally impossible for a booking agency to determine an individual's "real name." Since they have no easy and routine access to birth records and no time to research identities beyond a fingerprint check, the offender's "real name" is simply the first name under which he was arrested. Experience in the New Orleans system indicates that

⁶ This search is now performed by an Automated Fingerprint Identification System (AFIS), a computer especially developed for this function. The database, however, is still limited to persons previously arrested in New Orleans.

Table IV. Percentage of New Orleans Offenders with Known Aliases by Race and Age in 1985

Age in 1985	Race				All	(N)
	Black	(N)	White	(N)		
<17	8.2	(1,513)	6.3	(140)	8.0	(1,653)
17-25	20.9	(6,713)	18.0	(1,095)	20.5	(7,808)
26-35	33.4	(6,424)	30.5	(1,174)	33.0	(7,598)
36+	40.5	(2,105)	43.9	(323)	41.0	(2,428)
All	27.0	(16,755)	25.8	(2,732)	26.8	(19,487)

a "new" individual is often created in a criminal history records system not only because of deception but because of an inadequate search for a match on the part of the booking officer. An individual may reappear in the system as another person because of a misspelled first or last name, a different race (Hispanics may be coded as black or white), or some other discrepancy.

As an offender ages and remains active, the odds that identification problems will fragment the offender's history into multiple identities increases. The NOOS included a vigorous effort to combine the records of offenders under all known aliases. Table IV demonstrates that the age of the offender is, in fact, strongly correlated with the number of aliases. This leads not only to underestimates of the criminal careers of older offenders but also to distortions of the age-crime relationship.⁷

Another serious source of false-negative error in state and national fingerprint depositories is the local agencies' failure to submit fingerprint cards or failure to submit usable cards. An Office of Technology Assessment (OTA) (1982) report found that in 1982, 18% of local arrests were not reported to state central depositories. Also, arrests reported to central repositories may not be reported to the FBI. An 8-week audit of arrests reported to the Illinois repository found that 26% of arrests had not been reported by local agencies to the FBI (Belair, 1985, p. 26). Even when cards are submitted, they may be rejected by the FBI and the arrests not recorded if one or more prints are not usable. The FBI rejects 11% of cards submitted for this reason (Belair, 1985). Rejection rates vary greatly. The BJS (1991) survey of state agencies indicates that 13 states reject 10% or more of the prints submitted.

Therefore, if we take the more conservative OTA estimate (18% of arrests not reported) and assume that, on the average, states reject prints at the 11% FBI rate, we can estimate that 27% of arrests will not find their way onto fingerprint-based systems for these reasons alone.

⁷ In addition, some older offenders have rap sheets in manual criminal history systems that have never been converted to computer. These "missing" arrests will also lead to underestimation of the older offender's arrests relative to the younger offender's.

The extent of false-negative error in rap sheets can be estimated by comparing local, state, and FBI rap sheets on a group of offenders to determine the distribution and overlap of criminal records. Such an analysis has been performed by Widom (1989) for the adult records of 908 victims of child abuse and 667 members of a control group found in the metropolitan area of midwestern state. She reports a very vigorous identification effort, using Bureau of Motor Vehicle records to obtain Social Security numbers and marriage license records to obtain maiden names for females. Subjects were also searched in the local state, and FBI databases under all known aliases. Even after this effort, she finds that each of the three databases lack many of the individuals' arrests. Only 28.4% of the arrests are found in all three databases, and 43.6% are found in only one of the three databases. Further, it is clear that even with her careful efforts, this researcher has failed to count many arrests.⁸

Certainly, false-negative error will lead to underestimates of the number of arrests and therefore underestimates of recidivism and seriousness of prior history. The extent to which this missing arrest data leads to distortion of relationships between demographic variables and criminal behavior is not easily measurable. If we assume that fingerprint cards from metropolitan areas are more likely to be consistently submitted to state and federal repositories than those from small law enforcement agencies, offenders who spend much of their time in rural areas would tend to have less complete rap sheets. In any criminological study, if offenders being compared come from different jurisdictions, and jurisdiction of residence is correlated with, for example, race or employment status, differences between jurisdictions in the quality and reliability of fingerprint submissions will distort the effects of race and employment status on criminal behavior.

5. INTERPRETATION OF RAP SHEET DATA

5.1. Charges, Arrests, and Incidents: Definitional Problems

The bulk of all arrests is made by local law enforcement agencies, usually a police agency or a county sheriff, who generally maintains some

⁸ Only two-thirds of the arrest records in the local database of Widom's (1989) metropolitan area appear in the state or FBI records. On the assumption that the same slippage occurs in other local jurisdictions, it can be estimated that the 20% of the arrests that occur outside the metropolitan area represent, at best, only two-thirds of the arrests that actually occurred outside the area. Even this two-thirds is probably inflated, since arrests outside large cities are even less likely to find their way into state or FBI records than are urban arrests. Thus it is likely that the total number of arrests for the sample of offenders has been underestimated by at least 10%.

record of these arrests. A person is arrested for one or more offenses related to one or more criminal incidents. An arrest may be made on a warrant requested from a court by the arresting agency or some other local or state criminal justice agency, it may be made without a warrant on probable cause, or an arrest may be made at the direction of a court for some offense related to the court process such as failure to pay a fine or to appear in court. Finally, an individual may be arrested because a warrant for his arrest has been issued by some other jurisdiction.

An "arrest" is technically the seizure of a suspected offender to answer for a crime. However, the definition of an arrest within a law enforcement record system may vary. A single "seizure" for multiple criminal incidents may in fact be recorded as multiple arrests all occurring on the same date or as a single arrest. Charges listed under an arrest date in a local criminal history system may be associated with an "incident identifier" that corresponds to a written incident report and/or a call for assistance logged in a computer-aided dispatch system. Some systems record a separate arrest for each incident, and thus multiple "arrests" may be recorded during a single continuous booking session. This is rarely the case, however, outside large urban police jurisdictions. In short, an "arrest" may or may not have a one-to-one correspondence with a criminal incident, and therefore, charges listed under an arrest identifier may refer to one or more than one incident. This mixing of criminal events within an arrest occurs both in state fingerprint-based record systems and within the FBI system. Such mixing is not detectable because event identifiers are not part of the systems. This is the case because arrests in these systems are identified by an arrest date, so that all charges recorded during a booking event are necessarily combined under that date.

Table V gives the distribution of the charges recorded at booking in New Orleans for 22,404 offenders arrested at least once for burglary or armed robbery in New Orleans. Only those arrests that contained an event identifier are included. These offenders were arrested 177,549 times in New Orleans. On the average, each arrest consisted of 1.76 charges and about 39% of all arrests consisted of more than one charge. If all charges other than index charges (FBI Part I Crimes) are removed from the analysis, about 18.4% of index arrests (arrests where at least one charge was for an index crime) include more than one index charge. Clearly, the characterization of the multiple charge arrest is not a trivial problem.

The typical method of handling a multicharge arrest is to treat it as a single crime on the basis of the "most serious" charge. This approach has at least three flaws: (1) The arrest may actually refer to more than one criminal incident, (2) the proper seriousness ranking for crimes is

Table V. Distribution of Charges Among Arrests

All charges			Index only		
Number of arrests	Number of charges	Percentage	Number of arrests	Number of charges	Percentage
108,190	1	60.9	58,909	1	82
40,154	2	22.6	9,265	2	13
15,101	3	8.5	2,046	3	3
6,951	4	3.9	781	4	2
2,997	5	1.7	357	5	0
4,156	6+	2.3	640	6+	1
177,549			71,998		
Total number of charges	312,130			95,648	
Average number charges/arrest	1.76			1.33	
Charges NOT counted if arrests are reduced to a single charge	43%			33%	

problematic, and (3) the approach may be inappropriate to the research questions asked.

The extent to which the multievent arrest might represent a measurement problem can be estimated by analyzing a database that contains an event identifier. Such information is available for some arrest records in the population drawn for the New Orleans Offender Study. In addition to the date of arrest and other descriptive information about the charge, most New Orleans charge records also include an event identifier known as an "item number." An item number is the number assigned to a criminal event by the police department's dispatching system. If an individual is arrested (booked) at the same time for three burglaries, each burglary will have a different item number. If he is booked for two charges related to the same criminal incident (for example, burglary and possession of the stolen property taken during the burglary or rape and murder of the same victim), the charges will carry the same item number. If two individuals are arrested for committing a crime together, the charges for each individual will carry the same item number.

Table VI indicates that the multievent arrest presents a significant problem. A multievent arrest is defined as multicharge arrest generated from a booking session during which an offender is booked for criminal acts committed in more than one incident, i.e., for criminal acts that occurred on at least two separate occasions. Such booking sessions result in the production

Table VI. Distribution of Criminal Events Among Multicharge Arrests

All charges			Index only		
Number of arrests	Number of events	Percentage	Number of arrests	Number of events	Percentage
54,780	1	79.0	8,307	1	63.5
10,980	2	15.8	3,209	2	24.5
2,038	3	2.9	744	3	5.7
626	4	0.9	287	4	2.2
312	5	0.5	169	5	1.3
623	6+	0.9	373	6+	2.9
69,359			13,089		
Total number of events	92,091			22,887	
Average number events/arrest	1.33			1.75	
Events NOT counted if arrests are reduced to a single charge ^a	12%			12%	
Persons with at least one multievent arrest	9,082	(41%)		3,947	(18%)

^aIncludes single-charge arrests.

of a single fingerprint card covering more than one criminal event. This booking will appear as a single multicharge arrest on the offender's state or national rap sheet. Multievent arrests were identified for this analysis by the use of item number event identifiers. Had this identifier not been available, 12% of index criminal events would have been missed. Since event identifiers do not exist in state and FBI databases, it is likely that the multievent arrest is an important source of error in these databases. These errors are not confined to a few high-frequency offenders. If only Part I index charges are considered, about 37% of all multicharge arrests include charges from more than one event. About 18% of all offenders in the study had at least one multievent arrest among their index arrests. Almost 43% of offenders with long arrest records (10 arrests) have at least one multievent arrest. Since only New Orleans arrests could be checked for multievent arrests, and only portions of the criminal careers of some offenders are included in the study period, it is certain that the actual percentage of offenders with multievent arrests is significantly higher than the results presented here.

5.2. Arrests vs Charges

Even when all charges are related to a single event, it is generally considered necessary for purposes of analysis to “characterize” that arrest as to type. One charge is selected to characterize the criminal event, and the criteria for selection are almost always some measure of “seriousness.” Selecting among charges on the basis of seriousness is widely known to be a very problematic enterprise.

Yet it is difficult to find more than a few examples of research that uses arrests as a measure of criminal activity that describe how multicharge arrests are coded. Most researchers who fail to describe their ranking method probably used the FBI hierarchy method or simply chose the first listed charge. But even those conscientious researchers who attempt to use empirically based seriousness measures still face the problem of scoring gross UCR or state statute categories.

In general, “collapsing” arrests to a single charge using some seriousness criterion will result in undercounting of less serious offenses relative to more serious offenses. This distortion, coupled with the problematic aspect of the ranking process itself, implies that collapsing arrests should be done only when there is no other alternative. In fact, in practice, the coding of arrest by most serious charge, a practice that affects 39% of all arrests, is often done too early (at the data coding stage), is often unnecessary for the analysis, and is almost always done without adequate discussion or justification. If the number of arrests is used as an indicator of criminal activity, the way the multicharge arrest is to be coded should depend on the precise question asked. If we wish to compare offenders in a general way, such as on the basis of total index arrests, we simply count arrests where at least one charge is an index offense—seriousness ranking is unnecessary. Most prior arrest variables are coded this way. If, however, we wish to estimate the level of a particular type of activity—burglary, for example—we need to count the number of burglary charges, not the number of arrests where burglary is the most serious charge. If we wish to count “prior property arrests,” we count the number of arrests that include at least one property charge, not the number of arrests where a property charge was the most serious.

5.3. Process Crimes

An additional problem in interpreting rap sheet data involves the treatment of charges referring not to offenses committed while free but to acts related to arrest, court processing, custody, or supervision procedures: “process” crimes. Arrest process charges include “resisting arrest,” “flight to elude,” and, usually, “battery on a police officer.” A researcher interested in arrest charges as indicators of offenses committed while free should ignore

such charges. But this is not possible when a battery on a police officer is recorded simply as "assault and battery," which might then be coded by the researcher as the index crime "aggravated assault." Law enforcement agency records do not distinguish "seizure process" crimes from other crimes.

Detention and correctional agencies record their own set of "process" offenses as arrests, even when a seizure has not actually been made because the offender is already in custody when he commits the crime. While some of these crimes can by definition be committed only by the incarcerated (contraband offenses and escape), virtually the full range of street crimes, from murder to theft, can also be committed while incarcerated. The extent to which these offenses result in official arrests is a function of their seriousness and the policy of the correctional agency. An incarceration crime can be identified as such by the researcher only if the correctional institution is recorded as the arresting agency. But this is not always the case. Most state penitentiary system officers are not commissioned law enforcement officers. The local sheriff or the state police generally serve as arresting agents for serious crimes in penitentiaries. In jails, detention officers are sometimes commissioned officers, but they cannot be distinguished from patrol officers from the same department in arrest records. One solution to this problem might involve treating a charge filed during a offender's known term of incarceration as an incarceration process crime. Unfortunately, individuals incarcerated may also be charged with crimes committed before their incarceration when their connection to an earlier crime is established in the course of a criminal investigation.

An additional problem created by correctional agency fingerprint submissions is the tendency for prints submitted for identification purpose to appear as arrests on rap sheets. Correctional agencies, especially penitentiaries and probation or parole agencies, often submit a sentenced offender's fingerprints to its state fingerprint repository and to the FBI as a means of verifying identification. These submissions may be indistinguishable from arrests with the conviction charge appearing as an arrest charge with a final disposition, except that the submitting agency is a correctional institution. Such records duplicate arrest records generated by the original arresting agency for these crimes. It is often not possible to identify instances of such duplications, however, since original charges are often modified during the court process. It is therefore important that arrest records submitted by correctional agencies not be counted as separate criminal incidents.

6. DISCUSSION

A careful consideration of the problems of "rap sheet" data leads to certain general conclusions.

(1) The use of rap sheets only from local sources should be avoided because of the distortions it introduces into relationships between criminal behavior and demographic variables, such as age and race, that are associated with geographic mobility.

(2) The methods by which official criminal histories are built and maintained are likely to produce a predominance of false-negative error over false-positive error. On the average, offenders' arrests will be undercounted in any official criminal history, particularly if the records system relies on fingerprint submissions of other agencies.

The problem of false-negative error stems primarily from two sources: the problem of identification and the problem of nonsubmission/rejection of fingerprint cards. The problem of identification can be addressed in part by actively searching for duplications—the same individual treated as more than one individual—in all databases. Judgments will have to be made about goodness of fit: Are two individuals with the same last names and places and dates of birth, but with differently spelled first names, really the same individual? Or are they twin brothers? Inevitably, the researcher will begin to generate some false-positive error in making such judgments.

The problem of incompleteness in the list of arrests because of non-submission/rejection can be addressed only by combining databases from different sources. Whenever possible, multiple official databases should be merged and their inconsistencies carefully resolved.

(3) Rap sheets are deficient in final disposition and incarceration information. The disposition data that exist are frequently confusing and sometimes completely useless.

This problem can be addressed only by merging court and corrections databases with arrest databases. Terms of incarceration and supervision are best measured directly from correctional databases rather than deduced from sentences. Most states follow complex rules for calculation of normal release date, with good time, work or education credits, and a variety of other factors that are applied differentially based on criminal history or conviction charge. Of greater importance are parole, which is typically awarded after one-third of a sentence has been served, and pardon, which can be awarded at any time. Furlough and work release involve unsupervised street time and further complicate the picture.

(4) About 18% of arrests for index crimes in our sample include more than one index charge. The reduction of a multicharge arrest to a single charge for purposes of analysis should be done only when the analysis absolutely requires it. The coding of the multicharge arrest should be based on the intended use of the arrest variable in the analysis. About 37% of multicharge index arrests include index charges for more than one criminal event. A multievent arrest, however, can be identified only from those arrest

records that include an event identifier, and there is no way to make such an identification in most fingerprint-based systems. The multicharge and multievent analyses reported here suggest that it is almost always better to use charges rather than arrests as the unit of analysis.

(5) Certain charges recorded on rap sheets refer not to criminal acts committed while free, but to arrest or correctional process behaviour, or are duplications of charges already submitted by the original arresting agency. All of these must be ignored if charges are to be used as a proxy for offense rate while free. It is not always possible, however, to distinguish process crimes from street crimes.

The best course in coding possible correctional crimes is a compromise between counting all possible correctional process charges and counting none. If a charge is submitted by a correctional institution or is an arrest or correctional process type of offense (battery on a police or correctional officer, contraband offenses, escape), it should be removed from the analysis; however, other charges that occur during a period of incarceration should be assumed to apply to an offense prior to that incarceration term.

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