THE NEW ORLEANS INMATE SURVEY:

A Test of Greenwood's Predictive Scale*

ALFRED C. MIRANNE, Assistant Professor
University of Wisconsin at Eau-Claire

MICHAEL R. GEERKEN, Chief Administrative Officer
New Orleans Criminal Sheriff's Office

124020

* Direct correspondence to: Al Miranne, Department of Sociology, University of Wisconson-EC, Eau Claire, WI 54702. This research was supported by the National Institute of Justice, United States Department of Justice, Grant Number 86-IJ-CX-0021; and by the University of Wisconsin-EC, School of Graduate Studies and Office of University Research, and the University of Wisconsin-Eau Claire Foundation. The authors would like to thank Sheriff Charles C. Foti, Jr. for his invaluable cooperation and assistance with the inmate survey. We would also like to thank Jerry Wilcox and Peggy Sullivan of the Criminal Sheriff's Office for their comments and assistance in the preparation of this paper.

ABSTRACT

Analysis of face-to-face interviews with 200 inmates incarcerated in New Orleans, using a modified version of the RAND instrument used in California, Michigan, and Texas, showed the same highly skewed offense rate distribution but generally lower median offense frequencies. These lower rates are attributed both to an improved instrument and method of administration and to Louisiana's much higher incarceration rate. A search for a prediction model for the New Orleans inmate offense rates yielded the same seven variable model developed by the RAND researchers and the same predictive efficiency as well. The results suggest the generalizability of the seven item scale, at least to the prediction of inmate self-reported offense rates.

In 1978 the RAND Corporation conducted an extensive survey of jail and prison inmates in California, Michigan and Texas. One of the most provocative findings of their study was that the distribution of crime rates among offenders was highly skewed. Most inmates reported low or zero rates of offending, while a small percentage reported very high rates of offending (Chaiken and Chaiken, 1982). From a policy standpoint this raised the possibility of developing a cost effective policy of selective incapacitation where serious high-rate offenders would be incarcerated for a longer period of time than other offenders. Considering the current crisis of overcrowding in our jails and prisons and the cost of incarceration, an effective policy of selective incapacitation could offer a partial solution to our present dilemma -- at least from a cost-effectiveness viewpoint. Such a possibility has not been lost on legislators. As Visher (1986) has noted, some legislators have already introduced legislation to implement selective incapacitation as part of new sentencing policies.

A policy of selective incapacitation would entail distinguishing between high- and low-rate offenders on grounds other than present convicted offense; and sentencing the former to a longer period of incarceration than the latter. Clearly, accuracy of prediction is a necessary, though not sufficient, prerequisite for instituting such a policy. Selective incapacitation would also raise serious ethical questions, which will not be addressed in this paper.[1]

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[1] For a discussion of the ethical issues involved see Von Hirsch, 1976 and 1987.

Both Chaiken and Chaiken (1982) and Greenwood and Abrahamse (1982) have attempted to develop models to predict high frequency offenders using RAND's inmate self-report data. These efforts, however, have had only limited success. In 1982, based on the RAND data, Greenwood published a seven-item scale which, he reported, was able to distinguish high-rate offenders from low- and medium-rate offenders. Using his simple additive scale Greenwood estimated that reducing terms for low- and medium-rate California robbers while increasing terms for high-rate robbers could reduce the robbery rate by 15% and the incarcerated population for robbery by 5%. He estimated that it would require a 7% increase in prison population to bring about a 15% reduction in the crime of burglary. Also, he found that a policy of selective incapacitation would be less cost-effective in Texas due to the low offense rate among their inmates. For burglars, he estimates a 15% increase in incarceration would be necessary to achieve a 10% reduction in crime.

Greenwood noted the need to replicate his work at different sites in order to test its generalizability. This is particularly necessary since the predictive efficiency of the scale was measured using the same sample on which the model was developed. As Visher (1986:171) has pointed out, other research has shown that predictive accuracy for the initial sample on which a scale is constructed tends to be better than for other samples, though Greenwood argues that his 0-1 prediction scale would not suffer the expected shrinkage. In an analysis of arrest records of part of the original sample and a sample of California Youth Authority releasees (Greenwood and Turner, 1987), a 5-item version of the original scale did a poorer job of predicting subsequent arrests than it predicted self-reported rates of offending. While part of this difference can be attributed to the loss of two scale items, the authors find the cause to

be primarily in the low correlation between self-report offense measures and official arrest rates. While this difference might be caused by measurement error in the self-report rates, the authors conclude that the explanation lies primarily in the lower probability of arrest of (more competent) high rate offenders. A recent study of the predictive efficiency of a variety of other well-recognized models for predicting recidivism of the RAND three state sample (Klein and Caggiano, 1986), indicates that these other models do no better in predicting recidivism than the RAND scale. Most in fact do worse.

The RAND seven-item scale's predictive efficiency on even self-report measures of offending is uncertain. Since the predictive power of the scale was measured on the same sample used to select the independent variables, no conclusion can be reached about the generalizability of the model to other offender populations. And Spellman (1986) has argued that adjustments to the RAND self-report estimates to resolve ambiguities within the data (done by Visher, 1986) and accounting for residual career lengths and the participation of multiple offenders reduces estimated incapacitation effects of a RAND scale based sentencing policy to a level only 5% of that originally estimated.

Clearly, the debate on the possibility of a selective incapacitation policy turns in part on which criterion measure -- official arrest rates or self-reported offending rates -- is the most appropriate for testing the predictive power of these various scales. Both are imperfect indicators of the actual offending rate which, after all, is the key to any selective incapacitation policy. Arrest rate would be expected to be imperfectly correlated with actual offending rate even with the same "underlying" probabilities of arrest, since actual arrests will be

distributed among offenses according to a stochastic process. Further, rap sheets (from which arrest data are drawn) are known to omit arrests, and records of incarceration -- necessary for calculating arrest-rate-while-free -- are even more likely to be missing. (For the best discussion of errors in criminal histories, particularly automated ones, see Laudon, 1986).

Offending rates estimated from inmate self-reports are also problematic. Sources of error lie in: 1) honest confusion or inability to accurately recall even recent criminal events; 2) intentional deception; or 3) the unrepresentativeness of inmate samples. Visher (1986) has ably described the difficulties with the RAND instrument and the resulting problems in the calculation of offending rates. There is, as yet, no adequate method for estimating the extent of intentional deception. Of particular importance is the direction of intentional deception among various offense rate groups. Does the "tail" of very high rate offenders in the offense rate distribution represent a real subgroup or is it an artifact of the measurement method? No such tail exists for arrest rates for serious crimes because the pretrial release system and existing sentencing policies -- which to some extent already operate in a selective way on the multiple arrestee -- make it virtually impossible for an offender to be arrested for serious crimes at high frequency for any length of time before being incarcerated and thus removed from the population at risk.

Given the substantial error likely in both the arrest and self-report indicators of actual offense rate, it is too early to despair of our ability to formulate a model which can efficiently identify high rate offenders. The poor performance of models to date may be partly the result of measurement error in the offense rate indicators rather than

proof of the impossibility of developing such a model. It is therefore important to continue efforts to develop models for predicting offense rates by testing them on other offender populations and, in particular, on improved offense rate indicators. The present analysis focuses on the development of a predictive model using an improved self-report survey administered face-to-face to a new offender population. The resulting model is then compared to the RAND scale. To our knowledge no attempt has been made as yet to test the predictive power of the RAND scale on improved self-report offense indicators from offender populations not involved in the development of the original scale.

Survey Instrument:

Our primary purpose in redesigning the self-report instrument and changing the method of administration was to minimize error arising from honest confusion among the respondents. The high rate of functional illiteracy among New Orleans inmates, well documented in every educational testing program ever operated at the jail, led us to an early decision to administer the survey only in face-to-face interviews rather than the self-administered method used by RAND in its three state survey. Also, Chaiken and Chaiken (1982: 226) reported that Black respondents had substantially worse internal quality in their responses, in particular on confusion and inconsistency; and the New Orleans inmate population is overwhelmingly (75%) Black. Another benefit of the face-to-face method was that missing data and ambiguous responses were rare in our study. Consequently, determining the number of crimes committed (the numerator of the offense rate) was far less problematic than with the RAND data.

Using RAND's 1978 Jail/Prison Survey (Chaiken and Chaiken, 1982) as a foundation, we went to considerable effort to improve their original

instrument. The questionnaire was completely redrafted, the wording of questions modified, the format simplified, the instructions -- particularly concerning the calendar -- were clarified. Many new items were added, and some attitudinal items were deleted. It was administered to inmates in four separate pretests. It was also reviewed by jail deputies to ensure that questions were alternately phrased in local inmate terminology. Finally, the interviewers were required to interview each other as part of their training and as a final check for possible problems.

Our instrument is 37 pages long with 204 questions. Nevertheless, the average interview took only about 45 minutes to complete because of skip patterns. We added the offenses of rape and arson (not included in the RAND instrument) in order to include all Index offenses. We also added items to determine residential mobility, or transiency, and a history of mental hospitalization. Finally, we added a section for interviewer assessments of response validity.

One of the most important changes we made was with the calendar for calculating street months, or time-while-free -- an important component in the estimate of offense rate. The RAND instructions for filling out the calendar, found on their self-administered interview forms, proved to be very difficult to understand. Despite the fact that all of the interviewers were college educated, many had a great deal of difficulty in filling in the calendar (using the RAND format) during pretests. It is difficult to believe that the inmates in California, Michigan and Texas were able to accurately fill it out on their own. For example, RAND's subjects were given conflicting instructions. First they are told to "put X's in all the months when you were locked up," which includes the month

they were arrested. Then they are told that their street months "are the months on the calendar that do not have X's or lines in them." The problem is that they are told to include the month they were arrested, despite the fact that it has an X in it. This resulted in a lot of confusion for both the inmates and interviewers.

In addition, the RAND instrument dealt only with whole months. Consequently, inmates that were released immediately after their arrest or were held for only a fraction of the month are treated as if they spent the the entire month incarcerated. Consequently, the RAND survey results in an overestimate of the time incarcerated and, possibly, overestimates of the offense rate. To obtain a more precise measure of the time incarcerated we asked for the approximate dates of arrests and releases and allowed for fractional months in our measure of this key variable.

Another difference between RAND's calendar and ours is that RAND focused only on the months preceding the initial arrest for their current incarceration, even if the person was released on bail. Since offenders may commit additional offenses while free on bail, and since their recall of this most recent period of freedom is likely to be their most accurate, we opted to include all the time-while-free during the relevant 2 year span preceding their present term of incarceration. In other words, if the inmate was released after their arrest, as most were, we asked them to include this time in their street months. RAND excluded all months after initial arrest. This provides us with a broader time base for a pivotal variable component of the dependent variable.

Since both Greenwood (1982), and Chaiken and Chaiken (1982) found drug use to be an important correlate of high annual offending frequencies we decided to expand upon RAND's drug items. RAND used only the following basic categories of drug use: 1) Marijuana; 2) LSD/Psychedelics/Cocaine;

3) Uppers/Downers; 4) Heroin. We expanded it to a 14 category item using numerous street terms so as to minimize errors by either the inmate or interviewer (see Appendix A).

Finally, we changed the format of the items designed to estimate the rate of offenses for the more frequent offenders -- another important variable. The RAND format can be seen in Figure 1.

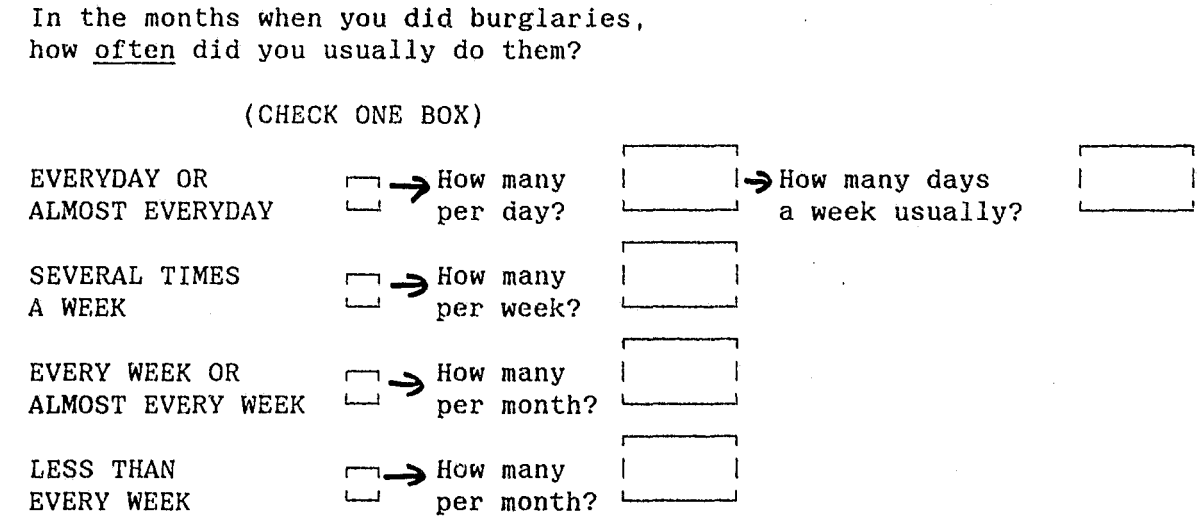

Figure 1: Question from RAND's 1978 jail/prison survey booklet. Source: Chaiken and Chaiken (1982).

Unfortunately, there are several problems with this format. First, the categories in the first column were not mutually exclusive. The category "almost everyday" overlaps with the second category "several times a week"; and the third category "almost every week" overlaps with the fourth category of "less than every week." Second, the inmate is asked twice in the second column "How many per month?" again indicating overlap. This redundancy and overlap was a source of confusion in our pretest interviews. Third, the most serious problem with this format is that it is likely to produce an overestimate of offense rates. Requiring respondents to focus on the number of offenses per week results in an

estimate that is a multiple of 52 (weeks per year). The significant question is whether respondents, particularly inmates, can accurately factor out the weeks when they were inactive. Certainly the easiest response would be to simply ignore the fact that there may have been weeks, if not months, when they were inactive. It would be far more difficult for them to factor into their answer the blocks of time when they were not criminally active. Finally, we found that our interviews seemed to flow better with the categories of very often, fairly often and occasionally in the first column. Apparently more inmates seem to think in those terms rather than the number of times per week. Consequently, we found the format presented in Figure 2 to be preferable to that used by RAND.

51. In the months when you did burglaries, how <u>often</u> did you usually do them? (CHOOSE ONE LETTER)

a. Very Often → How many per day? _____ → Who many days a week usually? _____

b. Fairly Often → How many per week? _____

c. Occasionally → How many per month? _____

Figure 2: Question from the New Orleans inmate survey booklet.

Methods

A random sample of 200 convicted inmates was drawn from the population of sentenced inmates with at least one burglary arrest during the period 1973-1985. The interviews were performed during the months of September-October, 1986 at facilities operated by the Orleans Parish Criminal Sheriff in New Orleans. Although the inmates were housed in a

parish (county) jail, the sentenced population more closely resembled that of a state pentitentiary due to circumstances in Louisiana corrections. First, convicted offenders can be sentenced to as long as twelve years in the parish jail in Louisiana, unlike the one year limit set in most other states. Second, more than 75% of the sentenced inmates held in the Orleans jail are in fact sentenced to the state pentitentiary but must be held in the jail due to overcrowding in state facilities. Thus the population from which the sample was drawn covered a very broad range of seriousness both of current charge and of criminal history.

Two obvious concerns with an inmate survey are selection bias by refusals and willingness to admit to illegal acts. Concerning the first issue, 93% of the inmates chose to participate: only 6.5% of the inmates we asked refused to participate and another 6.5% were unable to be interviewed, either because they had been transferred, released, or were ill. Comparison of the criminal histories of the refused/unable with those of volunteers showed no significant differences. In comparison, RAND reported the following response rates for their 1978 survey: 1) an average of 70% for the jails in all three states; 2) 49% in California and Michigan prisons; and 3) 82% in Texas prisons.

We were at first concerned that our high response rate resulted from the participation of street-wise inmates willing to be interviewed for the monetary reward but intending to falsely deny participation in criminal acts. (A fee of $5, just as in the RAND studies, was offered for a completed interview.) Table 1 presents the percentage of inmates that reported having committed each of the various types of crime. Clearly, our results fall in line with those reported by RAND. There is no evidence that deception in admitting criminal behavior existed more (or, for that matter, less) than in the earlier surveys.

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Table 1 about here
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Another explanation of our high response rate might lie in the method of operation of the interviews in the jail facilities. We wished to design the process in such a way that: 1) a sample inmate could not discuss the study or his potential participation in it with other inmates before he made his own decision on participation; and 2) inmates who had completed an interview could not discuss the questions and their answers with inmates who were not yet interviewed. In short, we wished to avoid any inter-inmate consultation either on the decision to be interviewed or on responses to interview questions. If there was to be deception, for example, we wanted it to be the inmate's own personal decision and not a peer group inspired display of "getting over" on the middle class researchers.

Carrying out these requirements is difficult in any correctional institution and was only possible in New Orleans because of the cooperation of the administration. The process worked as follows. All inmates who were selected for the sample from a given living area (called a tier or quad depending on the facility) were transported simultaneously from the area, without explanation, to a holding area near the interview rooms. The inmates were brought, one at a time, into the interview area, (not visible from the holding area) and asked for their voluntary participation. If he agreed, the interview began immediately. As many as six interviews were conducted simultaneously. If the inmate refused, he was brought back individually to the living area via a route not visible from the holding area. The interviews continued in this fashion until all interviews had been completed or refused for a living area. Since inmates

from different living areas are not mixed during the day to day operations of the jail -- recreation is taken one tier at a time and meals are served on the living areas rather than in common dining halls -- we believe that in most cases there was no contamination by sharing of the responses to questionaire items among inmates. We believe, further, that the lack of an opportunity for a group discussion of the decision to refuse led to the very low refusal rate.

We have only one indirect yet suggestive indication of the extent of deception. A few months after the interviews were completed the same inmates were approached by the principal investigator with a request that they volunteer again for the same survey, but this time their responses would be verified by a polygraph. To our surprise, 91% of the inmates indicated that they would be willing to participate. This might be taken as an indication of honesty of our survey responses, an indicator of the trust and rapport the face-to-face interviewers were able to establish with the inmates, or of the attraction of another $5 payment.

To assess the reliability of our data we employed both internal and external checks. Internal checks are primarily measures of confusion or laziness rather than of deception. Our internal check compared inmates' responses to two separate inquires into their frequency of offenses. Table 2 presents the percentage of inmates who were consistent in reporting their frequency of offenses. As expected, the least frequent offenses (forgery, fraud and arson) had the greatest consistency in responses, with 92-100% having perfect discrepancy scores. Self-reported burglary, robbery, and auto theft offense rates also demonstrate high consistency. Even for drug deals, with a median of 133 offenses, only 20% of the inmates had a discrepancy of over 20% between their two responses.

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Table 2 about here
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Visher's (1986) analysis of RAND's internal validity found that 83% of the inmates "passed" the internal quality test. A failure was defined as having more than 20% "bad" indicators on internal or external indicators. As expected, the ability to resolve discrepancies and limit confusion in a face-to-face interview yielded substantially better internal consistency than was obtained using the self-administered instrument.

As an external check, we compared each inmate's official record with their responses. Official records indicated that of the 88 inmates who were currently convicted for burglary 25% failed to report the conviction. We were surprised, however, that 8 (11%) of the 74 inmates who reported a burglary conviction were in error, i.e., they were false admissions. The presence of these false admissions would seem to undermine Greenwood's analysis and Visher's reanalysis of the RAND data, since both focused on inmates who reported that their current incarceration was the result of a burglary conviction. This means that inmates making a false admission were not excluded from the analysis yet the false denials were.

Findings:

The results of our inmate survey support RAND's finding that the distribution of offense rates (lambda) is highly skewed. Focusing specifically on burglary, Table 3 demonstrates the skewness in the distribution of offense rates found in all four sites. Excluding drug deals, which was distorted by one offender reporting over 140,000 drug deals, most of our inmates reported fewer than five offenses per year (Table 4). However, the upper 10% of our sample reported over 160

offenses per year (Table 5).

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Table 3 about here
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Table 4 presents the median estimates of lambda for the New Orleans sample, as well as RAND's study samples. In a highly skewed distribution the median is preferable to the mean as an estimate of the "typical" offender's crime rate since it is less affected by outliers. Clearly, our results fall in line with those reported by RAND. However, our estimates do tend to be at the low end of the continuum. We suspect that this is due, in part, to the fact that Louisiana has a much higher incarceration rate than the states in the RAND sample. In fact, Louisiana's 1986 incarceration rate (316) was 67% higher than the highest state in the RAND sample (Sourcebook, 1988). Of the states RAND focused on in 1978, Texas had the highest rate of incarceration (189), followed by Michigan (162), and California (88) (Sourcebook, 1986). Table 4 shows that this ranking is just the opposite of their ranking for estimates of lambda. This result is consistent with the notion that high incarceration rate is an indicator of a lack of selectivity of a state's criminal justice system in its use of incarceration. It also supports, more importantly, the idea that the probability distribution of lambda in the general offender population is skewed. Chaiken and Chaiken (1982: 223) noted that California inmates had more extensive criminal careers to report than did the Michigan, or especially the Texas prisoners.

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Table 4 about here
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Another interesting pattern is the negative relationship between response rates and lambda, which parallels that of the rate of

incarceration and lambda. California and Michigan have the lowest response rates and the highest estimates of lambda. On the other hand, the New Orleans study has the highest response rate and the lowest estimates of lambda. Since one would generally expect the more frequent offenders to have a higher refusal rate, one could logically assume that a higher response rate would result in a higher estimate of lambda. Yet the observed pattern is just the opposite. Possibly infrequent offenders have a higher refusal rate than the more frequent offenders. Another explanation might be that when the refusal rate is reduced through some enticement (such as the $5.00 payment), we tend to increase the number of individuals who agree to be interviewed but refuse to admit criminal behavior. This explanation, however, is contradicted by the reported participation rates (Table 1) which show little difference between the New Orleans and the RAND survey.

There are alternative explanations for this seemingly negative relationship between incarceration rates and offense rates of the incarcerated. The greatest difference in incarceration rates is between Louisiana and the other three states which are quite similar in their rates. Therefore the differences in self-report rates may largely result from differences in survey administration or coding. Estimates of lambda can be inflated either by overestimating the number of offenses or underestimating the time free. As we have pointed out, RAND's calendar tends to underestimate time free. Visher (1986) noted that estimating the number of street months was problematic for over 21% of the sample. Further, RAND's strategy of using minimum and maximum estimates for street months could result in an overestimate of lambda. Visher also noted that RAND's method of dealing with missing data concerning the exact number of offenses committed produced a high estimate for lambda. Specifically, 17%

of the low frequency offenders didn't answer the follow-up question indicating the exact number of offenses. RAND assigned 1 as a minimum estimate and 10 as the maximum estimate, which resulted in an average estimate of 5.5. Yet the typical low-frequency offender admitted to only 2-3 crimes.

Since we are particularly interested in high frequency offenders we should closely examine the 90th percentile of offenders. Table 5 shows a comparison of our 90th percentile estimates of lambda with those obtained by RAND. As expected, there is clearly a greater degree of variability among the states at the high end of the distribution than there is for the median estimates. This is to be expected since at the 90th percentile we are dealing with outliers that can be wildly divergent. Still it is interesting to note that except for drug deals New Orleans again has significantly lower estimates of lambda than the other states for these high frequency offenders.

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Table 5 about here
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Greenwood's Predictive Scale:

In 1982 Greenwood published a predictive scale to differentiate between high- and low-frequency offenders. One measure of of predictive accuracy is to compare inmate classifications by the model (as high, medium or low offenders) with their self-reported offense rate. Even more important is a determination of the relative improvement of prediction offered by Greenwood's scale over chance. This can be determined through a measure of relative improvement over chance (RIOC) developed by Loeber and Dishion (1983), which also allows for comparisons among different samples and studies.

From the New Orleans frequencies presented in Table 6 we can see that 49% (the sum of the diagonal entries divided by N) of the self-reported convicted burglars were correctly classified into high, medium and low categories by Greenwood's seven-point scale. That figure is between the 46% calculated by Visher (1986) and the 50% originally reported by Greenwood and Abrahamse (1982).

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Table 6 about here
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In Table 7 the first two columns give the percentage of inmates predicted to be high- or low-rate offenders that actually reported high- or low-offending frequencies, i.e., the percentage of respondents that were accurately predicted to be either high- or low-rate offenders. Using seven items very similar to Greenwood's, we classified our offenders similarly. The accuracy rates for the New Orleans sample are amazingly similar to those reported by Visher (1986), particularly between her calculations for "Unambiguous Cases" and our comparable "Consistency Check" subgroup, which excluded cases with inconsistencies in responses.

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Table 7 about here
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The third and fourth columns of Table 7 present the relative improvement over chance (RIOC) of Greenwood's scale predicting self-reported high- and low-offending rates. Here again the results from the New Orleans sample are close to those reported by Visher (1986). This was somewhat surprising since we expected greater deterioration in the predictive power of Greenwood's scale due to the new sample. Clearly, our results offer strong support for the generalizability of Greenwood's predictive scale, at least to inmate self-report samples.

Unfortunately, our relatively small sample size led to six of the seven items failing to attain .05 significance. As can be seen in Table 8, only prior conviction for burglary was statistically significant for the New Orleans sample. The adusted R^2 for New Orleans, though lower than for the entire RAND sample, is the same as for Michigan and close to that for Texas.

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Table 8 about here
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As pointed out above, our survey instrument contained, in addition to the RAND items, detailed questions on drug use, residential mobility, and mental hospitalization. Using regression analysis we expected to identify additional variables which might be suitable for inclusion in a preditive scale. However, to our surprise only the Greenwood items emerged as potential predictors.

Conclusion:

The New Orleans inmate survey revealed skewed distributions of self-reported offense rates, just as the earlier RAND self-administered surveys had done. The levels of offending reported, however, were generally lower than those of the RAND respondents. There are several possible explanations for this difference. First, the face-to-face interview approach for the New Orleans sample resolved potential confusion among respondents which may have contributed to overestimates of offense rates in the coding of the RAND data. Second, the much higher incarceration rate in Louisiana may be a symptom of a less selective incapacitation policy as exercised by the legislature and by local judges, leading to a greater representation of infrequent offenders in its jail and prison populations. Third, the format of the RAND items may have contributed to an

overestimate of offense rates (lambda). While it is not possible to choose between these explanations with the available evidence, we would advise future inmate surveys to randomize between RAND's question format and ours to assess the importance of this factor in estimating lambda.

The prediction model that emerged from our analysis of the New Orleans data is very similar to comparable analysis of the RAND data. This indicates that the RAND variables that emerged as predictors of inmate self-reported offenses were not an artifact of the problems of survey design, administration, or coding documented by Visher and others. The technical problems of the RAND three state survey (at least those not corrected by Visher's reanalysis) were not responsible for the predictive power of the Greenwood scale, nor did the resolution of many of those problems by our revised instrument and face-to-face interview approach improve the scale's predictive efficiency.

It is still arguable, however, that the predictive consistency of the Greenwood scale comes at least in part from the correlation of some or all of the items with measurement error inherent in inmate self-report surveys. Answers to the larger questions about the possibilty of improvements in incapacitation through the use of such scales must await new approaches to self-report surveys which offer indicators of deception through the use of the polygraph or other device, or studies of incapacitation policies using true experimental designs.

Table 1: Percent of Respondents Reporting Each Crime Type (N=200).

		California*		Michigan*		
	New Orleans	Prison	Jail	Prison	Jail	Texas*
Burglary	49.5	54.2	42.9	45.4	34.0	46.8
Robbery	20.0	48.6	22.9	37.6	19.9	25.3
Assault	37.0	46.6	27.4	33.6	22.6	25.6
Auto Theft	10.5	24.3	20.6	23.2	15.8	18.8
Other Theft	31.0	41.6	41.8	39.7	30.6	36.4
Forgery	9.0	28.4	25.1	14.1	15.7	21.5
Fraud	9.0	19.3	15.9	16.1	11.3	14.2
Drug Deals	32.0	54.5	45.0	41.4	35.6	34.6
All except Drug Deals	75.5	84.8	74.9	78.0	66.5	74.4
All Crimes	81.5	89.8	81.6	83.8	73.8	79.9

*SOURCE : Chaiken and Chaiken (1982: 203-216).

Table 2: Internal Consistency for Reported Offense Rates (N=200)

		Magnitude of Discrepancy	
	Perfect	Less than 10%	Over 20%
Burglary	80%	86%	10%
Robbery	82	86	10
Assault	72	74	19
Auto Theft	88	90	10
Other Theft	74	76	20
Forgery	95	96	2
Fraud	92	94	6
Drug Deals	72	78	20
Arson	100		

Table 3: Differences in Distributions of Lambda for Inmates Who Reported Committing a Burglary, by State.

Statistic	New Orleans	California*	Michigan*	Texas*
25th pct.	.7	2.3	1.9	1.2
50th pct.	1.5	6.2	4.8	3.1
75th pct.	5.1	49.1	24.0	9.9
90th pct.	55.4	199.9	258.0	76.1
Mean	25.1	98.8	82.7	34.1

*SOURCE: Visher (1986: 182).

Table 4: Median Estimates of Offense Rate for Inmates Reporting Each Crime

	New Orleans	California* Prison	California* Jail	Michigan* Prison	Michigan* Jail	Texas*
Burglary	1.5	9.8	6.3	6.2	4.9	3.6
Robbery	3.6	8.0	5.5	5.7	4.8	3.2
Assault	2.1	3.6	2.8	2.8	1.9	1.5
Auto Theft	3.0	6.0	3.1	4.8	4.9	2.0
Other Theft	5.7	16.0	9.0	7.0	6.0	5.7
Forgery	3.0	4.8	4.5	4.5	3.3	4.3
Fraud	4.3	6.9	5.3	4.6	5.3	4.5
Drug Deals	132.9	166.0	103.0	122.0	92.0	36.0
All except Drug Deals	4.4	42.0	17.0	17.0	9.0	9.0
All Crimes	8.9	135.0	72.0	104.0	24.0	15.0

*SOURCE: Chaiken and Chaiken (1982: 203-216).

Table 5: 90th Percentile Estimates of Offense Rate for Inmates Reporting Each Crime.

	New Orleans	California* Prison	California* Jail	Michigan* Prison	Michigan* Jail	Texas*
Burglary	55	384	189	400	213	112
Robbery	85	155	118	155	97	22
Assault	11	18	12	12	16	8
Auto Theft	62	99	56	413	43	10
Other Theft	155	724	583	296	384	387
Forgery	125	197	269	344	77	110
Fraud	679	268	327	263	367	180
Drug Deals	24035	4013	3251	3612	3054	2508
All except Drug Deals	166	989	735	645	438	338
All Crimes	4910	3004	2305	2005	2200	1288

*SOURCE: Chaiken and Chaiken (1982: 203-216).

Table 6: Frequency Distribution of Inmates by Predicted and Self-Reported Offense Rates for Self-Reported Convicted Burglars.

Predicted Burglary Rate (Score Values)	Self-Reported Burglary Rates			
	Low	Medium	High	Total
Low (0-1)	19	4	4	27
Medium (2-3)	16	13	10	39
High (4-7)	3	1	4	8
Total	38	18	18	74

Table 7: Measures of Predictive Accuracy and Percent Relative Improvement Over Chance (RIOC) for Different Groups and Predictive Models (percentages).

	Accuracy(%)		RIOC[c]	
Group or Model	Low-rate[a]	High-rate[b]	Low-rate	High-rate
Greenwood[d]	76	45	48	35
Visher's Reanalysis of Burglars[e]				
California	84	48	67	48
Michigan	74	34	44	19
Texas	68	61	33	48
Six-variable Scale[f]	72	47	48	27
Unambiguous Cases[g]	76	43	43	30
New Orleans				
Self-Reported Convicted Burglars[h]	70	50	39	34
High Consistency[i]	76	40	48	20

SOURCE: Visher (1986:195).

[a]The percentage of respondents predicted to be low-rate offenders (scoring 0 or 1 on scale) who actually reported low rates of burglary (below the median for their state).

[b]The percentage of respondents predicted to be high-rate offenders (scoring 4 or more on scale) who actually reported high rates of burglary (above the 75th percentile for their state).

[c]These measures adjust for the difference in base rate and are calculated according to the formula provided by Loeber and Dishion (1983).

[d]The figures in the first two columns are based on Cohen's (1983) correction of Greenwood's data (N=781).

[e]The sample is all convicted robbers and burglars (N=886).

[f]Prediction scale without one variable--past conviction for robbery or burglary--and using same cut points.

[g]Includes only respondents for whom lambda could be unambiguously calculated, and respondents with only slight ambiguity in responses to questions about number of crimes committed (N=568).

[h]The sample is all inmates reporting a burglary conviction (N=74).

[i]Inmates with a discrepancy of more than 10% in reported burglary rates are excluded (N=59).

Table 8: Summary Information from Five Regressions with Estimates of Lambda for Burglary as the Dependent Variable and the Seven Items in Greenwood's Scale as the Independent Variables.

Indep. Variables:	New Orleans	RAND States*	Calif*	Michigan*	Texas*
Prior conviction	X	X	X		X
Recent incarceration					
Juvenile conviction		X		X	
Juvenile incarceration					
Recent adult drug use		X	X	X	X
Juvenile drug use		X	X	X	X
Recent unemployment		X			X
Adjusted R^2	.12	.19	.22	.12	.15
N[a]	74	848	311	245	292

*SOURCE: Visher (1986: 189).

NOTE: The dependent variable is $\log_e$ (Lambda$_i$ +.05). An "X" indicates that the variable was significant at the .05 level in that equation.

[a]The New Orleans sample is only of burglars, whereas the other sites include robbers as well as burglars.

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APPENDIX A

Drug Questions

25. During the months when you were using drugs, how often would you say you usually used each of the drugs listed below? *(Circle one number for each drug.)*

	Did not use at all	A few times a month	A few times a week	Everyday or almost everyday	More than once a day
Heroin/Methadone.....	0	1	2	3	4
Barbiturates/downers/ "reds".....	0	1	2	3	4
Amphetamines/uppers/ "whites".....	0	1	2	3	4

Figure 1: Question from RAND's 1978 jail/prison survey booklet.
Source: Chaiken and Chaiken (1982).

42. During the months when you were using drugs, how often would you say you usually used each of the drugs listed below? (REPEAT CATEGORIES AND CIRCLE ONE NUMBER FOR EACH LETTER.)

	Never	Once or Twice	Every Once in a While	A Few Times A Month	A Few Times A Week	Every Day
a. Marijuana/Hashish/Pot/Grass Weed.....	0	1	2	3	4	5
b. Clickers.....	0	1	2	3	4	5
c. Hallucinogens/Psychedelics/ LSD/PCP(Angel/Dust)/DMT MDA/MDMA(Ecstacy)/Mescaline/ Peyote/Psilocybin(Mushrooms)	0	1	2	3	4	5
d. Cocaine/Coke/Crack/Snow.....	0	1	2	3	4	5
e. Heroin/Smack/Junk.....	0	1	2	3	4	5
f. Heroin & Cocaine together (Speed Ball).....	0	1	2	3	4	5
g. Illegal or Street Methadone..	0	1	2	3	4	5
h. Other Narcotics or Opiates- Opium/Morphine/Codeine/ Demerol/Dilaudid/Talwin....	0	1	2	3	4	5
i. Barbituates/Tranquilizers/ Downers/Reds/Nembutal/ Seconal/Tuinal.....	0	1	2	3	4	5
j. Valium.....	0	1	2	3	4	5
k. Amphetamines/Uppers/Speed/ Diet Pills/Crank/Bennies/ Black Mollies/Benzedrine/ Dexedrine/Preludin.....	0	1	2	3	4	5
l. Poppers(Amyl Nitrate)/Glue/ Paint Thinner.....	0	1	2	3	4	5
m. Quaaludes.....	0	1	2	3	4	5
n. Other:_____	0	1	2	3	4	5

Figure 2: Question from the New Orleans inmate survey booklet.

BIOGRAPHICAL INFORMATION

Alfred C. Miranne is Assistant Professor of Sociology at the University of Wisconsin-Eau Claire. He has published in the areas of deterrence and drug abuse. His current research endeavors are in the areas of incapacitation and tourist victimization.

Michael R. Geerken is Visiting Associate Professor of Sociology at Tulane University and Chief Administrative Officer for the New Orleans Criminal Sheriff. He has published in the areas of deterrence theory, incapacitation, geographical mobility, the psychological effects of sex and marital roles, drug use, survey methodology, and the uses of official crime statistics. He is currently a consultant for the National Institute of Justice funded project described in the article.