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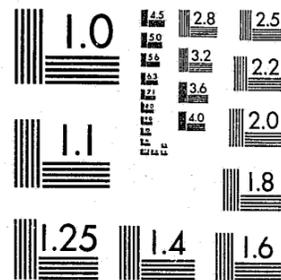
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COMMUNITY CONTEXTS AND CRIMINAL OFFENDERS

SUMMARY REPORT

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ACQUISITIONS

COMMUNITY CONTEXTS AND CRIMINAL OFFENDERS

Introduction

Two research traditions have been important to much of modern criminology. The risk assessment tradition dates at least from Quetelet and Goring, and has provided much of what we know concerning individual-level correlates of criminality. Research conducted in this tradition generally has been predictive in nature, and directly policy-relevent in intent. The individual offender is the unit of study, and a great deal of criminological research that has focused on <u>individuals</u> unfortunately has ignored physical and social environmental influences on behavior.

Similarly, much research conducted in the ecological and enviornmental traditions has ignored the individual--even though many sociological theories of crime causation deal largely with the social environment and its interaction with individuals or groups.

The two traditions generally have developed virtually independently. even though some persons have been influential to both. In particular, ecological research findings have not been used to inform the risk assessment tradition. During the early part of this century, community context was important to some of the risk assessment work, but such factors then were virtually ignored until the 1970's, when the bail reform movement again focused attention on issues such as "community ties" as potentially predictive of pretrial release outcomes.

A recent report by the National Research Council of the National Academy of Sciences (1981) suggests that research on the social and environmental factors

contributing to criminal behavior is missing and necessary (see also Monahan, 1981,1984; Gottfredson and Gottfredson, in press). We need to address the role of community factors if we are to improve upon our understanding of criminal behaviors and their impacts.

Person-Environment Interactions

There are three general approaches that one could take in attempting to predict and understand criminality: one could focus solely on characteristics of the offender (a trait or person approach), one could focus solely on the characteristics of the situation in which an offender is placed (a situational approach), or one could focus on interactions between offender and environmental characteristics (an interactionist approach).

We feel that the third model will prove most useful for providing advances. An offender's adjustment represents not only the influence of the environment on the person, but the person's influence on that environment. The environment may influence the offender's behavior in many ways. It may serve to elicit some behaviors which are reinforcing, such as drug abuse. The environment produces social agents who may encourage either behaviors leading to recidivism, or behaviors leading to successful adjustment. Social agents indirectly may influence the course of events by encouraging police or other crime control agents to keep track of the offender. Physical and land use factors may be a source of influence by providing targets or opportunities for crime (or by limiting these). Clearly, there are many ways in which the environment can have an influence on the offender and the offender's behavior.

Likewise, there are many ways in which the offender and his/her behavior may influence the environment. The mere presence of an offender, if known to

police or to community residents, may be a cause of increased vigilance, watchfulness, concern, or perhaps fear. Of course, the offender's behavior contributes to the environment by making it more or less orderly. If the offender's behavior becomes extremely antisocial, leading to the actual commission of crime(s), then this becomes an additional factor influencing environmental quality. Through mere presence, then, as well as through behavior, the offender may contribute to or detract from the quality of community life, and may stimulate local formal or informal control mechanisms.

The Research Problem

Two general research questions may be stated quite simply: First, by considering the socio-environmental context into which an offender is released after a period of incarceration, can we improve upon recidivism predictions which are based solely on personal characteristics of the offender himself? Second, what are the effects of offender populations on the community?

In thinking about these questions, we relied on prior research in the risk assessment and ecological traditions, and on research concerned with communities and neighborhoods. Reviews of this research are given in Gottfredson and Taylor (in press).

The literature relevant to potential impacts of community environments on offenders and vice-versa suggests a number of propositions which we found useful in guiding our research. First, the demographic and behavioral correlates of recidivism are remarkably consistent across studies. Little in the way of increased predictive power is likely to be achieved unless new ideas are investigated; and we propose that the situational approach holds considerable potential promise.

It also is clear that given the nature and availability of present predictor and criterion information, we are unlikely to see advances in predictive power based simply on the use of different statistical approaches. The most sophisticated and the simplest statistical methods result in devices of comparable predictive power. Rather, we are much more likely to advance our predictive ability through careful attention to the data themselves. Thus, a second proposition is that increases in predictive utility are likely to be realized through better and more careful measurement.

A third proposition, supported by considerable empirical evidence, is that areal socioeconomic and sociodemographic factors are related to delinquency rates. Perhaps of more importance, however, is a fourth proposition: Socio-environmental context, independent of socioeconomic or geographic factors, appears likely to influence delinquency rates and post-release adjustment. If this is so, our reading of the literature suggests a fifth hypothesis: meaningful and ecologically valid geographic or areal units are needed to assess and understand the relations between socio-environmental variables and the crime-related outcomes of interest (e.g., delinquency, recidivism).

Two final propositions are that the concept of neighborhood can help to define the requisite ecologically valid geographic units, and that the neighborhood concept itself suggests three classes of contextual variables that should be related to recidivism. These are the nature and extent of local social ties, attachment to the locale, and potentially supportive or criminogenic facilities.

These propositions formed the basis for the research which we report upon

here. In the course of our investigations, we developed several data bases: an offender data file, a neighborhood assessment data file, a criterion data file, information from the 1970 and 1980 census, and a neighborhood resident survey data file.

The Preliminary Study

A preliminary investigation of the impacts of community environments on released offenders (Gottfredson and Taylor, in press) provided results that, although limited in scope, were very encouraging. As hoped, we were able to increase predictive power through the inclusion of environmental characteristics in risk assessment models. In general, these increases principally were due to interaction effects of environmental and offender characteristics. The observed effects were statistically significant (resulting in increments of 1 to 13 percent of the variance, depending upon the outcome criterion considered), and also appeared theoretically meaningful, particularly from an interactionist perspective. Person-environment interactions appeared most promising when criterion variables were more complex than simple success/fail dichotomies. Indeed, when very complex criteria were used, person-environment interaction effects exceeded main effects for offender characteristics in magnitude. Finally, it was clear that the physical environmental assessments failed to fully capture the variation in neighborhood characteristics associated with criminal recidivism. Considerable environmental variation remained to be measured and help us understand the nature of the observed person-environment interactions.

Limitations to the Preliminary Study

We were unable (because 1980 census materials were delayed in release to

researchers) to assess adequately the effects of socioeconomic and demographic variables, and the careful examination of these effects is critical. Since the ecological literature suggests that the effects of socioeconomic and demographic variables (considered on an areal basis) are likely to be substantial, and since these factors are known to covary with other environmental characteristics, we need to examine the effects of environmental characteristics net of socio-demographic characteristics. The problem may be stated simply: socioeconomic and demographic characteristics are known to covary with crime-related behaviors. Concepts such as social networks, cohesion, incivilities, etc., are hypothesized to covary with crime-related behaviors, and appear to. Finally, social and demographic variables also are known to covary with these concepts of social cohesion and incivility. The research question is whether the concepts of cohesion, networks, incivilities, etc., are related to crime-related behaviors beyond their relation to socioeconomic and demographic characteristics.

Second, the environmental characteristics which we were able to measure were limited to observable physical characteristics. Of the relevant neighborhood concepts, those measured are less likely to have predictive power than are others. Variables assessed stood only as crude proxies for things which one would prefer to measure more directly, such as the nature and extent of local social networks, social cohesion, and attachment.

A More Complete Study

Our next efforts were designed to overcome each of the limitations to the preliminary study. We developed measures of socioeconomic and demographic factors based on the 1980 census and measures of social networks, neighborhood

cohesion, and incivilities based on an extensive survey of community residents in 66 of the 90 neighborhoods studied (sampling, survey procedures, and scale development are described in detail in Taylor, Gottfredson and Shumaker, 1984).

The survey of neighborhood residents asked a broad range of questions about local social dynamics, aspects of residents' attachment to the locale, place dependence, territorial attitudes, comparisons of the neighborhood vis a vis others, confidence in and expectations for the neighborhood, knowledge of the neighborhood, its features and organizations, responses to crime and other forms of social threat, perceptions and fear of crime and neighborhood disorder, and restriction of activities. For most of the issues considered, several questions were asked to ensure reliability of response.

Rather than relying on single questionnaire items, the structure of responses was reduced through a series of factor analyses designed to allow us to construct reliable scales to assess each of the constructs mentioned above. Principal components factor analysis (with varimax rotation) was used to reduce the item pool, and component scores used to construct scales. In general, resulting scales have excellent internal consistency reliabilities.

Census data similarly were reduced to three dimensions reflective of status (house value, income, type of employment, and educational level), stability (married couples, one unit structures and homeownership), and race and youth (percent black, and percent youthful population).

Findings[1]

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[1] Analyses based on survey information are limited (in this study) to 57 neighborhoods and 487 offenders. Analyses based on the physical assessments are based on 619 offenders and 67 neighborhoods.

Analyses reported here are based on three outcome criteria: a simple success/failure measure (arrest/no arrest during follow-up period), the proportion of the follow-up period arrest-free, and the number of arrests experienced during the follow-up period. In an effort to examine the stability of any effects observed over the follow-up period, both six and twelve-month (standardized across offenders) periods were investigated. By the end of the first twelve months following release from incarceration, over one-half of this sample of offenders had experienced at least one re-arrest; the average offender had experienced 2.16 arrests, and had remained arrest-free about eight and one-quarter months.

Contributions of Offender Characteristics. Risk models developed using only information concerning offenders' characteristics provided results very typical of those commonly found in such efforts, and the power of the models is in the mid- to upper-ranges typically observed. In short, we found nothing surprising. Variables commonly found predictive in other studies were predictive in this sample as well.

Contributions of Environmental Characteristics. What of efforts to identify environmental effects and person-environment interaction effects? We must give an unfortunately brief and disappointing answer: virtually no such effects were observed. Neither any of the census scales, nor any of the carefully constructed survey scales yeilded either main effects or interaction effects when entered (after personal characteristics, of course) in the models. The encouraging findings reported in our preliminary study completely failed to replicate. On the basis of these data we can demonstrate no support, at the individual level, for the situational model posited.

Effects of Offenders on Community Environments

Findings concerning the second of our "general research questions," relative to the impacts of offenders on community, are less discouraging. For purposes of these analyses, we treated the neighborhood survey scales as indices of "community outcomes." Of interest at the neighborhood level, then, is the extent to which the presence of offenders influences factors such as the community perception of its social climate, residents' fear of crime, and accommodation to social threat (e.g., through restriction of activities). In particular, we are interested in the extent to which these influences are manifest over and above other socio-demographic characteristics of the neighborhoods (e.g., as assessed by the census-based scales).

Both the ecological and risk assessment literatures provide ample evidence that offenders tend to come from similar kinds of environments, and that they return to environments which, if not the same, are similar to those from which they came. This clearly is true of the offenders in this study. Figure 1 gives the observed distribution of number of offenders per neighborhood. No offenders were returned to 23 neighborhoods, and the distribution drops off very sharply; but exhibits a very long tail (the final figure for number of offenders actually represents 30+). Two neighborhoods, for example, each contained over one-tenth of the total sample of offenders available for study.

Figure 1 and Table 1 About Here

Number of Offenders/Nbhd.
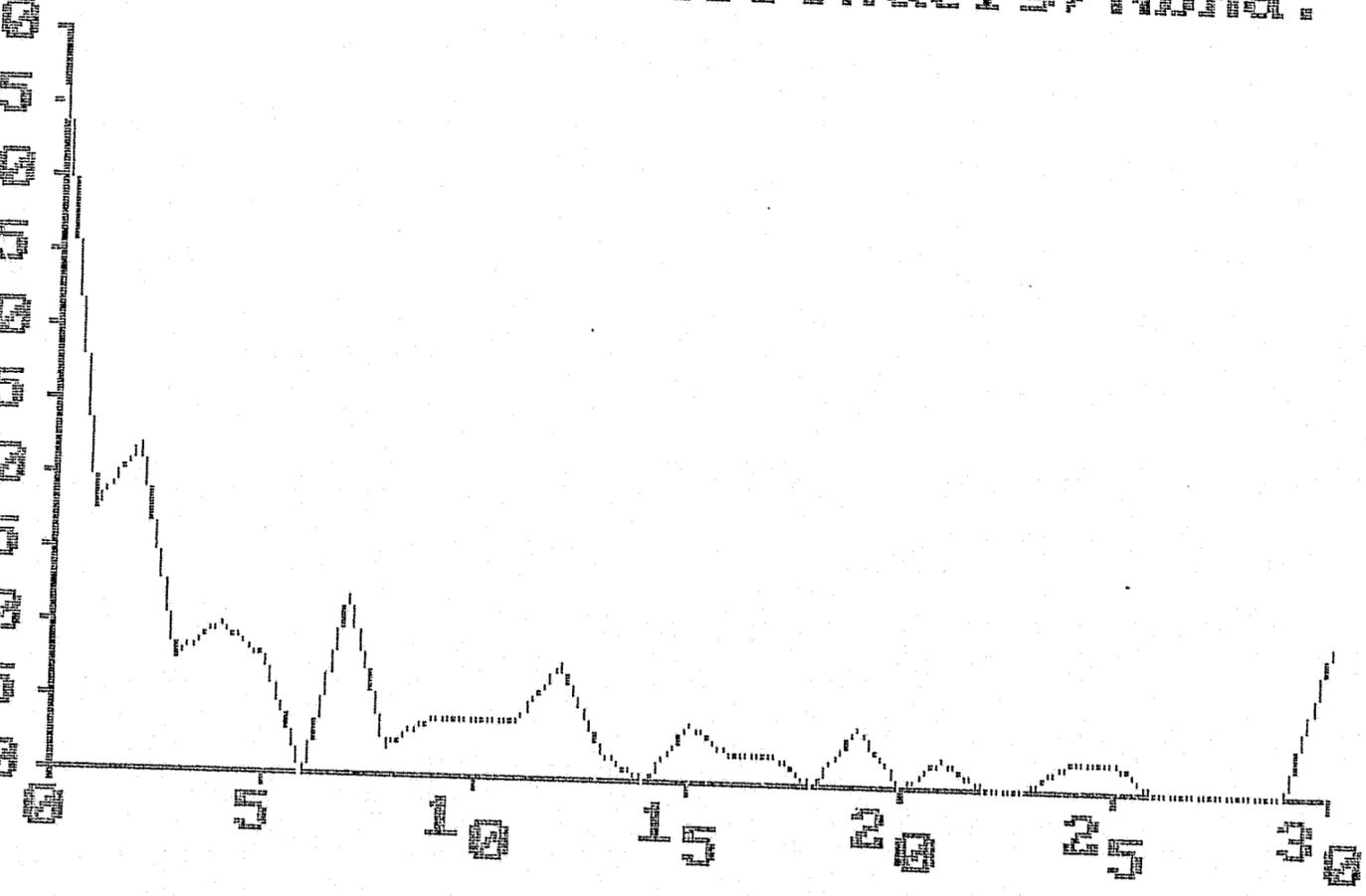
Number of Offenders
N of Nbhds

TABLE 1
COMPARISON OF ZERO-ORDER CORRELATIONS BETWEEN CENSUS FACTORS
AND OFFENDER RATES -- VARIOUS COMMUNITY OUTCOMES

CENSUS OR OFFENDER-BASED PREDICTOR

COMMUNITY OUTCOME	Status	Stability	Race/ Youth	Number of Offenders	Offenders/ Nbhd. Pop.	Offenders/ Nbhd. Hshlds.
Community Perception of Social Climate (57)	.616	.204	-.161	-.420	-.472	-.486
Residents' Attachment to Community (54)	-.219	.367	.560	.150	.119	.187
Residents' Expectations for Community (57)	.609	.207	-.179	-.381	-.538	-.559
Physical Signs of Incivility (64)	-.490	-.391	.083	.617	.738	.732
Community Perception of Physical Problems (57)	-.672	-.278	.252	.423	.587	.591
Community Perception of Social Problems (57)	-.628	-.227	.009	.302	.387	.375
Residents' Fear of Crime (57)	-.295	-.409	.262	.373	.488	.492
Community Perception of Crime Problem (54)	-.347	-.521	.176	.490	.641	.633
"Actual" Community Crime Problem (57)	-.295	-.511	.243	.512	.694	.683
Reported Restriction of Activities (57)	-.181	-.036	.426	.377	.440	.476

Notes: a) Number of neighborhoods/outcome measure is given in parentheses.
b) Status dimension reflects mean housing value, income, type of employment, education.
c) Stability dimension reflects married couple households, one-unit housing structures, and owner-occupancy.
d) Race/Youth dimension reflects percent black, young (0-5) children, and children (6-13).

Using census information, two rate measures were developed (offenders per 10,000 residential population, and per 10,000 households). The former ranges from 1.29 to 212.77; the latter from 3.10 to 588.24. Table 1 summarizes bivariate correlations of the three census-based scales, the two rate measures, and the raw number of offenders per neighborhood with the community outcome measures described earlier. (Interestingly, none of the census measures correlates better than .3 with any of the offender-based measures.)

The first three columns of the table confirm "typical" ecological research findings. Indices of socio-economic status, stability, ethnicity and age composition are rather powerfully correlated with indices of community decline, anomie, incivility, and crime rates. The last three columns are suggestive that offender concentration also is powerfully correlated with community decline, anomie, incivility, and crime. To observe otherwise, of course, would be surprising at best, and would lead us seriously to question the validity of the community outcome measures.

The remaining question is whether knowledge of offender concentration provides information about community outcomes over that which is provided by socio-economic status, stability, and ethnicity and age composition. The answer is yes. Offender/population rate (for example) adds significantly to the prediction of all but two of the community outcomes examined (these are Attachment to the Neighborhood and Community Perceptions of Social Problems). In some cases, the increments in explanatory power are quite substantial (e.g., offender rate adds 14% explained variance to Residents' Expectations for the Neighborhood, 10% to Community Perceptions of Physical Problems, 15% to Residents' Perception of Crime as a Neighborhood Problem, 13% to self-reported Restriction of Activities (but only 6% to Fear of Crime), and 20% to the

explanation of the actual neighborhood crime rate).

Offender Outcomes in the Aggregate

Finally, we investigated the effects of community environments on neighborhood-aggregate offender outcomes. Here, it seemed appropriate to use offender/population rate as a statistical control, and it was provided first opportunity to explain variation in aggregate outcomes. Aggregate offender characteristics are provided next opportunity, followed, in order, by census-based sociodemographic factors, the survey-based community factors, and finally, by an "offender mobility" measure (the number of times an offender was known to have moved households during the follow-up period). Although aggregate offender characteristics explain by far the bulk of the aggregate outcome variance, sociodemographic and community factors do add significant increments in some of the models. It remains the case that aggregate offender characteristics explain the bulk of the variation in outcomes even when sociodemographic and community factors are provided the advantage of order.

Summary and Conclusions

We began with a consideration of two research traditions that have, rather independently, been important to much of current criminology--the risk assessment and the ecological traditions. Our reading of these literatures strongly suggested that the risk assessment tradition could be greatly informed and strengthened by the ecological, and we posited the common-sensical notion that people's behavior--including offender criminal behavior--is a function both of the person and the setting in which that behavior takes place.

A preliminary study was conducted with very encouraging results: person x

environment interaction terms of modest power were observed; and results appeared consistent with criminological theory concerning the etiology of crime. A more extensive study then was conducted, designed to overcome certain limitations of the preliminary study, and to extend the explanatory power of effects demonstrated. Disappointingly, the preliminary findings fail to replicate, and no effects of environment (or of environmental/individual interactions) could be demonstrated at the individual level.

At the aggregate level, some effects for environment on aggregate (neighborhood-level) offender outcomes are demonstrated, but the overwhelming effects for aggregate offender characteristics are unmistakeable.

Finally, it is clear that offender concentrations have a substantial impact on neighborhood environments, and that these impacts obtain even after sociodemographic factors are controlled. All such effects are deleterious. Regardless of other community characteristics, residents of neighborhoods in which offenders are concentrated: (a) perceive the neighborhood social climate to be poor; (b) report low expectations for the neighborhood; (c) perceive more physical and social neighborhood problems; (d) report that they are more fearful of crime; (e) report that crime is a serious neighborhood problem; and (f) restrict their activities because of crime and its fear. Finally, these are communities--again, regardless of other factors--in which actual crime rates in fact are high.

Some limitations must be mentioned--and these pertain to both investigations reported. First, we were not able to "track" offenders: We have no idea how long they remained in study neighborhoods, and we do have evidence that this is a very mobile group. Second, outcome measures used in both studies

must be considered as crude proxies for recidivism. Third, for community factors such as those assessed via our surveys to influence offender behavior, the offender must to some extent be integrated into the social fabric of the community. We have no measure of the extent of this. Finally, at the individual level, the studies reported suffer a peculiar sort of range-restriction problem. There is very little variability in the kinds of places in which these offenders resided. In one series of analyses designed to "type" neighborhoods with respect to sociodemographic factors, we observed that the vast majority of offenders resided in one or two neighborhood classifications. Accordingly, it may well be that many more offenders than were available for study are needed to fully examine the kinds of effects sought here (for if no offenders returned to one of our study neighborhoods, the effect of environment could not be investigated; and if only one or two offenders were available for study, the contribution made by that neighborhood/offender combination must be considered of suspect reliability).

We remain committed to the situational model, despite the mixed results of the present investigations: it simply makes too much theoretical sense to dismiss readily. What is needed now are careful and detailed micro-level studies. These must be longitudinal in nature, and probably should be "crime-specific" in nature. Finally, careful attention must be paid to the issue of offender decision-making: After all, it is through the offender that all environmental influences are presumed to be mediated.

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