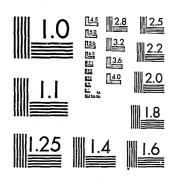
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THE RELATIONSHIP BETWEEN YOUTH
EMPLOYMENT AND JUVENILE DELINQUENCY:
SOME PRELIMINARY FINDINGS

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INTRODUCTION AND PRIOR LITERATURE

The belief that there is a causal relationship between unemployment and crime is commonly held by both politicians and members of the general public. For example, in an address to the Joint Economic Committee. Senator Hubert Humphrey stated that if "youths don't have a chance to earn money on the job, they get money on the streets" (Ninety-Fourth Congress, Second Session, (September 1976, p. 2). Additionally, The New York Times recently ran a front page series entitled "Cost of Black Joblessness Measured in Fear, Crime and Urban Decay" (12 March 1979). Moreover, these beliefs are evidenced by the fact that many community based crime prevention and nationally sponsored employment programs are structured on the assumption that the introduction of an employment opportunity will beneficially affect a youth's delinquent behavior. However, past surveys of the literature in this general area have reported inconclusive evidence for this relationship (Tropp, 1978). Clearly, a better understanding of the nature of the relationships between employment and crime is needed.

While it may initially appear that the theoretical research on employment and crime is contradictory, the conflicts in this literature can be partially reconciled. For example, the Becker (1968), Ehrlich (1973) and Sjoquist (1973) economic models of crime do not differ greatly in their results from those of the sociological model forwarded by Cloward and Ohlin (1973). The former group of theorists postulate that the rational individual will, after weighing the relative benefits and costs of licit and illicit activities, choose the activity with the highest expected returns. Therefore, by moving from a state of unemployment to empected returns.

ployment or from a low to a high wage job, the expected return from licit activities is increased relative to the expected return from crime resulting in less criminal behavior. Alternatively, Cloward and Ohlin (1973) state that our society closely identifies social worth with a social position but that for a large segment of our population there is a limited possibility of acquiring success. "Thus, when pressures from unfulfilled aspirations and blocked opportunities become sufficiently intense, many lower class youths turn away from legitimate channels, adopting other means, beyond conventional mores, which might offer a possible route to success-goals" (p. 105). Based on both types of reasoning an individual's criminal behavior should be negatively correlated with variables which measure the extent of legitimate opportunities for the individual.

While the afore mentioned theories represent the most cohesive literature on employment and crime, other hypotheses marginally related to the mainstream literature have been forwarded relating "economic" yariables to youth crime. This literature in conjunction with the two major competing theories is the source of considerable confusion as the peripheral literature seldom discusses the relationships between youth employment, unemployment and youth crime at the level of the individual. This literature focuses on the relationships between aggregate measures of economic prosperity and aggregate measures of crime and is therefore subject to the criticism of Robinson (1950) and Hannan (1971) who criticize the practice of using aggregate data to make inferences about individual behavior. An example of the literature which does not lie in the mainstream category and which is subject to the problems of aggregation is the paper by Bogen (1944) which discusses the relationship between adult employ-

ment, unemployment and youth crime. He postulates that increased employment opportunities for adults result in less time being spent in the supervision of children particularly in single parent households. He therefore feels that an increase in a composite measure of economic prosperity would be positively correlated with the adult employment rate which would be positively correlated with the youth crime rate. Another example of this literature is provided by Guttentag (1968) who feels that rapid industrialization is associated with a change both in prosperity and social structure. She proposes that the rapid rate of social change associated with increasing industrilaization in third world countries creates tensions which are the feeding grounds for normlessness and crime. While neither of these hypotheses is inconsistent with the mainstream literature on employment and crime, it is easy to see how these ideas could confuse the issue of the relationship between employment and crime at the level of the individual.

While the mainstream theoretical research has been appropriately focused at the level of the individual, empirical research, for lack of microlevel data, has focused almost exclusively on aggregate measures of economic variables and crime. Examples of the correlated variables studied include the percent of males unemployed in Chicago, Cincinnati, and Boston with age and sex specific arrest rates in the same cities (Glaser and Rice, 1959), the percent of males unemployed in Chicago, Cincinnati, and Boston with the arrest rates for property crimes expressed as the number of arrests divided by the age specific population of the appropriate areas (Fleisher, 1963), and general monthly unemployment data for

Detroit and total monthly contacts with the Youth Bureau of the Detroit Police Department (Singell, 1967).

Unfortunately, two studies which are based on micro-level data (Robin, 1969; Walthier and Magnasson, 1967) do not directly measure the impact of employment on juvenile delinquency, but rather measure the impact of a quasi-economic variable, participation in the Neighborhood Youth Corps program. Also, these studies lack an appropriate comparison group if the hypothesis to be tested is that employment, not NYC participation, affects delinquent behaviors. Both of the studies using micro-level data can be faulted methodologically in that they compare police records for all experimental and comparison group members over different time periods. Finally, the effect of participation in NYC on the individual as opposed to the effect of NYC participation on the experimental and comparison groups was not calculated, and consequently these studies are subject to the same criticisms as those based on aggregate data.

HYPOTHESES AND DATA

The data used and, as a consequence, the hypotheses tested qualify this paper as a preliminary investigation of the youth crime-employment relationship rather than a final and definitive essay on this subject. As the verification process used to insure the accuracy of the data in this paper took longer than anticipated, only 138 of the total of 302 employment records of youths who enrolled in a crime prevention program between January 3, 1975 and January 24, 1978 are currently available for analysis. Of the 138, the total number of youths who enrolled in this program between January 3, 1975 and September 21, 1976, only 120 have complete data files which are suitable for analysis. Also, after having com-

pleted a first round of analysis, it is felt that several important improvements should be made in the construction of the variables used for the analysis of the youth crime-employment relationship. These improvements in variable constructions would allow the testing of more complex hypotheses involving recursive and simultaneous equation systems which would deal with the sequencing of employment intervals and criminal events.

To elaborate, the way in which variables were constructed for this paper was to obtain aggregate measures over the periods that the youths in the sample were enrolled in this program. For example, the average monthly police contact rate for each youth and the percent of time employed over the period of enrollment in the community based delinquency prevention program were obtained. Although individual level data are being employed when these types of variables are constructed, the aggregation of data over time is involved. This aggregation precludes an investigation of the sequencing of point events such as the rejection of a job application or a police contact and interval events such as employment. Certain empirical results which follow in this paper, as well as theoretical considerations based on the sociological and economic crime theses, suggest that an investigation of the sequencing of these events will provide further insight into the employment-crime relationship. It should be noted however, that while the variable constructions used in this paper may not make the best possible use of the available data, they are based on individual level data and therefore provide an improvement on analyses based on aggregate employment or

unemployment data and crime data for large geographical areas.

The analysis in this paper focuses on the basic premise that there is an inverse relationship between the realization of legitimate opportunities such as employment and the frequency of criminal acts. However, the point may legitimately be raised that the referral of a youth to a job by the staff of the delinquency prevention program may be correlated with some other treatment provided at the center which is the "true" causal agent of a youth's delinquency. In order to establish the fact that this is an unlikely event, it should be noted that the major treatment provided through this program is the assignment of a counselor to each youth. Every youth enrolled in this program was the recipient of this treatment. Other services were provided to clients on a selective basis, according to the needs of the clients. For example, all of the youths who were charged with crimes just prior to intake into this program or during participation in the program were recipients of the program's legal aid services. The youths needing to transfer schools received the assistance of a school liaison officer. Thus, the receipt of services beyond the assignment of counselor is likely to be correlated with a youth's delinquent behavior prior to and during enrollment in this program, e.g., the more delinquent youths are likely to need legal services or school transfers. However, prior analysis of the data on the 302 youths comprising the population from which this sample is drawn, found that, aside from age, the youths who received job referrals through this program did not differ significantly from the youths who did not receive job referrals. It is therefore unlikely that the receipt of a job referral through this program is highly correlated with another treatment

selectively provided to those youths obtaining job referrals and that this other unknown treatment is operating through the employment variable.

Several additional assumptions are made throughout this paper. For example, it is assumed that delinquent opportunities are always available to a youth and, further that the nature of these opportunities do not change radically with time. Also, the extent of legitimate opportunities available to a youth are assumed measurable by several variables including the total length of time employed, "successfully" employed, "unsuccessfully" employed, the total number of jobs for which the youth applied and was rejected and the total number of jobs which the youth did not accept because of the type of employment even though the job was offered. A period of successful employment is distinguished from a period of unsuccessful employment by the fact that in the former case the youth was not fired for poor job performance, lack of attendance, tardiness, fighting on the job, theft, taking drugs, or other negative behaviors. The latter type of employment experience is not expected to operate on a youth's delinquent behaviors in the same way as a successful employment experience. The relevant data available on these youths included arrest records, detailed employment records, and demographic data on the youths and their families.

PRELIMINARY RESULTS ON EMPLOYMENT AND CRIME

Analysis of the 120 youths with complete data files begins with the calculation of Pearson correlation coefficients for four pairs of vari-

ables. The first coefficient correlates the average monthly number of police contacts with the average monthly number of jobs for which the youths applied but were rejected or which the youths were offered but the youths rejected because of the nature of the employment being offered. If job rejections on the part of youths and employers are related to a youth's feeling that legitimate avenues to success are not available to him, then the total number of job rejections should be negatively correlated with the average monthly number of police contacts.

However, the correlation coefficient between the average monthly number of police contacts and the number of jobs rejected by either party is negative, -.1357, and significant at the .07 level. This unforeseen result is partially explained by the fact that a job rejection presumes active job search which is generally a prerequisite for employment. Further, employment is negatively correlated with the average monthly number of police contacts. Therefore, the total number of job rejections on the part of youths and employers may be negatively correlated with the average monthly number of police contacts as a by-product of the positive correlation, .2236, between job rejections and employment which is significant at the .006 level.

In the second relationship considered, it is found, as anticipated, that there is a negative and significant correlation between the percent of time employed while on caseload and the monthly average number of police contacts while on caseload. The correlation coefficient is -.1959 which is significant at the .018 level. Additionally, examination of the third pair of variables finds that the correlation coefficient, -.1963,

between the percent of time successfully employed while on caseload and the average monthly number of police contacts also indicates an inverse relationship significant at the .018 level. While both of these correlations have the expected sign and are statistically significant, their magnitudes indicate that the percent of time employed or successfully employed while on caseload only explains approximately four percent of the variance in the average monthly number of police contacts while on caseload. The magnitude of the effect of employment on criminal behavior as measured by these variables is seen to be small.

The last relationship examined is the correlation between the percent of time unsuccessfully employed while on caseload and the average monthly number of police contacts. It was not expected that unsuccessful employment would operate in the same way as successful employment as a deterrent to delinquent behavior. Consistent with a priori expectations, the correlation coefficient, .0184, measuring the strength of the relationship between the percent of time unsuccessfully employed while on caseload and the average monthly frequency of police contacts is not statistically significant. It may be that the beneficial aspects of employment either cannot be appreciated by the youths who fail in their jobs or that some employment experiences, through no fault of the youths, are so negative that any potential benefits derived from them are not realized. The lack of a significant correlation between unsuccessful employment and frequency of police contacts, given that there is a significant correlation between successful employment and the frequency of police contacts, indicates that the nature of employment experiences should be investigated

when attempting to determine the effectiveness of employment as a substitute for delinquent behavior.

All of the zero order correlations just discussed with the exception of that between the job rejection rate and average monthly number of police contacts were consistent with a priori expectations. However, the relationships between the job rejection rate and the average monthly number of police contacts could be reasonably explained by a consideration of the job search process. Nevertheless, the correlations of the greatest interest, those between the employment and crime variables, had fairly low values even though the relationships were significant.

Additionally, the partial correlation coefficients between the employment and crime variables controlling for age, are insignificant. This is a result of the fact that age is a variable known to be strongly related both to the percent of time (successfully) employed and the frequency of police contacts. When other first order correlation coefficients were calculated, controlling for additional "explanatory" variables such as race, sex, and the number of parents with whom the client lives, the partial correlations remained negative, small but statistically significant. However, these other "explanatory" variables did not tend to be as highly or significantly correlated with either the percent of time employed while on caseload or the average monthly number of police contacts as was age. To repeat, the correlations between the employment and crime yariables were of the correct sign and significant, although the magnitudes of the coefficients were smaller than anticipated. Also, the control variables were correlated with the two variables of interest in the appropriate directions.

Upon reflection, it was felt that the small magnitudes of the correlation coefficients of interest may be due, in part, to the problem of aggregating to obtain the monthly number of police contacts and the percents of time employed and successfully employed while enrolled in the delinquency prevention program. These aggregate measures do not reflect the sequencing of employment intervals and crime events. Thus, while there is a negative and significant relationship indicated between the percent of time employed and the monthly police contact rate, it is possible that the fewer police contacts sustained by the people with more extensive employment experience actually took place while the youths were employed. Therefore, additional variables were calculated so as to compare the frequency of police contacts which occured while employed (successfully employed, unsuccessfully employed) to the number of police contacts which occurred while not employed (successfully employed, unsuccessfully employed). It was found that no police contacts whatsoever were sustained by any of the youths while they were employed, regardless of whether or not the employment was termed successful or unsuccessful. That is, none of the 139 police contacts sustained by the 120 youths over their intake periods occurred over the nineteen percent of the time that they were employed.

The results strongly suggest that the further development of variables which can give insight into the sequencing of employment intervals and crime events may lead to strong findings on the nature of this relationship. Further, by constructing variables which reflect the time series aspects of the youths' job search, employment and deliquent histories,

the economic and sociological models of crime can both be estimated and compared. The economic model of crime suggests a decision making process in which the expected returns from licit and illegal opportunities are simultaneously compared, and the activity with the highest expected return selected. On the other hand, the sociological model suggests a structured sequence of events in which a youth first attempts to succeed legitimately and after failure turns toward the fulfillment of success goals through illegal activities. Further research in this area will investigate the conditions under which it is possible either to affect a reconciliation of the two approaches or to reject one of them.

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