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**EMPLOYMENT AND CRIME**

**A Survey of Brooklyn Arrested Persons**

by

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## CHAPTER I

### INTRODUCTION

This report describes results from a survey of a sample (n=902) of Brooklyn males sixteen and older who were arrested in the summer of 1979. The survey covered the sample's employment experiences in detail over a two-year retrospective time span, and it included a few items of educational and personal background. Interviews were conducted in pre-arraignment holding pens, a setting which limited coverage of other personal and attitudinal areas and entirely precluded attempts to elicit self-reports of crime participation. However, the survey was augmented by the collection of official arrest and criminal history data for the entire sample (including arrests in a one-year post-interview period) and was also supplemented by a one-year follow-up survey (152 responding from a randomly selected subsample of 400). The follow-up did include additional personal and social background items, self-reports of crime participation and perceptions of the risks associated with crime, thereby permitting some exploration of the nature of the crime decision-making process and of the influence of social and personal background on that process.

This research was part of the larger efforts of the Employment and Crime Project of the Vera Institute of Justice. The Project, supported by the National Institute of Justice, has sought since September 1977 to study the nature of the relationships between employment and crime within poor, inner-city populations. This larger effort has encompassed extensive

literature reviews, exploratory interviews with misdemeanants jailed on New York City's Rikers Island, sustained field research in three Brooklyn low-income, high-crime neighborhoods and the survey that is discussed in this report.<sup>1</sup>

The overall perspective that has grown out of these efforts views employment-crime relationships as part of a larger process of individual exploration and development. This development includes, for young males within high-risk settings, early participation in street crime as well as regular but very often unsuccessful attempts to secure legal employment. The resulting interplay between exploration of legal and illegal options is mediated by social and cultural structures that take on different forms within specific neighborhood settings. This process is influenced by formal criminal justice agencies, although informal social controls are probably more important in accounting for the widespread phenomenon of drop out from street crime involvement during the early adult years. Informal controls may also explain specific limits on crime involvement during the period of participation. Throughout this process, individuals make choices between legal and illegal alternatives, but our research suggests that the conventional economic model of the crime decision requires substantial modification in view of the motivating and constraining effects of social and cultural processes operating within specific local settings.

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<sup>1</sup>For other reports on these activities, see Vera Institute of Justice (1979); Sviridoff and Thompson (1983); Thompson, Sviridoff and McElroy (1981); Smith and Thompson (1983); Sviridoff with McElroy (1984) and Sullivan (1984).

A. Research Aims

The research reported in this document was designed to gain understanding about employment-crime relationships among "high-risk" populations, to explore the nature of the crime decision-making process and to assess the effects on crime participation of numerous other "third factors," including family and peer group influences, schooling and age. In developing specific research questions, it was first necessary to define the population and crime phenomena that were the focus for the study. Our survey of labor market, criminological and program evaluation literatures (Thompson, Sviridoff and McElroy, 1981) suggested that an appropriate study population was one characterized as "high-risk" on two important, related dimensions: relatively impaired access to primary labor market employment due to sparse personal and family job networks; inadequate education, skills and work experience or low levels of return to education and skills because of the structuring of urban labor markets and discrimination; relatively greater access to illegitimate opportunities due to residence in densely-populated, racially and ethnically segregated high-crime residential areas.

The criminal involvements that appeared relevant to this study population included a wide range of high-risk, low-return activities such as street muggings and commercial and residential burglaries. Other relevant activities included some in which prospects for success were bolstered by a degree of organization and skill, such as auto theft, street-level drug dealing and assorted "con games."

Both choice of the study population and choice of the range of relevant crime phenomena were implicitly related to an underlying notion that individuals' involvements in both legitimate and illegitimate activities could be understood in terms of the structure of opportunities in which social and cultural factors played an important role. This general viewpoint was supported by much of the literature reviewed by the Project. Thus, for example, Harrison's (1972) early documentation of the different labor market returns to schooling for minority and white youths living in inner-city, urban and suburban areas, Bullock's (1973) comparisons of Chicano and black labor market careers and irregular economic explorations and assorted ethnographic studies (Ianni, 1974; Liebow, 1967; Anderson, 1978) all suggested the importance of opportunity structures governing both legal and illegal involvements.

The general conceptualization of employment-crime relationships that emerged from the Project's definitions of study populations and relevant crime involvements, and from its emphasis on opportunity structures in both legitimate and illegitimate spheres, was further refined in order to yield a range of specific research issues concerning the nature of employment-crime relationships for specific age groups.<sup>2</sup> Some of these issues were as follows:

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<sup>2</sup>As the actual research progressed, it also became clear that these relationships were differentiated in important ways among neighborhood and subcultural settings. For example, educational aspirations, sought-after employment and the nature and extent of crime involvement differ in important ways among

Pre-employment and school-leaving (16-19): Among the youngest age groups in high-risk populations, we expected to find a wide range of exploratory crime and delinquency, little employment and much evidence of peer group influences. Labor market involvements were expected to be intermittent, characterized by high quit rates and "targeted earning" strategies. School involvements were expected to be characterized by considerable conflict, including difficulties associated with delinquency and crime participation and high rates of drop-out. We expected that chronic delinquency would impede the acquisition of school credentials and that it might also be associated with lessened "pre-employment" experiences (errand running, work for family members, etc.).

Early legitimate and illegitimate involvements (19-24): Different employment-crime relationships were anticipated for the early adult period, in which sustained economic motivation and "work establishment" (Freedman, 1969) emerge. For example, it was anticipated that there would be a high degree of alternation between legitimate and illegitimate activities, with both sorts of involvement accompanied by disappointment and pressures to explore alternatives. Among the alternatives to low-level, secondary employment, participation in street crime

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the black, Hispanic and white neighborhoods that were studied in the Project's field research (Sullivan, 1984). In the survey research, ethnicity provides the only indicator of this important range of subcultural and ecological differences, and the effects of these variables were not fully specified when the research was designed.

was expected to be encouraged by exaggerated expectations of the returns associated with such crimes. Over time, the hidden cost of street crime participation would be discovered by individual experience, and individuals would become more and more likely to drop out of street crime in favor of even low-level employment (and some, furthermore, would be expected to gain access to somewhat more rewarding, quasi-organized crime activities (auto theft rings, drug selling, etc.).

Emerging strata (25 and older): Finally, among the oldest population groups, we expected a further differentiation in which there would arise a pattern of relatively stabilized legitimate and illegitimate involvements. The largest segment of the aging high-risk population was conceived of as remaining within secondary employment, perhaps experiencing somewhat improved opportunities as a result of accumulated personal job networks, skill at negotiating the relatively narrow options available, and liaisons with households receiving welfare and other income transfers. For this group, we believed that crime participation would diminish in frequency. For a much smaller group, success at entering quasi-organized criminal activities would also lead to a diminishing of arrests, even if crime participation continued or increased in frequency. Finally, some in the high-risk population would succeed in winning a more "sheltered" place within the labor market, with the enhanced job security, working conditions and income associated with primary employment deterring further crime participation.



**B. Limitations of the Sample**

Clearly, our survey of arrested persons cannot, by itself, satisfactorily address all of the questions that are implied by the overall perspective of the Project (indeed, many of the research questions outlined above are more properly addressed by the field research component of our research). If, for example, we begin by contemplating the universe of possible employment-crime relationships for all age groups in the total population, it is evident that a cross-sectional sampling of persons already arrested presents limitations. Work by West and his colleagues (1982) provides an instructive contrast. West was able to conduct a long-term longitudinal investigation of delinquency and adult crime that began with a random sampling of male school children within an inner-city London community. His study population included individuals with no criminal involvement, others with self-reported involvements who were never apprehended, and still others (a relatively small fraction of the total) who had extensive criminal involvements and long police records. The analyses based on this sample were able to draw upon interviews over more than a decade, and could attempt to relate such diverse factors as social workers' perceptions of family life, parental criminal involvement, elementary school teachers' ratings of participants' classroom behavior, health and mental health measures, employment and many other factors to the participants' criminal involvements.

In such an inquiry, it would be appropriate to ask, for example, why some youths participate in crime, but not others;

even why one brother participates, but not another? Since our survey focused only on those arrested, we were not able to address these questions directly. However, we do trace patterns of differential involvement within our sample by describing the differing frequencies and types of arrests according to age, ethnicity and different aspects of labor market experiences.

There is a second major set of questions that could be addressed far more easily by research such as West's than by a one-time-only survey such as ours. We would wish to discover how participation in street crime figures within the overall careers of those who engage in it. For this question, the restriction to arrested persons is less limiting than the lack of access to longitudinal (over time) data. We try to work around the limitations by sometimes comparing closely adjacent age cohorts, and assuming that differences between, for example, 16-17 year olds and 18-19 year olds reflect "aging" as well as cohort differences. The credibility of that assumption is strengthened by evidence from our own analysis and other analyses of per capita arrest data that show an extremely precipitous drop-off in crime between the mid-teens and the mid-twenties (Hirschi and Gottfredson, 1983).<sup>3</sup> Within such

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<sup>3</sup>For wider age discrepancies, age groups in our sample cannot be used to infer differences in the nature of crime participation associated with aging itself. The sample includes young persons who will never be rearrested and also a small, unusual group of older individuals whose sampled arrest represented their first contact with the criminal justice system. No coherent longitudinal pattern would result from the

narrow age spans, which furthermore contain 40 percent of the total sample, a complex of rapidly shifting factors (school-leaving, minimum age for some types of employment, emancipation from parental families) appears to have strong, immediate impacts on crime participation that may be discernible even within cross-sectional data.

A third set of questions that is important to an inquiry such as ours has to do with whether employment and labor market experiences independently influence arrests or whether they simply register the effects of other "causal" factors. One can imagine (and indeed, West found evidence for) many individual differences in personality, attitudes, home life, and so forth that might relate both to labor market performance and to criminal justice involvement. Such "third factors" might lead to spurious relationships between labor market and employment variables. Further, even if employment variables are of importance, their influence may be largely indirect: employment outcomes may have effects on other intervening variables (association with peer group members, residential location, etc.) that in turn affect crime participation. Once more, since labor market involvements are intertwined with many other factors in an individual's background and experiences, there is

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intermingling of widely disparate groups (e.g., 16-17 year olds and 35-50 year olds), since each group would be drawn from a distinct population and does not represent the future characteristics of a younger group or the past characteristics of some other older group in the sample.

an inevitable indeterminacy regarding which variables are of predominant importance for a given outcome. Because our respondents were being interviewed while in jail awaiting arraignment, we had to limit the scope and nature of the interview items and, therefore, we could address only a few areas that would have yielded information about "third factors."

In light of these considerations, why did we draw a cross-sectional sample from an arrested population? We did so for many reasons. First, arrested persons are an important policy target population, so that study of employment-crime relationships within this population may offer practical and relevant information concerning the design or improvement of employment programs that aim to avert crime participation. Second, very little street crime is observable in the general population. A random sample of the total U.S. population would be dominated by many groups (females, the middle-aged, the affluent) in which little or none of the behavior that we wish to study would be observed. Adding these groups to the study population would not contribute useful information. Third, we felt that arrested persons offered the best combination of accessibility and feasibility within the limits of our research resources. Attempting to sample from other non-arrested groups that do present high risks of crime participation would entail prolonged and costly efforts to identify, sample, and contact people who would benefit little from the research and who would have reasonable grounds for suspicion concerning its aims. Criminal behavior is concealed, and obtaining valid data from

hard-to-reach inner-city youths, especially coupled with other required data on socioeconomic background, school and occupational experience would be difficult if not impossible to achieve.<sup>4</sup> Finally, while the sample is not representative of the overall population of Brooklyn, the sample comes much closer to capturing at least a broad spectrum of individuals from within the subpopulation of primary interest to the Project: high-risk, inner-city youths. Our belief that we have succeeded in collecting information on a wide spectrum of inner-city youths, and not simply on a small, criminally-involved minority, derives from evidence of the high prevalence of arrests among inner-city populations. Blumstein and Graddy (1982), for example, use a combination of longitudinal data and a model of recidivism processes to estimate that the cumulative (by age 55) probability of an index arrest among large-city minority males is 51 percent (14% for large-city whites). The preponderant part of this lifetime risk arises during the teenage and early adult years. Such a high prevalence of arrests among large-city populations increases the likelihood that a diversity of individuals from within this subpopulation would appear in an arrested person sampling such as ours.

On balance, therefore, we have been willing to accept the limits of an arrested persons sample in order to obtain the

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<sup>4</sup>The decision to sample from an arrested population was not made lightly. We interviewed other researchers who had attempted delinquency or crime research that began with quasi-random sampling from block faces within inner-city neighborhoods and concluded from their experiences that a focus on arrested persons was the better course of action.

benefits it offers in terms of relatively large sample size, access to reliable official data and focus on an important policy target population. Furthermore, having decided to sample arrested persons, it was possible to take some measures to ensure the maximum inclusiveness of the sample actually obtained. For example, by sampling from the earliest feasible stage of the arrest-prosecution-adjudication process, we were able to include large fractions of individuals (youths, first offenders, those against whom prosecutions are quickly dropped, etc.) who are not available to studies of crime that focus on convicted, jailed or imprisoned populations.<sup>5</sup> The individuals included in this study who would have been missed in other research are less likely to have records of prior criminal justice involvement and they are likely to have somewhat stronger ties to legitimate social institutions, including marriage, schools and jobs. Second, because the sampling took place in a New York City jurisdiction, we were able to benefit from the statutory inclusion of sixteen and seventeen year-olds (23% of the sample) as "adult" cases. This group greatly increases coverage of a period of the life cycle when we believe persons engage in crime explorations simultaneously with their

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<sup>5</sup>For example, Witte, after reporting the results of her study of men released from the North Carolina prison system, observed:

As a whole, our results point up the need for additional tests of the economic model of crime using individual data. Such tests would be most beneficial if they dealt with groups less committed to criminal activity than former prison inmates. Perhaps the most realistic sampling frame would be individuals arrested in a given area. (1980, p. 182)

legal labor market, schooling and other activities.<sup>6</sup> In the following section, we draw some comparisons of the resulting sample with other relevant population groups.

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<sup>6</sup>For longitudinal data on dropout, cf. Wolfgang (1972) and Blumstein and Cohen (1979). For a fuller presentation of our initial model of joint legal and illegal exploration followed by a progressive narrowing and sifting of options, cf. Vera (1979).

### C. Empirical Comparisons

How successful have we been in identifying and sampling from a population that is not excessively "committed" to crime participation; that is, one that can provide generalizable insights into employment-crime tradeoffs? No definite answer can be given to this question, since census studies do not probe crime participation and, as already noted, inner-city minority youths are an especially hard-to-reach group for all researchers, including census enumerators. However, some evidence is available from a compilation and collation of unpublished U.S. Census data over three years (1978-1980) by Bienstock (1981). Bienstock has provided a description of the labor market experiences of a citywide sample of youths living in families with incomes below the poverty line.

Table 1.1 compares males in the citywide poverty youth sample (Census) with Vera's sample of arrested persons on three indicators: unemployment rate, the employment-to-population ratio (i.e., the total percentage of the samples who are employed) and the percentage in school among those OLF (out of the labor force, i.e., not working and not looking for work) and the percentage enrolled in school, among those out of the labor force (OLF). In making these comparisons for both teenagers (age 16-19) and young adults (age 20-24) both similarities and differences appear between poor youths in general and arrested youths. For the teenagers, the unemployment rate is high for the citywide sample (30%) and higher still for the arrested teenagers (47%). (For minority teenagers, the rates



TABLE 1.1

ARRESTED PERSONS AND NEW YORK CITY POOR YOUTHS:  
Selected Comparisons by Age

SELECTED INDICATORS	AGE			
	16-19		20-24	
	78-80 Census	1979 Vera	78-80 Census	1979 Vera
Unemployed <sup>a</sup>	30%	47%	18%	38%
Employment-to-population ratio <sup>a</sup>	21	44	47	55
In School (among OLF)	90	67	74	6
N	(53K)	(333)	(52K)	(202)

<sup>a</sup>Data taken from Table 3.2 below.

come somewhat closer together: 41% for black and Hispanic teenagers in the citywide sample and 50% in the arrested sample.) There was a very substantial difference in the employment-to-population ratio, with the ratio for arrested teenagers (44%) being three times the value (14%) of that of teenagers generally. As traced in more detail in Table 3.2 in Chapter III, this difference in ratios was brought about by a very large difference in labor force participation between the two samples. Three-fourths (70%) of the N.Y.C. poor teenagers were out of the labor force, while only 17 percent of teenagers were

OLF.<sup>7</sup> Finally, among the OLF teenagers, a much higher percentage (90%) of N.Y.C. poor OLF teenagers were enrolled in school than was true for arrested teenagers (67%).

Among the two young adult samples, there occurs a different pattern. For the young adults, the unemployment rate for the citywide sample is much lower (18%) than the rate for arrested young adults (38%), while, on the other hand, the employment-to-population ratios for the two samples are similar (47% for the general poor, 55% for the arrested young adults). Finally, for these older, college-age groups, school enrollment among those out of the labor force remains quite divergent (74% of the N.Y.C. poor young OLF adults versus 6% of arrested young adults are enrolled).

In summary, these comparisons offer evidence both of important similarities and of important divergences between arrested youths and poor youths generally. The most important similarity is that, for poor teenagers, the rate of unemploy-

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<sup>7</sup>Although this difference is very large, it may be explained in part by the fact that the Vera interview occurred in the summer, a period in which many teenagers enter the labor force in the interval between school enrollments. The Census data, by contrast, were gathered during the entire year, including the months of school attendance in which many school-age youths are out of the labor force. Secondly, it is possible that the jail setting of the Vera interview, and the fact that it was administered immediately after an interview designed to assess eligibility for pretrial release without money bail on the basis of an individual's "ties to the community," may have imparted an upward bias in responses of "looking for work" among those who were not working. (Since the pretrial release interview sought names, addresses and telephone numbers of employers and attempted to verify this information, it is not likely that the employment levels of the arrested person sample were unduly biased.)

ment (especially among minorities) is similar for the arrested and for the overall sample. Apparently, there are so many barriers to employment facing teenagers in New York City that whatever characteristics are associated with inclusion in a sample of arrested persons create few additional differences on this indicator (although Chapter III below documents important earnings differences between white and minority arrested teenagers). For young adults, there is a much greater divergence in unemployment rates; however, Table 3.2 in Chapter III shows that even for this older group the white unemployment rate is virtually the same for arrested (15%) and for poor young adults generally (16%). On the other hand, other evidence from this comparison suggests that arrested teenagers and young adults are less well established in such avenues to conventional success as the schools. Among the OLF teenagers and young adults, far fewer arrested youths are enrolled in school. They are thus less "protected" in terms of institutional environments and affiliations, and this isolation may result in heavier involvement in criminality and greater vulnerability to arrest.

The remaining chapters of this report present an essentially descriptive analysis of the survey findings. In Chapter II, we begin with the rather limited data available on the sample's school experiences, tracing age and ethnic patterns in current school enrollment among youths in the sample, and also looking at patterns in ultimate educational attainment among those no longer in school. An important inquiry in Chapter II centers on reasons for drop out from school and the interplay between schooling and labor market involvements.

In Chapter III, the account continues with a description of the sample's labor market experiences. Some continuity is provided by an effort in Chapter III to determine the extent to which educational attainments among sample members translate into economically meaningful labor market rewards. Regression analysis attempts to trace the net impact on wage rates of school attainments and other variables, finding important ethnic effects. Patterns in labor force status (employed, unemployed, out of the labor force), in total hours worked and in employment in jobs offering varying degrees of "labor market shelter" (off-the-books jobs, jobs in which taxes are withheld and jobs offering benefits such as paid sick and vacation time) are also described.

In Chapter IV we begin a description of the arrest data collected from official sources and (in the small follow-up) from sample members' own reports. Again, age and race/ethnic patterns in type and frequency of arrest, in the extent of prior criminal justice involvements and in rearrests over a one-year follow-up interval are described. More tentatively, some follow-up items on risk perceptions and on sample members' family background and other social contexts are described, together with speculations concerning their meaning in terms of the extent and nature of arrest involvements.

In Chapter V, an effort is made to link data concerning labor market experiences and arrests into an understanding of the association between the two phenomena. Multiple regressions using total arrest rates and income-only arrest rates are .

presented to give a general overview of the issue, followed by separate age and ethnic group analyses that use four selected labor market measures and relate each separately to income-oriented arrest rates. Chapter V concludes by describing the seeming sensitivity of arrest rates among older and minority arrested persons to influences from labor market variables. In reflecting on these differences in susceptibility to labor market influences, we conclude that the conventional economic choice model of crime decision-making omits consideration of social contexts that are important forces in controlling crime.

## CHAPTER II

### SCHOOLING

#### Introduction

In this chapter we describe the educational experiences and related perceptions of our sample of Brooklyn defendants. Although under increased scrutiny and subject to periodic criticism and reform (Hacker, 1984), education has retained its central place in the American cultural theme of individual striving and achievement. Education is viewed as a required preliminary to competition in the labor market. Occupational rewards, including income and status, are thought to be achievable in rough proportion to an individual's educational investments (Blau and Duncan, 1967); conversely, failure in the labor market -- especially in the self-assessments of the lower class -- is often accounted for in terms of failure to obtain an adequate education (Sennett and Cobb, 1973).

Although many assessments of education in a crime context emphasize delinquency rather than adult criminality (Elliott and Voss, 1974), one relevant theoretical perspective traces a path from inadequate educational preparation to labor market failure, and from that failure to participation in crime by those whose legitimate opportunities are limited and thus whose opportunity costs of crime participation are correspondingly low. On this view, which is surely at least partly correct, educational experiences and deficiencies serve as a "root cause" of crime, with employment difficulties playing a largely intervening role.

However, there are many competing theoretical models of the role of education and there are few empirical studies that provide the sort of data that would allow comparisons among them. For example, the view of criminality that emphasizes deviant values and socialization into a delinquent subculture would argue that school drop out might augment crime participation through processes of differential association, irrespective of labor market influences. West (1982) has suggested that school misbehavior and failure serve as early indicators of personal and family-linked difficulties that may, in turn, lead to criminality but that antedate and act independently of school influences. And finally, a very different crime-related role for schooling arises from acceptance of the belief that schools limit the freedom and frustrate the expectations of poor young people, inculcating self-blame for educational failure that in reality can be traced to institutional shortcomings. Here, schooling plays a direct criminogenic role through its frustrating impacts on youths (Bowles and Gintis, 1976).

In what follows, although we cannot address detailed causal hypotheses such as those implicit in the views sketched above, we can point up interesting aspects of the educational experiences of the sample and relate these experiences to the theoretical viewpoints briefly described above. Thus, for example, analysis of patterns of school enrollment, educational attainments and reasons for school drop out in the following section points up interesting differences between the schooling

experiences of racial minorities and white sample members. Perhaps surprisingly, the young minority sample members report considerably higher levels of school enrollment than do white arrested youths, but there is also evidence of strong pressures on minorities to drop out of school in order to secure immediate income and to meet family responsibilities.

The labor market opportunities cited as reasons for prematurely leaving school point up the conflicting short-term and longer-term consequences of schooling. As suggested by human capital perspectives (and echoed in the reported perceptions of sample members concerning the labor market benefits of school completion), remaining in school may, on the one hand, increase job stability, job quality and income; on the other hand, continued school enrollment exacts a short-term economic penalty in the form of high unemployment rates among in-school youths who are in the labor force. Thus, the evidence assembled below supports aspects of several of the theoretical viewpoints that we have sketched concerning the role of schooling in an assessment of employment-crime relationships. The schools help in the longer run but they also appear to harm some youths in the short run. These harmful impacts are not only economic, they also seem to derive from the relatively high levels of "dislike" of the school experience (cited by many as a main reason for leaving school).

In what follows, we will first describe patterns of school enrollment among youths in the sample, followed by a discussion of educational attainment and (among those who fail to complete



high school) the reasons given for school drop out. Next we will turn to consideration of the interplay of school and labor market participation, documenting the short-term labor market penalties, as well as the longer-term gains, associated with schooling.

A. School Enrollment and Attainments

1. Current Enrollment

Table 2.1 tabulates the sample's school enrollment by age and by ethnicity.<sup>1</sup> More than a quarter (27%) of the sample plans to return to school in the fall. Comparing age groups, we find that plans to return to school are very high among school-age respondents (86% of 16-year-olds; 67% of 17-year-olds) and drop sharply thereafter, until only 5 percent of those twenty-five and older report plans to return in the fall.

Although comparison of enrollment percentages for different age groups leads to the obvious conclusion that school enrollment diminishes with age, matters are not quite as simple as they seem. Although closely adjacent age cohorts probably reflect longitudinal patterns, widely separate age cohorts represent different populations, and comparisons among disparate age groups do not depict the impact of "aging" as would a longitudinal analysis of the same group of people over time.

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<sup>1</sup>Because the survey was conducted during July and August of 1979, school enrollment may be exaggerated to the extent that participants' reported plans to return to school outrun actual re-enrollment. The "in school" category includes those arrested persons who answered "yes" to the question "Do you intend to return to school in September?" In the one-year follow-up, arrested persons who were re-interviewed were asked whether they had attended school at all in the year intervening between the two interviews. Of 52 arrested persons who earlier reported plans to return and who were re-interviewed, 37 (71%) in fact confirmed that they had attended school; of seven re-interviewed arrested persons who earlier had reported no school enrollment, two in fact did describe some subsequent school attendance. (The n's are small because these questions were asked only of those participants who had reported some school participation in the two years leading up to the original interview.)

Table 2.1

**SCHOOL ENROLLMENT BY AGE AND ETHNICITY**  
(Percent in or returning to school)

AGE	ETHNICITY			
	Black	Hispanic	White	Total
16	91% (77)	95% (21)	50% (16)	86% (114)
17	83 (48)	54 (26)	36 (14)	67 (88)
18	43 (44)	14 (28)	40 (10)	33 (82)
19	28 (36)	12 (17)	20 (15)	22 (68)
20-24	11 (118)	4 (55)	8 (37)	9 (210)
25+	7 (182)	1 (69)	2 (49)	5 (300)
All ages N	32% (505)	20% (216)	17% (141)	27% (862)

Note: In this table, the numbers reported in parentheses represent the total number (or base number) of respondents in intersecting row and column categories of the independent variables. The actual number of cases represented by the percentages can be calculated by multiplying the percentage by the relevant base number.

$X^2 = 20.10$ ;  $DF = 10$ ;  $p < .0001$  for ethnic groups

The need to distinguish between true age differences and age cohort differences can be illustrated using data from the sample. Comparing enrollment percentages among sixteen year-olds from different race/ethnic groups (the top row of Table 2.1), we find quite high enrollments among blacks and Hispanics (91% and 95%, respectively) and drastically lower enrollment among whites, only half of whom plan to return to school. The minority-white discrepancies are still sharp among the seventeen year-olds, although enrollment is also much lower among seventeen year-old Hispanics.

If the older whites in the sample had had the same school enrollment experiences as the sixteen and seventeen year-old whites, and if the older minority respondents had resembled the minority sixteen and seventeen year-olds, then we would expect minority educational attainments to be much higher than those of whites. This is not the case; 51 percent of sampled whites twenty-five and older have obtained a high school diploma, a much higher level than among blacks and Hispanics (35% and 17%, respectively) (see Table 2.2). Clearly, older members of the sample differ from younger members in other things besides age; older whites have higher levels of schooling and older Hispanics much lower levels of schooling than would have been expected in the absence of important age cohort differences.

Granted that cohort differences limit longitudinal inference, Table 2.1 nevertheless points up very large differences in the school participation among ethnic groups within age categories. Within the population of young criminal court

defendants, there appears to be much greater attachment to schooling among the minority group members, amounting nearly to a two-to-one differential among sixteen year-olds. Such a differential, which is reversed among older cohorts, suggests that for young whites, school difficulties and the behavior associated with the arrest process are closely interrelated, possibly in a pattern of "delinquency" that is less motivated by income needs than is true for the minority arrested persons.

Besides data on school enrollment, parallel findings are obtained in comparing the mean days of enrollment for separate age and race/ethnic groups (Appendix Table A2.1). Sixteen and seventeen year-old blacks, and sixteen year-old Hispanics, have over 200 days of school enrollment in the year preceding the sampled arrest, as compared with 136 days for sixteen year-old whites, and 133 days and 91 days for seventeen year-old Hispanics and whites, respectively. The average number of enrolled days is of course much lower for the older groups, declining to under three weeks for those twenty years old and older.

## 2. Attainments

Table 2.2 presents a rather simple measure of educational success, namely, the percentages of various sample groups who have obtained a regular high school diploma. In our sample, where only a handful (12 individuals) have continued their education beyond high school, attainment of a regular high school diploma probably best signals the potential contribution of schooling for later labor market involvements. Those with

the diploma have a "credential" that they can offer employers. This credential may make its holder attractive to employers and would in some cases enable him to pass minimum job screening criteria. Altogether, one in five sample members have obtained the diploma, and among the two age groups past the peak ages of school attendance, the percentages with diplomas are corre-

Table 2.2

PERCENT OF SAMPLE MEMBERS WITH REGULAR HIGH SCHOOL DIPLOMAS, BY AGE AND ETHNICITY

AGE	ETHNICITY			
	Black	Hispanic	White	Total
16-17	1% (124)	0% (47)	7% (30)	1% (201)
18-19	10 (80)	4 (46)	12 (26)	9 (152)
20-24	27 (122)	13 (55)	47 (38)	27 (215)
25+	35 (176)	17 (71)	51 (47)	33 (294)
All ages <sup>a</sup> N	21% (502)	10% (219)	34% (141)	20% (862)

Note: In this table, the numbers reported in parentheses represent the total number (or base number) of respondents in intersecting row and column categories of the independent variables. The actual number of cases represented by the percentages can be calculated by multiplying the percentage by the relevant base number.

<sup>a</sup>  $\chi^2 = 32.39$ ; DF = 6;  $p < .0001$  for ethnic groups

spondingly higher (27% among 20-24 year olds; 33% among those 25 and older).

Table 2.2 also attests to important differences in educational attainment among the ethnic groupings. Overall, many more whites (34%) have obtained a regular high school diploma than blacks (21%), while blacks' attainments are twice the level of Hispanics' (10%). There are, as well, minor differences in the age patterning of attainments between the ethnic groupings. Relatively more whites appear to have attained their high school diploma "on schedule," with 7 percent attaining a high school diploma before age eighteen; no Hispanics and only 1 percent of blacks achieved this, a hint that the minority sample members may have somewhat greater difficulty translating time enrolled in school into actual attainment of a credential. At the other end of the age range, differences in white attainments tend to flatten after age 20-24, with those older showing only a slight further difference in attainment (from 47% to 51%). Among blacks, although attainments are lower overall, they continue to increase across age groupings (increasing for example from 27% to 35% between the two older age groupings).

The Hispanic pattern is like the black pattern among the youngest group, but like the white pattern among the oldest (no further difference in attainments). Indeed, for Hispanics, increases in attainments stop after the young age groups, probably signalling that among older Hispanic arrested persons

there are many migrants from Puerto Rico and other Hispanic areas where school completion may have occurred at the eighth grade or so for the majority of the population.



**B. Drop Out and Its Reasons**

Later sections of this chapter and Chapter III trace some of the implications of successful completion of at least the minimum of high school education. For now, however, let us consider the experience of those who fail to reach this threshold. Table 2.3 tabulates the incidence of school drop out among all those in the sample who reported having left school. (Note, for example, that while Tables 2.1 and 2.2 were based on 862 cases -- the total sample of 902 less cases with missing information -- Table 2.3 is based on only 600 cases, with 262 participants returning to school subtracted.)

Overall, Table 2.3 shows rather strong age differences in drop out rates, with further differences discernible between the Hispanics on the one hand, and the blacks and whites in the sample on the other. As already noted, school enrollment is high among sixteen and seventeen year-olds, so that in Table 2.3 there are only 36 sample members who have left school at that age. Of these, 92 percent left without the diploma. Indeed, only one black and two white sample members have earned a diploma at this age. Somewhat surprisingly, the incidence of drop out without a diploma is virtually as high among the much larger group of 18-19 year-old school-leavers as among 16-17 year-olds. Nine out of ten in this age range leave without the diploma, including virtually all Hispanics (97%). In the two older age groupings, the incidence of drop out declines (70% among those 20-24; 66% among those 25 and older). In these

Table 2.3

PERCENT WITHOUT A DIPLOMA BY AGE AND ETHNICITY<sup>a</sup>  
(School-Leavers Only)

AGE	ETHNICITY			
	Black	Hispanic	White	Total <sup>b</sup>
16-17	92% (13)	(9)* ( 9)	86% (14)	92% (36)
18-19	86 (51)	97 (35)	89 (18)	90 (104)
20-24	66 (96)	90 (51)	56 (34)	70 (181)
25+	61 (165)	85 (66)	60 (48)	66 (279)
All ages <sup>c</sup> N	67% (325)	90% (161)	67% (114)	73% (600)

Note: In this table, the numbers reported in parentheses represent the total number (or base number) of respondents in intersecting row and column categories of the independent variables. The actual number of cases represented by the percentages can be calculated by multiplying the percentage by the relevant base number.

<sup>a</sup> Of those in the sample who had already left school, 35.5 percent had a high school diploma or GED.

<sup>b</sup>  $\chi^2 = 29.44$ ; DF = 3;  $p < .0001$  for age groups

<sup>c</sup>  $\chi^2 = 32.67$ ; DF = 2;  $p < .0001$  for ethnic groups

\*Too few cases to percentage.

older groups, as previously, drop out is especially high among Hispanics (90% of those 20-24; 85% of those 25 and older).

1. Age Cohorts and Drop Out

In the context of a labor market and crime study, we felt it important to arrive at a classification of reasons for school drop out that would give maximum emphasis to labor market and economic factors. The resulting classification is given in summarized form in Table 2.4, which tabulates reasons for school-leaving by age. (Table A2.2 gives a fuller breakdown.) Three broad categories of reasons for leaving school were developed: the first reflecting those answers that appeared to stem from income or job-related reasons (these were instances where it seemed that opportunities or else family duties "pulled" the participant out of school); the second reflecting academic problems (dubbed cases where the respondent "drifted out" of school in the sense that he attributed his failure to his own behavior or attributes without pointing to any very specific reason); and the third reflecting school-leaving because of serious disruptions (where the respondent was "pushed out" because of expulsion, arrest or drug problems).

As Table 2.4 shows, there are large age cohort differences in reasons for leaving school. Since respondents described an event that occurred at roughly the same age for all of them (usually 16 or 17), the age cohort differences in Table 2.4 in part reflect the impact of different circumstances at different periods in the past on school participation (the table also

reflects differences in the characteristics and in the backgrounds of persons arrested at different ages in a cross-sectional sample).

**Table 2.4**  
**AGE AND REASON FOR LEAVING SCHOOL**  
(School Dropouts Only)

REASON FOR LEAVING	AGE				
	16-17	18-19	20-24	25+	All ages
Job, family, military (pulled out)	36%	26%	47%	69%	51%
Disliked school, no ability (drifted out)	61	54	35	17	34
Expelled, arrested, drugs (pushed out)	4	20	18	14	16
Total N	101% (28)	100% (92)	100% (115)	100% (166)	101% (401)

$\chi^2 = 59.95$ ;  $DF = 6$ ;  $p < .0001$

Note: The N in this table is reduced because those individuals who left school with a diploma are omitted (they were included in Table 2.3).

Table 2.4 shows a steady decline across age groups in those who gave as a reason for leaving the fact that they disliked school or had poor grades or little ability to do school work. Nearly two-thirds (61%) of 16-17 year-old dropouts gave this as their reason for leaving school, whereas only about one in five (17%) of the twenty-five and older group gave

this as a reason. Correspondingly, the older dropouts were more likely to report leaving for work (or to look for work), to meet family responsibilities or to enter the armed forces. Most strikingly, nearly one in four (24%) of those in the twenty-five and older cohort gave as a specific reason family responsibilities as the cause for leaving school (family responsibilities is one of the subcategories in "pulled out"; see Table A2.2 for the detailed breakdown).

Unfortunately, because of the many differences among age cohorts in an arrested person sample, it is impossible to draw definite conclusions concerning the age-linked differences in reasons given for dropping out of school. Conditions in the schools may have deteriorated over time. Older respondents may recall their school days differently, with some reasons for leaving fading from memory more rapidly than others (or, over time, persons may come to view school drop out within a broader perspective). There may have been change in youth labor market opportunities and in the ability and willingness of families to make sacrifices in order to keep their children in school and to ensure their success in school. Finally, sample selection -- the fact that the older arrested group is more heterogeneous (including both "fluke arrests" and aging chronic offenders) -- gives little reason to expect that educational attainments would be the same for different age groups.

For young defendants, however, some perspective can be gained by comparisons with data from non-arrested groups.

Table 2.5 compares reasons given for dropping out of school by

18-19 year-old arrested persons in our sample with the reasons given by a national sample of 1980 high school sophomores who were re-interviewed in 1982. Although the responses of the national sample had to be regrouped and also rather arbitrarily adjusted for the fact that multiple reasons for school-leaving were allowed, there appears to be at least a broad similarity in reasons given for drop out by the two samples. In each, roughly one in four respondents point to jobs or family responsibilities as the reason for leaving school, and in each

Table 2.5

**SCHOOL-LEAVING AMONG 18-19 YEAR-OLDS  
NEW YORK CITY DEFENDANTS AND NATIONAL SAMPLE**

REASON FOR LEAVING	NYC DEFENDANTS	SPRING 1980 SOPHOMORES
Job, family, military (pulled out)	26%	28%
Disliked school, no ability (drifted out)	54	64
Expelled, arrested, dumped (pushed out)	20	8
Total N	100% (92)	100% (1,188)

Note: These percentages represent a regrouping of a more detailed list of reasons in which it was possible for respondents to indicate multiple reasons (the distribution was artificially adjusted for multiple responses by dividing all frequencies by the average number of responses per participant (1.95)). Cf. "High School Dropouts: Descriptive Information from High School and Beyond," Bulletin, U.S. Department of Education, National Center for Education Statistics, November 1983.

sample, over half of the school-leaving reasons relate to dislike of school (defendants, 54%; national sample, 64%). Not surprisingly, 20 percent of the 18-19 year-old defendants, as compared with only 8 percent of the national sample, identified expulsion or related incidents as reasons for school-leaving.

Thus, it would appear that, among teenagers, school-leaving is not usually attributed explicitly to labor market opportunities, either by very poor and largely minority groups such as our Brooklyn defendants, or by those surveyed in representative national samples. The point is an important one, since some observers (Bullock, 1973) have noted a tendency among poor minority youth to leave school for employment opportunities during stages of the business cycle when labor markets become tight (i.e., demand for workers is high), only later to encounter severe unemployment as the business cycle moves toward slack labor markets. At that point, re-entry into high school is also often blocked.

These teenage patterns are also at variance with the data for older arrested persons, where leaving school for economic reasons and to fulfill family responsibilities was seen to be the dominant pattern. Despite the difficulty of interpreting cohort differences in a sample of arrested persons rather than in a sample of the general population, it is likely that this large difference has something to do with secular changes in the availability of jobs for school-age youths.

Concluding our comparison of reasons for school drop out between arrested teenagers and a representative national

sampling, we note that, although the distribution of reasons is broadly similar for the two groups, the prevalence of drop out is very different. In the national sample, only 14 percent of males (20% of blacks, 18% of low SES, and 21% of urban sample members) in fact dropped out of high school between the sophomore and senior year; among our Brooklyn defendants, by age 20-24 (an age at which most have left school), only 27 percent had obtained a regular diploma (Table 2.2), indicating a much higher underlying rate of drop out from high school.

None of these comparisons of dropping out among age groupings or between our defendant sample and a national sample points to any specific role of schooling in the generation of crime. At this point, all we can say is that dropping out appears to be much higher among arrested persons and that, when it occurs, it appears to arise from roughly the same reasons as those identified by youthful dropouts in the general population. These reasons for the most part appear to center on the schooling experience itself (poor grades, dislike of school) rather than on outside factors that "pull" the youth out of school (family duties, labor market opportunities).

## 2. Ethnicity and Dropping Out

Ethnic differences in drop out rates are presented in somewhat greater detail in Table 2.6. Although all three ethnic groups appear equally likely to point to job and family reasons to account for their leaving school, Hispanics are a bit more likely to identify family obligations specifically (20%) as compared with blacks (15%) and whites (10%).



Table 2.6

ETHNICITY AND REASON FOR LEAVING SCHOOL  
(School Dropouts only)

REASON FOR LEAVING	ETHNICITY			
	Black	Hispanic	White	Total
<u>"Pulled Out"</u>				
To find work	19%	19%	12%	18%
To take a job	11	8	17	11
Family	15	20	10	16
Military	2	1	1	2
	47%	48%	40%	47%
<u>"Drifted Out"</u>				
No ability	4	1	5	3
Disliked school	21	35	31	28
	25%	36%	36%	31%
<u>"Pushed Out"</u>				
Expelled	12	5	4	8
Arrested	6	3	2	4
Drugs	2	1	2	2
	20%	9%	8%	14%
<u>Other</u>	7	8	14	8
Total	99%	101%	98%	100%
N	(211)	(146)	(77)	(442)

There also appear to be some differences in the economic positions of the white sample members as compared with either of the minority groups. Whites seem to have an important labor market advantage, in that they are more likely to explain employment-related school-leaving in terms of leaving for a job already in hand rather than leaving merely to look for a job. Expressed as ratios, the frequencies underlying Table 2.6 suggest that for every white respondent who reported leaving school to look for work, 1.4 others reported leaving to take up a job already located; for Hispanics, this ratio is 1 to .4; for blacks, 1 to .6.

Taken together, we have labelled sample members who have left school for job and family reasons (plus a tiny group who left for the military) as having been "pulled out" of school. Conceptually, these people are alike in that they do not attribute the interruption of their education to things that have happened in school itself. Rather, their behavior points up the "opportunity costs" of continued schooling that must be borne by youths from poor families who have a need for income that they might otherwise earn, or for their help in child care and other family responsibilities.

The next broad grouping of reasons for leaving school has more directly to do with the quality of the school experience itself. These reasons for school-leaving are diffuse; they have been labelled instances of "drifting out" of school. Overall, the modal category of reason for leaving school was simple dislike of school; 28 percent of drop outs gave this

reason. Comparing ethnic groupings, we find that black respondents are rather less likely to identify the reasons for their leaving school with "drifting out" (i.e., either "no ability" or "disliked school"); 25 percent of blacks gave such reasons as compared with 36 percent of Hispanics and whites.

Finally, about one in seven school drop outs (14%) reported being "pushed out" of school, for the most part indicating that they had been expelled (8%) or that a police arrest had led to their leaving (4%).

### C. School and Labor Market Participation

As noted in the introduction to this chapter, an important perspective on schooling in the context of employment-crime research is to see education as a key experience that prepares persons for the labor market. In this section, two aspects of this role are examined. First, we examine concurrent patterns of school and labor force participation. Do those of school age participate in the labor market in differing degrees that relate to their school status? Second, we consider respondents' perceptions of the economic significance of educational credentials, and we consider how these perceptions differ according to educational attainment, age and ethnicity.

#### 1. School Status and Labor Market Participation

Evidence has already been presented concerning the economic pressures for dropping out of school (Tables 2.4 and 2.6). But besides assessing these pressures in terms of the reasons given for leaving, direct evidence can also be brought to bear in terms of differences in labor force status according to school status. Table 2.7 presents the relationship between age, school status and the percent of the sample working at the time of the interview. The data suggest that school participation heavily influences concurrent labor force participation (recalling, however, that the employment data are from a summer interview). About one-third (36%) of 16-17 year-olds who plan to return to school were also working, while 53 percent of 16 17 year-old dropouts were working. In this direct sense,

Table 2.7

PERCENT OF THE TOTAL SAMPLE WORKING,  
BY AGE AND SCHOOL STATUS

AGE	SCHOOL STATUS			
	In or returning	Out without diploma	Diploma or degree	All school statuses <sup>a</sup>
16-17	36% (147)	53% (32)	(2)* (3)	39% (182)
18-19	50 (40)	48 (89)	(8)* (9)	51 (138)
20-24	47 (17)	56 (123)	63 (49)	57 (189)
25+	(9)* (14)	63 (171)	72 (87)	66 (272)
All ages <sup>b</sup> N	41% (218)	57% (415)	70% (148)	55% (781)

Note: In this table, the number reported in parentheses represents the total number (or base number) of respondents in intersecting row and column categories of the independent variable. The actual number of cases represented by the percentages can be calculated by multiplying the percentage by the relevant base number.

<sup>a</sup>  $\chi^2 = 51.46$ ; DF = 3;  $p < .0001$  for age groups

<sup>b</sup>  $\chi^2 = 38.30$ ; D = 2;  $p < .0001$  for school status

\* Too few cases to percentage

continuing in school appears to impose at least a short-term opportunity cost.<sup>2</sup>

**2. Perceptions of the Economic Significance of Education**

All members of the sample were asked whether having a high school diploma helped (or would help) "to find or hold a job" (and whether it would help "just a bit" or "a great deal"). Table 2.8 relates these perceptions of the economic significance of educational credentials to actual educational attainments. We note first however that the greatest number of cases

Table 2.8

**EDUCATIONAL CREDENTIALS AND PERCEPTION OF SCHOOLING'S LABOR MARKET BENEFITS**

PERCEPTION OF LABOR BENEFITS	EDUCATIONAL CREDENTIALS				
	No Diploma	GED	H.S. Diploma	AA/BA	All
No help	22%	65%	53%	25%	31%
A bit	17	13	12	17	16
A great deal	61	22	36	58	53
Total N	100% (617)	100% (55)	101% (163)	100% (12)	100% (847)

<sup>2</sup>The magnitude of the cost cannot be precisely estimated. As noted, there is a disparity between the summer employment measured and a fall return to school. In addition, as also discussed earlier, some school dropouts have left to go directly into jobs that may in fact not last for a significant period, thus artificially elevating employment levels for recent dropouts.

in the table (617) lie in the "no diploma" category; compared with this, only a few (55) have obtained a GED, about a fifth (163) a regular high school diploma, and a handful (12) some college-related credential.

Corresponding to this distribution of cases, there are differences in perception that take on a somewhat anomalous form. The large group without a diploma are far more likely to perceive possession of one as offering "great help" in labor market terms (61%), while only a minority of those who have actually attained the credential see it as that valuable: a fifth (22%) of GED holders see it as "a great help," a bit more than a third (36%) of regular diploma holders see it in these terms, and seven out of the twelve (58%) with some college degree see it this way.<sup>3</sup>

Thus, except for a handful who have some college credential in our sample of arrested persons, perception of the significance of the high school degree in labor market terms is inversely related to actual attainment of the credential. The "have nots" view the diploma as possessing great economic potency, the "haves" are far less enthusiastic.

A more refined test of this possibility is presented in Appendix Table A2.3. Here, the percentages reporting that educational credentials help "a great deal" are cross-tabulated by both school status (in a simplified three-way version) and

<sup>3</sup>The responses of these few college-educated sample members are not strictly comparable, since the question wording referred to a "college degree" for this group.

by labor force status (employed, unemployed, out of the labor force (OLF)). Among the in-school group, no differences in perceptions occur in relation to labor force status. Overall, three-quarters (74%) report that the credential helps "a great deal," and this hardly varies. Among those out with the diploma, however, participants who are working are more likely to report schooling's benefits (43%) than are those unemployed (23%) or OLF (29%). Among school drop outs, however, this relationship with labor force status is again blurred, with only the OLF subgroup (who are, in a sense, "double drop outs") being somewhat less likely to report a "great deal" of help (43%) than those employed (49%) or unemployed (57%).

To some extent, it appears that the perception of the economic value of the diploma is strong up until the point that it is subjected to test; for those groups who are not in a position to make this test (e.g., drop outs), belief in the diploma's efficacy remains; for others who go into the labor market and test its effectiveness, belief is eroded.

There is, however, still another related way to look at these patterns. It may be that the possession of the high school diploma (and the skills that usually accompany its possession) is a necessary but not a sufficient condition for a modicum of labor market success.

Belief in the effectiveness of the diploma also arises in somewhat different patterns among the ethnic groupings, as is disclosed in Table 2.9. Here (once more controlling for school status), it appears that strong commitment to the diploma's



labor market effectiveness is retained equally among the three ethnic groupings so long as they remain in school, but that among those out without a diploma, there are greater differences in the perception of its efficacy.

Table 2.9

**ETHNICITY, SCHOOL STATUS AND PERCEPTION OF  
SCHOOLING'S LABOR MARKET BENEFITS**  
(Percent Reporting "Helps a Great Deal" in Getting a Job)

ETHNICITY	SCHOOL STATUS			
	In/ Returning	Out w/o Diploma	Diploma/ Degree	All Statuses
Black	70% (163)	59% (173)	32% (131)	54% (467)
Hispanic	72 (43)	60 (126)	30 (27)	58 (196)
White	72 (25)	38 (48)	38 (56)	44 (129)
All Ethnic Groups	71% (231)	56% (347)	33% (214)	53% (792)

Note: In this table, the numbers reported in parentheses represent the total number (or base number) of respondents in intersecting row and column categories of the independent variables. The actual number of cases represented by the percentages can be calculated by multiplying the percentage by the relevant base number.

D. Conclusions

We introduced this chapter with a brief review of several different and somewhat conflicting interpretations of the significance of schooling and educational experiences for participation in crime. Perhaps the simplest view is that which sees the schools as a training ground, preparing individuals for subsequent competition in the labor market. Those who "fail" in this preparation emerge prematurely and ill-equipped for competition in the labor market. Thus, facing reduced legitimate opportunities, school failures confront rational reasons to prefer illegitimate involvements. However, the data actually presented in the chapter support a somewhat more complex view. To be sure, we found substantial differences between levels of drop out in our sample of arrested persons and in a representative national sample, but we also found similarities in the reasons for drop out, including the short-term "pull" of labor market opportunities and the "push" exerted by such factors as dislike of school. These data go some way to support an interpretation that inverts the usual human capital story: people do not become poor because they have failed at school, they fail at school (or, in any event, they drop out of school) because they are poor.

In the following chapter, we do present data that support the human capital notion that schooling contributes to subsequent labor market rewards. But in the concluding chapter of this report, we return to the phenomenon of conflicting short-term and long-term perspectives -- which in that chapter we

term "myopia" -- and we attempt to see both school drop out and participation in much high-risk, low-return crime within a larger context in which adult influences (especially parental intervention and support) shape behavior in ways that modify conventional individualistic interpretations.

## CHAPTER III

### EMPLOYMENT

#### Introduction

In this chapter we describe the employment and other labor market experiences of our arrested person sample. In the sample, in addition to much unemployment and much low-paying work, we found a considerable variety of employment and labor market experiences. We also found important differences in labor market outcomes among ethnic and age groupings.

This chapter first describes the labor force status of the sample at the time of the summer 1979 interview in Brooklyn; unemployment rates, the percent of the sample at work and the level of labor force participation are described for the sample members and compared with other population groups. Next, we describe the industry, occupation and certain other non-wage characteristics of the jobs held. Then, we examine data on earnings and hours worked. Finally, we examine the incidence of joblessness and non-work durations.

**A. Labor Force Status**

In the summer 1979 interview, respondents were asked questions designed to identify their status in the labor market in terms comparable to standard measures used in the Current Population Survey and other U.S. Census studies.

Table 3.1 compares labor force status, by ethnicity, of our sample to the 1980 census of Brooklyn males. The sample respondents' reported labor force participation rate (those either working or seeking work) is a consistent 85 percent across all ethnic groups in our sample, compared to only 66 to 68 percent for all Brooklyn males aged sixteen and over. However, the unemployment rates in our sample are about four times those of the corresponding ethnic groups in the general Brooklyn population. Both the higher labor force participation and the higher unemployment in our sample are partly attributable to the relative youth of our interviewees -- the median age of our sample is twenty-two compared to a median of thirty-one for Brooklyn as a whole. Thus, we have relatively few retirees, and many more individuals in the hard-to-employ ages of sixteen to twenty.

Table A3.1 (in the Appendix) breaks down labor force status for our sample by both age and ethnicity. In this more detailed breakdown, the age patterns in labor force status are fairly consistent across all ethnic groups. However, employment rates of whites are consistently higher than those of blacks or Hispanics. Older sample members show higher levels of employment (and of full-time vs. part-time work) and lower

Table 3.1

**LABOR FORCE STATUS BY ETHNICITY**  
**1980 CENSUS VS. 1979 VERA SAMPLE**  
(Census data on Brooklyn males 16 and over)

LABOR FORCE STATUS	ETHNICITY							
	Black		Hispanic		White		Total	
	1980 Census	1979 Vera	1980 Census	1979 Vera	1980 Census	1979 Vera	1980 Census	1979 Vera
Employed	57%	51%	60%	54%	62%	67%	60%	54%
Unemployed	9	34	8	31	4	18	6	31
OLF	34	15	32	15	33	15	33	15
Total N	100% (209K)	100% (481)	100% (110K)	100% (206)	99% (467K)	100% (141)	99% (786K)	100% (828)
Unemployment rate*	14%	40%	12%	36%	6%	21%	9%	36%
Labor force participation**	66%	85%	68%	85%	66%	85%	67%	85%

\*The unemployment rate is the result of dividing those unemployed by the sum of the employed and unemployed (e.g., by all of those in the labor force).

\*\*Represents those in the labor force, e.g., the denominator of the unemployment rate, as a percentage of the total sample.

rates of unemployment than the younger men: 47 percent of the teenagers (16-19 years) are unemployed, compared to 38 percent of the young adults (20-24 years) and 22 percent of the prime-age (25-54 years) adults. The black, young adults are the only exception to the pattern of lower unemployment in older age groups. The 20-24 year-old blacks have a 47 percent unemployment rate; not much better than the 51 percent rate of the teenagers. Labor force participation is highest for young adults of all races: 91 percent of the 20-24 year-olds say they are either working or looking for work, compared to 83 percent of the 16-19 year-olds and 83 percent of the 25-54 year-olds.

Table 3.2 attempts to control our comparisons for age and income by using data from the New York Current Population Survey (CPS). The comparison data are drawn from 16-19 and 20-24 year-old males from households with incomes below the poverty line. These data were collated and analyzed by Herbert Bienstock (1981) from unpublished monthly CPS data for the years 1978 through 1980.

Labor force participation (LFP) is much lower for the CPS comparison group than for our sample: the LFP rate is 26 percent for poor N.Y.C. teenagers and 83 percent for arrested teenagers; it is 75 percent for poor N.Y.C. young adults (20-24 years) and 90 percent for arrested young adults. This difference is probably due in part to higher levels of school enrollment in the general CPS sample. Bienstock reported school enrollment only for OLF teenagers and young adults in

Table 3.2

SAMPLE LABOR FORCE STATUS VS. NYC MALE YOUTHS BELOW POVERTY LINE<sup>a</sup>

	WHITE		BLACK/HISPANIC		ALL	
	78-80 CPS	1979 Vera	78-80 CPS	1979 Vera	78-80 CPS Averages	1979 Vera
16-19 YEAR OLDS						
Employed	27%	57%	10%	41%	14%	44%
Unemployed	13	30	7	41	12	39
Out of labor force	59	13	83	18	74	17
Totals	100% (24K)	100% (54)	100% (87K)	100% (279)	100% (53K)	100% (333)
Unemployment rate	33	34	41	50	46	47
Labor force participation	40%	87%	17%	82%	26%	83%
<hr/>						
	WHITE		BLACK/HISPANIC		ALL	
	78-80 CPS	1979 Vera	78-80 CPS	1979 Vera	78-80 CPS Averages	1979 Vera
20-24 YEAR OLDS						
Employed	59%	81%	32%	50%	58%	55%
Unemployed	11	14	14	40	17	35
Out of labor force	30	6	54	10	25	9
Totals	100% (31K)	101% (36)	100% (82K)	100% (166)	100% (52K)	99% (202)
Unemployment rate	16	15	31	44	23	38
Labor force participation	70%	95%	46%	90%	75%	90%

<sup>a</sup> Sources: Bienstock (1981) Tables 35 and 36.



the CPS survey. These rates were 92 percent and 58 percent respectively, compared with 67 percent and 6 percent respectively for arrested OLF teenagers and young adults. The summer timing of the Vera interview may also have resulted in elevated labor force participation, a supposition bolstered by the much greater gap between the two samples in LFP rates for teenagers (57% difference) versus young adults (15% difference).

Finally, it is possible that our arrested youths lied by claiming employment or job search when, in fact, they were out of the labor force. However, because they were asked details concerning employment (firm name, address, etc.), the more likely bias would have been to claim job search rather than actual employment. Such false claims by the arrested sample would have elevated the arrested youths' unemployment rates as compared with the CPS youths. However, these rates are virtually identical for the teenager samples (the CPS rate is 46%, the Vera rate is 47%) and for the white young adults (CPS rate is 16%, the Vera rate is 15%). For minority young adults, there is a wider divergence: the CPS sample shows a 31 percent unemployment rate, compared to 46 percent for our 20-24 year-old non-whites. If we have the expectation of equal unemployment rates, there is little indication of an upward bias in labor force participation as reported by the arrested person sample. It is more likely that the bulk of the difference between the two samples is attributable to early school-leaving and consequent job search and (for those in school) to the different timing of the two interviews.

The prevalence of arrests among inner-city minority youths led us to anticipate that characteristics of an arrested person sample (such as employment and educational attainment) might not differ so greatly from those of appropriately defined comparison groups (see the discussion in Chapter I above).<sup>1</sup> Unemployment in our sample is indeed much higher than for the whole of Brooklyn (Table 3.1), but our sample is also more likely to be seeking work than the general population of Brooklyn males. When we attempt to focus on a narrower comparison group -- youths with income below the poverty line (Table 3.2) -- unemployment rates begin to converge. Thus, we find some evidence that the employment characteristics of the sample of arrested persons have some relevance for the more general population of economically disadvantaged inner-city teenagers and young adults.

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<sup>1</sup>For example, Blumstein and Graddy (1982) estimated a cumulative probability of 51 percent of ever being arrested for an index offense for large-city black males in the United States.

**B. Characteristics of Current or Most Recent Jobs**

**1. Industry, Occupation and Other Non-Wage Characteristics**

This section will describe in some detail the characteristics of jobs currently or most recently held by our interviewees in the summer of 1979.

Table 3.3 starts by presenting U.S. Census industry classifications for the jobs in our sample, along with comparisons to the 1970 and 1980 Brooklyn census. The industries in our sample are dominated by retail trade (25%), manufacturing (18%), business and repair services (9%), construction (9%) and transportation (7%). The "Professional and Related" category also counts for a significant fraction, but this may be misleading: almost all of this category is comprised of menial hospital jobs, educational services, and welfare services. Close reading of the interviews suggests that many of the jobs technically classified as "Professional and Related" are low-skilled work provided by the state or city government. Similarly, most construction jobs in the sample derive from government programs and provide relatively short-term and low-paid work. Many construction related programs are meant to place participants in stable private sector work, but prospects for good placements are usually very dim.

Detailed jobs within the retail trade category for our sample (not in the table) are dominated by grocery stores and food stores (6% and 3%, respectively) and automotive repair (2%). Other notable detailed industries are "Apparel and Accessories" (3%) and "Trucking Services" (3%).

Table 3.3  
INDUSTRY COMPARISONS

INDUSTRY CLASSIFICATION	1970 CENSUS BROOKLYN	1980 CENSUS BROOKLYN	1979 VERA
Agriculture & mining	0%	0%	1%
Construction	4	3	9
Manufacturing	23	19	18
Transportation	6	7	7
Communications & other public utilities	4	3	1
Wholesale trade	5	5	5
Retail trade	14	13	25
Finance, insurance & real estate	12	13	3
Business & repair services	5	6	9
Personal, entertainment & recreation services	5	4	6
Professional & related services	17	22	12
Public administration	6	5	3
Total . . . . .	101%	100%	99%
N . . . . .	(965K)	(820K)	(779 )

Sources: U.S. Census, Advance Estimates of Social, Economic, and Housing Characteristics, 1980;

U.S. Census, 1970.

A look at our respondents' occupation categories in Table 3.4 helps to round out the picture. Our respondents' occupations are often concentrated in the most menial roles within their industries. For example, although Table 3.3 showed 25 percent of our sample in "retail trade," Table 3.4 shows only 4 percent in the "sales workers" category. Our respondents in "retail trade" are perhaps more likely to be freight handlers or stock and material handlers. Similarly, looking at the detailed occupation data (not in the table), a large fraction of the total number (79) of clerical workers are made up of messengers and office boys (18) and shipping and receiving clerks (11). The largest individual occupation in the non-household service category (181 persons) is janitors and sextons (47).

Comparisons afforded by Table 3.4 with the U.S. Census also support the general point that an arrested persons sample occupies a marginal position in the labor market. Only a third as many sample members (3%) as Census respondents (9%) are in professional or managerial occupations (and subordinate counseling and program assistant roles are included in this category); conversely, many more of our sample (18%) than Census respondents (4%) are "laborers," and our sample shows further relative concentrations in craftsmen and kindred (16% vs. 10%), operatives (non-transport) (14% vs. 9%), and "services, non-household" (23% vs. 14%).

Tables 3.5 and 3.6 describe the class of employment (private company, government jobs, etc.) of our sample members'

Table 3.4

OCCUPATIONAL COMPARISONS

CENSUS OCCUPATIONS	1980 CENSUS BROOKLYN	1979 VERA
Professional and managerial	9%	3%
Managers and administrators	11	5
Sales	9	4
Clerical and kindred	27	10
Craftsmen and kindred	10	16
Operatives, non-transport	9	14
Operatives, transport	4	7
Laborers	4	18
Services, non-household	14	23
Household workers	1	0
Total . . . . .	98%	100%
N . . . . .	(823K)	(787)

Source: U.S. Census, New York and New Jersey volumes.

current or most recent job. Overall, we find a close correspondence with class of employment data from the 1980 Census (Table 3.5). Employment with private companies dominates both groups. Our sample is slightly less likely to be working for the government. Self-employment accounts for only 6 percent of our sample's jobs and 4 percent of the Brooklyn Census jobs.

Table 3.5

CLASS OF EMPLOYMENT COMPARISONS WITH 1980 CENSUS

CLASS OF EMPLOYMENT	1980 CENSUS BROOKLYN	VERA SAMPLE CURRENT/MOST RECENT JOB
Private company	76%	79%
State, local and federal government	20	15
Self-employed	4	6
Other	0	0
Total . . . . .	100%	100%
N . . . . .	(820K)	(785)

Source: U.S. Census, Advance Estimates of Social, Economic, and Housing Characteristics, 1980.

When we examine class of employment by ethnicity for teenagers and adults separately (Table 3.6), we begin to find some important contrasts. For all groups the most common employers by far are private companies. Black respondents are much more

likely to hold government or government program jobs than the Hispanics, and somewhat less likely to be self-employed. Also, of the five respondents who reported working for a private employment agency, all were black. These figures accord with our fieldwork findings that black youths are more likely to seek and aspire to work in government or institutional areas, while Hispanics are more likely to look for work through personal and community ties.

Table 3.6  
TYPE OF EMPLOYER BY ETHNICITY

TYPE OF EMPLOYER	ETHNICITY			
	Black	Hispanic	White	Total
Private company or agency	74%	85%	84%	78%
Government	6	2	5	5
Government program	14	6	1	10
Self-employed	5	8	9	6
Other	1	0	1	1
Total . . . . .	100%	101%	100%	100%
N . . . . .	(455)	(194)	(136)	(785)

Note: Table is too sparse for reliable tests of statistical significance.



The whites had about the same percentage of "government jobs" as the blacks. The difference between the two groups arose in the government programs category (blacks: 14%; whites: 1%). It was sometimes difficult to distinguish between "government jobs" and "government programs." Government jobs were generally more established and better paid. Typical government program jobs, on the other hand, were temporary in nature (82% were summer jobs) and most offered little useful skills training. Only 40 percent of our 16-19 year-olds in government program jobs said they picked up skills at the job. Jobs with private companies seemed generally better than government program jobs in this respect: 55 percent of 16-19 year-olds said they picked up skills in private sector jobs. Even when government programs offered skills training, placement in permanent, related private sector jobs was rare.

The sharp racial segregation of government program jobs is one of the most striking results of our survey. Of a total of sixty-five 16-19 year-olds in government program jobs, fifty-three were black, eleven Hispanic and one was white. For black teenagers, government program jobs were 30 percent of all reported employment, compared with 13 percent for Hispanics and only 2 percent for whites. Part of this phenomenon may be explained by the somewhat better economic status of the whites -- but even our white group has serious employment difficulties. Twenty-nine percent of our 16-19 year-old whites were unemployed at the time of the interview, and 13 percent were out of the labor force. Since many employment programs for

teenagers are targeted to minorities and the poor, these jobs may actually be somewhat less accessible to whites. However, the almost total absence of whites from government programs also seems to underscore the relative undesirability of these jobs to whites.

A close look at our data uncovered some important relationships between summer-only jobs, government programs, school status, and ethnicity. Although government programs composed only 10 percent of all jobs, they accounted for 56 percent of the summer jobs in our sample. Private companies provided 35 percent of the summer jobs we counted. Eighty-six percent of summer jobs were held by respondents who were returning to school in September.

About half (48%) of the jobs held by respondents in school or returning to school were summer-only jobs (see Table 3.7). However, only 18 percent of the in-school whites held jobs that were considered summer-only jobs. Year-round jobs increase the whites' earnings potential while in school and reduce the short-run earnings disadvantage associated with school-going. But just as importantly, these private sector, year-round jobs are probably better integrated with the labor market at large. White youths thus have a chance at acquiring important labor market experiences and connections even before they graduate. Government summer jobs may be important for meeting the income needs of school-going youths, but they offer little preparation for the private sector dominated job market awaiting workers when they leave school.

Table 3.7

PROPORTION OF CURRENT/RECENT JOBS CLASSIFIED AS  
 SUMMER JOBS BY ETHNICITY  
 (Those in/returning to school only)

JOB CLASSIFICATION	ETHNICITY			
	Black	Hispanic	White	Total
Summer-only jobs	53%	44%	18%	48%
Year-round jobs	47%	56%	81%	52%
Total N	100% (141)	100% (34)	100% (22)	100% (197)

$\chi^2 = 9.6$ ; DF = 2; Prob < .01

Table 3.8 classifies the jobs held by our sample as "off books," "taxes only," and "taxes and benefits." Overall, 28 percent of the sample held "off-books" jobs. Jobs that withhold taxes, and especially those that also offer benefits, are more likely to be with employers of larger size and greater overall resources than off-books jobs. "Taxes only" jobs are often government program jobs.

The ethnic patterns in benefits and tax withholding are about what we would expect. Whites had the highest proportion of taxed jobs that offered benefits (45% versus 34%), blacks held the most taxes-only jobs (42% versus 33% for Hispanics and 21% for whites -- a fact traceable to the large number of government program jobs in this group). Blacks also held the

lowest proportion of off-books jobs, perhaps reflecting the dearth of informal jobs in housing project areas where blacks are concentrated.

Table 3.8

"OFF-BOOKS" JOBS AND JOB BENEFITS BY ETHNICITY

TAX/BENEFIT STATUS OF CURRENT/MOST RECENT JOB	ETHNICITY			
	Black	Hispanic	White	Total
Off-books	24%	33%	33%	28%
Taxes withheld	42	33	21	36
Taxes and benefits	34	34	45	36
Total N	100% (439)	100% (190)	100% (132)	100% (761)

$\chi^2 = 21.7; DF = 4; Prob < .001$

Table 3.9 presents age-graded patterns of job benefits separately by ethnicity. Tax withholding and benefits improve to some extent with age within each ethnic group. The white group shows the most dramatic decline with age<sup>2</sup> in off-books employment -- from 56 percent at 16-19 to only 10 percent at

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<sup>2</sup>Because the oldest sample members (those 55 years or older) were often disabled or retired, they have been excluded from the tables that follow.

Table 3.9

TAX AND BENEFIT CHARACTERISTICS OF JOBS BY AGE  
AND BY ETHNICITY

TAX AND BENEFIT CHARACTERISTICS	ETHNICITY								
	Black			Hispanic			White		
	16-19	20-24	25-54	16-19	20-24	25-54	16-19	20-24	25-54
Off-books	29%	24%	19%	35%	34%	28%	56%	38%	10%
Taxes	59	37	27	44	25	23	22	23	14
Taxes and benefits	12	38	54	21	40	48	22	38	73
Total N	100% (169)	99% (102)	100% (161)	100% (81)	99% (47)	99% (60)	100% (45)	99% (134)	100% (18)

25-54. The oldest white age group also shows the highest proportion of tax and benefit jobs at 73 percent.

The Hispanics show high levels of off-books employment even in the older age groups. The oldest Hispanics also fare poorly in the proportion of jobs in the taxes and benefits category (48%). The 16-24 year-old Hispanics seem to do at least as well in procuring benefitted jobs as the young blacks and whites.

Another aspect of employment in our sample was provided by reports concerning whether or not the respondent belonged to a union in connection with his current or most recent employment. Table 3.10 relates the incidence of unionization to ethnicity and age. Appendix Table A3.2 presents the ethnic patterns for both actual union membership and whether, in the absence of membership, the sample member worked at a location where others were in a union. In general, access to union or union-related jobs was higher for whites (except those 20-24) and is also higher among older age groups within each ethnic group.

## **2. Earnings and Hours Worked**

Table 3.11 presents the means of several earnings variables by age and by ethnicity. Throughout this chapter, we will frequently distinguish between hourly wage rates and hours of work obtained.

Table 3.10

UNION MEMBERSHIP BY ETHNICITY AND AGE  
(Percent belonging to union)

AGE	ETHNICITY			
	Black	Hispanic	White	Total
16-19	7% (151)	9% (74)	20% (44)	10% (269)
20-24	21 (82)	30 (44)	16 (25)	23 (151)
25-54	40 (133)	33 (49)	51 (35)	40 (217)

Note: In this table, the numbers reported in parentheses represent the total number (or base number) of respondents in intersecting row and column categories of the independent variables. The actual number of cases represented by the percentages can be calculated by multiplying the percentage by the relevant base number.

X<sup>2</sup> for ethnic differences within age groups as follows:  
 16-19: X<sup>2</sup> = 7.4    DF = 2    Prob < .05  
 20-24: X<sup>2</sup> = 2     DF = 2    n.s.  
 25-54: X<sup>2</sup> = 3     DF = 2    n.s.

Table 3.11

MEANS OF EARNINGS, HOURS WORKED, AND DAYS IN SCHOOL BY AGE AND ETHNICITY  
(Standard Errors in Parentheses)

AGE	ETHNICITY					
	Black		Hispanic		White	
	N	Mean	N	Mean	N	Mean
<u>16-19</u>						
Current/most recent gross hourly wage	170	\$3.30 (.11)	80	\$3.33 (.18)	41	\$3.65 (.31)
Legal income last year	206	\$1685 (184)	93	\$1647 (295)	56	\$3300 (641)
Hours worked last year	193	500 (49)	88	467 (61)	53	1115 (147)
Days in school last year	202	159 (9)	92	105 (14)	55	85 (17)
<u>20-24</u>						
Current/most recent gross hourly wage	100	\$3.62 (.12)	45	\$3.95 (.25)	32	\$5.39 (.70)
Legal income last year	122	\$3136 (348)	56	\$3748 (497)	38	\$7955 (1852)
Hours worked last year	114	876 (83)	52	1072 (144)	33	1498 (177)
Days in school last year	122	19 (5)	56	0 (0)	38	18 (10)
<u>25-54</u>						
Current/most recent gross hourly wage	153	\$5.07 (.23)	55	\$4.58 (.28)	46	\$7.08 (.64)
Legal income last year	182	\$5365 (485)	69	\$5243 (694)	52	\$8600 (1496)
Hours worked last year	159	1116 (90)	64	1094 (138)	46	1334 (201)
Days in school last year	182	14 (4.28)	69	4 (3.96)	52	0 (0)



Among teenagers, there are few differences in wage rates among ethnic groups. Teenage whites show the highest mean wage rate (\$3.65/hr) but the mean wages of teenage blacks and Hispanics are not much lower (\$3.30/hr and \$3.33/hr, respectively). However, dramatic differences appear in total hours of work over the past year among these three groups. The teenage whites work far more hours (1115) than do teenage blacks (500) or Hispanics (467), giving white teenagers about double the annual income of minority teenagers despite similar hourly wage rates.

The lower work hours of blacks and Hispanics may explain the much higher levels of school enrollment described in Chapter II above. Black 16-19 year-olds have the highest average days in school last year (159), followed by Hispanics (105) and whites (85). Limiting our comparisons to respondents who spent 120 or more days in school last year, ethnic differentials in hours worked persist. Whites in school for 120 days or more over the past year worked an average of 788 hours over the year; in-school blacks, 472 hours; and in-school Hispanics, 351 hours. The lower average work hours of the young in-school blacks are consistent with what we know about their access to jobs. If our in-school black respondents managed to find employment, it was likely to be in a government program limited to the summer months.

It is also possible that there is some difference in willingness to work among the ethnic groups in our sample. One way to approach the willingness or personal incentive to work is to compare an individual's reservation wage (the lowest wage

at which he is willing to work) to the wage he is likely to receive in the labor market. We compared the mean reservation wages reported by 259 of our unemployed respondents to the actual mean wages reported by comparable age and ethnic groups.<sup>3</sup> The results in Table 3.12 show that mean reservation wages are very close to mean actual wages for the 16-19 year-old blacks, Hispanics, and whites. The minority youths' lower reservation wages correspond to the lower actual wages they receive in the market. Thus we find no evidence here of ethnic differences in willingness to work at available wages.

Some ethnic differences in reservation wages do appear among the older age groups, but any inferences must remain speculative due to the small sample sizes. The 20-24 year-old unemployed Hispanics appear in Table 3.12 to have relatively high reservation wages.

In the older age groups we begin to find dramatic ethnic differences both in hourly wage rates and hours worked. The 20-24 year-old whites earned an average of \$5.39/hr, while the blacks earned \$3.62 and the Hispanics \$3.95; the 20-24 year-old whites worked 1,498 hours over the past year (Table 3.11) while blacks (876 hours) and Hispanics (1,072 hours) worked much less. The combined result of these wage rate and hours worked differences was that 20-24 year-old whites earned an average of \$7,955 in the past year, while blacks and Hispanics of the same age earned \$3,136 and \$3,748, respectively. Similar ethnic differentials occur in earnings and hours worked among the 25-54 year-old sample members.

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<sup>3</sup>The reservation wage question was asked of a random subsample of interviewees in one of the two interview supplements.

Table 3.12

RESERVATION WAGE AND ACTUAL WAGE BY AGE AND ETHNICITY  
(Standard Errors in Parentheses)

AGE	ETHNICITY					
	Black		Hispanic		White	
	N	Mean	N	Mean	N	Mean
<u>16-19</u>						
Reservation wage (hourly)	78	3.31 (.17)	35	3.28 (.17)	14	3.60 (.32)
Current gross hourly wage	170	3.30 (.11)	80	3.33 (.18)	41	3.65 (.31)
<u>20-24</u>						
Reservation wage (hourly)	48	3.48 (.15)	17	4.62 (.42)	5	3.92 (.31)
Current gross hourly wage	100	3.62 (.12)	45	3.95 (.25)	32	5.39 (.70)
<u>25-54</u>						
Reservation wage (hourly)	41	3.80 (.17)	13	3.59 (.49)	5	7.27 (3.02)
Current gross hourly wage	157	5.03 (.23)	56	4.52 (.28)	46	7.08 (.64)

The persistent ethnic differences in our survey suggest that the three groups may be operating in distinct labor market environments. Blacks show the strongest orientation toward governmental and institutional channels for advancement (such as school and government programs). However, they lack access to the better opportunities in the private sector. This orientation of the blacks may be seen as an adaptive response to discrimination in the private labor market. Blacks may perceive a greater likelihood of equal treatment and opportunity in governmental and institutional settings. The private sector remains the most significant source of employment for all groups. Many blacks who begin their careers with schooling and work in temporary government programs may later be frustrated in their attempts to advance into stable and meaningful government employment.

The Hispanics show a greater involvement in private sector employment than the black respondents. However, a large proportion of Hispanics work in declining manufacturing industries in the private sector. Inferences about their job advancement prospects are also complicated by possible cohort differences in our sample. The youngest Hispanics do relatively well in terms of hourly wage rates, while the oldest do relatively poorly. It is difficult to determine whether the relatively flat age profile in wage rates for Hispanics is due more to poor advancement prospects in their labor market (largely manual labor in the private sector) or to relative improvements in the younger cohorts.

Table 3.13 attempts to shed light on job advancement prospects by comparing proportions of respondents reporting raises or promotions in different age and ethnic groups. Jobs held by minority 16-19 year olds appear to be predominantly "dead end"; only 15 percent of the blacks and 12 percent of the Hispanics in this age range received raises or promotions in their cur-

Table 3.13

PERCENT OF RESPONDENTS GIVEN RAISE OR PROMOTION  
AT CURRENT OR MOST RECENT JOB, BY ETHNICITY AND AGE

AGE	ETHNICITY			
	Black	Hispanic	White	All Ethnic Groups <sup>a</sup>
16-19	15% (170)	12% (83)	44% (45)	18% (298)
20-24	33 (102)	42 (45)	41 (29)	37 (176)
25+	52 (152)	40 (52)	56 (43)	50 (247)
All ages <sup>b</sup> N	32% (424)	28% (180)	48% (117)	34% (721)

Note: In this table, the numbers reported in parentheses represent the total number (or base number) of respondents in intersecting row and column categories of the independent variables. The actual number of cases represented by the percentages can be calculated by multiplying the percentage by the relevant base number.

<sup>a</sup>  $\chi^2 = 71.16$ ;  $p < .0001$  for age groups

<sup>b</sup>  $\chi^2 = 21.01$ ;  $p < .01$  for ethnic groups

rent or most recent job. Whites (16-19) did much better: 44 percent said they had received a raise or promotion.

There is a marked increase in raise/promotion incidence moving from the 16-19 to 20-24 age groups among the blacks and Hispanics. Reported raises/promotions increase again among 25-54 year-old blacks, but the oldest Hispanics show little difference from the 20-24 year-olds.

Our interviewees were also asked about whether or not they had "picked up skills" at their jobs and whether they were satisfied with the job. On these items, there did not appear to be large or consistent differences by age or by ethnicity. Overall, about half of our respondents said that they had picked up skills at their jobs. The only notable ethnic contrast in this item occurred among the 16-19 year-olds: young whites were substantially more likely to report that they picked up skills.

### 3. Minimum Wage Compliance and Implications for Unemployment

The federal minimum wage, to the extent that it is enforced in this labor market, may help to explain the less drastic ethnic wage differentials in the youngest age group. The minimum wage is also commonly cited as a cause of unemployment. While the issue has been heavily debated, it is generally acknowledged among economists that the minimum wage has some disemployment effects. An alternative explanation of unemployment is that an unemployment equilibrium occurs in the labor market for low-skilled workers: market wages for this group may be too low to motivate sufficient work effort, thus

there is no wage that is low enough to equal the marginal product of the worker.

Our survey suggests that a substantial fraction of employers do not comply with the minimum wage -- and that there are many employees who are willing to work at sub-minimum wage rates, at least for a while.<sup>4</sup> Twenty-four percent of the sample reported a wage which was below the federal minimum at the time of their employment. As expected, most sub-minimum wage jobs were concentrated among the younger members of the sample: 44 percent of the 16-17 year olds and 26 percent of the 18-19 year olds earned less than the minimum. Blacks and Hispanics were slightly more likely than whites to earn less than the minimum (25% for blacks and Hispanics vs. 19% for whites).

The employment patterns of the Vera sample are also marked by frequent quits -- a seemingly paradoxical result considering the sample's high rates of unemployment. Part of the quit phenomenon can be accounted for by the younger members of the sample who have limited attachment to the labor market. Osterman (1980) has observed a similar pattern of weak job attachment and "exploration" among the youths he studied. However, our field research also points to another pattern where workers are pressured out of their jobs because of low wages or exploitative working conditions (Sullivan, 1984;

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<sup>4</sup>The minimum wage level changed several times during the period covered by the Vera survey: on Jan. 1, 1977 it changed from \$2.00 to \$2.30; on Jan. 1, 1978 it increased to \$2.65; on Jan. 1, 1979 it became \$2.90.

Chapter III). Those who quit or are fired from such low-skilled jobs can generally be easily replaced by employers because of the large supply of unskilled labor.

Is there an unemployment equilibrium brought about by a low wage/low work effort relationship? While we cannot arrive at a definitive answer here, we can offer some relevant observations. The typical unskilled worker in this population works for a small private company under fairly close supervision. Lateness and absence from work is generally not tolerated (policies are often much more strict than for white-collar occupations), and the general impression is that most of these (private sector) jobs involve rather hard work. The actual economic productivity of the worker naturally depends on the efficiency of the enterprise and the competitive conditions in its market -- but the intrinsic effort of the worker himself appears to be high in most cases despite the low wages offered.<sup>5</sup> In this environment of close supervision, the workers appear to "regulate" their work effort by quitting their jobs when conditions become too bad to tolerate. In jobs that involve firm- or task-specific human capital, or where close

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<sup>5</sup>Pressing economic need seems to override finer distinctions about wage rates and work effort for many in this population. The Vera Institute's Neighborhood Work Project, a program which provides near minimum-wage (\$4.15 per hour) jobs for released offenders under very demanding work conditions, is heavily oversubscribed by men who apparently need any job that they can get. Here too, however, few men actually complete their allotment of work (the question of who drops out for better jobs vs. those who simply quit is one of the issues currently being researched at Vera). In another Vera program (Community Service Sentencing), site supervisors have been approached by non-participants asking to work the day in exchange for the program's standard remuneration: carfare and lunch money.



supervision is impractical, the employer's position is different: here there is reason for him to offer incentives (high wages, good job conditions) to the employee to keep him at the job (Doeringer and Piore, 1971).

## C. Earnings Determination

### 1. Determinants of Hourly Wage Rates

Thus far we have examined several different measures of labor market performance, relying mostly on age and ethnicity to categorize the members of our sample. In order to isolate the many other factors affecting job performance, such as education, experience, and criminal involvement, in the following sections we use ordinary least squares (OLS) regression models for various labor market outcomes.

Table 3.14 presents a multiple regression of hourly wage rates for the entire sample. Age, prior job experience (PRIOREXP), high school diploma (REGDIP),<sup>6</sup> and highest grade completed (HIGRADE) all have significant positive effects on hourly wage. The variable INSCHL (returning to school in September) has a negative impact on current wages, but falls short of significance.

The ethnicity coefficients BLACK and HISPANIC are large in magnitude and statistically significant. This reinforces the earlier findings from simple differences in mean wage rates (Table 3.11). Even after controlling in the regression for differences in age, education, and experience, minority respondents show a severe earnings disadvantage. For example, the model implies that a black or Hispanic in our sample can

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<sup>6</sup>The model distinguishes between the standard high school diploma (REGDIP) and the General Equivalency Diploma (GED). The magnitude of their coefficients are similar, but including both separately in the model reduces their apparent statistical significance.

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Table 3.14

MULTIPLE REGRESSION OF LOG OF HOURLY WAGE RATE  
(Standard Errors in Parentheses)

VARIABLE	COEFFICIENT
INTERCEPT	.068 (.369)
AGEYRS	.048 (.015)
AGEJSQ	-.00067 (.0002)
PRIOREXP	.000087 (.00002)
REGDIP	.097 (.059)
GED	.086 (.077)
HIGRADE	.036 (.012)
INSCHL	-.068 (.051)
BLACK	-.161 (.051)
HISPANIC	-.147 (.059)
MARRIED	.071 (.044)
ARRESTS	.0067 (.009)
INC2DAYS	-.00018 (.0004)
PRIORS	.0045 (.005)
WGDATE	.000028 (.00004)
	R <sup>2</sup> = .245 N = 579

expect to receive only about 78 percent of the hourly wage of a white individual with similar characteristics and qualifications.<sup>7</sup>

In a sample of arrested persons, it is natural to assume that the criminal justice involvements of sample members would adversely affect labor market outcomes, including hourly wage rates, since time spent in "the system" would interfere with work or job search and a record of criminal justice involvement, if known, might make the participant less attractive to potential employers. However, no significant relationships between wage rates and our three crime measures (arrests during the last two years (ARRESTS), days of incarceration in the past two years (INC2DAYS), and arrests prior to two years ago (PRIORS)) showed up in these regressions.

The wage rate regressions also attempted to control for the various sources of support available to individuals when unemployed.<sup>8</sup> Economic "search theories" of unemployment suggest that those who have better means of outside support are more willing and more able to wait for higher wage offers before accepting a job. Two recent social experiments (LIFE and TARP) offering transitional financial aid to released ex-offenders while they were looking for work did show a positive

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<sup>7</sup>This comparison uses the whites' mean wage of \$5.43/hr as a basis. The model predicts larger wage differentials at higher income levels, and lower wage differentials at lower income levels because it is based on the log transformation of the wage rate.

<sup>8</sup>The support variables are not included in the final versions of the equations shown in Table 3.14.

association between receipt of financial support and wage rates for the jobs they found (Rossi et al., 1980; Mallar and Thornton, 1978). Unfortunately, the evidence from our sample on this issue is scant. It is difficult to rank with confidence the various different sources of support in order of monetary value or desirability.<sup>9</sup> For example, the quality and extent of government or institutional support varies greatly depending on the nature of the specific program or institution. Similarly, the strength of personal supports depends on the financial resources (and willingness to help) of family and friends. There is some reason to believe that personal supports were named in the absence of any additional, independent support resources. Thus, personal supports would occupy the lower end of the support resource scale. Our regressions did in fact show a negative and statistically significant association of personal supports with wage rates. Other support variables fell short of statistical significance in the wage rate model.

## 2. Determinants of Hours Worked

In this section, we estimate a regression model to identify the determinants of hours worked in the past two years.<sup>10</sup>

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<sup>9</sup>The survey used a battery of support items which were subsequently grouped into savings, unemployment insurance, "odd jobs," "hustling," personal ("family," "spouse," "friends") and institutional ("welfare," "other transfer") types.

<sup>10</sup>About 82 percent of our sample had at least some work over the past two years. Thus, the statistical problem of "sample truncation" (from people with zero hours of work) is not likely to have any practical importance for these regression results.

Table 3.15

MULTIPLE REGRESSION OF HOURS WORKED  
OVER THE PAST TWO YEARS

VARIABLE	COEFFICIENT
INTERCEPT	823.233 (1011.506)
AGEYRS	84.253 (59.658)
AGESQ	-1.429 (.9)
PRIOR2YR	.957 (.144)
PR2YRSQ	-.00011 (.00002)
REGDIP	277.571 (232.628)
GED	415.903 (296.189)
HIGRADE	11.745 (46.886)
DAY1SCHL	-0.645 (1.085)
INSCHL	-305.349 (272.680)
BLACK	-431.295 (198.713)
HISPANIC	-725.793 (228.400)
MARRIED	683.404 (173.829)
ARRESTS	44.533 (36.964)
INC2DAYS	-3.421 (1.740)
PRIORS	-31.474 (19.626)
	R <sup>2</sup> = .227 N = 618

Table 3.15 presents the results. Hourly wage rate was not significant in exploratory regressions and is not included in Table 3.15. Prior job experience (PRIOR2YR) has the strongest association with current hours worked. Unlike the results with hourly wage rates, age does not show a statistically significant association with hours worked. The effect of having a diploma or GED is positive,<sup>11</sup> while the highest grade completed shows only a weak effect. As with hourly wages, the coefficients for BLACK and HISPANIC are negative and significant. Controlling for all other factors in the regression, blacks on average obtain 431 fewer hours of work over the past two years than whites, while Hispanics on average obtain 726 fewer hours.

Three measures of criminal involvement -- arrests during the past two years (ARRESTS), incarceration (INC2DAYS), and prior arrests (PRIORS) -- have the expected negative sign. Of the three crime variables, past incarceration (INC2DAYS) shows the strongest relationship to hours worked.<sup>12</sup>

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<sup>11</sup>When the two types of high school degrees are merged as a single diploma variable, they show statistical significance at the .01 percent level.

<sup>12</sup>Since the mean days of incarceration over the past two years was only fourteen days, it is unlikely that the incarceration coefficient simply reflects foregone employment hours due to time spent in jail.

D. Periods of Joblessness

Almost half (46%) of our 1979 sample was either unemployed or out of the labor force at the time of the interview. The overall median length of these jobless spells which were on-going at the time the respondent was interviewed in the summer of 1979 was 222 days.

Table 3.16 compares median jobless durations for ethnic groups, finding only small differences between the groups. This result is somewhat surprising since the white respondents report far more days of work over the past year. If average jobless durations are roughly similar between the three ethnic groups, then the differences in days worked could be explained by the relative instability of jobs held by the minorities. Median duration of currently held jobs in our sample is 367 days for whites, 124 days for Hispanics, and 211 days for blacks. Thus, it appears that the hours worked disadvantage of

Table 3.16

**MEDIAN JOBLESS DURATIONS BY ETHNICITY**  
(Currently non-working respondents)

ETHNICITY	MEDIAN JOBLESS DURATION	N
Black	232	(275)
Hispanic	237	(115)
White	196	(58)
Total	222	(448)



our minority respondents is largely accounted for by the shorter duration of the jobs they hold.

When asked "Why did you leave your job?" and "What is your biggest problem finding work?" (see Tables A3.3 and A3.4 in the Appendix), participants' responses were varied. The shortest median jobless durations are for those who quit for another job (116 days) or were "laid off" (138 days). Those who said they were fired (172 days) or had problems with the boss (149 days) also report relatively lower median durations. People who quit because of illness (614 days) or who lost their job because of an arrest (667 days) have the longest jobless durations. However, only 3 percent of the respondents said that an arrest was responsible for the loss of their last job.

The most common response to "What is your biggest problem finding jobs?" was lack of jobs (see Table A3.4). No education was the biggest problem for 9 percent of the respondents; surprisingly, this group had the lowest median jobless duration (185 days). Criminal records were the biggest problem for another 9 percent; these people had the second highest median jobless duration (399 days). (Incarcerated groups might be over-represented here.)

## CHAPTER IV

### CRIME

#### Introduction

This chapter presents what we know concerning the arrest experiences of the Project's sample of Brooklyn criminal court defendants. The greater part of that knowledge draws upon official arrest histories and, therefore, does not explicitly encompass underlying crime participation. Since the data were obtained exclusively from an arrested population, comparisons are also limited to the type and extent of criminal justice involvement among those "known to the authorities."

The Project does have available one source of information that allows a closer examination of perceptions and social contexts related to crime behavior among an arrested person sample. One year after the summer 1979 interview, an effort was made to re-interview a randomly selected subsample (n=400) of the original 1979 sample. The small follow-up interview sought information on respondents' perceptions of the risks involved in their criminal activity; their reports of the criminal involvements of friends and family members; and (among those admitting personal criminal involvement) their recollections of efforts to plan their crime as against engaging in "spur of the moment" acts. These follow-up items provide a direct, valuable glimpse at respondents' reported crime participation.

However, two characteristics of the follow-up interview sample restrict it to essentially exploratory and speculative uses. First, the small size of the successfully recontacted subsample (n=152) makes extensive multivariate analysis impossible. Second, and more importantly, the low percentage of successful re-contacts (40%) suggests that those ultimately followed up are unrepresentative of the total group selected for re-interviews. These two limitations do not prevent us from presenting in a tentative way interesting information on social contexts and perceptions of the risks associated with different types of criminal activity that were elicited in the follow-up. In presenting these data, however, we do not make claims as to their representativeness of the overall arrested population and we do not attempt to apply formal statistical tests.<sup>1</sup>

In what follows, we first describe the specific police arrest charges associated with the sampled arrest and discuss the development of a charge type categorization that highlights

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<sup>1</sup>The follow-up clearly differs from the originally interviewed sample on at least this variable "success of re-interview." However, in comparing the two samples on numerous interview and arrest history variables that were elicited from the total sample at the original interview or from criminal history data (age, race/ethnicity, schooling, employment status at the first interview, type and severity of sampled arrest charge, etc.), there was no evidence from t-tests of a statistically significant ( $p < .10$ ) difference between the total sample and the successfully re-interviewed subsample. One or two items did reach the .10 threshold of significance, but this was expected given the large number of comparisons that were made. This result, while unexpected, is consistent with the notion that essentially random factors (bad addresses, residential mobility, etc.) accounted for the high level of attrition in the follow-up sample.

income/non-income distinctions; we then examine the associations between personal characteristics of sample members and arrest charge characteristics; next, we examine the prior criminal justice involvements of sample members and consider outcomes from the sampled arrest; finally, we turn to a detailed examination of the follow-up data. Discussion of the follow-up is divided into an analysis of risk perceptions and scrutiny of contextual data such as the crime involvements of family members and friends and the characteristics of respondents' social environments. The following chapter examines the relationship between arrest involvements and labor market variables.

### A. Arrest Charges and Charge Typology

Our data on the arrests of the Brooklyn sample come from official arrest records, which were coded in detail for a time span that began two years prior to the sampled (summer 1979) arrest and extended for one year after.<sup>2</sup> For simplicity, each of the arrests in the three-year interval was summarized by a seven-category "charge type" variable that reflected the nature and severity of the police charges accompanying the arrest.<sup>3</sup> While sample members vary in the number and types of their recorded arrests, each respondent's records contain at least the summer 1979 arrest that led to his inclusion in the sample. Discussion in this section focuses exclusively on this sampled arrest.

Table 4.1 sets out in bold face the seven major charge categories for the sampled arrest. In some instances, the table also presents the more detailed arrest charges that were included within the major categories. Three income-oriented categories -- robbery, burglary and grand larceny -- were present in the arrested person sample with enough frequency to preclude the need for further aggregation. However, a rather

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<sup>2</sup>Still earlier arrests were summarized into variables noting the total number of early arrests, number of convictions, days in jail and months in prison, etc.

<sup>3</sup>Although criminal charges technically originate only at lower court arraignment and are brought by the prosecution, the New York City police describe the defendant's activities using Penal Law headings. These informal characterizations are frequently termed "police charges" and usually closely resemble later formal prosecution charges at arraignment.

Table 4.1

## ARREST CHARGE TYPES FOR SAMPLED ARREST

	<u>Number</u>	<u>Percent</u>
<u>INCOME CHARGES:</u>		
Robbery	138	16.0%
Burglary	183	21.2
Grand larceny	99	11.4
Other income:	97	11.2
(Arson)	(5)	(.6)
(Fraud)	(12)	(1.4)
(Gambling)	(12)	(1.4)
(Pimping)	(2)	(.2)
(Drug sales)	(5)	(.6)
(Prostitution)	(2)	(.2)
(Petty larceny)	(59)	(6.8)
<u>Total Income</u>	<u>517</u>	<u>59.8</u>
<u>NON-INCOME CHARGES:</u>		
Serious violence:	52	6.0
(Murder & manslaughter)	(29)	(3.4)
(Kidnapping)	(1)	(.1)
(Rape)	(22)	(2.5)
Assaults & weapons:	271	31.4
Assault	(138)	(16.0)
Weapons	(107)	(12.4)
Conduct	(20)	(2.3)
Resisting arrest	(5)	(.6)
Other non-income	(1)	(.1)
Drug possession & other:	25	2.9
Drug possession	(24)	(2.8)
Morals	(1)	(.1)
<u>Total Non-Income</u>	<u>348</u>	<u>40.3</u>
<u>TOTAL ALL ARREST CHARGES*</u>	<u>865</u>	<u>100.1%</u>

\*Missing arrest charges = 37.

diverse array of charges has been collected under the "other income" category.<sup>4</sup>

In Table 4.1, income-oriented offenses predominate.<sup>5</sup> More than one-fifth (21%) of the sample were arrested on burglary charges and nearly that percentage (16%) were arrested on robbery charges. Taken altogether, income-oriented categories accounted for three-fifths of all arrests.

Income orientation may, in fact, be understated in Table 4.1 because the charge category to which an arrest was assigned can sometimes be ambiguous. For example, if there was both an income- and a non-income-oriented charge associated with an arrest, we classified the arrest based on the more serious of the two charges. Thus, sometimes an income-oriented charge was superceded by a non-income-oriented charge with a higher felony weight. This problem was lessened somewhat by coding the charge type as income-producing when an underlying income and non-income charge had the same severity (generally, income-oriented charges tend to carry a higher felony weight than accompanying non-income charges).<sup>6</sup>

Table 4.2 shows the extent to which the charges made on the sampled arrest were either purely income-producing, non-

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<sup>4</sup>The inclusion of five arson charges under this category is arbitrary.

<sup>5</sup>Besides the charges reported in Table 4.1, others were charged through so-called Desk Appearance Tickets (DATs), which provide for the immediate release of the person charged with arraignment scheduled in the future. DATs are, however, issued only for comparatively minor and usually non-income offenses, and have not been included in our sample.

<sup>6</sup>An additional reason for coding as income those arrests with both income and non-income charges of equal severity is the Project's emphasis on income crime and its role as an alternative to legitimate employment.

Table 4.2

MIX OF INCOME/NON-INCOME CHARGES ON SAMPLED ARREST BY CHARGE TYPE  
(Current Arrests)

MIX	CHARGE TYPE							
	Robbery	Burglary	Grand Larceny	Other Income	Serious Violence	Assaults & Weapons	Drug Poss. & Other	All Charges
All income charges	38%	81%	63%	76%	0%	0%	0%	39
Mixed income & non-income	62	19	37	24	21	4	20	24
All non-income charges	0	0	0	0	79	96	80	37
Total N	100% (138)	100% (183)	100% (99)	100% (97)	100% (52)	100% (271)	100% (25)	100% (865)



income-producing or mixed. For each charge type, the table presents the fraction of arrests that resulted in only an income charge, in only a non-income charge or in both income- and non-income-producing charges. Of all income-oriented charges, burglaries are most likely (81%) to be "pure types," with no admixture of non-income charges; other income (76%) and grand larcenies (63%) follow. Least "pure" is the robbery charge type; 62 percent of arrests in this category have an associated non-income charge. Most of the non-income charges associated with robbery are, as expected, assaults (43%) or weapons (52%). Among those grand larcenies with an admixture of non-income charges, 78% of the non-income charges were for "unauthorized use," a lesser charge typically included in arrests for auto theft, which in some cases (e.g., joyriding by teenagers) is not income-oriented.

Besides summarizing a range of underlying specific charges, our charge typology can also be used to describe the relative severity of the arrest charge. A charge category in the typology may include a range of offenses that are classified in the New York State Penal Law as anything from a violation (least serious) to an A felony (most serious). Numerical weights ranging from one (violations) to eight (A felonies) were assigned to each of these severity classifications. Then, given the kinds of offenses that are included in each category, it can be described in terms of the minimum and maximum severities of the included Penal Law offenses. Table 4.3 gives these and also the mean severities and associated standard deviations

Table 4.3

CHARGE TYPE AND CHARGE SEVERITY  
(Sampled Arrests)

CHARGE SEVERITY	CHARGE TYPE						
	Robbery	Burglary	Grand Larceny	Other Income	Serious Violence	Assaults & Weapons	Drug Poss. & Other
Minimum severity	4.00	4.00	3.00	2.00	4.00	2.00	3.00
Maximum severity	7.00	7.00	6.00	7.00	7.00	4.00	4.00
Mean	6.16	5.05	4.31	4.22	5.91	3.33	3.40
Standard Deviation	0.70	0.60	0.56	1.39	1.22	0.78	0.55
N	138	183	99	97	11	12	5

Key:

Violation = 1  
 B misdemeanor = 2  
 A misdemeanor = 3  
 E felony = 4

D felony = 5  
 C felony = 6  
 B felony = 7  
 A felony = 8

for each charge type. As can be seen in the table (examining standard deviations), the "drug possession and other" charges are the most, and the "other income" charges are the least homogeneous.

We have devoted a considerable amount of space to describing the construction of the charge type variable because it is a key variable in identifying income-oriented crime participation. In using charge type to classify sample members, we implicitly assume that charge type at least on average reflects relatively stable, on-going criminal activities of the individual.<sup>7</sup> Use of the charge type variable would be questionable, for example, in a situation in which most offenders engage in a wide variety of offenses and get arrested on a particular charge on a random basis. In these circumstances, it would be possible that charge type of the sampled arrest simply reflects the chance occurrence of arrest for a particular offense. We would then not expect charge type to be related to the personal characteristics of the individual; nor would we anticipate an association between charge types for consecutive arrests of an individual.

In fact, as is evident in Table 4.4, there is more stability in the charge type classification than would be anticipated

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<sup>7</sup>In presenting evidence of some continuity in arrest charges associated with different arrests, we by no means wish to argue for rigid patterns in crime behavior or for a simplistic definition of criminal career types on the basis of arrest charge information. Others have, we believe, both critiqued the notion of narrow career types and demonstrated the considerable overlap in criminal involvements among those convicted for given offenses (Chaiken and Chaiken, 1982).

in the absence of any crime specialization at all.<sup>8</sup> Table 4.4 cross-classifies the sampled and subsequent arrest for those sample members who were rearrested, using four broad charge classifications (robbery, burglary, other income and non-income charges).<sup>9</sup> The ratios in the diagonals of the table represent the discrepancy between the actual percentage of respondents who have been rearrested for the same charge type as their sample arrest and the expected percentage (if there were no associations between the two arrests). The overall chi-square relating the two charge distributions is highly significant ( $p < .0001$ ). For example, "other income" charges, which represent 33 percent of all subsequent arrest charges, are 49 percent of the subsequently arrested persons whose sampled arrest was in this category, providing the indicated ratio of 1.48. Similarly, 50 percent of those arrested on non-income charges, if they were rearrested at all, had rearrest charges in this category, versus 31% of the total rearrested group, providing the indicated ratio of 1.61 of actual to expected arrests in this cell of Table 4.4

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<sup>8</sup>For a discussion of the many issues associated with the notion of offender "careers," see Gibbons (1977).

<sup>9</sup>The charge categories were further collapsed to emphasize our interest in income rather than non-income crime, and to eliminate overly refined differences (such as between petty larceny, included within the "other income" category of the seven-category variable, and grand larceny).

Table 4.4

CONTINUITY BETWEEN SAMPLED AND  
 SUBSEQUENT ARREST CHARGE TYPES  
 (Ratio of Actual to Expected Arrest Frequencies:  
 Rearrested Sample Members Only)

SUBSEQUENT ARREST	SAMPLED ARREST				(N)
	Robbery	Burglary	Other Income	Non- Income	
Robbery	1.65	1.00	0.88	0.88	(57)
Burglary	0.33	2.06	0.83	0.61	(60)
Other Income	1.09	0.76	1.48	0.73	(107)
Non-Income	0.97	0.71	0.71	1.61	(102)
N	(50)	(93)	(88)	(95)	(326)

$\chi^2 = 56.42$ ; DF = 9;  $p < .0001$

**B. Personal Characteristics and Sampled Arrest Charge Type**

Charge types vary by age, ethnicity, schooling and marital status. Younger respondents were more frequently arrested on income-oriented than on non-income-oriented charges, and they were charged with robberies especially often. Blacks and Hispanics, respondents without diplomas and respondents who had never been married, also were more often arrested for income-oriented crimes. However, before addressing the details of the relationship of charge type to personal characteristics, some consideration should be given to differences between the sample as a whole and the general Brooklyn population.

Because ours is a sample of arrested persons, comparison between sample characteristics and the characteristics of the Brooklyn population (of males 16 and older) provides insight into the differences that define arrested subpopulations. For example, Table 4.5 compares the age distribution of the sample of arrested persons with the age distribution of Brooklyn males sixteen and older. It is evident that young males are greatly over-represented in a sample of arrested persons as compared with older males. Youths sixteen to seventeen years old are included in the arrested person sample with a frequency 4.6 times as great as would be expected if age and arrest were unrelated. Over-representation drops systematically with age until those forty-five and older account for only three percent of arrested persons but account for 41 percent of the population of Brooklyn males sixteen and older.

Table 4.5

VERA SAMPLE AND BROOKLYN POPULATION  
COMPARISONS ON SELECTED CHARACTERISTICS

AGE	Vera Sample	Brooklyn <sup>a</sup> (16+)	Sample/ Brooklyn Ratio
16-17	23%	5%	4.6
18-19	17	5	3.4
20-24	25	12	2.1
25-44	33	37	.89
45+	3	41	.07
Total N	100% (902)	100% (NA)	

<sup>a</sup> Estimated from 1980 U.S Census; assumes age distribution of male, female population are comparable.

These comparisons suggest that, since no sample members enter the sample more than once, per capita arrest rates among young Brooklyn residents are far greater than for older residents. It is also likely, judging from the peaking of arrested person-population disparities among the youngest age category (indicative of a peaking of per capita arrest rates in that age group) that actual street crime incidence may peak at a still earlier age, although great caution must be exercised in making inferences from arrest data to the levels of underlying criminal activity (for example, with age, crime skill may increase or offenders may shift from more risky to less risky offenses).

Table 4.6 gives a breakdown of charge types by the age of the respondent at the time of his arrest, showing age differences that are highly statistically significant ( $p < .0001$ ). The much greater incidence of robbery and burglary arrests for younger age cohorts within the sample is striking. Virtually equal and large proportions (30% and 28%) of 16-17 year olds were arrested for these two charge types, with another large segment arrested for grand larceny (14%) and then a miscellany of other income crimes (5%). Taken together, more than three-fourths (77%) of the 16-17 year-old cohorts were arrested for income-oriented crime and three-fourths of this in turn was either for robbery or for burglary.

Among older teenagers (ages 18-19), the overall percentage of arrests for income-oriented crimes remains high (73%). However, there is also a discernible spreading of arrests across the other income-oriented subtypes. Robbery arrests account for only 18 percent of arrests among older teenagers, grand larceny arrests rise from 14 to 18 percent and "other income" arrests double from 5 to 11 percent of arrests.

For adult arrested persons (those 20 and older), there is a further dispersion among types of income crime, and there is an especially noticeable reduction in percentages of those arrested for robbery. For adults as well, the overall incidence of income-oriented crime is also smaller: 56 percent of those 20-24 and 47 percent of those 25 and older were arrested for income-oriented crimes.



**Table 4.6**  
**CHARGE TYPE BY AGE**  
 (Sampled Arrest)

CHARGE TYPE	AGE				
	16-17	18-19	20-24	25+	All ages
<u>Total income</u>	<u>77%</u>	<u>73%</u>	<u>56%</u>	<u>47%</u>	<u>60%</u>
Robbery	30	18	14	8	16
Burglary	28	26	21	15	21
Grand larceny	14	18	10	8	12
Other income	5	11	11	16	11
<u>Total non-income</u>	<u>23%</u>	<u>27%</u>	<u>43%</u>	<u>54%</u>	<u>40%</u>
Serious violence	7	3	6	6	6
Assaults & weapons	14	24	34	43	31
Drug poss. & other	2	0	3	5	3
<u>Total all charges</u>	<u>100%</u>	<u>100%</u>	<u>99%</u>	<u>101%</u>	<u>100%</u>
<u>N</u>	<u>(195)</u>	<u>(148)</u>	<u>(214)</u>	<u>(304)</u>	<u>(861)</u>
Missing					(41)
All cases					(902)

$\chi^2 = 118.17; p < .0001$

Although these comparisons are of age cohorts rather than derived from a longitudinal data series, the sharp, consistent shifts out of robbery and burglary for adjacent age categories do seem to suggest developmental or longitudinal phenomena. This speculation is also somewhat bolstered by an age patterning in the continuity of charge type between sampled and subsequent arrests. Table 4.7 shows in its diagonal elements the percentages of respondents in three age groups who were re-arrested for charges within the same category as their sampled arrest. Continuity is modest, although evident, among 16-19 year-olds. Robberies, in all age groups, seem to have little continuity. Sixteen to nineteen year-olds arrested on robbery charges were most likely to be subsequently arrested on "other income" charges. For 20-24 year-olds, "other income" and non-income offenses dominate the subsequent arrest charges of those arrested for robbery. Finally, among those 25 and older, non-income crimes are the most common subsequent arrest charge category for those arrested on a robbery charge. But for all other charge types, continuity is much more pronounced. In all cases except robbery and for all ages, the modal association in Table 4.7 is between the same charge type for the sampled and subsequent arrest. It also seems that continuity grows more pronounced among older age groups, pointing to a possible narrowing of crime activities among older groups.

In parallel with the income-oriented arrest percentages are age patterns in non-income arrests. Charges involving assaults and weapons represent only 14 percent of charges

Table 4.7

CONTINUITY BETWEEN SAMPLED AND SUBSEQUENT  
ARREST CHARGE TYPES CONTROLLING FOR AGE  
(Participants Rearrested Within One Year After Sampled Arrest Only)

SUBSEQUENT ARREST	SAMPLED ARREST														
	16-19 Year Olds					20-24 Year Olds					25+ Year Olds				
	Robbery	Burglary	Other Income	Non-Income	All Arrests	Robbery	Burglary	Other Income	Non-Income	All Arrests	Robbery	Burglary	Other Income	Non-Income	All Arrests
Robbery	34%	20%	21%	18%	22%	18%	15%	14%	19%	17%	(1)	7%	7%	4%	7%
Burglary	3	36	18	13	20	9	40	24	16	23	(1)	36	4	0	10
Other Income	41	25	46	33	35	36	15	43	19	27	(1)	36	57	17	36
Non-Income	22	19	15	36	22	36	30	19	45	34	(4)	21	32	79	48
Total all Charges N	100% (32)	100% (59)	100% (39)	100% (39)	99% (169)	99% (11)	100% (20)	100% (21)	99% (31)	101% (83)	(7)	100% (14)	100% (28)	100% (24)	101% (73)

$\chi^2 = 22.94; p < .01$

$\chi^2 = 11.12; n.s.$

$\chi^2 = 29.78; p < .001$

against those in the 16-17 year-old group, but 43 percent of charges against those 25 and older (Table 4.6). Drug possession charges appear to vary irregularly among the age cohorts, being somewhat higher among older groups. Crimes of serious violence (murder, manslaughter and rape) are relatively rare and are more or less evenly spread across the age cohorts.

Table 4.8 shows information about type of arrest charge and ethnicity. The two minority groups have high and nearly identical percentages of income-oriented arrests. However,

**Table 4.8**  
**CHARGE TYPE BY ETHNICITY**  
(Sampled Arrest)

CHARGE TYPE	ETHNICITY			
	Black	Hispanic	White	Total
<b><u>Total income:</u></b>	<b><u>61%</u></b>	<b><u>61%</u></b>	<b><u>52%</u></b>	<b><u>59%</u></b>
Robbery	22	7	9	16
Burglary	19	25	21	21
Grand larceny	9	15	15	11
Other income	11	14	7	11
<b><u>Total non-income:</u></b>	<b><u>39%</u></b>	<b><u>39%</u></b>	<b><u>48%</u></b>	<b><u>40%</u></b>
Serious violence	6	7	6	6
Assaults & weapons	29	32	39	31
Drug poss. & other	4	0	3	3
<b><u>Total all charges</u></b>	<b><u>100%</u></b>	<b><u>100%</u></b>	<b><u>100%</u></b>	<b><u>99%</u></b>
<b>N</b>	<b>(508)</b>	<b>(214)</b>	<b>(142)</b>	<b>(864)</b>

$\chi^2 = 51.03; p < .0001$

comparing specific income charges, differences between the black and Hispanic groups are evident. Twenty-two percent of blacks, but only 7 percent of Hispanics, were arrested on robbery charges. Arrests on burglary charges are rather evenly distributed across all three groups, and grand larceny charges (which include auto thefts and probably some arrests for joy-riding) are the same for Hispanics (15%) and whites, but somewhat lower for blacks (9%). The differences in charge type by ethnicity presented in Table 4.8 are highly statistically significant ( $p < .0001$ ).

On the non-income side, there appear to be no great differences according to ethnicity. Certainly, arrests on serious violence offenses are the same for the three groups; the percentages of arrests for assaults and weapons charges are a bit higher for whites (39%) than for blacks (29%) or Hispanics (32%).

Although the backgrounds of arrested persons could not be surveyed in detail in the 1979 jail-based interview, there are two variables -- school completion and marital status -- that do serve as indicators of the association between key social statuses and type or extent of crime participation. Table 4.9 shows the association between charge type (in a collapsed form) and school completion separately for those 18-19, 20-24, and 25 and older. Within each age grouping, those without diplomas are more likely to be charged with robbery or burglary offenses than are those with a diploma. Forty-four percent of those 18-19 who have not completed school were charged with one

Table 4.9

CHARGE TYPE BY HIGH SCHOOL COMPLETION AND AGE  
(Sampled Arrests of Those 18+)

COLLAPSED CHARGE TYPE	AGE							
	18-19		20-24		25+		ALL AGES (18+)	
	No Dip	HS Dip	No Dip	HS Dip	No Dip	HS Dip	No Dip	HS Dip
Robberies & burglaries	44%	(5)*	39%	26%	25%	19%	35%	23%
Grand larceny and other income	31	(1)	20	24	25	21	25	21
Serious violence	4	(0)	8	3	5	10	6	7
Assaults & weapons	21	(7)	32	38	40	47	32	44
Drug possession and other	0	(0)	1	9	5	3	2	5
Total N	100% (134)	- (13)	99% (155)	99% (58)	100% (192)	100% (94)	100% (481)	100% (165)
	x <sup>2</sup> = 8.23 p < .05		x <sup>2</sup> = 10.81 p < .05		x <sup>2</sup> = 4.47 n.s.		x <sup>2</sup> = 30.96 p < .0001	

\*Too few cases to percentage

or the other of these offenses, as compared with five out of the thirteen sample members who had a diploma at this age. Comparisons for the two older age groups, with larger frequencies available, are 39 percent versus 26 percent (for 20-24 year-olds) and 25 percent versus 19 percent (for those 25 and older). The differences are statistically significant (.05 level) for all but the oldest age group.

Table 4.10 compares the (collapsed) type of the sampled arrest charge with marital status for two age groups: arrested persons 20-24 and those 25 and older (there were too few married arrested persons in younger age groups to warrant inclusion in the table).<sup>10</sup> Among those 20-24, marital status does not appear to be related to the type of the sampled arrest. Both 35 percent of those never married in this group and 35 percent of married respondents were arrested on robbery or burglary charges; percentages for arrests on the other charge types were also virtually identical for these two groups, with some fluctuation among arrested persons in the "common law" and "separated/divorced" categories.

However, among respondents 25 and older, marital status does appear to be related to charge type (significant at .05 level). For this older group, 35 percent of those never married were arrested on robbery or burglary charges; 12 percent of married respondents were arrested on these charges.

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<sup>10</sup>Among 335 respondents in the sample aged 16-19, only ten (3%) were in a common-law relationship, two were separated or divorced, and six (2%) were married at the time of the interview.

Table 4.10

COLLAPSED CHARGE TYPE BY MARITAL STATUS  
(Controlling for Age; Those 20 and Older)

COLLAPSED CHARGE TYPE	20-24				25+			
	Never Married	Common Law	Sep/Div	Married	Never Married	Common Law	Sep/Div	Married
Robbery & burglary	35%	40	(1/8)	35	35	21	21	12
Grand larceny & other income	22	17	(2/8)	23	23	32	19	22
Serious violence	5	9	(3/8)	4	3	8	5	10
Assaults & weapons	36	29	(2/8)	35	32	37	51	52
Drug possession and other	3	6	(0/8)	4	6	3	5	4
Total	101% (144)	101 (35)	- (8)	101 (26)	99 (96)	101 (38)	101 (63)	100 (105)

$\chi^2 = 10.68$   
n.s.

$\chi^2 = 24.43$   
 $p < .05$



Twenty-one percent of those in the two "intermediate" groups -- those in common-law relationships and those formerly married -- were arrested on these charges.

Why is marriage apparently related to charge type among those 25 and older, but not among those 20 to 24? Possibly, this is because "never married" remains the majority status for 20-24 year-old arrested persons (68% of those in this age were never married), whereas "married" is the modal status among those 25 and older (32% in this category never married; 35% married). Thus, the significance of "married" (in terms of self-selection if not necessarily in terms of the actual impact of the institution) changes with age. Younger, never married respondents are typical of their age cohort, but over time the fact of never having married begins to identify an individual as atypical. The association between above average arrests for robbery or burglary charges and "never married" emerges at roughly the same point where the typical-atypical distinction reverses. Even though the data are for age cohorts, they appear consistent with a longitudinal pattern in which some older respondents evince a double form of "immaturity": they continue to be arrested for crimes that are more typical of the young (robberies and burglaries) and they remain unmarried, unlike increasing numbers within their age cohort.

Older, married respondents were arrested rarely for robberies and burglaries. When arrested at all, they were charged with either minor or serious violence. Ten percent of married, older respondents were charged with serious violent crimes, as

compared with 3 percent of those who were older but never married. Arrests for assaults and weapons comprised 52 percent of the older, married group, but 32 percent of the older, never married group.

### C. Prior Criminal Justice Involvement

We have so far discussed the sampled arrest, emphasizing the income versus non-income orientation of that arrest and the manner in which the type of the arrest related to personal characteristics. We now examine the prior criminal justice involvements of respondents, relating the extent and nature of prior involvement to charge type and to personal characteristics. With this as background, we will attempt in the next section to show how outcomes from the sampled arrest (convictions, incarceration) relate to charge type, to personal characteristics (age, ethnicity), and to the extent and nature of prior involvement in the criminal justice system.

#### 1. Number of Prior Arrests

Table 4.11A gives the association between charge type of the sampled arrest and a main indicator of prior involvement: the total of prior (adult) arrests. Overall, 31 percent of the sample have no record of prior arrests as adults, 13 percent have one, 19 percent have two to three, and 36 percent of the sample have four or more priors. The incidence of prior arrests is also related to the type of the current arrest charge. Those arrested on serious violence charges are least likely to have prior arrests (38% have no priors) while those arrested on "other income" charges are most likely to have a record (22% are without priors). To some extent, the charge type/priors association results from the fact that charge type

Table 4.11

A. PRIOR ARRESTS BY CHARGE TYPE

CHARGE TYPE	0	1	2-3	4+	TOTAL	N
Robbery	34%	10	24	32	100%	124
Burglary	30	13	20	37	100	168
Grand larceny	32	17	17	33	99	87
Other income	22	15	16	47	100	86
Serious violence	38	10	20	32	100	50
Assaults & weapons	33	12	18	36	100	223
Drug poss. & other	19	29	14	38	100	21
All charges	31%	13	19	36	99%	759
Missing						143
Total						902

$\chi^2 = 23.03$ ; n.s.

B. RECENT PRIOR ARRESTS BY CHARGE TYPE  
(2 Years Preceding the Sampled Arrest)

CHARGE TYPE	0	1	2-3	4+	TOTAL	N
Robbery	48%	18	21	14	101%	124
Burglary	48	23	17	12	100	168
Grand larceny	51	21	11	17	100	87
Other income	53	16	19	12	100	86
Serious violence	64	20	6	10	100	50
Assaults & weapons	60	18	15	7	100	223
Drug poss. & other	43	43	14	0	100	21
All charges	53%	20	16	11	100%	759
Missing						143
Total						902

$\chi^2 = 29.66$ ;  $p < .05$

is associated with the age of the arrested person and age, in turn, is strongly related to number of priors.<sup>11</sup>

A somewhat different picture of prior involvement is therefore obtained when we focus on priors in the two-year period leading up to the sampled arrest, rather than on all prior arrests. Table 4.11B therefore gives the association between charge type and recent prior arrests. Overall, as would be expected, there is a higher percentage of those with no recent priors as against those with no priors throughout the adult period (53% versus 31%). Comparing the two sub-tables, it appears that those arrested on "other income" charges show the greatest shift in percentages from total to recent priors. For this group, there is a 31 percent increase (from 22% in Table 4.11A to 53% in Table 4.11B) of those falling into the no priors or no recent priors categories. In other words, those persons who are arrested on "other income" charges are relatively likely to have some record of past criminal involvement but they are relatively less likely to have a recent record. Those arrested on assaults or weapons charges and those arrested on charges of serious violence also show considerable disparities between the proportion with no priors and the proportion with no recent priors (assaults and weapons encompasses 33 percent of those with no priors, up to 60 percent of

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<sup>11</sup>Age is associated with total number of prior arrests for the obvious reason that older arrested persons have had longer time periods in which they have been "at risk" of arrest. For example, only 2 percent of 16-17 year-olds, but 34 percent of those 25 and older, have seven or more prior adult arrests (see Table 4.12A).

those with no recent priors; serious violence encompasses 38 percent of those with no priors, up to 64 percent of those with no recent priors). The association between number of prior arrests and charge type does not reach statistical significance for total prior arrests (Table 4.11A) but it is significant for recent prior arrests ( $p < .05$ , Table 4.11B).

At the other extreme, persons arrested on robbery, burglary, and grand larceny charges display relatively little disparity between their recent and their long-term criminal record (for example, the incidence of no recent priors is only 14 percent greater than the overall incidence of no priors among robbery arrested persons).

The evident reason for the differential sensitivity of some charge types to an adjustment that, as noted, partially controls for age is that charge type and age is related, as is prior arrest involvement and age. Table 4.6 above has already presented the association between charge type and age; Table 4.12 now shows the priors-age association. As expected, there is a very strong association between the number of prior adult arrests and age. For 61 percent of those who are 16-17 years old, the sampled arrest represented their first adult arrest, whereas for those 25 and older, only a fifth of the sample were experiencing their first adult arrest. Much of this relationship (especially for 16-17 year-olds) results from the fact that young persons enter the adult criminal justice system with a "clean slate," in the sense that Family Court records are not usually available to adult authorities or to researchers.

Table 4.12

A. PRIOR ARRESTS BY AGE

TOTAL PRIOR ARRESTS	AGE				
	16-17	18-19	20-24	25+	All ages
0	61%	30%	22%	20%	31%
1	16	18	12	11	13
2-3	14	24	22	17	19
4-6	7	18	24	17	17
7+	2	10	19	34	19
Total N Missing	100% (165)	100% (135)	99% (196)	99% (276)	99% (772) (130)

$\chi^2 = 155.29; p < .0001$

B. RECENT PRIOR ARRESTS (LAST 2 YEARS) BY AGE  
(18 and over)

PRIOR ARRESTS IN LAST 2 YEARS	AGE				All Ages (18+)
		18-19	20-24	25+	
0		40%	44%	60%	51%
1		22	23	19	21
2-3		16	21	14	16
4+		22	11	7	12
Total N		100% (135)	99% (196)	100% (276)	100% (607)

$\chi^2 = 42.28; p < .0001$

Despite the generally lower levels of overall prior arrests of young persons depicted in Table 4.12A, Table 4.12B also shows that young persons are more likely to have a record of recent prior arrests (within the last two years). Sixty percent of those 18-19, but only 40 percent of those 25 and older, have a record of one or more arrests over the past two years (22 percent of those 18-19 versus 7 percent of those 25 and older have four or more recent priors). This divergence is due to the inverse relationship between arrest rate and age.

The extent of prior arrests is also related to the ethnic classification of arrested persons, and this association, unlike that between charge type and priors, is not the spurious result of an age-ethnicity relationship (in our sample, there is no association between ethnicity and age). Table 4.13 shows the association between ethnicity and prior arrests. Both minority groups (blacks, 28%; Hispanics, 33%) show a lower incidence of first arrests than do whites (43%). Blacks, furthermore, show slightly more priors; 22 percent of blacks, 18 percent of Hispanics and 13 percent of whites have records of seven or more prior arrests. Both the relationship of ethnicity with total prior arrests and with priors over the past two years is weakly statistically significant (.10 level).

Table 4.14 introduces age into this relationship, with the percentages in the table representing those with seven or more prior arrests in each of the intersecting age and ethnic groupings. Table 4.14 pinpoints the oldest age groups as the major source of the difference between black and Hispanic prior



Table 4.13

A. PRIOR ARRESTS BY ETHNICITY

TOTAL PRIOR ARRESTS	ETHNICITY			
	Black	Hispanic	White	Total
None	28%	33%	43%	32%
One	14	12	14	13
2-3	19	21	19	19
4-6	18	17	12	17
7+	22	18	13	19
Total N	101% (457)	101% (190)	101% (127)	100% (774)

$\chi^2 = 14.33; p < .10$

B. RECENT PRIOR ARRESTS (LAST TWO YEARS) BY ETHNICITY

PRIOR ARRESTS IN LAST TWO YEARS	ETHNICITY			
	Black	Hispanic	White	Total
None	49%	56%	65%	53%
One	22	19	15	20
2-3	17	13	15	16
4+	12	12	6	11
Total N	100% (457)	100% (190)	101% (127)	100% (774)

$\chi^2 = 12.23; p < .10$

involvements. Comparing the percentages along the 25 and older column in Table 4.14, 40 percent of blacks, 31 percent of Hispanics and 19 percent of whites have been arrested seven or more times in the period leading up to the sampled arrest. None of the ethnicity-priors relationships for separate age groups is significant.

## 2. Time Incarcerated for Prior Involvements

After a record of adult arrests, time spent incarcerated in jail or prison probably represents the second major indicator of prior criminal justice involvement. The tables that follow show that this indicator also is associated with charge type, age and ethnicity.

Table 4.15 gives the association between the charge type of the sampled arrest and a record of prior time spent in jail or in prison. Among all charge types, those arrested on robbery charges (a relatively young group) were least likely to have spent time in jail or prison for previous offenses. Conversely, those arrested for "other income" offenses (a relatively older group) were most likely to have spent some time in jail or prison (17%, one year or less; 20%, more than one year). It is interesting that, while those arrested on serious violence charges had on the whole slightly below average exposure to jail or prison (72% had no prior incarceration), those in this group with prior incarceration were much more likely to have had lengthy incarceration (6%, one year or less; 22%, more than one year).

Table 4.14

PRIOR ARRESTS BY AGE AND ETHNICITY  
(Seven or More Prior Arrests)

ETHNICITY	AGE				All ages
	16-17	18-19	20-24	25+	
Black	2% (109)	11% (72)	20% (109)	40% (166)	22% (456)
Hispanic	- (32)	9 (43)	21 (53)	31 (62)	18 (190)
White	4 (24)	5 (20)	15 (34)	19 (48)	13 (126)
All Ethnic Groups N	2% (165)	10% (135)	19% (196)	34% (276)	19% (772)
	$\chi^2=4.63$ n.s.	$\chi^2=0.68$ n.s.	$\chi^2=.58$ n.s.	$\chi^2=6.47$ n.s.	

Note: In this table, the number reported in parentheses represents the total number (or base number) of respondents in intersecting row and column categories of the independent variable. The actual number of cases represented by the percentages can be calculated by multiplying the percentage by the relevant base number.

Table 4.15

PRIOR INCARCERATION BY CHARGE TYPE  
OF SAMPLED ARREST

PRIOR INCARCERATION	CHARGE TYPE							
	Robbery	Burglary	Grand Larceny	Other Income	Serious Violence	Assaults & Weapons	Drug Poss. & Other	All Charges
None	77%	65%	70%	63%	72%	66%	71%	68%
One year or less	10	17	17	17	6	17	10	15
More than one year	12	18	13	20	22	17	19	16
Total N	99% (124)	100% (168)	100% (87)	100% (86)	100% (50)	100% (223)	100% (21)	99% (759)

As expected, and as shown in Table 4.16A, the association between age and prior incarceration is quite strong. Ninety-five percent of those 16-17 had no prior jail or prison exposure, while only 55 percent of those 25 and older were similarly unscathed. Table 4.16B next presents the association between ethnicity and prior time in jail or prison. Black arrested persons showed the highest level of prior incarceration (36%), followed by Hispanics (27%) and whites (21%).

Table 4.16

A. PRIOR INCARCERATION BY AGE

TOTAL INCARCERATION	AGE				
	16-17	18-19	20-24	25+	All ages
None	95%	75%	62%	55%	69%
One year or less	4	20	23	14	15
More than one year	1	5	15	32	16
Total N	100% (165)	100% (135)	100% (196)	101% (276)	100% (772)

$\chi^2 = 125.89; p < .0001$

B. PRIOR INCARCERATION BY ETHNICITY

TOTAL INCARCERATION	ETHNICITY			
	Black	Hispanic	White	Total
None	64%	73%	79%	69%
One year or less	17	14	11	15
More than one year	19	13	10	16
Total N	100% (457)	100% (190)	100% (127)	100% (774)

$\chi^2 = 11.92; p < .05$

D. Outcomes from the Sampled Arrest

In a pattern largely unrelated to the age or ethnicity of the respondent, a bit more than half (56%) of the sample were convicted on charges derived from their sampled arrest. We confined ourselves to the comparatively scant information available from official arrest records (sometimes supplementing missing data using information supplied us by the New York City Criminal Justice Agency). With this simplified information, we developed a three-way classification of case outcomes: dismissed (or rarely, acquitted after trial); convicted after a plea of guilty (or rarely, after trial) and sentenced to probation or conditional discharge; convicted after a plea or trial and sentenced to jail (less than one year) or prison (one year or longer).

Table 4.17 gives the case outcomes for the sampled arrest according to the type of the arrest charge. As can be seen, overall conviction percentages do vary according to charge type (they are as high as 70 percent for burglary arrests and as low as 41 percent for assaults and weapons). Somewhat greater variation is evident, however, in the percentages who are incarcerated if convicted according to type of charge. No persons convicted of "drug possession and other" charges were incarcerated, while 46 percent of those convicted for serious violence offenses and 44 percent of convicted robbers were incarcerated.

Table 4.17

OUTCOME OF THE SAMPLED ARREST BY CHARGE TYPE

CHARGE TYPE	PERCENT CONVICTED OF TOTAL CHARGED	PERCENT INCARCERATED OF TOTAL CONVICTED
<u>INCOME CHARGES:</u>		
Robbery	64% (89)	44% (57)
Burglary	70 (145)	42 (102)
Grand larceny	51 (81)	44 (41)
Other income	64 (69)	27 (44)
<u>Total Income</u>	64% (384)	40% (244)
<u>NON-INCOME CHARGES</u>		
Serious violence	71 (34)	46 (24)
Assaults & weapons	41 (218)	16 (90)
Drug possession & other	55 (20)	0 (11)
<u>Total Non-Income</u>	46% (272)	20% (125)
<u>TOTAL ALL ARREST CHARGES</u>	56% (656)	33% (369)



**E. Rearrests**

Table 4.18 gives the association between age and rearrest within one year of the sampled arrest (referred to as subsequent arrest). Overall, 44 percent of the sample was rearrested within one year of the original interview. Twenty-four percent of the sample was arrested once subsequently, 17 percent twice and 4 percent of the sample were rearrested three or more times. The age-subsequent arrest relationship is highly statistically significant ( $p < .0001$ ). Forty percent of those 16-17 were not rearrested within the year, whereas 57 percent of those 20-24 and 73 percent of those 25 and older escaped rearrest.

**Table 4.18**  
**SUBSEQUENT ARRESTS BY AGE**  
 (One Year Follow-up)

SUBSEQUENT ARRESTS	AGE				
	16-17	18-19	20-24	25+	All ages
0	40%	41%	57%	73%	56%
1	32	29	26	15	24
2	26	22	16	8	17
3+	2	7	2	4	4
Total	100%	99%	101%	100%	101%
N	(165)	(135)	(196)	(276)	(772)
Missing					(130)

$\chi^2 = 73.75; p < .0001$

**F. Risk Perceptions**

Our follow-up survey of a small (n=152) subsample of the original survey presented the opportunity to explore areas of self-reported crime participation and perceptions of the risks associated with crime. The topic of risk perception was of interest to us because of the renewed attention over the past decade and a half in the economic model of crime choice (Becker, 1968; Ehrlich, 1973). Although the economic model focuses conceptually on the cost-benefit calculations of individual decision makers, its applications have been almost exclusively to aggregate data, with the resulting nearly insurmountable problems of interpretation. We believed that inquiring into arrested persons' perceptions of the risks associated with six example crimes (selected from the field research) would shed some light on the concrete, individual decision-making processes that must ultimately underlie the economic model's validity. Although, as we discussed above, the low recontact rate and resultant probable bias of the follow-up subsample limits us to an exploratory and descriptive use of the data.

As some recent work has emphasized (Cook, 1980), the economic model's assumptions that potential offenders have immediately available, costless and error-free information concerning the risks associated with different types of crime is subject to considerable qualification. We believed that the self-reports of the follow-up respondents would contribute more

realistic data concerning how deterrence is translated into risk perceptions.

Figure 4.1 depicts the perceived risks of injury and of arrest for six example crimes (burglary, robbery, grab and run, shoplifting, marijuana selling and operating a con game).<sup>12</sup> The figure points up sharp differences among these crimes on the two dimensions. Burglary is rated highest on risk of injury, closely followed by robbery and grab and run, and by con games at further remove. These four activities occupy the upper righthand quadrant of Figure 4.1, indicating that risks on both dimensions are above the mid-points on the subjective categories.

In contrast, shoplifting falls below the middle line on injury risk, though it ranks relatively highly on risk of arrest. Finally, marijuana selling represents the only crime that respondents appear to feel poses neither a substantial risk of injury nor of arrest.

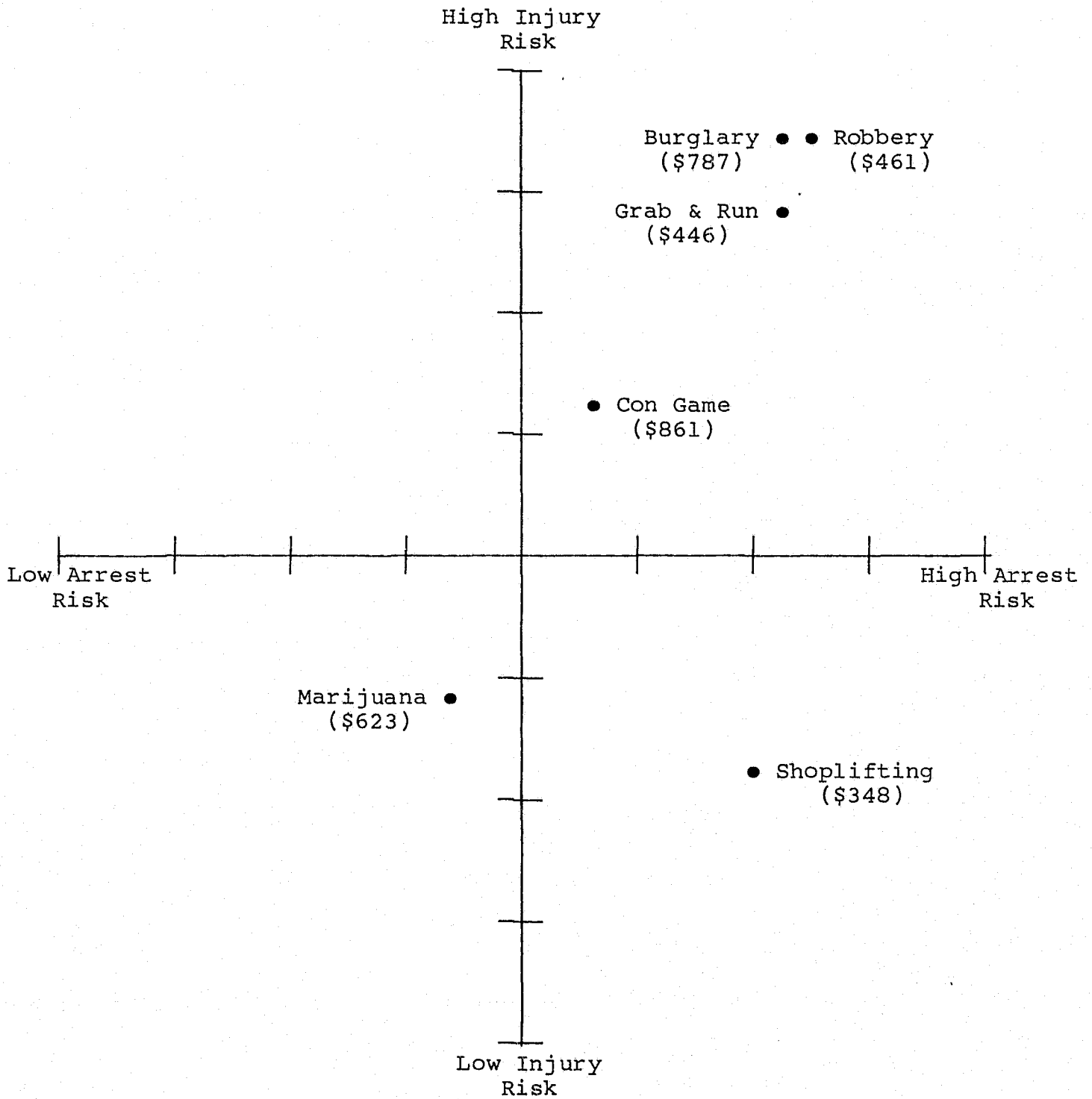
Respondents were also asked to estimate the average weekly income ("take") that could be garnered from the example crimes and also the level of skill required to engage in them. No strong association appears between the level of take and the riskiness of the crime. Burglary, the riskiest of the six example crimes, does offer the second highest weekly take

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<sup>12</sup>In what follows, all assessments of risk of arrest and of injury, and of the needed skill associated with the example crimes, are measured by an arbitrary assignment of the values "3" for "very risky" (or "great skill"), "2" for "somewhat risky" ("some skill"), and "1" for "not at all risky" ("no skill required"). In the tables, the means and standard deviations of these arbitrary subjective assessments are presented.

Figure 4.1

RESPONDENTS' PERCEPTIONS OF RISKS AND ECONOMIC BENEFITS ASSOCIATED WITH DIFFERENT ILLEGAL ACTIVITIES<sup>a</sup>



<sup>a</sup> Dollar amounts in parentheses refer to estimates of average weekly earnings for the respective crime types.

(\$787), but con games, which occupy a low to intermediate position on the risk dimensions, are rated the most lucrative (\$861) and marijuana sales, the least risky of the six example crimes, are third most lucrative (\$623).

The lack of a definite association between the risk of an example crime and its lucrativeness poses a puzzle.<sup>13</sup> Why would an offender engage in a more risky venture if he did not expect a higher return? Part of the answer to this appears to relate to skill requirements. Table 4.19 presents data that suggest that the perceived skill requirements for the example crimes depart markedly from the arrest and injury evaluations and on the whole agree with assessments of lucrativeness. Con games are perceived as the most lucrative of the six crimes, and they are also perceived as requiring the most skill; burglaries place second in lucrativeness and skills needed. The only significant departure between the money and skill rank orderings occurs with shoplifting. It is seen as a relatively skilled activity (ranked third) but as not at all lucrative (ranked sixth). To a degree, the agreement between skill ratings and lucrativeness may account for why some youths participate in relatively less lucrative, higher risk activities such as robbery. They may not have (or perceive themselves as having) the requisite skill for other low-risk, high-return ventures (notably con games). Nevertheless, other

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<sup>13</sup>The discussion here follows that presented in Smith and Thompson (1983).

Table 4.19

**RESPONDENTS' PERCEPTIONS OF RISKS ASSOCIATED  
WITH DIFFERENT ILLEGAL ACTIVITIES**  
(3=very risky, 2=somewhat risky, 1=not risky)

ITEM	Weekly Returns	Arrest Risk	Injury Risk	Skill Rating
Burglary*	\$787 (1453)	2.6 <sup>a</sup> (.058)	2.8 (.044)	2.6 (.056)
Robbery*	461 (1238)	2.7 (.051)	2.8 (.044)	2.2 (.074)
Grab & Run	446 (537)	2.6 (.062)	2.7 (.049)	1.7 (.076)
Shoplifting	348 (481)	2.5 (.063)	1.6 (.071)	2.3 (.070)
Marijuana	623 (963)	1.9 (.079)	1.7 (.073)	1.7 (.072)
Con Game	861 (1097)	2.2 (.078)	2.2 (.071)	2.7 (.050)

<sup>a</sup> Standard errors of the mean are in parentheses; N's vary between 81 and 98 for weekly returns and between 128 and 132 for other variables.

ITEM	RANK ORDERS ON:			
	Weekly Returns	Arrest Risk	Injury Risk	Skill Rank
Burglary	2	2.5	1.5	2
Robbery	4	1	1.5	4
Grab & Run	5	2.5	3	5.5
Shoplifting	6	4	6	3
Marijuana	3	6	5	5.5
Con Game	1	5	4	1

\* One extreme value deleted.

activities such as marijuana selling are not perceived as requiring skill but are perceived as offering high returns. These exceptions may be accounted for by the need for two other important investments by those engaging in the activity: purposive, sustained time commitments and working capital.

Of all the crimes used in the battery, marijuana selling probably requires the largest or second largest (after con games) amount of time devoted to the activity. This required time investment probably offsets its relatively low-risk, high-return attributes in the decisions of some offenders. Our interview did not delve into details of time allocation (which we believe to be quite difficult to obtain from a population such as ours in any event), so this line of reasoning must remain tentative.

Marijuana selling also probably requires the largest or second largest investment of working capital. An inability to make this investment probably prompts some offenders into other activities.<sup>14</sup> While it is interesting to speculate on reasons why the various dimensions of risk, return and ease of entry into these six example criminal activities are not in perfect balance, it may also be that perfect agreement is by no means

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<sup>14</sup>Besides the need for working capital, our field research also suggests that marijuana selling requires the capacity for the individual to insulate himself from peer group pressures to "share the wealth." Several study participants "went out of business" because they failed to conserve cash for replenishing their inventory. Such pitfalls, which are likely to apply as well to the operation of con games, suggest that older persons may succeed better in crimes that require working capital.

necessary. Our perception data do, however, suggest overall agreement on the degree of risk and level of return associated with diverse, typical street crimes; some, by no means perfect, balancing is evident in which high-return crimes either pose high risks (burglary) or are perceived as demanding high levels of skill (con games).

Besides the overall patterning of risk perceptions, it is interesting to ask whether the arrested person's own crime involvement is associated with his risk perceptions. When we tried to examine very specific connections (for example, testing whether the perceived risk of robbery was greater or less for those arrested on robbery as against other charges), we found weak and inconsistent associations. On the other hand, there did appear to be a more general association between income orientation and risk perception; those arrested on non-income charges perceived the risks associated with the six example income crimes as greater than did income-oriented arrested persons. (For example, 77 percent of persons arrested on non-income charges versus 55 percent of persons arrested on income charges rated shoplifting as "risky," or "very risky.") Persons arrested on non-income charges also appeared to estimate a lower weekly take from these example crimes than did persons arrested on income charges.



### G. Contextual Variables

The follow-up survey gave us a chance to learn something about the social contexts and neighborhood environments of the arrested person sample. The items in the follow-up covering this area were exploratory. They concerned, for example, the incidence of crime victimization among arrested persons, arrested persons' perceptions of crime in their own neighborhoods, their reports of crime involvement among friends and family members, and their descriptions of family living arrangements and family members' ties with the labor market.

Table 4.20 shows the relationship between charge type and a battery of ten indicators of family and social settings. The marginal frequencies in Table 4.20 are striking. Over half of the follow-up respondents (52%) reported that they were themselves the victims of a crime; two out of three (68%) perceived that they lived in "tough" or "very tough" neighborhoods. A bit less than one-third (29%) reported that their families did not know or did not care about their crime participation and, indeed, two of five (43%) reported that at least one other close family member had also been arrested at some time. Not surprisingly, nearly two-thirds (63%) reported that their friends supported their crime involvement, while 39 percent reported that "most" of their friends did crime. Only 35 percent reported that "most" of their friends had jobs. It is this profile of high crime and low employment opportunity that guided our original conceptualization of a "high-risk" population.

Table 4.20

**FAMILY AND SOCIAL SETTINGS BY CHARGE TYPE**  
(Current Arrests)

FAMILY AND SOCIAL SETTING INDICATORS	CHARGE TYPE					
	Robbery	Burglary	Grand Larceny	Other Income	Assaults & Weapons	Total*
% victimized	52 (25)	45 (31)	48 (23)	64 (11)	56 (43)	52% (143)
% perceive "tough" neighborhood	87 (23)	77 (31)	61 (23)	36 (11)	68 (41)	68% (139)
% family DK/DC about R's crime	33 (15)	17 (23)	45 (11)	(1/7)	45 (11)	29% (68)
% family member arrested	39 (23)	54 (28)	43 (21)	54 (13)	34 (41)	43% (136)
% friends support R's crime	64 (14)	62 (24)	67 (12)	(4/7)	67 (12)	63% (70)
% most friends do crime	42 (24)	48 (25)	44 (18)	40 (10)	31 (29)	39% (114)
% with most friends in jobs	26 (19)	32 (22)	39 (18)	(2/6)	48 (21)	35% (91)
% drug/alcohol problem	12 (25)	20 (30)	22 (23)	38 (13)	33 (43)	24% (144)
% father worked when R was 16	69 (13)	69 (13)	91 (11)	(7/9)	78 (18)	76% (68)
% in single parent household at 16	36 (25)	39 (31)	50 (22)	15 (13)	35 (43)	38% (144)

\*The total column includes at most seven "serious violence" and three "drug possession & other" defendants not separately tabulated.

The indicators of family and social context showed no particular association with the type of the arrest charge. Victimization was high (64%) among "other income" arrested persons, but these individuals were older and therefore had had more time to experience victimization (even though the rate of victimization over any given span of time would be expected to decline with age). Those arrested for robbery were more likely to describe themselves as living in "tough" neighborhoods (87%; 68% for the total sample) and were somewhat less likely to report that most of their friends held jobs (26%; 35% for the total sample). These differences were also probably related to the relative youth of the robbery arrested persons. Finally, on some indicators, those arrested for assaults and weapons appeared to come from somewhat lower risk circumstances: fewer reported that other family members had been arrested (34%; 43% for the total sample); fewer reported that most of their friends did crime (31%; 39% for the total sample); and relatively more reported that most of their friends held regular jobs (48%; 35% for the total sample).

There were surprisingly few reports of drug or alcohol problems (24% of the total sample; 48% of those 25 and older) and most of the sample (76%) who had lived in two-adult households at age sixteen reported that a father or other older male in the household was working at that time; only a third (38%) reported living in a single parent household at age sixteen.

Still different patterns involving the social context indicators appear in Table 4.21, which tabulates these indica-

Table 4.21  
FAMILY AND SOCIAL SETTINGS BY AGE

FAMILY AND SOCIAL SETTING INDICATORS	AGE				
	16-17	18-19	20-24	25+	Total
% victimized	49 (39)	38 (24)	51 (35)	59 (49)	51% (147)
% perceive "tough" neighborhood	65 (37)	83 (24)	82 (34)	52 (48)	32% (143)
% family DK/DC about R's crime	17 (23)	44 (16)	28 (14)	31 (16)	29% (69)
% family member arrested	36 (36)	50 (24)	62 (34)	28 (46)	42% (140)
% friends support R's crime	64 (22)	71 (24)	50 (14)	61 (18)	62% (71)
% most friends do crime	47 (34)	50 (20)	32 (28)	35 (34)	40% (116)
% with most friends in jobs	31 (29)	36 (14)	21 (24)	48 (50)	32% (94)
% drug/alcohol problem	5 (38)	8 (25)	23 (35)	48 (50)	24% (148)
% father worked when R was 16	65 (17)	69 (13)	71 (14)	92 (26)	77% (70)
% in single parent household at 16	46 (39)	40 (25)	37 (35)	35 (49)	39% (148)

tors according to age. No consistent differences according to age occur for the incidence of crime victimization. Victimization is high for the oldest group (59% among those 25 and older) but it is not much lower than that among the youngest group (49% among 16-19 year-olds). Reports of friends who "support" an individual's criminal activities do not vary with age either (64% of 16-19 year-olds reported such support, 61% of those 25 and older also reported it).

However, for some other items ("tough" neighborhoods, arrests of family members) there appears to be a curvilinear pattern in the age data. Crime-linked values on these indicators peak either among the 18-19 or 20-24 year-old groups. This may occur because during this age range many individuals win emancipation from their parental families while, at the same time, they have as yet failed to form stable conjugal relationships on their own.

Finally, there is a rise in the incidence of drug or alcohol problems with age in Table 4.21. Only 5 percent of 16-17 year-olds reported drug or alcohol problems; 8 percent of 18-19 year-olds, 23 percent of those 20-24 and 48 percent of those 25 and older reported such problems.

Two final items among the social context indicators in Table 4.21 -- whether at age sixteen the respondent lived in a two-parent household and, if so, whether the male household head was working -- show rather different patterns. Forty-six percent of 16-17 year-olds reported living in single parent households, but only 35 percent of those 25 and older reported

such arrangements when they were sixteen. Among households with a male present, 92 percent of the oldest group reported that the male head worked most of the time, as against 65 percent of the 16-17 year-olds.

## CHAPTER V

### Introduction

This chapter delineates relations between employment and crime while asking whether relationships are different at different ages or for participants in different social contexts.

There are several reasons why the task of relating these activities forces us to be somewhat more speculative than we have been in the discussion so far. First, interest focuses on whether there is a causal influence of employment on crime participation. The issue of causality is not addressable directly from a cross-sectional sampling of arrested persons, and so after offering the available descriptive information, we try to explore its possible significance against a backdrop of literature, program experimentation and plausible conjecture. Second, in many instances in what follows, we fail to observe relationships and patterns in the data that we expected to see on the basis of prevalent theoretical models and commonsense beliefs about employment and crime. The drawing of inferences from the absence rather than from the presence of an expected pattern is essentially less well controlled (indeed, logically, it is entirely open-ended), but the effort nonetheless is justified if only as a means of formulating plans for further inquiry.

Although our speculations go beyond the descriptive data available, we have attempted to ensure that they are consistent with the most pronounced patterns in the data. For example, in

the following section we concentrate on the striking differences in employment and arrest experiences according to age cohorts in our sample, and we also describe group differences. In a concluding section, we consider whether the economic choice model of employment-crime relationships provides an adequate interpretation of the pronounced age patterns observed in our data, discussing phenomena that we believe must augment a narrowly based economic choice explanation. We end by suggesting that the unfolding longitudinal patterning of involvement in crime and in employment requires the recognition of important social-psychological and peer group influences on individual behavior. Where we can, we illustrate our argument for the importance of social contexts with data from our small follow-up survey and from other research. Before turning to these issues, however, we briefly examine the employment-crime data for the total sample.



A. An Overview of the Empirical Data

Tables 5.1 and 5.2 present the results of regressions of each of three total arrest and three income-related arrest measures on age, ethnicity and selected schooling, employment and background variables. The arrest variables in Table 5.1 (p. 150) are: (1) the log of the total arrests in the two year period ending with the sampled arrest (which is excluded); (2) a dichotomous indicator of rearrest in the one year period following our interview; and (3) the log of the number of arrests in the total three year period that includes the two years leading up to the interview and the one year following (once again, the sampled arrest is excluded).<sup>1</sup> The Table 5.2 (p. 157) arrest measures refer to the same three time periods but include only income-oriented arrests (the sampled arrest is included in the two-year and three-year measures, since whether or not that arrest was income oriented conveys useful information in the Table 5.2 context.)

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<sup>1</sup>We used the log of arrests rather than the number of arrests because the log increases more slowly than the raw number of arrests. Intuitively, it means that the models treat the difference between one and two arrests as more important than the difference between ten and eleven arrests. A log transformation reduces distortions in results that may be caused by a few very large values of the dependent variable.

Each of the dependent measures employed here has its advantages and disadvantages for different types of analysis. For the vast majority of the sample, detailed information on work experiences and school attendance is available only for the past two years. Therefore, we can relate variables like work hours and job characteristics to arrests occurring during the same time interval only for this two-year prior period.

Analysis of subsequent arrests allows us to make somewhat more powerful statements about "predictors" of future arrest.

Before considering the results of these regressions, it is important to emphasize the many limitations associated with such analyses when applied to a cross-sectional sampling of arrested persons such as ours. First, a sample of arrested persons does not permit generalization to the total population of those involved and those uninvolved in the criminal justice system. Thus, while we may try to explain differences in frequency of arrest, we are constrained by the fact that everyone in the sample has passed the threshold from zero to at least one arrest and we cannot determine whether the variables used in our analysis are able to explain passage across this threshold. An analysis of a sample of arrested persons such as ours cannot exclude the possibility that a variable that only weakly differentiates between few and many arrests might powerfully differentiate between the arrested and the unarrested.

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These analyses also have some serious limitations. Nothing is known about the individual's job history after the 1979 interview -- if he lost his job shortly after his arrest, then past job characteristics do not accurately reflect his experiences in the follow-up period. The relatively short (one year) duration of the follow-up period also allows less time to "sample" the individual's criminal activities via recorded arrests. Indeed, the paucity of rearrests pointed to the appropriateness of a binary dependent variable. Chances are good that low-rate offenders (or ones who were lucky, skillful, or engaging in low-risk crimes) were not arrested at all during the follow-up period.

The three-year arrest histories give us the broadest look at an individual's criminal history, although we do not have complete work history information for the entire period. The longer time period means that the individual was less likely to escape arrest by chance. The mix of "prior" and "subsequent" arrests in the three-year arrest measure might have been a source of concern if the determinants of past and future arrests varied substantially. We found, however, that the patterns of determinants of past and future arrests were similar.

Second, there are important variations in employment-crime relationships among subgroups in our sample. Associations emerge between employment and crime relatively more strongly among some subgroups (minorities, older arrested persons) and disappear altogether for other groups (teenage arrested persons, whites of all ages). These subgroup patterns signal the presence of statistical interactions that may be obscured in a regression analysis of the total sample. (This has prompted the age and ethnic subgroup analyses presented below.)

Third, it is possible that there are important unmeasured variables (family background, attitudes, social contexts) that, if included in the regression equations, would improve predictive power (the r-square associated with the equation) even if they were moderately correlated with variables already included. But even if they did not increase explained variation, inclusion of such variables might reduce mis-specification of our models (i.e., they remove biases in our estimates of the strength of other variables in the model).

Fourth, the apparent explanatory strength of many variables in a regression equation depends in subtle ways on the degree of mutual exclusivity that exists between dependent and independent variables. In our regressions, for example, inclusion of a variable representing early arrests (those taking place more than two years prior to the sampled arrest) would have increased the R-squares in the models presented by about one-third. Yet, inclusion of this variable would only have underscored the fact that -- for unknown reasons -- sample

members' past arrest behavior tends to resemble their recent arrest behavior. Inclusion of a prediction variable that thus closely resembles the dependent variable, although it would increase explained variation, would also be likely to distort the estimates otherwise obtainable concerning the significance and relative importance of other variables of greater conceptual importance, including in this case both age and ethnicity (both of which are correlated with early arrests).

Finally, we must acknowledge the limitations of the dependent measure -- arrests -- as constituting an imperfect indicator of underlying crime participation. It may be that employment and school experiences are more reliably and validly assessed in our research than is crime participation, and that with an improved indicator of the latter, the explanatory power of the regression results would be enhanced.

Taken altogether, these qualifications limit our confidence in the regression results. In succeeding sections, other approaches will be deployed to elaborate on and qualify the initial indications presented here.

### 1. Three Total Arrest Measures

Let us turn now to the data from the regressions. The independent variables in these regressions represent many of the factors separately discussed in the preceding chapters. Age and ethnicity (represented by a dummy variable for blacks -- an Hispanic dummy variable was not significant) were found in the preceding chapter to be strongly associated with both the frequency and type of arrests. These variables will be

used below to organize our discussion of the longitudinal and cross-sectional patterning of crime, respectively.

Considering first age in the context of the three total arrest rate regressions (see Table 5.1A), we find once more that arrest rates are lower for older sample members. The sign of the age coefficient is negative and is significant at the .01 level for all three rearrest measures. Net of all the other variables in the model, each year of age reduced the log arrest measures by .01 (2-year period), .03 (rearrests over subsequent year) and .02 (3-year period).<sup>2</sup>

The coefficients for the binary variable singling out blacks among the ethnic groupings indicate not quite as strong effects as were true for age. The signs for all three coefficients are positive, indicating higher arrests among blacks, net of the other variables in the models. They are significant

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<sup>2</sup>Reversing the logarithmic transformation (i.e., going from log arrests to arrests), these coefficients translate into roughly a reduction in .06 arrests per year of age for arrests over the two-year period, .04 for subsequent arrests and .05 for the three-year period (these figures are calculated using the overall sample means of the arrest measures as bases). However, because these are unstandardized coefficients and the dependent measures are logarithmic transformations of arrests (for the 2-year and 3-year measures), the coefficients have no direct, concrete interpretation. In general, they should be assessed in terms of their signs (positive or negative) and in terms of their statistical significance (as indicated either by the asterisks in the tables or by comparison with their parenthesized standard errors). In particular, the reader should not be misled by small absolute values. For example, the coefficient for "hours worked (past two years)" is .000031 for the two-year period in Table 5.1; however, this measures the reduction in the log arrest measure of a one hour increment in working. Thus, this "small," negative decrease in log arrests is in fact substantial and statistically significant (it is twice the parenthesized standard error) at the .05 level.

Table 5.1A

**MULTIPLE REGRESSION: LOGARITHM OF NUMBER OF ARRESTS ANNUALLY**  
 Regression Coefficients (b): Standard Errors in Parentheses

	Two years before the sampled arrest	One year after the sampled arrest <sup>a</sup>	Entire three year period
Intercept	.8620*** (.1009)	.850*** (.1680)	1.3273*** (.1044)
Age in years	-.0098*** (.0036)	-.0348*** (.0066)	-.0185*** (.0038)
Black	.1316** (.0539)	.1168 (.0826)	.1372** (.0557)
Regular diploma	-.1638** (.0688)	-.3114*** (.1147)	-.2036*** (.0712)
Enrolled in school	-.0467** (.0716)	.0032 (.1018)	.0030 (.0735)
Hours worked (past 2 years)	-.000031** (.000015)	-.000059*** (.000025)	-.000040** (.000015)
Out of the labor force	.1443* (.0753)	.1954** (.1093)	.1721** (.0779)
Job with benefits	-.1096* (.0612)	.0084 (.0981)	-.1250** (.0633)
Sigma-squared	n/a	.8089 (.0768)	n/a
	R <sup>2</sup> =.0736	R <sup>2</sup> =.1049	R <sup>2</sup> =.1355
	N=674	N=683	N=674

\*\*\*p<.01; \*\*p<.05; \*p<.10

<sup>a</sup> Computed by maximum likelihood tobit regression; other results from ordinary least squares regression.

<sup>b</sup> The regression on arrests over the two and three year period exclude individuals under the age of 16 and 1/2 at the time of the sampling arrest. (This is because the arrest histories for these people cover an insufficient amount of time to reliably extrapolate an estimated number of arrests over a two year period.)

**TABLE 5.1B**  
**INTERCORRELATIONS OF ARREST RATE PREDICTORS**  
 (Number of Observations in Parentheses)

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1. Age in years	1.0000 (885)												
2. Black	.0148 (884)	1.0000 (894)											
3. Regular diploma	.2815 (870)	.0154 (878)	1.0000 (886)										
4. Enrolled in school	-.4327 (814)	.1572 (824)	-.1941 (822)	1.0000 (831)									
5. Hours worked (past 2 years)	.2990 (811)	-.0823 (820)	.1922 (815)	-.2886 (766)	1.0000 (824)								
6. Out of the labor force	.0429 (754)	-.0009 (761)	-.0140 (756)	.1042 (712)	-.2047 (730)	1.0000 (765)							
7. Job with benefits	.3060 (754)	-.0502 (761)	.2507 (756)	-.2741 (712)	.2800 (730)	-.0804 (765)	1.0000 (765)						
8. 2-yr income arrests (log)	-.3821 (736)	.1270 (736)	-.2546 (722)	.2688 (674)	-.2358 (676)	.1156 (633)	-.2600 (633)	1.0000 (736)					
9. 1-yr subsequent income arrests (log)	-.2606 (772)	.1052 (774)	-.1953 (760)	.1960 (712)	-.1849 (710)	.0764 (660)	-.1605 (660)	.3572 (736)	1.0000 (774)				
10. 3-yr income arrests (log)	-.4100 (736)	.1244 (736)	-.2752 (722)	.2587 (674)	-.2557 (676)	.1050 (633)	-.2690 (633)	.9301 (736)	.6444 (736)	1.0000 (736)			
11. 2-yr total arrests (log)	-.1708 (736)	.1142 (738)	-.1640 (724)	.1040 (676)	-.1642 (678)	.0974 (634)	-.1551 (634)	.7259 (736)	.3126 (738)	.6924 (736)	1.0000 (738)		
12. 1-yr subsequent arrests (log)	-.2496 (772)	.0830 (774)	-.1920 (760)	.1663 (712)	-.1868 (710)	.0679 (660)	-.1591 (660)	.3307 (736)	.8419 (774)	.5652 (736)	.3458 (738)	1.0000 (774)	
13. 3-yr total arrests (log)	.2703 (736)	.1108 (738)	-.2180 (724)	.1717 (676)	-.2134 (678)	.0986 (634)	-.2068 (634)	.6923 (736)	.6281 (738)	.7925 (736)	.8665 (738)	.7224 (738)	1.0000 (738)

(at the .05 level) for the two-year and three-year arrest rates, and non-significant (but about one and a half times the standard error) for rearrests in the one year subsequent period.

Besides the background variables of age and ethnicity, two sorts of explanatory variables have been introduced into the three regression models presented in Table 5.1. First, two variables measure aspects of schooling; next, three variables measure labor market and employment experiences. The detailed measures in each of these groups will now be described.

Of the two schooling variables, the first -- attainment of a regular high school diploma -- more directly relates to market "incentives" that might weigh directly in an economic calculus of the alternative costs and rewards of legal versus illegal behavior. This is because, as predicted by human capital theory and as suggested by the analysis in Chapter Three above, those with higher educational attainments may offer more potential productivity to employers, inducing them to offer higher wages or more hours of employment, all else equal. The coefficients for the diploma dummy variable are consistent with this perspective.<sup>3</sup> They are negative in all three regressions and they are highly statistically significant (.01 level) for the rearrest and three-year arrest rate

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<sup>3</sup>However, they are also consistent with a number of other perspectives, such as the simple notion that attainment of the diploma reflects personality factors like persistence and deferral of gratification.



measures and significant (.05 level) for the two-year arrest rate measure.

Though these results for the diploma measure are consistent with a human capital perspective, educational attainments may have additional, indirect crime-reducing effects as well. Educational attainments are probably more closely linked with early employment experiences that in turn lead to improved subsequent employment and to reduced criminal justice involvement. Net of its contributions to improved early employment experiences, schooling may have only a limited continuing impact, either on current employment or (via current employment) on arrests. The complete chain of hypothetical effects of human capital on crime participation is lengthy.

Net of possession of a high school diploma, there are no statistically significant associations between the other schooling measure -- current school enrollment -- and the total arrest measures. Current school enrollment has a perhaps ambiguous association with extent of criminal involvement in any event. On the one hand, schooling may be disrupted by an individual's criminal involvements, by the attendant court appearances and perhaps time spent in custody, and by transfers to disciplinary schools initiated by school authorities who have become aware of the sample member's criminal justice involvements. These connections would suggest a negative association between current school enrollment and the arrest rate measures. On the other hand, as was argued in Chapter Two, enrollment in school may exact a short-term economic

penalty on those youths who enjoy few family supports, prompting them to engage in income crime.

Completing the three total arrest regressions are three variables measuring labor market experience. The first two of these, hours worked over the past two years and status as being "out of the labor force" (OLF) at arrest, partly represent "time allocation" and thus parallel school enrollment. Hours worked over the past two years is significantly and negatively associated with all three arrest measures (.05 level for the 2-year and 3-year measures; .01 level for rearrests). The OLF indicator, as expected, is positively associated with all three arrest measures; however, its influence appears somewhat weaker, showing only marginal statistical significance (.10 level) for two-year arrests and moderate significance (.05 level) for rearrests and for the three-year measures.<sup>4</sup>

The remaining employment variable may be said to measure the quality of sample members' employment. The binary variable of jobs with "benefits" represents the third and final point on a job quality progression that begins with "offbooks" employ-

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<sup>4</sup>The weaker statistical significance for OLF status may reflect the fact that it has been measured at a single point in time (at the sampled interview), whereas other measures, such as hours worked, encompass much longer time periods. Although the status of "unemployed" is not introduced explicitly into the equation, its influence is incorporated indirectly in the hours worked variable. Hours worked also is an indirect measure of employment income. In preliminary regressions, the wage rate was not found to significantly relate to arrests net of hours worked, possibly because hours worked has been more reliably measured or because, in a predominantly low-wage sample, income is more determined by the sheer availability of work (hours worked) than it is by the wage rate paid for those work hours that do become available.

ment (i.e., no taxes withheld and no job benefits), and then includes jobs for which taxes are withheld but no benefits are offered (this category applies mostly to government-funded summer jobs for youths in the sample) and ends with jobs offering benefits (all of which also withhold taxes). In analyses not reported here, this three-category measure of job quality was found to be highly correlated with standard but much more elaborate measures of labor market segmentation, such as the scheme devised by Gordon (1971); it is also associated with other indicators of sheltered employment such as labor union membership.

The job benefit dummies for the two-year and three-year arrest measures have the expected signs and are significant at the .10 and .05 levels, respectively, but the coefficient for job benefits and rearrests is essentially zero and non-significant.

The regression coefficients recorded in Table 5.1 all have plausible signs. Overall, the three total arrest models explain about seven percent of the variance in two-year period arrests, 10 percent of the variance in rearrests and 14 percent of the variance in arrests over three years. Although this is not a great deal of explained variance, it is comparable with that obtained in models estimated on similar populations. For example, the Manpower Demonstration Research Corporation's (1981) evaluation of the national supported work experiment obtained an R-square of .08 in a regression predicting the occurrence over an 18-month period of any arrest for

individuals in its ex-offender cohort. As will next be shown, rather more variance can be accounted for if attention is focused on income-oriented arrests.

## 2. Three Income-Oriented Arrest Measures

Table 5.2 presents results for the same three arrest measures, but it includes only arrests for income-oriented charges. By and large, the coefficients in Table 5.2 parallel the results from Table 5.1 and will not be discussed in as great detail.

Age and ethnicity are highly significantly associated (.01 level) with all three arrest rate measures. The educational attainment measure (regular diploma) has the same signs as in the earlier regressions and is highly statistically significant (.01 level). Enrollment shows a positive and weakly statistically significant association (.10 level) only for two-year arrests.

The employment variables in Table 5.2 also parallel the results earlier shown for total arrests in Table 5.1. OLF status is significantly and positively related to all three income-oriented arrest rate measures (.01 level for two-year and three-year arrest rates and .05 level for rearrests). Finally, the job benefits dummy variable is negatively related to the two-year and three-year income-oriented arrest rate measures and is statistically significant (.05 and .01 levels respectively) for these two measures but is not statistically significant and has essentially a zero value for income rearrests.

Table 5.2

MULTIPLE REGRESSION: LOGARITHM OF NUMBER OF  
INCOME ARRESTS ANNUALLY  
Regression Coefficients (b): Standard Errors in Parentheses

	Two years before the sampled arrest	One year after the sampled arrest <sup>a</sup>	Entire three year period
Intercept	1.2832*** (.0781)	.5399*** (.1815)	1.5172*** (.0817)
Age in years	-.0193*** (.0028)	-.0343*** (.0072)	-.0234*** (.0029)
Black	.1182*** (.0417)	.2014** (.0878)	.1339*** (.0436)
Regular diploma	-.1804*** (.0532)	-.3751*** (.1269)	-.2028*** (.0557)
Enrolled in school	.0093* (.0550)	.0425 (.1059)	.0659 (.0575)
Hours worked (past 2 years)	-.000024** (.000011)	-.000066*** (.000027)	-.000032*** (.000012)
Out of the labor force	.1728*** (.0583)	.2429** (.1131)	.1711*** (.0609)
Job with benefits	-.1200** (.0473)	-.0033 (.1046)	-.1185*** (.0495)
Sigma-squared	n/a	.7970 (.0868)	n/a
	R <sup>2</sup> =.2198	R <sup>2</sup> =.1050	R <sup>2</sup> =.2455
	N=674	N=683	N=674

\*\*\*p<.010; \*\*p<.05; \*p<.10

<sup>a</sup> Computed by maximum likelihood tobit regression; other results from ordinary least squares regression.

<sup>b</sup> The regression on arrests over the two and three year period exclude individuals under the age of 16 and 1/2 at the time of the sampling arrest. (This is because the arrest histories for these people cover an insufficient amount of time to reliably extrapolate an estimated number of arrests over a two year period.)

For the most part, the effects recorded in Table 5.2 parallel those described in Table 5.1. Indeed, using R-squares as criteria for goodness of fit, these variables are much more successful in accounting for variation in income-oriented arrests than they are in accounting for all arrests. Some 22 percent of the variance in two-year income arrests, 11 percent of the variance in income rearrests and 25 percent of the variance in three-year income arrests are accounted for by the Table 5.2 regressions.

What overall conclusion can be drawn concerning the strength of the relationship between employment and crime from these regressions? Although the quantitative form of the regression coefficients and R-square data tempt one to offer a highly precise answer to this question, there are some hidden difficulties that lie in the way of such precision. First, as with any social science research, the part of human behavior that can be explained systematically amounts to a relatively small fraction of the total. Much behavior results from chance factors and randomly acting forces that act on each individual in different ways. In an individual-level analysis such as ours, such factors do not cancel each other out.

Second, all of the caveats associated with the earlier discussion of regressions apply in interpreting the strength of relationships implied by the findings. The regressions indicated that, for a sample of arrested persons, employment and schooling experiences do help to predict the extent of involvement in the criminal justice system, although they are not as

powerful predictors as are age and ethnicity. These variables may be more powerful in predicting who becomes involved in the criminal justice system at all, but such a determination would require that the analyses be done on a population that includes those never arrested.

In the following section, we describe the age patterning of crime participation. In the third section of the chapter, we look at ethnic differences in crime participation.

**B. Age and Ethnicity Patterns in Employment-Crime Relationships**

It comes as no surprise that age and ethnicity are important determinants of criminal activity as measured by arrest outcomes. What is more interesting is the role of age and ethnicity in mediating the relationship between labor market involvements and crime participation. In order to test for the presence of interactions among age (or ethnicity), a major labor market variable and crime, we included an hours worked-age (and an hours worked-ethnicity) interaction term into an analysis of variance that otherwise duplicated exactly the regressions reported in Tables 5.1 and 5.2. Doing so, we found that for the most part the interaction terms did not attain statistical significance. Indeed, on this basis, further examination of ethnic patterns in the data is not warranted. However, in the case of the age and labor market interactions, there was some evidence of significant interactions. For example, in the analysis of variance accounting for two-year arrests, an F-test indicated that an interaction term involving age and hours worked was significant at the .001 level.

Finding this interaction provides some justification for a closer examination of labor market and crime patterns for age groups separately. This is explored in what follows.

**1. Age Patterns**

Table 5.3 shows age cohort differences in annual arrest rates (for the three years extending two years prior to the



sampled arrest through one year following) broken down by the categories of four selected labor market variables.<sup>5</sup> In these tabulations, the influence of other variables besides age have not been controlled for and the differences are cohort differences rather than differences over time in the behavior of the same individuals. For the total sample (the right most column in Table 5.3), there is a statistically significant (.05 level) association between all four measures and arrest rate. The participant's employment status at arrest (employed, unemployed, out of the labor force); the number of hours that he worked in the year preceding the sampled arrest; his weekly wage; and his access to employment offering various levels of

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<sup>5</sup>In these analyses, the three year arrest rate (average number of arrests per year) was used in order to extend the period in which young respondents were eligible for arrest in adult court. This rate does not include the sampled arrest. For 16-17 year olds, annual arrest rates were adjusted to reflect time at risk since respondents' sixteenth birthdays. Those under 16 1/2 at the time of arrest were excluded.

Because the arrest rate covers a relatively broad three-year period, it should be recognized that the age of arrest does not perfectly coincide with the age groups with which arrest rates are associated. For example, some individuals in the 20-24 category were 18 at the time of some prior arrests; others were 25 at the time of subsequent arrests.

It should also be recognized that the arrest rate measure is not adjusted for reduced time at risk related to periods of incarceration. The Project did not have adequate measures of time served in the two years prior to the sampled arrest, or of detention length and time served in the subsequent year. However, only 16 percent of the sample were incarcerated at all in the two years before the sampled arrest and only three percent had been sentenced to six months or more during that period. Adjustments affecting a relatively small proportion of the sample for brief periods of time would not have significantly affected arrest rate measures.

Table 5.3

ARREST RATES AND SELECTED EMPLOYMENT VARIABLES BY AGE GROUP<sup>a</sup>

EMPLOYMENT VARIABLES	AGE				Total Sample
	16-17	18-19	20-24	25+	
<u>Employment Status at Arrest</u>					
Employed	.88	.93	.55	.42	.60**
Unemployed	.76	.99	.60**	.61	.73
Out of Labor Force	1.19	.92	1.08	.65	.91
<u>Hours Worked (Prior year)</u>					
0	.99	.93*	.86*	.65**	.82**
1-799	.82	1.17	.61	.79	.87
800-1599	.69	.79	.60	.49	.61
1600+	.81	.65	.50	.17	.36
<u>Weekly Wage (Current/most recent job)</u>					
Up to \$99	.76	.99	.56**	.72**	.84**
\$100-149	1.07	.89	.53	.72	.75
\$150-199	.95	1.02	.64	.44	.66
\$200+	.53	.86	.35	.29	.37
<u>Job Benefit Status</u>					
"Off the Books"	.72	1.08	.74	.79*	.81**
Taxes Withheld	.94	.92	.56	.66	.77
Taxes and Benefits	.88	.93	.48	.28	.44

\*\*p<.05; \*p<.10

Note: In these tables, F-statistics test the null hypothesis that the dependent variable is statistically unrelated to the given independent variable.

Standard errors and N's are in Table A5.1 in the Appendix.

<sup>a</sup> Computed by maximum likelihood tobit regression; other results from ordinary least squares regression. See Appendix A for a discussion of why these methods were employed.

job-linked benefits (taxes withheld, one or more benefits such as paid vacation) are all significantly associated with the annual rate of arrest over the three-year period that brackets the sampled arrest.

However, for the first two age cohorts (16-17 and 18-19 year-olds), there is only one weakly statistically significant variation in arrest rates according to the values of these four labor market variables. For 16-17 year olds, arrest rates are a bit higher (1.19) for those out of the labor force (OLF) than for those employed (.88) or looking for work (.76), but this is not true for the 18-19 year olds and it is not significant for the younger group. Arrest rates are higher for 16-17 year olds who worked no hours in the prior year (.99) than for those working 1600 or more hours (.81), but this is not significant; among 18-19 year olds, there is a weakly statistically significant difference (.93 for 0 hours vs. .65 for 1600+ hours). Arrest rates are lower for higher wage as against lower wage groups (although among 16-17 year olds, they peak for those in the \$100-149 a week category (1.07). Also among 16-17 year olds, the handful in a job with taxes withheld and benefits offered have higher rates (.88) than those in off the books jobs (.72); while for 18-19 year olds, there is the expected but only a weak difference between off-the-books and benefitted jobs (1.08 vs. .93).

Turning next to the two older cohorts, we find many consistent differences in arrest rates among the categories of the four selected labor market variables. Among 20-24 year olds,

arrest rates virtually double between those who are employed (.55) and those who are out of the labor force (1.08); arrest rates are generally much lower for the oldest (25 and older) cohort, but differences between the employed and OLF groups remain (.42 vs. .65), although they fall short of statistical significance. For hours worked, differences are strong for the 20-24 year olds (.86 for no hours, declining to .50 for 1600+) and they are even stronger for the oldest group (.65 for no hours, declining to .17 for 1600+). Again, weekly wage shows strongly significant differences in arrest rates for the two older cohorts between the lowest (\$99 and lower) and highest (\$200 and higher) categories (for 20-24: from .56 to .35; for 25+: from .72 to .29). Finally, job benefit status shows arrest rate differences in the expected direction for both cohorts, although they are only weakly significant for the oldest cohort.

In summary, the four different labor market variables show only one weakly statistically significant difference for the two youngest age cohorts and some perverse differences appear; by contrast, among the two older age cohorts, data for the same four variables point to six statistically significant differences and, in general, contrasts in arrest rates between adjacent categories of the labor market variables build smoothly in the expected directions.

Before considering the larger relevance of these results, we have to consider a significant weakness in the data. That is that the data derive from comparisons among different in-

dividuals, and as we noted above, these comparisons have not controlled for numerous other variables besides age.<sup>6</sup> This opens the possibility that other differences may account for the emergence of arrest rate differences among older age cohorts according to the values of selected labor market variables. One further test, lessening this possibility, was undertaken with our data. This test takes advantage of the fact that a large part of our sample consists of individuals who have experienced both periods of working and periods of not working over the two years leading up to the sampled arrest. By calculating two separate arrest rates for each of these individuals -- one for his working periods and one for his not working periods -- we can compare the impacts on arrest of working versus not working for identical individuals. Stable personal characteristics (age, race, education, etc.) are thus perfectly controlled (even characteristics, such as IQ, not explicitly measured in the survey), although seasonal or other contextual variables might still be related to both arrests and working versus not working periods. The results of this procedure, which necessarily excluded those persons (n=247) who worked all of, or none of, the two-year period or for whom job history information was incomplete, are presented in Table 5.4.

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<sup>6</sup>It might also be argued that even age has not been well enough controlled for, since for example in the oldest cohort the remaining range in ages is some 40 years. For this and the next oldest group, continuous age variables were introduced into the arrest rate and labor market analyses discussed above, with no effect on the reported differences or on their statistical significance.

We find using this very different technique that there is among older participants, but not among the younger, an apparent inverse association between working and arrests. For 18-19 year olds in Table 5.4, arrest rates on all charges during periods of working (.99) actually exceed rates during non-working periods (.76). Among those 20-24, however, the difference disappears; rates for working and non-working periods are essentially the same. Finally, arrest rates for those in the 25-54 year old group fall to .29 per year during working periods from .51 per year during non-working periods, confirming for this groups the expectations of economic choice theory.

Table 5.4

**MEAN ANNUALIZED ARREST RATES (ALL CHARGES): WORKING AND NON-WORKING PERIODS COMPARED CONTROLLING FOR AGE\***  
(Standard Error of the Mean in Parentheses)

AGE	N	Working Periods	Non-Working Periods	Ratio of Working Rate: Non-Working Rate
18-19	108	.99 (.193)	.76 (.094)	1.30
20-24	132	.58 (.095)	.54 (.076)	1.07
25-54	117	.29 (.067)	.51 (.096)	.57
All Ages	360	.61 (.072)	.59 (.051)	1.03

\*Subsample of individuals with between 30 and 700 days of work over the past two years.

A pattern emerges when the above analyses are considered together. That pattern suggests that older persons in the sample evince a greater "sensitivity" to economic variables or to their circumstances as defined in employment and labor market terms; conversely, the young seem relatively insensitive to economic factors. Moreover, this interpretation of the employment and crime data is consistent with well-established understandings of youth labor market behavior. A considerable literature has come to view youths' labor market behavior as relatively less stable or "exploratory," as evincing "targetted earner" motivations (i.e., jobs are held until a fixed sum of money is obtained), and as including high rates of job quitting that are not followed by other employment or by job search. (Osterman, 1980; Feldstein and Ellwood, 1978; Freeman, 1980.) For many youths, therefore, labor force drop-out and unemployment are a function of limited employment opportunity and greater social tolerance for not working. Both limited opportunities and the institutional norms defining adolescence also foster a more attenuated subjective attachment to the labor market on the part of youths. For most older individuals, by contrast, there is little tolerance for not working and a greater need for economic independence.<sup>7</sup>

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<sup>7</sup>Chapter Three presented some evidence on this point. For example, the data on reservation wages (Table 3.12) suggested a close matching of reservation wages with actual wages for the 16-19 year old respondents. However (with some exceptions), reservation wages were lower than actual wages for older individuals. This implies that unemployment was less choice related for older individuals.

## 2. Ethnic Patterns

Table 5.5 presents the associations between the annual arrest rate (over a three-year period) and four employment variables for black, Hispanic and white sample members separately. The general patterns involving the arrest measures and the labor market variables are similar for each of the ethnic groups. However, we see that this similarity in general pattern stands against a backdrop of strikingly different underlying levels of arrest rates.

For each of the two minority groups, there is a consistent association between the labor market outcomes and arrest rates, and the association is in the expected "inverse" direction: when labor market outcomes are positive (e.g., employment, many hours worked, high wages, "sheltered" jobs), the associated arrest rates are lower. For whites, by contrast, there is only a weak and sometimes (e.g., hours worked) no association between the labor market and arrest measures.<sup>8</sup>

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<sup>8</sup>The relatively small size of the white sample does mean that statistical tests lose their power, so that differences of the same absolute magnitudes as obtained with statistical significance among the minority groups may not be statistically significant among the whites. However, the differences for the white group were generally smaller in absolute magnitude, as well as failing of statistical significance.



Table 5.5  
**ARREST RATES AND SELECTED EMPLOYMENT VARIABLES  
 BY ETHNIC GROUPS<sup>a</sup>**

EMPLOYMENT VARIABLES	ETHNICITY			
	Black	Hispanic	White	Total Sample
<u>Employment Status at Arrest</u>				
Employed	.70**	.52	.42	.60**
Unemployed	.77	.69	.53	.73
Out of Labor Force	1.11	.70	.59	.91
<u>Hours Worked (Prior year)</u>				
0-799	.94**	.77**	.50	.85
800+	.50	.38	.47	.47
<u>Weekly Wage (Current/most recent job)</u>				
Up to \$99	.89**	.96**	.24**	.84**
\$100-149	.86	.56	.59	.75
\$150-199	.76	.37	.70	.66
\$200+	.39	.46	.28	.37
<u>Job Benefit Status</u>				
"Off the Books"	.91**	.81**	.54	.81**
Taxes Withheld	.92	.51	.36	.77
Taxes and Benefits	.46	.43	.38	.44

\*\*p<.05; \*p<.10

Note: In these tables, F-statistics test the null hypothesis that the arrest rate is statistically unrelated to the given labor market variable.

Standard errors and N's are in Table A5.2 in the Appendix.

C. The Economic Choice Model and the Sample Data

In the preceding analyses, we discovered an important role for age and for ethnicity in arrest regressions (Tables 5.1 and 5.2) in which these variables preserved statistical significance net of many other explanatory factors. In a separate analysis (Table 5.3), we found that the relationship between arrest rates and selected labor market variables was significant only for older age cohorts. Such an important role for age and for ethnicity in accounting for arrests is rather inconsistent with models of crime participation that rely exclusively on economic variables, and which see crime as resulting from a rational weighing of alternative activities in a decision process unaffected by age or ethnic differences.<sup>9</sup>

In what follows, we will first briefly discuss the assumptions underlying economic choice and draw out the model's predictions concerning the associations between arrests and labor market variables; then we consider whether the choice model appears to "work" in terms of the empirical data already presented. Next, we will offer our own necessarily speculative view of factors that we believe usefully supplement the economic choice perspective.

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<sup>9</sup>Economic models of crime behavior do provide for "taste variables," factors that are viewed as reflecting different subjective evaluations of incentives (or disincentives, such as the risk of arrest or punishment) and thereby affecting the way in which these incentives in turn affect the dependent measure. Age and ethnicity are usually interpreted in this way (e.g., Ehrlich, 1973).

1. The Economic Choice Model

The economic choice model of crime participation is founded on the assumption that people seek in rational ways to maximize their own well-being or "utility." The core assumption of the economic choice model (Becker, 1968) is that the behavior of offenders is responsive to incentives, and indeed reflects a universal phenomenon of utility-maximizing choice. Although intuitively plausible, the rational choice approach pays little heed to three important phenomena that qualify its application:

-- First, the circumstances within which decisions are in fact made can lead to very different types of choices in different specific contexts. For example, the behavior of Saturday morning shoppers, traders on the floors of the stock exchanges and students deciding whether or not to stay in school or quit in order to begin earning money -- though they are all characterizable as utility-maximizing -- are molded within distinct "markets" manifesting differing institutional frameworks, widely varying degrees of organization and varying types and quality of information available to decision makers;<sup>10</sup>

-- Second, evidence for behavior in response to incentives is sought "at the margin" -- that is, economists look for the

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<sup>10</sup>For example, it would be ridiculous to see price quotes on stock exchange tickers for "Italian ices," no matter how thirsty floor traders on the exchanges became. This commonsensical partitioning of behavior into distinct institutional frameworks is rarely acknowledged by universalistic choice models, although researchers generally have restricted specific applications of the economic model to narrowly-based phenomena

effects of small increases or decreases in incentives in terms of small increases or decreases in some outcome variable (e.g., crime participation). This narrow focus may obscure the fact that incentive variables have small impacts on behavior in comparison with other factors. An illustration of this possibility is provided by a recent study of black youth unemployment in three cities, in which self-reports of crime participation were elicited from participants in addition to detailed information on their legal labor market involvements. Subsequent analyses of these data suggested that three other personal background factors -- drug use, alcohol use and gang membership -- were more significantly predictive of crime participation than were such traditional incentive measures as legal earnings (Viscusi, 1983).

-- Third, the high prevalence of crime within certain settings and subpopulations makes implausible the assumption of the economic model that all individuals sampled in a given cross-section are identical except for the differences in the measured economic incentives that they confront (such as legal wage rates, educational attainments, etc.). Unmeasured "incentives" might include differences in community and family influ-

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such as white collar tax cheating (Allingham and Sandmo, 1972), street crimes within low-income populations (Viscusi, 1983), women (Bartel, 1976), or recidivism among parolees (Witte, 1975), and so forth. By thus separately studying distinct groups, these researchers implicitly acknowledge that these groups differ in other respects than in the incentives that they confront (or that very different incentive phenomena, such as loss of reputation as against prolonged imprisonment, have differing significance for these subpopulations).

ences, neighborhood crime opportunities, the quality of police law enforcement efforts and the different ecological characteristics of specific residential settings. "Universalistic" approaches that neglect these contextual factors fail to control for a wide range of influences that mediate crime decision-making.

What does the economic choice model predict concerning employment-crime associations that would be observed in samples such as ours? In its simpler forms, the model yields the commonsense prediction that those individuals with higher levels of legal income (or potential income, as measured for example by education variables) would, all else equal, manifest less crime participation. The overall regressions in Tables 5.1 and 5.2 above provide at least a modicum of support for this prediction. Also, the increased ability of selected incentive variables to account for variation in income-oriented as against all arrests can be interpreted as supporting the economic choice perspective. However, as commonly applied, the economic choice perspective leads us to expect essentially the same trade-offs between employment/income variables and crime participation for all age and ethnic groups, since conventional economic analyses assume a universally available labor market without significant structural (age, ethnic) barriers to job access.

This expectation is not at all confirmed by our data. Based on evidence from our survey, the practical significance of economic incentives in reducing crime seems confined to

older age groupings and to minority group members. This specificity is broadly consistent with much other research. Holtzman (1982) compared employment incomes of offenders and of the general population according to age, and found that young offenders have higher legitimate incomes than those of the same age in the general population. Viscusi (1983) analyzed self-reported legal and illegal incomes in the three-city survey described above and found that the self-reported legal incomes of his offender subsample were on a par with those of non-offenders.<sup>11</sup> Finally, the Manpower Demonstration Research Corporation (MDRC) evaluation of a national test of the supported work model found no differences between the arrest rates of program participants and a randomly selected control sample, even though incomes of experimentals were higher during the early program period. Effects on arrest rates were observed for an older sample of ex-addicts (MDRC, 1981).

If, in these and in many other comparable studies, youths do not seem to respond to economic incentives, then how are we to understand their behavior? We turn to this issue next.

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<sup>11</sup>In his own interpretation, however, Viscusi emphasizes the role of incentive variables that measure the differences in potential income returns from legal as against illegal involvements. These incentive variables account for statistically significant variation in self-reported street crime (although a contrary interpretation would stress the likelihood that those who perceive that crime options are more attractive than legal income options do so as a result of their participation in crime).

## 2. Factors Augmenting the Economic Choice Model of Crime Participation

Our general argument is that there are important differences in the crime decision-making process, social contexts that affect choice between crime and non-crime options and broader opportunity structures that define crime and non-crime options. These differences are related to both age and minority status. Thus, to fully understand employment-crime relationships, they must be approached through three related avenues. First, we may focus (as does the economic model) on individual decision-making and on the interplay of individual attitudes, motivations and perceived incentives. Next, we may focus on the social contexts that affect decision-making. For the young, these social contexts are more or less mediated by adult interventions in youths' decision-making. Such intervention by older individuals introduces different time horizons, attitudes towards risk and "discounting," and thus transforms the decision problem from an individualistic effort at utility maximization to family efforts at maximizing interdependent utilities.<sup>12</sup>

Finally, we may focus on the macro-level opportunity structures -- both legal and illegal -- in which some age, ethnic or social class groups experience different opportunities

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<sup>12</sup>In the economic choice literature, Danziger and Wheeler (1975) were the first to emphasize the possible significance of interdependent utility functions, although their emphasis differed from the current discussion.

to succeed within educational, labor market and crime settings. Although our sample is drawn from a predominantly poor, inner-city population (and hence we cannot examine the full range of social class and cultural structures), we have found important ethnic differences in the educational, labor market and crime spheres, and these are sufficient to develop at least some of the points required for a structural analysis.

In addressing these three avenues of interpretation, age and ethnic differences provide important evidence at all levels: they attest to the existence of differing individual decision processes, to differing social contexts affecting youths' decision-making and to differing macro-level opportunity structures. The three types of interpretation are also mutually related. For example, disentangling that part of criminality that stems from adolescent short-sightedness or "myopia" from that part that stems from weakened or ineffective adult interventions, and disentangling both of these from a final more purely "structural" component is often a matter of conjecture. We nevertheless believe that such a multi-level understanding is useful, because it may someday allow us to integrate evidence from surveys such as this one with cultural, ethnographic, historical, and cross-cultural research.

In what follows, we take the more limited first step of recasting the broad findings of our own survey in terms of the three levels of interpretation that we have sketched here, discussing first the age patterns in the survey and then the ethnic patterns.



a. Age and Crime Participation

Individualistic View. The individualistic view of youths' crime decision-making is familiar from a wide range of crime and labor market literature. The conventional explanation proceeds on the basis of individual differences. Some youths are forward looking, plan and incorporate long-term goals into their behavior. They are generally risk averse and they respond to the pull of opportunities in the distant future. Other youths respond to the environment close by, seek immediate gratification, are "reactive" rather than "purposeful," do not plan and do not take into account the long-term consequences of their actions. Differences among youths in such behavior as school drop-out and participation in street crime are a direct result of these individual differences in myopia. Some observers of youth crime note that behavior such as impulse crime is intensified within certain economic, social class or "poverty subculture" groupings (Banfield, 1970), but these interpretations usually seek to anchor the behavior to attributes of the individual (often, in psychological terms such as "immediate gratification," "present time orientation," etc.).

Social Contexts Affecting Decisions. An alternative view of crime decision-making begins by observing that there are important links between a person's decisions at different ages. Decisions made at early ages have lasting consequences that may not be understood by the youthful decision maker himself, even though they are recognized by others (parents,

older acquaintances, etc.). For example, school drop-out at age 16 has long-term effects on later labor market prospects, both in terms of work availability and the characteristics of available employment; however, these considerations rarely enter into the youth's own decision to leave school.<sup>13</sup> At the same time, current school enrollment limits hours available for work and therefore appears to exact a short-term economic penalty in the form of lower present earnings. Immediate considerations, such as the desire for income from a fulltime job, are much more likely to influence a youth's decision to leave school.

The social context view notes that almost everyone grows older, and in the process, wiser. If this is true, then many of the adults surrounding youthful decision makers would be expected to recognize the adverse consequences for youths of their short-term decision-making and, given a concern for their longer term welfare, they would be expected to intervene and reshape the youths' behavior in order to improve that longer term welfare. For example, middle class parents often discourage their children from leaving high school and provide them with tutors and extra incentives to succeed academically.

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<sup>13</sup>This impression was confirmed in interviews conducted by one of the authors with school dropouts at the New York City Court Employment Program. These youths reported that they had little awareness of long term consequences of school drop-out when they left school, although their attitudes changed rather dramatically over the course of a few years and by the time they were interviewed they had begun to make strenuous efforts to obtain equivalency diplomas.

Allowances are available for daily expenses as well as funds for clothes and leisure activities. Special assistance in the form of legal and counseling services are often available to mitigate the negative effects of a youth's myopia.

All caring adults do not have equal resources for controlling youthful behavior, and some are less able than others to shape the actions of their children or to mitigate their negative effects. Thus, behavior which on the one hand may be viewed as reflecting the myopia of lower-class, minority youth may also be understood as reflecting the dearth of resources possessed by lower-class adults to correct or compensate for that myopia.

The views of myopia as individually-based and deriving from social contexts and adult influences are complementary. Our own position is that youthful myopia is universal, but that its consequences are patterned according to cultural, social class and community differences. For youths in general, immediate influences in the environment tend to dominate, while distant opportunities that require a directed, sustained expenditure of effort over the long term exert only a relatively weak pull. For poor youths in high risk settings, this means that factors in the immediate setting -- the crime activities of age peers, weak family controls, diminished economic resources, disorganized neighborhoods, disruptive schools, etc. -- all combine to affect behavior much more powerfully than do visions of future opportunities that are linked to the labor market, to educational institutions and to other aspects of the

social environment. For more advantaged youths, immediate settings also exert strong attractions, but these settings are themselves different and, even when they present risks for these youths (e.g., middle class drug abuse), parents and other adults are often able more effectively to intervene and provide concrete motivation for behavior that will enhance longer term opportunities.

Macro Social Structures. If this characterization of the differing social contexts surrounding youthful decision-making is accurate, then it becomes evident as well that the "crime decision" made by a youth differs greatly according to his position within macro-level opportunity structures. For example, the high incidence of female-headed households among young arrested persons (46% among those 16-17, 40% among those 18-19) and the relatively low incidence of employment among male household heads even in intact families (65% employed among those 16-17, 69% employed among those 18-19) suggest that (a) arrested persons as a group experience diminished levels of adult influence and control (i.e., that the social contexts surrounding youths' decision-making are impaired) and (b) the families as a whole confront unfavorable opportunities. As we have already noted, the task of disentangling the source and relative significance of influences at different levels is not easy.

Another danger confronting a youth whose family occupies a disadvantaged position is the increased probability that a confluence of many different events (such as pressing financial

need, family conflict or break-up and adolescent emotional upheavals) will force the youth into a sudden "bind" in which his time horizons are shortened and his behavior responds only to aspects of the immediate situation. Sudden school drop-out, continuing participation in crime without heed to risks of arrest or of injury, and unexpected failure within programs while nearing the threshold of success are instances of behavior that appear "myopic," "self-defeating," or "irrational," but which are interpretable at any one of the three levels of analysis.

b. Ethnicity and crime participation. Discussion of ethnic differences in crime decision-making continues the three-level approach introduced above in the discussion of age. In reflecting upon age differences in crime decision-making, we argued that although youthful myopia was a widespread phenomenon, evidence purporting to show large individual differences in myopia often reflects differences in social contexts (in the resources available for and in the success of adult interventions), and in addition, that there are intractable structural age barriers to job access that account for much of the behavior of youths, including apparent myopia. Although a somewhat parallel argument can be made in discussing the influences on crime participation of ethnicity, the nature of the analytical differentiation among individualistic, social context and macro-level structural factors is different for ethnic status; in general, a much greater weight is to be given to the structural level.

Individualistic factors. Everyone experiences the transitions of the life cycle. Most adults can empathize with the problems of youth. Racial or ethnic statuses, however, are relatively immutable. Given this difference, it is something of a surprise that relatively few of the respondents specifically alluded to race discrimination in their own reports (in the follow-up survey) of labor market experiences. For example, only 16 percent of the sample reported race as a negative factor impeding their acquisition of a job when asked about "barriers." In general, there was little evidence in the survey research or in the Project's parallel field research that crime participation was either motivated by or understood in terms of race-related barriers. In this sense, ethnicity did not play a conscious, self-ascribed role as an individual-level factor in crime decision-making.

Social contexts affecting decisions. But, although respondents did not appear to perceive their ethnic status as of importance in their labor market and crime involvements, ethnicity is associated with different social contexts that in turn affect crime decision-making.

Macro-social structures. The ethnic patterns that were discussed above are ones in which minority arrested persons more closely resemble a general background of economic disadvantage and widespread involvement in crime (viz., arrests of family members), whereas white arrested persons stand out more as deviant individuals against a background of less severe disadvantage (more jobs, better neighborhoods,

more involvement by or at least communication with parents). This similarity between the minority sample members and the general minority population and somewhat greater dissimilarity among sample and general population whites reflects the impacts of macro-level opportunity structures. Indeed, the juxtaposition of relatively high levels of crime opportunity and relatively low levels of legitimate opportunity formed our original definition of the research population of high-risk individuals.

Finally, although we have utilized ethnic patterns in the data (in the absence of adequate measures of, for example, social class position) we do not mean to imply that we have discovered subcultural patterns. Although there may well be subculturally-based ethnic patterns in crime participation, attempts to trace such differences to subcultural roots must be informed by types of information not available to us in the survey study and in any case must be carefully evaluated in terms of alternative social class, community and ecological explanations.<sup>14</sup>

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<sup>14</sup>For example, in our survey data, some of the differences in the percentages of arrests for robbery among young black, Hispanic and white arrested persons seem to be related to residence within high-rise public housing projects. Black teenagers are more likely than Hispanics, and far more likely than whites, to report residence in such housing. Moreover, our field research in Brooklyn has suggested some reasons (crowding, anonymity, lack of other targets) why the ecology of project neighborhoods fosters crimes such as robberies. Are these patterns "racial?" In this case, it would appear that the lower prevalence of Hispanics in such housing is an historical accident stemming from the recency of their immigration, while the scarcity of whites stems from their relative socioeconomic advantage.

**D. Conclusion**

Our purpose in this section has been to reflect on the nature of the crime decision and on the extent to which conventional economic models fit the data from our sample. What we have concluded is that the economic model does more or less adequately frame overall relationships between economic incentives and income-oriented crime, but that it takes little account of the differences in decision-making that occur over the life cycle or for those of a given age located within different social contexts. Having introduced these qualifications and refinements, what can we ultimately conclude concerning employment-crime relationships? How "important" is employment, and labor market opportunities generally, in determining participation in crime?

What we would suggest in concluding this report is that questions such as these are almost meaningless without a careful specification of both time-frame and level of analysis (for example, the three levels we have defined above). At an individualistic level, and with attention focused on youths and on the role of incentive variables that measure the direct influence of income opportunities, employment phenomena have little direct effect on crime participation. For older individuals within an arrested persons sample, even a narrow individualistic focus on incentive variables supports the conclusion that employment reduces participation in crime.

When the level of analysis shifts to social contexts and to their effects on crime participation, matters no longer are



as simple. For youths, changes in these contexts (in family resources, in adolescent peer groups, etc.) may have decisive effects. West (1982), for example, found that youths in his longitudinal research who left their inner-city London neighborhood for smaller provincial towns experienced dramatic fall-offs in crime participation, even after controlling for pre-move characteristics. In another provocative finding, the Mathematica evaluation of the national Job Corps found that post-program arrest rates were lowered even among program dropouts, a group that for reasons of self-selection alone would be supposed to have elevated, not reduced, arrests. Once more, it is likely that many of these youths did not return to their pre-program community settings, opting instead to return to other communities.

Finally, although our sample of arrested persons has not provided consistent support for the proposition, we would argue that for all age groups there are important direct and indirect effects of macro-level opportunity structures. These effects arise first of all because of the barriers to job access for those under age 18, and they arise because of the manner in which economic opportunity affects the social contexts within which crime decision-making takes place. Labor market rewards endow adults with the resources needed to intervene in the risky, often myopic decisions made by youth; they encourage (or if they are inadequate, they inhibit) youths to make investments in their own human capital. Even among the very young, where few direct relationships are evident, labor market oppor-

tunities indirectly but importantly affect crime participation. They affect it not solely through an economic calculus undertaken by isolated individuals but through a communal striving for a better future to be shared by parents and children alike.

Table A2.1

MEAN DAYS IN SCHOOL BY AGE AND ETHNICITY  
(Enrollment over Year Prior to Interview)

AGE	RACE/ETHNICITY			
	Black	Hispanic	White	All Races
16	220 (77)	234 (20)	136 (16)	217 (113)
17	210 (47)	133 (26)	91 (13)	169 (86)
18	75 (43)	42 (29)	55 (10)	61 (82)
19	56 (36)	20 (17)	49 (16)	46 (69)
20-24	19 (122)	0 (56)	18 (38)	14 (216)
25+	13 (189)	4 (71)	0 (52)	8 (312)
All ages N	72 (514)	46 (219)	37 (145)	59 (878)

Table A2.2  
 AGE AND REASON FOR LEAVING SCHOOL  
 (School Dropouts Only)

REASON FOR LEAVING	AGE			
	16-19	20-24	25+	All Ages
<u>"Pulled Out"</u>				
To find work	12%	18%	26%	20%
To take a job	9	9	17	12
Family	6	18	24	17
Military	1	2	2	2
	28	47	69	51
<u>"Drifted Out"</u>				
No ability	6	4	1	3
Disliked school	50	30	16	30
	56	35	17	34
<u>"Pushed Out"</u>				
Expelled	12	10	5	9
Arrested	2	5	6	5
Drugs	1	3	2	2
	16	18	14	16
Total	100%	100%	100%	100%
N	(120)	(115)	(166)	(401)

Table A2.3

PERCEPTION OF SCHOOLING'S LABOR MARKET BENEFITS  
 BY SCHOOL STATUS AND BY LABOR MARKET STATUS  
 (Percent Reporting "Helps a Great Deal" in Getting a Job)

SCHOOL STATUS	LABOR MARKET STATUS			
	Employed	Unemployed	OLF	All Statuses
In School	72% (72)	73% (77)	79% (42)	74% (191)
H.S. Diploma	43 (120)	23 (31)	29 (24)	38 (175)
Dropout	49 (235)	57 (123)	43 (46)	51 (404)
All Statuses	52% (427)	58% (231)	54% (112)	54% (770)

Note: In this table, the numbers reported in parentheses represent the total number (or base number) of respondents in intersecting row and column categories of the independent variables. The actual number of cases represented by the percentages can be calculated by multiplying the percentage by the relevant base number.

Table A3.1

## DETAILED LABOR FORCE STATUS BY ETHNICITY AND AGE

LABOR FORCE STATUS	BLACK			HISPANIC			WHITE*			ALL RACES		
	16-19	20-24	25-54	16-19	20-24	25-54	16-19	20-24	25-54	16-19	20-24	25-54
Working full time	22%	35	51	24	39	52	39	61	53	26	41	52
20-30 hrs/wk	13	10	6	14	4	3	9	6	4	13	8	5
Less than 20 hrs/wk	5	3	8	5	12	11	9	14	9	6	7	9
Unemployed	41	42	20	40	35	18	30	14	9	39	35	18
Out of labor force	19	10	15	17	10	17	13	6	26	17	9	17
Totals	100	100	100	100	100	101	100	101	101	101	100	101
N	(193)	(115)	(164)	(86)	(51)	(66)	(54)	(36)	(47)	(333)	(202)	(277)
	$\chi^2 = 46$ DF=8 Prob=.0001			$\chi^2 = 24$ DF=8 Prob=.0001						$\chi^2 = 69$ DF=8 Prob=.0001		
Unemployment rate**	51%	47	23	48	39	22	34	15	12	47	38	22
Labor force participation***	81%	90	85	83	90	83	87	94	74	83	91	83

\*Table is too sparse for reliable tests of statistical significance.

\*\*The unemployment rate is the result of dividing those unemployed by the sum of the employed and unemployed (e.g., by all of those in the labor force).

\*\*\*Represents those in the labor force, e.g., the denominator of the unemployment rate, as a percentage of the total sample.

Source: Job JWTPA 512, pp. 12-19.

Table A3.2

UNIONIZED OR UNION-RELATED JOBS BY ETHNICITY

UNIONIZATION	ETHNICITY			
	Black	Hispanic	White	All Races
Some union workers at job site	40%	41%	43%	41%
No union at job site	60	59	57	59
Total N	100% (388)	100% (170)	100% (123)	100% (681)

X<sup>2</sup> n.s.

	Black	Hispanic	White	All Races
	Respondent a union member (if union was present)	53%	53%	61%
Not a union member	47	47	39	45
Total N	100% (156)	100% (68)	100% (51)	100% (275)

X<sup>2</sup> n.s.

Table A3.3

MEDIAN JOBLESS DURATIONS BY RESPONSE TO  
"WHY DID YOU LEAVE YOUR JOB"

REASON FOR LEAVING LAST JOB	MEDIAN	FREQUENCY	PERCENT OF SAMPLE
Quit, other job	116	6	2%
Quit, working conditions	209	30	9
Quit, low pay	179	37	11
Quit, problems with boss	149	24	7
Quit, illness	614	28	8
Quit, school	236	10	3
Quit, family reasons	262	11	3
Quit, moved	259	7	2
Arrested	667	9	3
Laid off	138	69	20
Temporary job	336	62	18
Fired	172	44	13
Other	76	8	2
Total . . . . .	-	345	101%



Table A3.4

MEDIAN CURRENT JOBLESS DURATIONS BY RESPONSE TO  
"WHAT IS YOUR BIGGEST PROBLEM FINDING WORK?"

BIGGEST PROBLEM IN FINDING WORK	MEDIAN DURATION	FREQUENCY	PERCENT OF SAMPLE
Lack of jobs	207	100	43%
No skill	281	10	4
No education	185	21	9
No experience	236	18	8
Criminal record	399	20	9
Drug/alcohol problem	543	3	1
Age	232	13	6
Other	138	47	20
Total . . . . .	-	232	100%

Table A5.1

AGE ANALYSES OF EMPLOYMENT-CRIMINAL HISTORY  
(N's and Standard Deviations)

EMPLOYMENT VARIABLES	AGE							
	16-17		18-19		20-24		25+	
	S.D.	N	S.D.	N	S.D.	N	S.D.	N
<u>Employment Status at Arrest</u>								
Out of Labor Force	.18	27	.23	16	.16	17	.14	41
Unemployed	.13	48	.13	49	.08	67	.13	50
Employed	.13	48	.12	61	.07	98	.07	160
		<u>123</u>		<u>126</u>		<u>182</u>		<u>251</u>
<u>Hours Worked (Prior year)</u>								
0	.14	39	.20	20	.11	39	.10	78
1-799	.11	62	.12	60	.10	51	.14	39
800-1599	.25	13	.18	24	.11	40	.14	39
1600+	.27	11	.20	21	.10	49	.09	90
		<u>125</u>		<u>125</u>		<u>179</u>		<u>246</u>
<u>Weekly Wage (Current/most recent job)</u>								
Up to \$99	.11	59	.17	27	.13	24	.21	18
\$100-149	.18	24	.13	48	.08	60	.11	68
\$150-199	.21	18	.19	22	.10	45	.12	55
\$200+	.33	7	.22	17	.11	33	.09	102
		<u>108</u>		<u>114</u>		<u>162</u>		<u>243</u>
<u>Job Benefit Status</u>								
"Off the Books"	.13	46	.16	32	.09	50	.12	52
Taxes Withheld	.12	51	.12	57	.09	52	.11	63
Taxes and Benefits	.34	7	.17	30	.08	62	.08	130
		<u>104</u>		<u>119</u>		<u>164</u>		<u>245</u>

Table A5.2

ETHNIC ANALYSIS OF EMPLOYMENT-CRIMINAL HISTORY  
(N's and Standard Deviations)

EMPLOYMENT VARIABLES	ETHNICITY					
	Blacks		Hispanics		Whites	
	S.D.	N	S.D.	N	S.D.	N
<u>Employment Status at Arrest</u>						
Out of Labor Force	.13	57	.14	25	.15	19
Unemployed	.08	140	.10	55	.15	19
Employed	.07	200	.07	93	.07	74
		397		173		112
<u>Hours Worked (Prior year)</u>						
0-799	.05	238	.08	105	.12	45
800+	.07	155	.10	69	.11	63
		393		174		108
<u>Weekly Wage (Current/ most recent job)</u>						
Up to \$99	.10	84	.12	31	.16	13
\$100-149	.09	120	.09	63	.14	17
\$150-199	.10	86	.12	31	.12	23
\$200+	.11	77	.11	35	.08	48
		367		160		101
<u>Job Benefit Status</u>						
"Off the Books"	.10	93	.09	53	.10	34
Taxes Withheld	.09	125	.09	54	.13	21
Taxes and Benefits	.08	148	.09	55	.08	50
		366		162		105

## BIBLIOGRAPHY

- Allingham, M.G. and Sandmo, A.  
1972 "Income Tax Evasion: A Theoretical Analysis."  
Journal of Public Economics, 1 (November) 323-338.
- Anderson, Elijah.  
1978 A Place on the Corner. Chicago: University of  
Chicago Press.
- Banfield, Edward.  
1970 The Unheavenly City. Boston: Little, Brown and  
Co.
- Bartel, Ann.  
1976 "Women in Crime: An Economic Analysis." Research  
Paper No. 143. New York: Graduate School of  
Business, Columbia University.
- Becker, Gary.  
1968 "Crime and Punishment: An Economic Approach."  
Journal of Political Economy, 76 (March/April)  
176.
- Bienstock, Herbert.  
1981 Young People in the New York Labor Market. New  
York: Center for Labor and Urban Policy Programs  
Research and Analysis. December.
- Blau, Peter and Duncan, Otis D.  
1967 The American Occupational Structure. New York:  
Wiley.
- Blumstein, Alfred and Cohen, Jacqueline.  
1979 "Estimation of Individual Crime Rates from Criminal  
Records." The Journal of Criminal Law and Crimi-  
nology 70 (4) 561-585.
- Blumstein, Alfred and Graddy, Elizabeth.  
1982 "Prevalence and Recidivism in Index Arrests." Law  
and Society 16 (2).
- Bowles, Samuel and Gintis, Herbert.  
1976 Schooling in Capitalist America. New York: Basic  
Books.
- Bullock, Paul.  
1973 Aspiration vs. Opportunity: Careers in the Inner  
City. Ann Arbor, Michigan: Institute of Labor and  
Industrial Relations, University of Michigan.

- Bureau of National Affairs.  
1976 "Selection Procedures and Personnel Records." Personnel Policies Forum. Survey No. 114. September.
- Burtless, Garland and Hansman, J.A.  
1978 "The Effect of Taxation on Labor Supply: Evaluating the Gary Negative Income Tax Experiment." Journal of Political Economy 86 (6) 1103-1130.
- Chaiken, Jan M. and Chaiken, Marcia R. with Peterson, Joyce E.  
1982 Varieties of Criminal Behavior: Summary and Policy Implications. Rand Corporation. August.
- Cook, Philip J.  
1980 "Research in Criminal Deterrence: Laying the Groundwork for the Second Decade." In Norval Morris and Michael Tonry (eds.), Crime and Justice. Vol. II. Chicago: University of Chicago Press, pp. 211-268.
- Danziger, Sheldon and Wheeler, David H.  
1975 "The Economics of Crime: Punishment or Income Redistribution." Review of Social Economy 33 (October) 113.
- Doeringer, Peter B. and Piore, Michael J.  
1971 Internal Labor Markets and Manpower Analysis. Lexington, Massachusetts: D.C. Heath.
- Ehrlich, Isaac.  
1973 "Participation in Illegitimate Activities: A Theoretical and Empirical Investigation." Journal of Political Economy 81 (May/June) 521-565.
- Elliott, Delbert S. and Voss, Harwin L.  
1974 Delinquency and Dropout. Lexington, Massachusetts: Lexington Books.
- Feldstein, Martin and Ellwood, David.  
1978 Teenage Unemployment: What Is the Problem? Cambridge, Massachusetts: National Bureau of Economic Research, Working Paper No. 274. August.
- Freedman, Marcia K.  
1969 The Process of Work Establishment. New York: Columbia University Press.
- Freeman, Richard B.  
1980 "Why Is There a Youth Labor Market Problem?" In Bernard E. Anderson and Isabel V. Sawhill (eds.), Youth Employment and Public Policy. Englewood Cliffs, N.J.: Prentice Hall.
- Gibbons, Don C.  
1977 Society, Crime and Criminal Careers. Englewood Cliffs, N.J.: Prentice-Hall.

- Gordon, David M.  
1971 "Class, Productivity, and the Ghetto." Ph.D. dissertation, Harvard University.
- Greenberg, David.  
1984 "Age and Crime." In Sanford Kadish (ed.), Encyclopedia of Crime and Justice. New York: Macmillan.
- Greenwood, Peter W. with Abrahamse, Allan.  
1982 Selective Incapacitation. Santa Monica, California: Rand Corporation.
- Hacker, Andrew.  
1984 "The Schools Flunk Out." The New York Review of Books. XXXI (6) 35-40.
- Harrison, Bennett.  
1972 Education, Training and the Urban Ghetto. Baltimore: The Johns Hopkins University Press.
- Hennessy, Michael H.  
1976 Crime and Capital: Released Offenders and Employment. Ph.D. dissertation, Northwestern University.
- Hirschi, Travis and Gottfredson, Michael.  
1983 "Age and the Explanation of Crime." American Journal of Sociology 89 (3) 552-584.
- Holtzman, Harold R.  
1982 "The Serious Habitual Offender as 'Moonlighter': An Empirical Study of Labor Force Participation Among Robbers and Burglars." The Journal of Criminal Law and Criminology 73 (4) 1774-1792.
- Ianni, Francis.  
1974 Black Mafia: Ethnic Succession in Organized Crime. New York: Basic Books.
- Liebow, Elliot.  
1967 Tally's Corner: A Study of Negro Street Corner Men. Boston: Little, Brown and Co.
- Mallar, Charles and Thornton, V.D.  
1978 "Transitional Aid to Released Prisoners: Evidence from the LIFE Experiment." Journal of Human Resources 13 208-236.
- Manpower Demonstration Research Corporation.  
1981 Final Report of the Supported Work Evaluation. New York: Manpower Demonstration Research Corporation.
- Miller, Neal.  
1979 Employer Barriers to the Employment of Persons with Records of Arrest or Conviction. Washington, D.C.: U.S. Department of Labor. (unpublished)

- New York Urban Coalition  
1972 Survey of Corporate Job Applications.
- Orsagh, Thomas and Witte, Ann Dryden.  
1980 "Economic Status and Crime: Implications for Offender Rehabilitation." The University of North Carolina. February. (Mimeo.)
- Osterman, Paul.  
1980 Getting Started: The Youth Labor Market. Cambridge, Massachusetts: MIT Press.
- Petersilia, Joan.  
1983 Racial Disparities in the Criminal Justice System. Santa Monica, California: Rand Corporation. June.
- Rossi, Peter H.; Beck, Richard A.; and Lenihan, Kenneth A.  
1980 Money, Work and Crime. New York: Academic Press.
- Sennett, Richard and Cobb, Jonathan.  
1973 The Hidden Injuries of Class. New York: Vintage.
- Smith, Michael E. and Thompson, James W.  
1983 "Employment, Youth and Violent Crime." In Kenneth R. Feinberg (ed.), Violent Crime in America. Washington, D.C.: National Policy Exchange.
- Sullivan, Mercer.  
1984 Youth Crime and Employment Patterns in Three Brooklyn Neighborhoods. New York: Vera Institute of Justice.
- Sviridoff, Michele with McElroy, Jerome E.  
1984 Employment and Crime: A Summary Report. New York: Vera Institute of Justice.
- Sviridoff, Michele and Thompson, James W.  
1983 "Links Between Employment and Crime: A Qualitative Study of Rikers Releasees." Crime and Delinquency 29 (2) (April) 195-212.
- Thompson, James W.; Sviridoff, Michele; McElroy, Jerome E. with McGahey, Richard and Rodriguez, Orlando.  
1981 Employment and Crime: A Review of Theories and Research. Washington, D.C.: National Institute of Justice, U.S. Government Printing Office.
- Unco Corporation  
1970 Study to Determine the Relative Success or Failure of Corps-members with Police Records in Job Corps and in Initial Placement.
- Vera Institute of Justice.  
1979 "Employment and Crime: A Research Design." New York: Vera Institute of Justice. (Mimeo.)

Vera Institute of Justice.

1983 Final Report of the Alternative Youth Employment Strategies Program. New York: Vera Institute of Justice.

Viscusi, W. Kip.

1983 Market Incentives for Criminal Behavior. Cambridge, Massachusetts: National Bureau of Economic Research, Conference on Inner-City Black Youth Unemployment, August 11-12.

West, D.J.

1982 Delinquency: Its Roots, Causes and Prospects. Cambridge, Massachusetts: Harvard University Press.

Witte, Ann Dryden.

1976 "Earnings and Jobs of Ex-offenders: A Case Study." Monthly Labor Review 99 (12) (December) 31-39.

Witte, Ann Dryden.

1975 Work Release in North Carolina: An Evaluation of Its Post-Release Effects. Chapel Hill, N.C.: Institute for Research in Social Science.

Witte, Ann Dryden.

1980 "Estimating the Economic Model of Crime with Individual Data." The Quarterly Journal of Economics (February).

Wolfgang, Marvin E.; Figlio, Robert M. and Sellin, Thorsten.

1972 Delinquency in a Birth Cohort. Chicago: University of Chicago Press, pp. 109-126.