

✓ DELINQUENCY IN A BIRTH COHORT II: CWS  
A SUMMARY

Submitted by  
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Delinquency in a Birth Cohort was the first large-scale birth cohort study of delinquency undertaken in the United States based upon a generalizable, urban population. The delinquency careers of all boys born in 1945 who resided in Philadelphia from their tenth to their eighteenth birthdays were described and analyzed. It is important to note that the 1945 cohort study developed base line, cohort delinquency rates from a data source unlike any other previously investigated in this country. Desistence and recidivism probabilities, offense switching, offense severity escalation, disposition probabilities and their effect on subsequent delinquency are all measures that can be best estimated from longitudinal, preferably cohort, data.

Because the 1945 birth cohort study was unique and valuable, the present study was undertaken to replicate the prior research. Replications of scientific findings are common, lauded and necessary in the physical sciences; they are relatively rare, albeit still necessary, in the social sciences. They are even less common in criminology and criminal justice, which is most unfortunate. In a discipline closer to its nascency than most, criminology requires replications to determine or to ensure reliability and validity. Researchers in this field are often more interested in trying to break new ground than to confirm an earlier travelled terrain. But when a methodology capable of generating a new set of findings, important to theory and empirical application, is demonstrated, it should be reiterated in order to determine whether it is possible to buttress consistency and to affirm the reality observed. Prevention of crime, social invasion of the biographies of people, deterrence and purposefully promoted change are significant modes of social intervention, especially in a democracy. They can have serious

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policy effects that require the best available insight based on the best available evidence. Birth cohorts, or longitudinal analyses, provide this opportunity. A replication of evidence in the same setting maximizes the validity and reliability of this kind of analysis for the benefit of science and of social policy.

Another birth cohort in Philadelphia, the site of the first cohort, affords the opportunity to examine the effects on delinquency of growing up in a different time and sociocultural setting. The 1945 cohort was born in the final year of World War II, which sets its years of delinquent involvement in the period from 1955 through 1962. The 1958 cohort was born thirteen years later, which sets the period of delinquent involvement in the years from 1968 through 1975. The social milieu of the two cohorts differ and may represent different pushes toward or pulls away from delinquency. For the 1958 cohort, delinquency years coincide with America's involvement in the Vietnam War, the rise in drug abuse, social protest, etc. This period of rapid social change and pervasive social unrest is in sharp contrast to the more tranquil period of adolescence experienced by the 1945 cohort.

Although the social environments differ considerably, the criminal justice environments of the two cohorts are much alike. The policies and procedures for law enforcement, especially in the handling of juvenile offenders, was the same for both cohorts. Likewise, juvenile court policy followed the same statutory provisions for the disposition of delinquents in the 1958 cohort as were in place for the 1945 cohort. Naturally, this consistency in official policy does not preclude the possibility of

differences in the informal handling of delinquents in the two cohorts, either by the police or by juvenile court authorities. However, the uniformity of the criminal justice process applied to the two cohorts at least ensures that differences in either the extent or character of delinquency are not an artifact of the system and more probably are reflective of real differences in behavior.

Thus cohort changes can be displayed in a setting that had a political, police and juridical background similar to the earlier cohort. Whether offense probabilities by age, race, sex, crime types, seriousness, etc. are different will be measurable and recordable within the same geographic boundaries. Another birth cohort study in another jurisdiction would be useful, to be sure, but differences from the present study would have more difficulty being explained by reasons of generational differences than by geography and demographic factors; whereas differences in a new Philadelphia cohort would rest more upon real differences in offensivity. Changes, if any, in drug offenses, crimes by females, amounts and locations of victimization through violence, kinds and length of court and institutional sentences can be specifically attributable to the specific cohort variations if the new cohort is in Philadelphia rather than elsewhere.

Are crimes of violence more or less today inherent in the generational wave of a cohort born 13 years later than the World War II birth cohort of 1945? Or is the rate essentially the same and only swelled by the total volume of children produced in the cohort? Is juvenile crime more serious on the scale of gravity than it was in the earlier cohort?

Is the second generation more specialized in offensivity than the parent group? Do offense careers have similar desistence rates? Is racial differentiation in juvenile justice dispositions still evident? These are only a few of the more obvious questions answerable by a birth cohort replication in the same jurisdiction.

To ensure that the present study was comparable to its predecessor, the 1958 cohort was defined in the same way and the data collection procedures and sources used were the same as in the 1945 cohort. Thus the present cohort consisted of those youths born in the target year who had continued residence in the City of Philadelphia at least from age ten through age seventeen. The residence restriction not only ensures that each cohort member is exposed to the environment at the same time, but also guarantees that the individual will face the same period at risk of delinquency.

The data were gathered from three sources—schools, police and the juvenile court. From school records we obtained background data pertaining to the race, sex, date of birth and residential history of the subject. The last, together with Bureau of Census data, provided the means for determining the social class of the cohort members. The school records also yielded data pertaining to school achievement, graduation status and other school-related measures. From the records of the Juvenile Aid Division of the Philadelphia Police Department we obtained the delinquency data for the cohort. These data consisted of all the police contacts recorded for a juvenile, whether or not the offense resulted in official arrest processing.<sup>1</sup> We supplemented these rap sheets with the

police investigation reports which contain the essential details concerning the offense. These details include information about physical injury, property theft or damage, use of weapons and any other relevant information about the event, victim or offender which we deemed important for this or future analysis. From the records of the Juvenile Court Division of the Court of Common Pleas for Philadelphia we collected data pertaining to how the case was handled by the juvenile court system.

The 1958 birth cohort is composed of 13,160 male subjects. Six thousand two hundred and sixteen (47.2%) are white, while 6944 (52.8%) are nonwhite. Six thousand four hundred and fourteen (48.7%) are low SES, while 6746 (51.3%) are high SES. Compared to the 1945 cohort, the 1958 cohort is noticeably different. The 1958 cohort is larger, with almost one third more members. More important, the racial composition of the 1958 cohort is more even than was the case for the earlier cohort. Whereas the 1945 cohort consisted of 71 percent white boys and 29 percent nonwhite boys, the 1958 cohort has about 47 percent white and 53 percent nonwhite. Further, although both cohorts had slightly more than one half high SES subjects (54% in Cohort I and 51% in Cohort II), the racial differences in SES are much less pronounced in the 1958 cohort than in the 1945 cohort. That is, in Cohort I about 70 percent of the whites, compared to just 16 percent of the nonwhites, were high SES. In Cohort II, however, about 79 percent of the white boys, compared to 27 percent of the nonwhite boys, are high SES. In Cohort II, therefore, nonwhites are neither the minority of subjects nor as disadvantaged as their counterparts in the previous cohort.

Because we have investigated a number of topics surrounding the issue of delinquency, it is desirable to summarize the major findings with respect to the various topic areas of interest. These areas are prevalence, incidence, delinquent subgroups, age, recidivism and dispositions.

#### Prevalence

Of the 13,160 males in the 1958 birth cohort, 4315, or about 33 percent, had at least one police contact before reaching their eighteenth birthday. The proportion of delinquents is thus extraordinarily close in the later cohort to that observed in the first (34.9%).<sup>2</sup> Both cohorts show a relationship between race and delinquency and SES and delinquency, but the relationships are less pronounced in the 1958 cohort. In the present cohort about 42 percent of nonwhites were delinquent, compared to 23 percent of whites, for a difference of 19 percent. In the earlier cohort delinquency involved 50 percent of the nonwhite boys, compared to 29 percent of the white boys, for a difference of 21 percent. Similarly, the SES differential is 18 percent in Cohort II, compared to 19% in Cohort I.

In addition to race and SES, we found several other background variables were related to delinquency status. Delinquents showed more residential instability than did nondelinquents. Delinquents exhibited much lower scholastic achievement levels than nondelinquents. Perhaps as a consequence, the former completed fewer years of school than did the latter. For all of these variables nondelinquents fared better than delinquents regardless of race, SES or cohort.

With respect to the levels of delinquency status, we found that the 1958 cohort had a different concentration than did the 1945 cohort. Of the delinquents in Cohort II, about 42 percent were one-time offenders, 35 percent were nonchronic recidivists and 23 percent were chronic recidivists. Cohort I contained about four percent more one-time delinquents (46%) but a very nearly equal percentage of nonchronic recidivists (35%). Most important, the prevalence of chronic delinquents in the earlier cohort (18%) was five percent less than in Cohort II. Concerning race, we found that the wide disparity in Cohort I had declined in the second cohort. That is, in the 1945 cohort white delinquents were much more likely to be one-time offenders than were nonwhite delinquents (55% vs. 35%) and much less likely to be chronic offenders (10% vs. 29%). In Cohort II, however, the white vs. nonwhite proportions were 52 vs. 37 percent at the one-time offender level and 15 vs. 27 percent at the chronic offender level. In particular, therefore, chronic delinquency increased for whites from 10 to 15 percent while it declined among nonwhites from 29 to 27 percent in the 1958 cohort, compared to the 1945 cohort.

We found that the same set of factors that were related to the status of nondelinquent versus delinquent were also related to the level of delinquency. In both cohorts, one-time offenders compared to recidivists moved less often, had higher achievement scores, completed more years of school and were much less likely to have been disciplinary problems in school.

### Incidence

The results pertaining to the character and extent of delinquency in the two cohorts revealed important differences. The 1958 cohort was responsible for 15,248 delinquent acts up to the age of eighteen, while the 1945 cohort committed 10,214 offenses, which is an increase of nearly 50 percent (49.2%). Although the volume of delinquent acts is properly a function of the number of delinquents in the cohort, which automatically results in more expected offenses for the 1958 cohort by virtue of its larger delinquent population, the rates of delinquent behavior confirmed that the later cohort was more offensive per unit of population.

Thus the Cohort II offense rate (1159 offenses per 1000 subjects) was higher than the rate in Cohort I (1027). This cohort effect is slight compared to the differences that were found for specific offense types, especially serious acts of delinquency. For UCR index offenses, the Cohort II rate (455) was about 1.6 times higher than the Cohort I rate (274). The discrepancy increased to a ratio of over three to one when violent index rates were compared. With respect to specific offenses, the data clearly showed the more serious character of delinquency in the 1958 cohort. The Cohort II rate exceeded the Cohort I rate by factors of 3:1 for homicide, 1.7:1 for rape, 5:1 for robbery and almost 2:1 for aggravated assault and burglary.

When the incidence data were examined by race we found once again that the predominant race effect in Cohort I diminished in Cohort II.

For the earlier cohort the overall offense rate for nonwhites (1984) was three times higher than that for whites (633). The disproportionate involvement of nonwhites in serious delinquency in Cohort I was 4.6 times higher for UCR index offenses and 15.2 times higher for violent offenses compared to the white rates. In the second cohort the non-white to white comparisons revealed smaller differences for overall offenses for which the ratio was 2.6:1, and for index offenses for which the ratio was 3.7:1. Most important, the Cohort II violent offense rate for nonwhites was less than six times higher (5.8:1) than the rate for whites. This differential is large but clearly less startling than the ratio of 15:1 obtained in Cohort I. When expressed in terms of percentage increases from one cohort to the other, the data further confirmed the sharper increase for whites. Violent delinquency increased by about 300 percent in Cohort II over Cohort I, but for nonwhites violent offenses increased by only 86 percent, while for whites violent delinquency increased by almost 500 percent.

In our research with the two birth cohorts we have investigated the severity of the delinquent acts as a quantitative measure as well as the legal categories into which offenses fall.<sup>3</sup> When we analyzed the quantitative data, the greater severity of delinquency in the 1958 cohort was found once again. Thus, for example, we observed that, while 87 percent of the Cohort I offenses fell in the lower end of the severity continuum, 56 percent of the Cohort II offenses were so rated. More to the point, less than one percent of the offenses committed by the 1945 cohort fell at the upper ranges of severity, compared to 20 percent for the 1958 delinquent acts.

The severity data further confirm the finding that offense seriousness reflected a smaller race effect in Cohort II than in Cohort I. We computed offense rates weighted by the severity of the act. In Cohort I the nonwhite severity rate was about 4.4 times as great as the white severity rate. In Cohort II the nonwhite rate was still higher but the ratio declined to a factor of 3:1. When we took offense type into account, with a particular focus on injury offenses, we observed strong race and SES effects in both cohorts. In Cohort I the weighted injury rate for nonwhites was higher than for whites by a factor of four among low SES subjects and by a factor of five and one half among high SES subjects. In Cohort II the nonwhite rates exceeded the white rates by factors of three and four at the low and high levels of SES, respectively. In terms of SES, the low status rates exceeded those of the higher status regardless of race. The ratio was 4:1 in Cohort I and 3:1 in Cohort II.

Injury offenses can involve a range of injury level from minor harm to death. We investigated the distribution of injury levels by cohort and by race within each cohort. We found that injury offenses were not only more prevalent in Cohort II than in Cohort I but also involved more serious amounts of harm. The least serious level of injury, minor harm, accounted for 58 percent of the injury offenses in the 1958 cohort, compared to 71 percent in the 1945 cohort. Seven percent more treated and discharged cases occurred in Cohort II (28%) than in Cohort I (21%). For the two most severe levels of physical injury there were twice as many hospitalizations and nearly three times as many deaths in the proportions of these events in Cohort II compared to Cohort I. The results

by race indicated that nonwhites were more likely to inflict the two most severe levels of physical harm compared to whites. For the 1945 cohort about 8 percent of nonwhite injury offenses, compared to about 5 percent of white injury offenses, involved death or hospitalization. For the 1958 cohort the proportions for both races were higher but maintained about the same ratio differences between them. About 14 percent of the injury offenses by nonwhites and 9 percent by whites involved either death or hospitalization to the victim.

In addition to offenses involving injury, we analyzed offenses in terms of the two other major components of severity: property theft and damage. We found for both cohorts that few offenses involved substantial dollar losses. In Cohort I 27 percent of the theft offenses and 13 percent of the damage offenses involved a monetary loss of \$100 or more. In Cohort II about 19 percent of the theft offenses and 30 percent of the damage offenses involved a dollar loss in excess of \$100. In the aggregate the offenses in the 1958 cohort had a greater level of theft and damage than in Cohort I. For theft offenses the median dollar loss in Cohort II (\$40) was over two times greater than the median value in Cohort I (\$17). Concerning damage offenses, the Cohort II median was also about twice as high as that in Cohort I (\$25 vs. \$12).

With respect to race differences in the level of property theft or damage we found distinct cohort effects. For the 1945 cohort the weighted property theft rate for nonwhites (834.6) was almost four times higher than the rate for whites (214.7) and the weighted property damage rate for the former (408.7) was also about four times higher than that of the

latter (103.6). However, in the 1958 cohort the nonwhite predominance was much smaller among property offenses of theft and was replaced by a white differential among damage offenses. For theft offenses the nonwhite weighted offense rate (610) was less than twice as high as the white rate (352) compared to the factor of four found in Cohort I. For damage offenses the white severity rate (523) was higher than that of nonwhites (465), the reverse of the situation observed in Cohort I.

Thus the incidence and severity results obtained in this research showed distinct differences between the cohorts. The offense rates, overall and for serious offenses, were appreciably higher in the 1958 cohort than in its predecessor. Serious and violent offenses composed a greater share of delinquency and were of greater severity in Cohort II than in Cohort I. The two cohorts were only alike in the rates and concentration of the relatively minor or trivial acts of delinquency. Further, although both cohorts showed race and SES differences, with nonwhites and low SES subjects appearing to be more delinquent and more involved in serious delinquency, our results clearly indicated that these effects were more pronounced in the earlier cohort than in Cohort II. Of special note was the result that the race differences were much less striking in the later cohort.

#### Delinquent Subgroups

One of the more important findings of the 1945 cohort study concerned the issue of chronic delinquency. The data that were uncovered demonstrated that a small fraction of the cohort, those delinquents with at

least five police contacts, had committed a far greater share of the offenses than their proportionate representation in the cohort would have suggested. While they constituted just six percent of the cohort and 18 percent of the delinquent subset, the chronic offenders were responsible for a total of 5305 offenses, or 52 percent of all the delinquent acts. When situated among the recidivists, the chronic offenders composed about one third of the offenders with at least two contacts, but were responsible for over 60 percent of the offenses attributable to recidivists. When the severity of the delinquency was considered, the role of the chronic offender became even more apparent. The 627 chronic delinquents had committed 63 percent of the UCR index offenses, while for the most serious delinquencies the chronics were responsible for 71 percent of the homicides, 73 percent of the rapes, 82 percent of the robberies and 69 percent of the aggravated assaults.

These data have been the most enduring results of the 1945 cohort study. Although it had long been suspected that a small group of habitual, serious offenders had skewed rates of offending, it was not known exactly how small this group actually was or how great a share of offending could be attributed to them. It was with great interest, therefore, that we approached the issue of chronic delinquency in the 1958 cohort. With the new data we would be in a position to confirm the existence of the chronic offender as well as the character and extent of his delinquency.

In the 1958 cohort we found that the chronic offender effect was again quite pronounced. The 1958 cohort contained 982 chronic delin-



quents. They represent 7.5 percent of the cohort and 23 percent of the delinquents. These chronic delinquents accounted for a total of 9240 offenses, which were 61 percent of all the offenses and 69 percent of the offenses by recidivists. We also found the expected relationship between the chronic offender and serious delinquency. Chronic delinquents were responsible for 68 percent of the UCR index offenses and were similarly overrepresented in the most serious delinquencies—61 percent of homicides, 75 percent of rapes, 73 percent of robberies, 65 percent of aggravated assaults and 66 percent of the offenses which involved injury.

When we examined the chronic offender by race and SES the 1958 cohort produced results which, when compared to Cohort I, may prove to be the most significant findings of the research. That is, for the 1945 cohort the skewed rates and extreme severity of the chronic delinquent held for nonwhites and low SES subjects but not for whites or high SES. Nonwhite chronics committed 65 percent of all the offenses by nonwhites and 91 percent of the offenses by nonwhite recidivists. On the other hand, white chronics committed a far smaller share of the total delinquency, 35 percent, and less than half (45%) of the offenses by white recidivists. Similarly, low SES chronics were responsible for 60 percent of the total offenses by low SES offenders but high SES chronics were involved in only 35 percent of the delinquent acts committed by high SES offenders.

The Cohort II results clearly indicate that the chronic offender was dominant for both races and both levels of SES. Among whites, chronic offenders committed about 50 percent of the offenses while for

nonwhites the chronics committed 65 percent of the offenses. By SES the results were almost identical to those by race. High SES chronics were involved in 51 percent of the offenses by their SES group and low SES chronics were involved in 65 percent of the delinquent activity of their SES group.

In short, the chronic delinquent was found in the 1958 cohort as he was in the previous cohort. In the present cohort, however, he accounted for slightly larger shares of the pool of delinquents and the offenses they committed. He had a substantial involvement in the most serious and injurious acts of delinquency. Most important, the chronic offender demonstrated these effects regardless of his race or SES level.

#### Age and Delinquency

##### Age at Onset

The point at which a juvenile begins his delinquent career is, from the point of view of research on recidivism and related issues, significant in one crucial respect. Age at onset, given the fact that delinquency is limited to some maximum age by statute (age 17 for our two cohorts), forever establishes the maximum career length that a delinquent can attain as a juvenile. Because this period at risk is thus set, the extent of further delinquent behavior, or even the character and severity of the subsequent offenses may be influenced by the offender's age at onset.

Our data indicate that the 1958 cohort had higher rates of delin-

quency, especially the most serious offenses. We looked to the age at onset data as one possible explanation for the cohort offense differences observed in this research. The results pertaining to age at onset did not offer a viable explanation.

We found that the proportions of delinquents who began their careers at various ages from seven through seventeen were about the same for both cohorts. From age seven through age nine 6.6 percent of the Cohort II delinquents and 5.8 percent of the Cohort I delinquents had started their careers. From ages ten through fourteen 56.1 percent of the delinquents in the 1945 cohort and 45.8 percent of the delinquents in the 1958 cohort had initiated their involvement in delinquency. For the late starters, ages 15, 16 and 17, we found that 47 percent of delinquents in both cohorts were so classified. These findings were generally repeated when race, SES and chronic offender status were examined.

The two cohorts were also alike with respect to the finding that age at onset was inversely related to mean number of offenses. On average, the earlier an offender started, the more offenses he accumulated. The correlation between age at onset and mean number of offenses was strong for both races and SES levels in each cohort. The highest correlation was the same in both cohorts—low SES nonwhites—with values of  $-.97$  in Cohort II and  $-.99$  in Cohort I. The weakest correlation obtained was also for the same group in the two cohorts—high SES nonwhites—with values of  $-.64$  in the 1958 cohort and  $-.74$  in the 1945 cohort.

The assumption that a delinquency career started early will produce

more severe delinquency was not confirmed by our data. The mean severity of delinquency was only moderately related to age at onset in Cohort I, while for Cohort II the severity scores fluctuated across the age-at-onset categories. Although the measured severity of offenses was not strongly related to age at onset, we found that age at onset was related to the type of offenses that were committed. That is, the earlier an offender began his career, the more likely he was to engage in index offenses, compared to delinquents who began at the tail end of the age continuum.

On the whole, age at onset was not strongly related to offense severity. Most important, the cohorts were sufficiently similar with respect to age at onset so that the starting points of the delinquent careers in the two cohorts did not explain the greater severity of delinquency in the later cohort.

#### Age at Offense

The age distribution of delinquency was similar for the two birth cohorts. The proportion of offenses increased with age to a peak at age 16. Most of the offenses were committed late in the career. At ages 15, 16 and 17, 64 percent of Cohort II offenses and 60 percent of Cohort I offenses were committed. The results by race, however, showed a cohort effect. For Cohort I, both whites and nonwhites followed the overall pattern of increasing offenses by age and a peak at age 16. In the 1958 cohort the nonwhite data followed this trend but the results for whites did not. White offenses continually increased with age and reached their peak at the final year at risk—age 17.

When we computed age-specific crude offense rates and offense rates weighted for severity we found evidence of different race effects for the cohorts. The data for Cohort I showed a wide disparity by race. Overall, the nonwhite crude rate was three times higher and the weighted rate over four times higher than the white rate. These discrepancies showed distinct age effects, however. For both crude and weighted rates discrepancy between races was highest at the early ages and decreased steadily by age. The situation in Cohort II was different. The overall rates were closer by race, with nonwhites having a crude rate 2.6 times higher and a weighted rate 3.3 times higher. Further, unlike Cohort I data, the results by race in Cohort II were closer across the age continuum.

The age distribution for index and nonindex offenses differed for the two cohorts. In Cohort I the proportion of both index and nonindex offenses increased from age ten to a peak at age 16. Nonindex offenses predominated at all ages but especially so late in the juvenile career. In Cohort II the proportion of serious and trivial offenses increased as delinquents aged. But in the 1958 cohort nonindex offenses were not the dominant type of offense. This type of offense showed the higher percentage at ages 10 and under and 13 to 15. Index offenses were the higher percentage at ages 11 and 12 and later in the career (16 and 17) when a higher percentage of the delinquents were active.

The two cohorts were quite similar in the severity of index offenses, by age. For this type of delinquency we found that average severity increased with age regardless of race. The cohorts were dissimilar in nonindex delinquency. The 1945 cohort showed no trend for

either race in the mean seriousness of nonindex events by age. For Cohort II the white severity scores were higher and showed sharp increases late in the career. Nonwhite scores followed the index pattern of increasing severity with age.

We grouped index offenses into four categories—violence, robbery, property and other—and these data showed a clear cohort effect. In Cohort I crimes of violence increased steadily from age 10 and under to age 16, robbery events showed a sharp increase from age 12 to age 13 but then fluctuated to age 17, and property offenses generally increased from age 10 to age 15. Thus, although the index offenses of violence, robbery and property were more likely to occur late in the career, only violent offenses showed a clear and direct relationship with age. In Cohort II a clear age effect was evident for all the serious index offenses. Crimes of violence showed a steady increase from age 11 to age 17. Both robbery and property offenses increased up to age 16. The fact that Cohort II offenses were committed later in the career is clearly evident when we see how concentrated the offenses were at ages 15 to 17. The two cohorts were close in violent offenses for which 67 percent of the Cohort I offenses and 70 percent of the Cohort II offenses were committed in the last three years of delinquency. For both robbery and property offenses, however, the Cohort II data predominate: 75 percent of the Cohort II robberies compared to only 45 percent of the Cohort I robberies, and 66 percent of the former's property offenses compared to just 51 percent of the latter's were committed at ages 15, 16 and 17.

Taken together, age at onset and age at offense, data for the two

cohorts leave unresolved the greater delinquency of the 1958 cohort. Delinquents in both cohorts began their careers almost evenly across the age continuum. The age at offense data for Cohort II, however, generally indicate that delinquents were still active beyond the ages when Cohort I offenders reached their peak.

#### Recidivism

The starting point of delinquency in the two cohorts was about the same. Over 60 percent of the first offenses were nonindex, and the most prevalent type of index offense was theft, which accounted for 13 percent of the first offenses. When we compared the first offenses of one-time offenders with those of recidivists, we found cohort differences. In Cohort I, 72 percent of one-time offenders committed a nonindex offense, compared to 59 percent of recidivists (at their first offense). In Cohort II, 63 percent of one-time offenders committed a nonindex offense, compared to 60 percent of the first offenses of recidivists. Further, over one half of the index first offenders in Cohort I (51%) desisted, compared to 43 percent in Cohort II. Thus, because Cohort I involved a higher proportion of nonindex events at the first offense than did Cohort II, and because the probability of desisting for these nonindex offenders was higher in Cohort I than in Cohort II, more offenders in Cohort II moved on to at least a second offense than in Cohort I.

From the second offense onward, the chance of desistance was greater in Cohort I than in Cohort II. Thirty-five percent of delin-

quents in the 1945 cohort versus 28 percent of delinquents in the 1958 cohort desisted after the second offense. For the third offense the respective chances of desistance were .28 versus .27. Beyond the third offense the likelihood of committing further offenses was higher in Cohort II and ranged between .74 and .83, compared to Cohort I in which the range generally fell between .71 and .79.

With respect to the probabilities of committing the index events of injury, theft, damage or combination, we found the following. First, the chances of committing an index offense were small when compared to the probability that a nonindex event would be committed at each rank number of offense. Second, the probability of committing an index offense of theft was higher than for any other type. These results were obtained for both cohorts, but with the Cohort II probabilities being higher than those in Cohort I.

The recidivism data obtained for the UCR categories of offenses further indicated the cohort effect. Cohort II delinquents were more likely to have engaged in UCR property offenses two, three, four or more times (.42 to .84 vs. .38 to .65) than were offenders in Cohort I. The two cohorts differed more substantially with respect to violent offenses. The chance that a delinquent had committed a UCR violent offense was 2.5 times higher in Cohort II (.26) than in Cohort I (.10). After the first violent offense Cohort II probabilities ranged from .35 to .85 at the point of eight or more violent offenses. Cohort I scores were much lower and with one exception (.5) did not exceed .33.

Concerning the severity of offenses across the ranks from the

first to the fifteenth offense, we found a slight tendency for severity to increase with offense rank. In Cohort I the overall offense severity scores increased slightly, nonindex and theft offenses showed almost no severity increase, damage and combination offenses had moderate severity increments; but for injury offenses a strong upward trend for the first ten offense ranks was observed. For the 1958 cohort the total offense and nonindex offense severity scores were about 1.5 times as high as those of the lower offense ranks, the range of severity scores was less for theft, damage and combination offenses but the upward trend was distinct nonetheless, and for injury offenses the severity scores showed great swings up and down across offense ranks.

In addition to recidivism probabilities and severity scores by rank number of offense, our static offense data were concerned with the age at offense and time between offenses. Generally, we learned that the offense histories were compressed over a rather short period, regardless of the type of offense. This result pertained to both cohorts. For the 1945 cohort delinquents averaged about 14 years of age for the first offense and about 16 years of age for the fifteenth offense, for an interval of about two years. For the 1958 cohort, first offenses were committed at an average age of just over 14, while the fifteenth offenses were committed at an average age of just under 16, for an interval of just less than two years. As expected, we found that the time between offenses was related to rank number of offense. As the offense rank increased the time between offenses decreased. The time between the first and second offense was 18.5 months in Cohort I and 17.6 months in Cohort II. The time between the second and third offenses was about

10.5 months for both cohorts. Beyond this point the interval continued to decline but was never shorter than about three months between offenses. Thus the failure time was different in the early offense ranks, but as more and more offenses were accumulated, failure time was effectively a constant.

#### Offense Specialization

In the previous analyses we treated the probability of committing a first, second, third and so on out to the  $k$ th offense as a "static" probability because in its computation the likelihood of each offense type was considered without regard to the type of prior offense. We unexpectedly found that the probability of committing an offense, even when classified by type, changed very little over offense number. We had assumed that, if more serious offenses were more likely to appear among the later offenses in a delinquent career, the probability distributions of index offenses would have shifted noticeably as the number of offenses increased, thus reflecting a propensity toward the commission of more serious offenses. In short, we expected that the chances of committing an index offense would increase more or less directly with offense number.

Because we found no such increase in the offense probabilities by offense number, it can be suggested that the process which generated the offense-specific probability distributions operated in about the same manner at each offense number. If it is true that the chance of committing a particular type of act is independent of the number of offenses that a juvenile has already accumulated, then the search for patterns in

delinquent careers must abandon the static mode of analysis, in which the frequency of delinquency is highlighted, in favor of dynamic models which link the chances of subsequent activity both to the number and type of prior events.<sup>4</sup>

We focused our later analyses on transition probabilities. Our goal in these analyses was the development of inferential statements about switching from one type of offense to another, or continuing with the same type as offense-rank advances. We focused these analyses on several groups of offenders. At first we concentrated on models of all offenders regardless of the number of offenses they had committed. Here the state of desistence was used as a transition state. In later models we eliminated desistence and concentrated on the offense patterns of recidivists. We analyzed separately two groups of recidivists: delinquents who had accumulated at least five offenses and delinquents who had committed at least nine acts of delinquency. By focusing on different sets of offenders we were able to investigate whether offense patterns were observable generally or whether offense switching and specialization were dependent on a certain career length.

The offense patterns exhibited by the offenders in both cohorts were found to be very much alike. The most likely transition observed was to a nonindex offense regardless of the type of prior offense. For the 1945 cohort damage offenders were the most likely to move to a nonindex offense, while for the 1958 cohort nonindex offenders were the most likely to commit a nonindex offense on their next offense. The next most likely transition was to the state of desistence. In both cohorts injury

offenders were the most likely to move to this state. If offenders did not move to a nonindex event or desist from further delinquency, they were likely to commit an index offense involving property theft.

When we examined the probabilities of like offense repeats and analyzed the residuals to determine the extent of offense specialization, we found that like offense repeats were evident but the tendency to specialize was stronger for the 1958 cohort. In Cohort I theft and combination offenders showed the strongest tendency to specialize. Injury offense repeats were moderately greater than chance. Damage offense repeats did not appear to be more frequent than expected by chance. In Cohort II the type of subsequent offense was related to prior offense for all offense types. For any offense type the offender most likely to have committed it next was one who had committed it just prior.

The strongest evidence of offense specialization was found for the recidivism models. The five-time offenders in Cohort I showed a significant tendency to repeat theft, combination and injury offenses, while damage offense repeats were observed only slightly more often than by chance. The Cohort II data presented the unmistakable finding that the five-time chronic offenders tended to specialize and did so for all offense types. Combination offenses showed the greatest repetition, followed closely by injury and theft repeats. Damage offenses were repeated very often but not with the specialization tendency evident for the other offense types.

When we expanded the delinquent career to include at least nine offenses, specialization was again observed in both cohorts but it was more

pronounced in Cohort II. The nine-time offenders in Cohort II had the strongest repeat tendency for theft, followed closely by combination offenses. Injury and damage offense repeats were repeated less substantially but the specialization tendency was clear nonetheless.

The overall offense patterns did not show significant race effects. Whites and nonwhites in both cohorts were likely to move to a nonindex offense regardless of prior offense type. When an index transition was made, the type of offense usually committed was theft. When an offender desisted, he was most likely in a prior state of injury offense than any other offense type.

When we eliminated desisters and concentrated on the offense patterns of recidivists, we found both race effects and cohort effects that were substantively important.

Five-time white offenders in Cohort I most often repeated theft offenses. The results for the other offense types showed only a slight tendency to specialize. In the 1958 cohort the white five-time recidivists appeared to specialize in two offenses strongly (combination and theft). Damage offenses showed only slight specialization.

The five-time nonwhite chronics in Cohort I showed evidence of repeating more offense types than their white counterparts in either cohort. These offenders tended to specialize in combination, theft and injury offenses. For Cohort II nonwhite chronics a strong relationship was found between prior and subsequent offense type for all offenses. The strongest evidence of specialization occurred for injury offenses, while the

tendency to repeat theft, damage and combination offenses was slightly lower.

As we moved to the very chronic recidivists, those with at least nine offenses, we found that the results for five-time offenders were accentuated for all groups.

The nine-time white offenders in Cohort I specialized in theft, damage and combination offenses, compared to just theft for their five-time counterparts. The Cohort II nine-time offenders specialized in injury, theft and damage offenses, compared to combination and theft repetitions for their five-time offense counterparts.

The nine-time nonwhite offenders in Cohort I showed the same tendencies to specialize as did their five-time recidivist counterparts. They both tended to repeat theft, combination and injury offenses. The nine-time nonwhite recidivist in Cohort II displayed the strongest evidence of offense specialization. Even when compared to his five-time offense counterpart, the evidence of offense patterning was stronger across all offense types for the nine-time nonwhite recidivist in Cohort II.

In short, we found evidence of offense specialization among recidivists (as opposed to occasional delinquents). The evidence became more pronounced as the number of offenses increased.<sup>5</sup> The results were clear for both cohorts, although different patterns were found by race.

### Offense Escalation

We learned from our static analyses that offense severity was not greatly influenced by rank number of offense. Thus offenses that were committed late in the career were not found to be more serious than those committed early in the career. This is one way of looking at the issue of escalation. Because this type of analysis does not consider whether the offense being examined was a repeat or an event being committed for the first time (a high rank number does not ensure that it is a repeat), we decided to investigate the issue of offense escalation from a dynamic point of view. In these analyses we analyzed whether a repeat offense had a higher severity than its predecessor and whether the number of repeats continued to inflate offense severity.

We found, with only a few exceptions, that when an offense was repeated the severity was greater than that of its predecessor. The exceptions were one theft repeat (the seventh in Cohort I and the eighth in Cohort II), two theft repeats (the third and sixth in Cohort I and the fourth and fifth in Cohort II) and one damage repeat (the first in Cohort I). Most important, the injury offenses were repeated in both cohorts with substantial increases in severity. The patterns by race did not depart from these overall patterns in a meaningful fashion.

We employed multiple regression analyses to see if we could identify factors which would explain the greater severity of repeat offenses. We used prior severity, age, time between offenses and number of intervening offenses as predictors. Our models did not explain much variation and none of the predictors seemed to stand out.

We can only conclude that offense escalation was evident in both cohorts (and most substantial for injury offenses) but we were unable to identify possible causes.

### Disposition

Our final analyses concerned the handling of the delinquents by the police and juvenile court authorities. Our analyses were concerned with two principal issues. First, we tried to determine whether the various dispositions were related to such factors as race, SES, offender status, type of offense or offense severity. Second, we investigated whether the type and frequency of dispositions, especially court penalties, had an association with recidivism.<sup>6</sup> In other words, we examined whether severe dispositions worked to reduce recidivism. We found cohort differences for each of the two issues.

The initial disposition point in the handling of our delinquents is the police decision to remedial or to arrest the offender. If the police officer decides to remedial the offender, the delinquent is handled informally and released to his parents. If, on the other hand, the police officer decides to arrest the offender, the delinquent is handled officially and may be exposed to a court hearing and a severe penalty. In both cohorts we found that the police were more likely to expose certain offenders to arrest and further processing in the juvenile justice system than was the case for other offenders. However, we also found that the extent of the difference between offenders was greater in Cohort I than in Cohort II.



The 1945 cohort showed race and SES effects in the decision to arrest offenders. Forty-four percent of nonwhite delinquents were officially arrested compared to 23 percent of white offenders. For SES the difference was only slightly less, as 39 percent of low SES delinquents were arrested compared to 24 percent of high SES offenders. When race and SES were considered together, the discrepancy persisted. The difference was less at the lower level of SES for which 44 percent of nonwhites compared to 28 percent of whites were arrested. The difference at the higher level of SES was 21 percent, as 41 percent of the nonwhites compared to 20 percent of whites were arrested.

For the 1958 cohort these race and SES differences were diminished. The difference by race was reduced from 19 to 9 percent: 60 percent of nonwhites versus 51 percent of whites were arrested. The SES discrepancy was reduced from 15 to 7 percent: 60 percent of low SES delinquents were arrested versus 53 percent of high SES delinquents. The joint race and SES relationship to arrest was similarly lower in Cohort II than in Cohort I. At the lower level of SES nonwhites were arrested more than whites, with a difference of eight percent (61% vs. 53%) compared to 16 percent in Cohort I. At the higher level of SES the race difference of nonwhites to whites was 56 percent versus 51 percent, or just five percent compared to 21 percent in Cohort I.

Because these differences, especially the large disparities in Cohort I, could be due not to race itself but the greater likelihood that recidivists, index offenders and offenders who commit offenses with high severity (categories which involved nonwhites disproportionately), we

examined the race effects controlling for these other factors. The results did not explain the race difference in arrest status.

Whether the offender was a one-time offender or a recidivist, he was more likely to be arrested if he was nonwhite than white. The Cohort I differences disfavoring nonwhites were 17 percentage points (30% vs. 13%) for one-time offenders and 18 percentage points (45% vs. 27%) for recidivists. The Cohort II differences disfavoring nonwhites were smaller and amounted to 10 points (46% vs. 36%) for one-time offenders and six points (61% vs. 55%) for recidivists.

By type of offense the Cohort I results were most pronounced. Nonwhites were about twice as likely to be arrested for nonindex offenses than were whites (21% vs. 10%), while for index offenses the difference was 20 percent for nonwhites (68% vs. 48%). In Cohort II we found that there was no race effect for nonindex offenses; nonwhites (35%) and whites (37%) were arrested in almost the same proportion, with the slight difference disfavoring whites instead of nonwhites. For index offenses a race difference was observed, but the difference was 11 percentage points disfavoring nonwhites compared to 20 points disfavoring nonwhites in Cohort I.

Thus we found that in the 1945 cohort study nonwhites and lower SES subjects were treated more severely at the initial disposition of remedial versus arrest. The discrepancies in the 1958 cohort were not as reflective of processing differentials by either race or SES. We also found that offender status and character of the offense, appropriate legal criteria, also influenced the arrest decision in both cohorts.

In addition to differences in the distribution of dispositions, we also investigated the relationship between disposition type and subsequent delinquency. Our findings indicated that severe dispositions, like court penalties involving at least probation, did not appear to reduce recidivism substantially. It was evident, however, that court penalties were more effective in the 1958 cohort than in its predecessor.

In Cohort I we found that the probability of committing a subsequent offense increased steadily from the first through fourth offense and, most important, the more severe the disposition the higher was the probability of recidivism. Thus when an offender did not receive a court penalty for his first index offenses, the probability of any second offense was .61 and the probability of a second index offense was .25. On the other hand, when an offender received a court penalty at his first index offense, the probabilities were higher. The probability of any type of additional offense was .68 and the probability of index recidivism was .31.

The Cohort II data revealed that court penalties were more effective than in Cohort I. Offenders who were given a court penalty showed a .52 probability of committing another offense, compared to a .62 probability for delinquents who were handled more leniently. For index recidivism the probabilities were closer, as 24 percent of the court penalty cases committed another index offense compared to 27 percent of the remediated offenders.

When we followed the court penalty cases from the first through the fourth offense the difference between the cohorts was further evident.

Twenty percent of the first-time index offenders in Cohort I were given a court penalty. Sixty-eight percent committed a second offense and of these 47 percent were index offenses. About 53 percent of the two-time offenders received another court disposition and of them 77 percent violated the law a third time with 51 percent of these third offenses being index. After the third offense 81 percent of the offenders received a court penalty and of them all went on to a fourth offense, with 76 percent committing an index offense.

When we followed the Cohort II court penalty cases we found that the proportion of desisters was greater and if the offender did not desist the chances that his next offense was of the index variety were lower than in Cohort I. Of the 1667 first index offenses, about 19 percent were given at least probation. Of these, 52 percent committed a next offense compared to 68 percent in Cohort I. Of the second offenses, 48 percent (vs. 53% in Cohort I) were index offenses. At the third offense, we found 64 percent of the offenders, with 52 percent having committed index offenses (vs. 78% and 52% in Cohort I). Like Cohort I all of the three-time recidivists in Cohort II went on to a fourth offense but, unlike the former for which 76 percent of the fourth offenses were index, the fourth offenses in Cohort II that followed a court penalty showed only 28 percent index offenses.

It is clear that the use of court penalties made some difference in Cohort II. What is equally important is the fact that repeat court penalties for serious offenses were not used frequently. In Cohort II a court penalty was given in 18 percent of first index offenses, 29 per-

cent of second index offenses, 31 percent of third index offenses and 54 percent of fourth index offenses. Thus 46 percent of the recidivists who had accumulated up to four index crimes had not received at least a penalty as severe as probation for one or more of their index offenses. The Cohort I data showed a similarly low prevalence of court dispositions.

#### Implications

We have investigated the phenomenon of delinquency in two birth cohorts. The cohorts contained just over 23,000 male subjects. We identified 7790 as delinquent. Over the course of their juvenile careers these delinquents were responsible for a total of 25,462 official acts of delinquent behavior. We have amassed a considerable array of data. We have described these data and have analyzed the relationships among them. We have been particularly concerned with the differences that were exhibited between the cohorts. But we have also investigated the cohort similarities, the continuity over time exhibited with respect to crucial aspects of delinquency.

Our purpose in this research was to analyze and describe, not to prescribe. Yet the body of findings we have uncovered is such that offering a few recommendations is unavoidable. Our concluding task, therefore, is to draw on the results in order to identify the more salient and more policy-relevant implications of this research.

Our data do not support etiological observations and thus we cannot speak of causes. But some of our findings are suggestive of significant relationships that should not be ignored. Delinquency was more prevalent

among nonwhites and among subjects of lower SES than among whites and boys of higher SES. Delinquency was also associated with residential instability, poor school achievement and failure to graduate from high school. These factors were also related to the extent of delinquency as well. Taken together, these factors portray a disadvantageous position which may encourage delinquency, be correlative with it and some other factor or, in some instances, be a consequence of delinquency.

In criminological terms these factors indicate the failure of control mechanisms and the presence of social structural strain that disfavors certain segments of the society. These concepts are not new and, in fact, form the core of two of the more important criminological theories. What is important, therefore, is not that we found evidence of strain or a breakdown of controls but, rather, these factors operated for two different cohorts of youth. The cohorts differed with regard to the strength of the relationship to delinquency of the various factors but, essentially, notable differences were observed.

The implication for criminological research seems clear. Future research should be less concerned with whether the differences we observed, especially with respect to race and SES, are real or an artifact of society's response to delinquency. More, and more focused, attention must be centered on delinquency where it is located most often and on the conditions which foster the differences that are found. Criminology can ill afford to continue a research agenda which so refuses to acknowledge differences in the prevalence of delinquency that it is unable to explain them.

Although our data did not focus on the antecedents or causes of delinquency, they did focus on the phenomenon itself. In this regard the findings suggest several policy-relevant issues.

Cohort II—born 13 years after Cohort I—had more youths and more delinquent youths but the proportion of delinquents was the same. Further, the offenders in Cohort II, growing up in the late 60s and early 70s, committed more crimes and much more serious crimes. A pervasive question is whether Cohort II, with a very violent criminal population of a small number of nasty, brutal offenders is a demographic aberration. Will Cohort III, born, for example in 1970, be as violent over their juvenile careers? We do not know but we suspect several things.

The rate of violent crime by "dangerous" offenders will decrease nationally because of the reduction of the 15-24 age group in the population. We also suspect that, because fertility rates of nonwhites will continue to be higher than white rates, violent crime among nonwhites will probably not be abated until the end of this century. Thus ordinary crimes of violence should, in the aggregate, decline. But a smaller adolescent/young adult population may still have an increase in violent crime. Furthermore, the chronic juvenile offender will be a continuing problem no matter how large or small the demographic base from which he is drawn.

Cohort II may be just an aberrant display of illegal behavior, particularly violent crime. Cohort III may be less offensive and less violent. We need to know. If Cohort II had a social response that was more retributive, perhaps the effect would be reflected in lower rates

of violence among the offenders in Cohort III. The social policy of today can affect the behavior of juveniles tomorrow. We need not, however, direct our policy to what the offense rate might be ten years from now. We should have a policy for the present cohorts. The Cohort II juveniles were violent, more violent than their predecessors. Society must react to the present corpus of violence whatever may be the diminished or increased exhibition of criminal violence in the cohorts of the next generation.

Cohort II was an escalation of violent criminality, a fearful phenomenon for the public and a surplus of cases for prosecutors, judges and other agents of the criminal justice system. But Cohort II was not unusual in the small cadre of serious, chronic, violent offenders. They were simply more delinquent and more violent than their Cohort I counterparts. Our social reaction to such criminality should be related to our knowledge that chronic offenders started their violent harm early in life and will apparently continue if allowed to do so.

There are many possible ways in which to respond to the problem of the chronic juvenile offender. The specific proposals we offer here are, given the state of our knowledge, the minimum response we can expect of the juvenile justice system.

Juvenile courts should adopt close probation supervision for first- and second-time index offenders. When these offenses occur early in the life of delinquents (as they do for chronic offenders) there is a temptation to be lenient and give the delinquent the benefit of the doubt. Yet we know that the chronic offender is detached from the schools and

other community-based socialization and control agents. Failure to impose sanctions, failure to impose necessary controls early on can encourage further delinquency. This is apparently what happened in Cohort II. Initial index offenses were not singled out for severe dispositions early enough to have a deterrent effect.

When less severe sanctions fail to curb recidivism, intensive intervention is warranted. Incapacitation in a secure facility after the third index offense should become the rule rather than the exception. This sanction is already present, of course, but scarce resources have limited the number of spaces that are available. Often, judges are unable to order incapacitation for some offenders due to space constraints and must rely instead on the continued use of probation. We believe this is not a sufficiently severe penalty for a three-time index offender. Thus either the available spaces in secure facilities should be reserved for the chronic offender or more space should be created. Most important, the voluntary avoidance of incapacitative dispositions must be remedied.

In order to eliminate sanctioning inconsistencies and system failures in the processing of chronic delinquents, we recommend initiatives that are designed to help the juvenile justice system to identify, prosecute and punish/rehabilitate the chronic offender. Known variously as habitual offender programs, operation hardcore, etc., these programs apply many of the procedures followed in adult career criminal programs to the juvenile justice process. These initiatives are too new for us to know if they work. We expect, however, that they will have a beneficial effect on the juvenile justice process and its clients.

We believe that the improved handling of offenders within the juvenile justice system is, at least for now, preferable to the increasing tendency to remove juveniles from the juvenile process by certifying them for adult prosecution. This process is fostered by the belief that the juvenile system has failed to curb recidivism and that adult courts hold a better promise of severe sanctions. Removing juveniles from the province of juvenile court is not only premature but is faulty in major respects.

First, the rationale for waiver is based on the assumption that more severe penalties are not just available but will be applied. The available evidence on this issue does not show that juveniles who have been referred for adult prosecution receive more severe sentences. In many instances these offenders received more lenient sanctions than comparable offenders in juvenile court.

Second, the waiver procedure assumes a degree of efficiency in predicting dangerousness (usually expressed as the likelihood of an additional serious offense) that is not supported by available evidence. Most waiver statutes specify that an offender's age, in combination with current offense and prior record, are legally permissible factors that predict future misconduct and thus may be used as waiver criteria. We know of no body of research which indicates that these or any other criteria are useful predictors of recidivism generally or violent recidivism in particular. Most studies that we are familiar with show a considerable percentage of "false positives", which refers to cases that were predicted to be recidivistic but actually were not. In

addition, there is a considerable number of "false negatives", which are actual recidivists who were nonetheless predicted to be desisters.

Thus waiver processes which rely on such faulty prediction criteria will mislabel many offenders with grave consequences. Some will be misidentified as "dangerous" and will be waived to adult court. They will face adult criminal justice procedures and, if convicted, can face harsh sentences and possible incarceration with adult felons. Some offenders, who will be recidivists, will be misidentified and will be exposed to the more benign dispositions of the juvenile court.

Thus juvenile waiver is a faulty policy, but even if this were not true, it is premature. Juveniles can and should receive severe penalties in juvenile court when their instant offense and prior record warrant such action. Although the juvenile justice system is based on the notion of judicious nonintervention, we can revise our thinking and expectations according to the severity of the offender. The chronic juvenile offender is special and warrants special handling. We need not waive such offenders to adult court before we have tried to improve his handling in the juvenile system. Waiver is not only no substitute for sound juvenile justice policy but may even provide an excuse for not developing such a policy.

Juvenile justice must be flexible so that it can adjust its reaction to different cohorts. It should react strongly to that small cadre of violent people and react softly to nonserious offenders. Cohort III could be less violent if we had a more rigorous and informed reaction to Cohort II. Or Cohort III may, sui generis, be less violent.

Each birth cohort, however large, is but a life history, a single case study in the demography of time. Although these biographies march through time together biologically, at least generally so, they do not all cross the threshold from legally conforming to legally violating behaviors. And those who do have different paces: some start earlier than others and never stop; most turn back over the threshold and are not seen officially again. Now, the application of social control, of social intervention to reduce future crime, can make use of that knowledge by recognizing differential life paths and paces, by taking into account delinquent/criminal transition probabilities. A juvenile and criminal justice policy that focuses on the few at the most propitious time has the greatest likelihood of effecting change. Social intervention applied to those few need not be merely restrictive and depriving of liberty; it can also be healthful for and helpful to those who are under control.

No scheme for the control of criminal violence can have immediate and universal effect. If at all successful, it will have systemic effects rippling through a successive chain of cohorts. Thus when and how 15-year-old violent offenders are handled in one decade can have an effect on how 15-year-olds behave in a later decade. By observing several birth cohorts we can hope to measure the socially vertical effects over time.

We are still sufficiently close to the juvenile years of Cohort II to design policy based on what we have learned in analyzing delinquent and violent careers. Preparing now for a program aimed at reducing

future violence (of one, two or three decades) is proper. A Cohort III might be less violent without a concerted policy of social control now, but inaction could be a dangerous and costly social experiment. Planning social interaction now may or may not produce a less dangerous Cohort III. If Cohort III were to be less violent, we might not know whether it was due to a past policy or to a kind of generational spontaneous remission. But developing policy now, based on what we have observed, is at worst most likely to be benign and at best to be benevolent.

# NOTES

1. In Philadelphia, when a police officer has contact with a juvenile, he/she has the option to handle the offender informally (remedial) or to make an arrest. In the case of a remedial, the offense is recorded on a rap sheet but, instead of any further processing, the offender is released to the custody of his or her parents. With an arrest, the offense is also recorded on a rap sheet, but the offender is referred to a city agency for counseling or to the juvenile court for possible adjudication. Because our delinquency data consist of all police contacts, regardless of whether they were handled informally or resulted in an official arrest, our delinquency measure is more complete than measures based solely on arrest or court appearance data. Most important, because arrest- and court appearance-based delinquency measures can involve differential selection of some offenders versus others, our delinquency measure is less subject to such selection biases.
2. Because our delinquency measure is based on police contacts, not just arrests, court appearances or adjudications, caution is warranted when comparing our prevalence data to results obtained in other research. Our proportion of delinquents could be greater owing to the effect of using police contacts instead of some more restrictive measure or to differences in the populations themselves.
3. We measured offense severity according to a procedure developed by T. Sellin and M.E. Wolfgang (The Measurement of Delinquency, New York: Wiley, 1964). The procedure involves the assignment of numerical weights to various components of an offense. The components are level of injury, amount of property theft or damage, victim intimidation, premises entered and vehicles stolen. The specific weights were derived from our recent national survey of crime severity (M.E. Wolfgang, R.M. Figlio and P.E. Tracy, The Seriousness of Crime: Results of a National Survey, forthcoming).
4. The offense types used in the offense specialization analyses were also derived from the Sellin-Wolfgang severity scheme. Five offense types were used. If an offense involved the severity component of injury, theft or damage, it was classified as such. If an event involved more than one of these components, it was classified as combination. If an offense did not involve a measurable severity component, it was classified as nonindex. It should be noted that this scheme produces a conservative test of offense specialization. That is, although the combination category involves two or more severity components, it is treated as a separate category. It is possible to classify combination offenses in terms of the most serious component that occurs. We are developing models which will accomplish this but, in light of the present effort to replicate the 1945 cohort, we have utilized the same procedures as in the earlier cohort.

5. Essentially, our results indicate that the longer a delinquent's career, the greater the likelihood that a pattern of specific offenses will develop. The occasional offender with less than five offenses may seem to commit a variety of delinquent acts, but chronics and very chronic delinquents seem to repeat offense types as a function of the frequency of their delinquency.

6. Recidivism was measured in several ways in the disposition analyses. In some instances, recidivism referred to subsequent police contacts generally, while in others, recidivism referred to police contacts for specific offenses like index or nonindex.



**END**