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*Delinquency  
Careers in  
Two Birth  
Cohorts*

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# *Delinquency Careers in Two Birth Cohorts*

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## Preface

*Delinquency in a Birth Cohort*, published in 1972, was the first criminological birth cohort study in the United States. Nils Christie, in *Unge norske lovovertredere*, had done the first such study as his dissertation at the University of Oslo in 1960. Professor Thorsten Sellin was the inspiration for the U.S. study. He could read Norwegian, and I could a little because I studied at the University of Oslo in my graduate years.

Our interest in pursuing a birth cohort study in the United States was fostered by the encouragement of Saleem Shah who awarded us a grant from the National Institute of Mental Health to begin our birth cohort studies at the University of Pennsylvania by investigating the delinquency of the 1945 cohort. We studied this group of 9,945 boys extensively through official criminal history and school records of their juvenile years. Subsequently, we followed up the cohort as adults using both adult arrest histories and an interview of a sample of the cohort. Our follow-up study was published as *From Boy to Man, From Delinquency to Crime* in 1987.

Our interest in studying the delinquency and criminality of cohorts continued and was bolstered by the reception given to our previous study. Through a series of grants from the Office of Juvenile Justice and Delinquency Prevention, we began in 1977 to replicate our earlier work with a new Philadelphia cohort, born in 1958, which contained both males and females. This volume is a comparison of males in the 1958 cohort (Cohort II) with the 1945 birth cohort (Cohort I). The data in Cohort II pertaining to the 14,000 females have been partially analyzed in the doctoral dissertations of Carol Facella, Laura Otten, and Elizabeth Piper.

As we now analyze the 1958 birth cohort and compare it with the 1945 birth cohort, we are convinced that a third birth cohort should be examined, perhaps one born in 1973 or thereabouts. Our center has done research with Dr. Dora Nevares on a Puerto Rican birth cohort born in 1970, with which we make comparisons to the 1945 and 1958 Philadelphia cohorts (Nevares, 1990). The Sellin Criminology Center

is conducting a similar birth cohort study in Wuhan, China, for cross-cultural comparisons with the Philadelphia and San Juan findings.

Longitudinal studies from Copenhagen, Stockholm, Tokyo, London, and Racine and others yet unpublished will be continued at least until the end of this century. These studies are producing dramatic, causally inferential results in a discipline little blessed with solid replications. Eastern Europe and Moscow are good candidates for the next round of longitudinal research in delinquency.

Within this volume, we offer a full comparative birth cohort research analysis in the same jurisdiction: Philadelphia. The effect of age of cohorts, of the spacing of offensive behavior over time, and of historical moments in time are referred to in this volume. We have only some answers, some allusions to causation, for most of our work is descriptive. But description lends strength and commonly leads to explanation, especially to inferences that can be drawn from life cycles such as we try to display in this work.

Research with longitudinal data is long, arduous, tedious, and requires tenacious adherence and devotion to the tenets of research management and analysis. We have benefited greatly from the research teams of graduate students who participated in these tasks. Their assistance was instrumental in the completion of our research and they deserve our deep appreciation. As Research Associate at our center, Dr. Neil Weiner has been especially important to all of these tasks and we wish to acknowledge his devoted work with us. We have also benefited from the continued support of the National Institute of Juvenile Justice and Delinquency Prevention. We would like to acknowledge the professional efforts of our initial program monitor, Pamela Swain, who saw us through the difficult early stages of the research, and her successor, Wendy Wilson, who worked with us to bring the study to completion.

We hope that the efforts of this research will encourage further longitudinal analyses that may offer policy implications as well as enhance our knowledge of patterns of delinquency.

Marvin E. Wolfgang

*Philadelphia*

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## Introduction

*Delinquency in a Birth Cohort* (Wolfgang, Figlio, and Sellin, 1972) was the first large-scale birth cohort study of delinquency undertaken in the United States based upon a generalizable, urban population. The official delinquency careers of all those boys ( $n = 9,945$ ) born in 1945, who resided in Philadelphia at least from their tenth to their eighteenth birthdays, were described and analyzed. Compared to the cross-sectional variety of research, it is noteworthy that the 1945 birth cohort study developed baseline, career delinquency rates and parameters using a data source for a study population unlike any other previously researched in this country. Desistance and recidivism probabilities, offense switching, offense severity escalation, and court disposition probabilities and their effects on subsequent delinquency are fundamental delinquency career measures that, prior to the 1945 cohort study, were investigated with less than optimum data and/or limited study populations.

Because the 1945 birth cohort study was unique and proved to be very valuable to the discipline, the present research project was undertaken to replicate its pioneering predecessor. Replications of scientific findings and particular research approaches, methods, and strategies are crucially necessary in science. Although replications are quite common in the natural and physical sciences, they are relatively rare—albeit still very necessary—in the social sciences.

Unfortunately, replications are especially uncommon in criminology/criminal justice. In a discipline closer to its nascency than most, criminology requires replications to determine or to ensure reliability and validity, and also to provide for the thorough theory testing and conceptual refinement that a comparatively new discipline surely needs. However, researchers in criminology seem to have been more interested in trying to break new ground than to confirm an earlier traveled terrain.

When a methodology, like the birth cohort approach, is demonstrated to be important both to theory development and empirical application, and when this method produces a new set of important findings,

it should be reiterated in order to determine whether it is possible to buttress consistency and to affirm the observed findings with other data and with different study populations.

Study replications conducted in the same setting maximize the chances of affirming the validity and reliability of research data for the benefit of both the scientific discipline and the social policy which is directly based on that discipline. Thus, another birth cohort using Philadelphia as the site 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 possible delinquency involvement in the period from 1955 through 1962. Born 13 years later, the 1958 cohort, on the other hand, experienced a delinquency risk period from 1968 through 1975.

The social milieu of the two cohorts clearly differs and may represent different "pushes toward" or "pulls away from" delinquency involvement. For the 1958 cohort, the period at risk for delinquency coincides with America's involvement in the Vietnam conflict, the rise in drug abuse, increasing social protest, and the like. This period of rapid and profound social change and pervasive social unrest is in very sharp contrast to the more tranquil period of adolescence experienced by the 1945 cohort.

Although the underlying social environments thus differed considerably, the criminal justice environments of the two cohorts were very much alike. The policies and procedures of law enforcement, especially in the handling of juvenile offenders, were the same for both cohorts. Likewise, juvenile court policy followed the same statutory provisions for the intake and disposition of delinquents in both the 1958 and 1945 cohorts.

The intercohort consistency in both statutory codes and agency policy, which we very carefully investigated, does not preclude the possibility of differences in the informal handling of delinquents in the two cohorts, either by the police or by the juvenile court. 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 probably not artifacts of the system, a situation that very likely would obtain if the replication had been conducted in a different jurisdiction.

Thus, by replicating the 1945 cohort with another birth cohort from the same city, the cohort continuities and differences can be displayed in a setting that had a governmental style and political tone, as well as a law enforcement and judicial background, that were very similar. Whether offense probabilities by age, race, social class, crime type, and

severity are different for the respective cohorts will be readily measurable and recordable within the same geographic boundaries. Another birth cohort study in a different jurisdiction would be useful, but compared to differences arising in the present same-site replication, any cohort disparities would be more difficult to attribute to generational factors owing to the possible influence of different geography, or different demographic composition, or the interaction of the two. Thus, it would seem that any differences obtained in this replication would more likely rest upon real differences in the delinquency phenomenon than upon extraneous factors.

In addition to these general replication issues are a number of obvious research questions that are only addressable by a replication in the same jurisdiction. Is delinquency in general, and are crimes of violence in particular, more pervasive 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 but the volume merely swelled by the total size of the cohort population? Is the juvenile crime committed by the 1958 group more serious on an empirical gravity scale than it was for the 1945 cohort? Is the second generation more specialized in delinquency than was the older group? Do offense careers have similar desistance rates? Has there been any measurable change in the way delinquents are handled by the courts? These are but a few of the many relevant issues that our cohort replication will attempt to address.

The prevention and deterrence of crime, and the adjudication and punishment of criminals, are significant forms of social intervention, especially in a democracy. These purposive invasions of the biographies of people have serious implications not only for policy, but also for the general citizenry as well. Thus, criminal justice policies and practices cannot be divorced from the criminological research enterprise; they must reflect the best available insight based upon the best available evidence. We believe that birth cohorts in particular, and longitudinal research in general, offer the most promising approach for the production of research data that are capable of both increasing the knowledge base in criminology and properly informing criminal justice policy initiatives.

The research study reported in this volume concerns a continuing longitudinal investigation of a cohort of persons who were born in 1958, and who continuously resided in the city of Philadelphia during the years for which they were at risk for delinquency—at least from age 10 through age 17. The specific focus of this publication is the replication effort to compare the juvenile delinquency careers of the males in the 1958 cohort with those of their 1945 predecessors. We have restricted

this particular volume to the males in the two cohorts for several reasons. First, the 1945 birth cohort did not contain females, and thus, the females in the 1958 cohort cannot be used within the comparative focus of this book. Second, there are two excellent analyses of the 1958 females available elsewhere (see Facella, 1983; Otten, 1985). Last, we have addressed the female delinquency and crime of the 1958 females in our follow-up of the 1958 cohort (see Tracy *et al.*, 1989).

In addition to this replication, which compares the males in the two birth cohorts, the 1958 cohort study has also examined the violent juvenile offenders (Piper, 1983), the females (Facella, 1983), and the male versus female differences in the 1958 birth cohort (Otten, 1985). Further, we have just completed the second major component of the project, which follows the entire cohort into the sphere of adult crime through Philadelphia police and court records and FBI files (Tracy *et al.*, 1989). Last, at present we are just concluding a third component of the project, which involves a comprehensive interview with a sample of approximately 1,000 members of the cohort.

The 1958 birth cohort project is a longitudinal study that has been ongoing since 1977 and has continuously occupied the professional efforts of the small research team for 12 years and counting. We have put forth this effort because we are committed to the longitudinal approach to the study of delinquent and criminal careers and to what we believe are unique benefits that accrue, in particular, from the birth cohort approach.

We are aware that this particular view of longitudinal research is not universally held in the discipline. In fact, there is a very vocal minority that has recently been highly critical of longitudinal research on delinquency and crime. We shall briefly address these views in Chapter 3. We are confident, however, that the test of time will serve to validate our efforts, if not silence the critics of longitudinal research in criminology altogether.

## *Cohort Studies in Criminology*

### *The Recognized Need for Cohort Studies*

The present longitudinal research concerning the comparative delinquency careers of males in two large birth cohorts must be viewed within an historical criminological context. The discipline has only recently embraced the investigation of criminal careers using the longitudinal method, although the desirability of investigating the criminal behavior of cohorts has been indicated in the literature for a very long time.

For instance, at the end of the nineteenth century, H. von Scheel, director of Germany's National Bureau of Statistics, pointed out the need to follow groups of offenders. He wrote:

Ideal criminal statistics that would follow carefully the evolution of criminal tendencies in a given population should not work with crude annual contingents but with generations. They should start with the first offenders of a given year and continue to observe these persons, showing their later convictions, instead of counting them as new individuals each time they are convicted. (1890: 191)

A few years later, Otto Kobner recognized the need to study individuals, not just groups of offenders. He noted that "correct statistics of offenders can be developed only by a study of the total life history of individuals" (1893: 670).

Georg von Mayr explicitly raised the issue of birth cohorts when he argued that,

A deeper insight into the statistics of criminality is made possible by the disclosure of developmental regularities which must be sought through a study of the manner in which criminality develops in the course of a human lifetime. To do this it is necessary to identify the offender and his offense in the population and to keep him under constant statistical control so that it is possible for each birth cohort entering punishable age and until all its members are dead, to study statistically its participation or nonparticipation in criminality and the intensity of such participation in its various forms. . . This is the task of the "criminality table" or the "marriage table," etc. This also has significance for the important problem of recidivism. (1917: 425-426)

Similarly, Trenaman and Emmet have suggested that,

In order to estimate the incidence of delinquency, one needs to know more than just the annual ratio of offenders to population. One needs to consider the outcropping of crime throughout the life-time of a whole generation. One needs to know the probability of any child born at any given time becoming a delinquent sometime during his life. To estimate such a probability, we must consider the number of children born each year (numbers which may conveniently be referred to as "generations") and count year by year the individuals of each generation who are convicted in the courts for first offenses. When all the members of a particular generation are dead, it will then be possible to express the probability as a ratio of the total number who were convicted at least once to the total number of the generation at birth. (1952: 204-205)

In 1960, at a conference held by the British Home Office on research into the causes of delinquency, D. V. Glass advocated studies of birth cohorts, and Sir Aubrey Lewis said that "one advantage to cohort studies was that they were not to any great extent dependent on retrospective data, as some other types of research are" (British Home Office, 1960: 2).

In their work on the measurement of delinquency, Sellin and Wolfgang noted how students of juvenile delinquency believe that,

A true index of delinquency or delinquents must be based on an assessment of conduct during the entire time that juveniles are subject to the law. They say that indices based on annual data give no hint of the number of juveniles who become delinquents before they reach adulthood. (1964: 66)

Wolfgang and Sellin were led to conclude that, if the information available in police records would permit the retrospective construction of an age cohort index, and if the records would also permit the construction of measures of the delinquency of each age cohort entering the juvenile age bracket as it grows to adulthood, then

We could discover at what age different members of the cohort first became delinquent and the extent and nature of their recidivism during their juvenile years. If this were done for each successive age cohort, the relative value of preventative action programs aimed at juveniles could be tested by investigating changes in patterns of delinquent conduct, reduction in recidivism, etc., in successive age cohorts as they progressively come under the influence of such programs. (1964: 67)

Hirschi and Selvin, in discussing the problem of causal order, the criterion for judging the claim that one variable causes another, have suggested that a solution to the problem, at least in principle, is the longitudinal or panel study. "In an ideal version of this design, the investigator would select a sample of infants and continually collect data

on them until they become adults" (Hirschi and Selvin, 1967: 53). Similarly, Farrington (1981) has remarked that longitudinal surveys are especially useful in studying the course of development, the natural history, and the prevalence of a phenomenon at different ages, how phenomena emerge, and continuities and discontinuities from earlier to later ages.

### *Previous Studies of a Cohort Character*

In light of the importance attached to cohort studies, one might expect such research to be quite prevalent. However, a review of the literature reveals the opposite—very few cohort studies (examining delinquency) have been attempted. Also, the few studies which have been made contain even fewer genuine birth cohorts. The cohort studies published prior to the appearance of the results of our first cohort (1972) are reviewed below.

The earliest study of the delinquency of a cohort was published by Ferguson in 1952. The study concerned 1,349 Glasgow boys for whom police and court conviction data were collected up to their seventeenth birthdays. The study dealt generally with the well-being of the boys at home, at school, and in their early postschool years, with delinquency considered as one of the yardsticks of well-being. In a subsequent work, Ferguson and Cunnison (1956) followed up 568 of the boys and collected criminality data from their eighteenth birthday up to the age of 22.

In England in the mid-1940s, a national survey of health and development was launched. From a total of 12,268 legitimate single births occurring throughout England, Scotland, and Wales during the week of 3-9 March 1946, a sample of 5,362 births were selected for continuous longitudinal study. Thus far, two studies of delinquency in the sample have appeared. One concerns the boys who had been convicted of at least one indictable offense before their sixteenth birthday, and compares them with the nondelinquents with respect to the presence or absence of symptoms of maladjustment (Mulligan *et al.*, 1963). The other study, which deals with the 2,402 boys in the birth sample who were living in Great Britain in 1963, focuses on the social class origin of the delinquents (Douglass *et al.*, 1966).

In 1960 a study finally appeared which contained the results of a very extensive study of a birth cohort. With the cooperation of the military, Nils Christie was able to locate the names of all males born in 1933 who had registered in Norway for compulsory military service ( $n = 20,000$ ). The national penal register was searched for any criminal rec-

ords of the men up to 1958. Although much briefer, a Danish birth cohort study was reported a year later (Christiansen, 1961).

The period before 1972 also saw the publication of two near-birth cohort studies. One, dealing only incidentally with delinquency, concerned 487 children in the sixth grade of the public schools of a mid-western city who were followed for a 9-year period (Havighurst *et al.*, 1966). The interest in delinquency centered on social class differences and the development of a prediction instrument based on social maladjustment. The study was not a true birth cohort because 30% of the subjects were born in five earlier or later years than the rest (1940). The other study was much more concerned with investigating delinquency (Conger and Miller, 1966). This research involved a cohort of males ( $n = 2,348$ ) born in 1939 or 1940 in Denver, Colorado, whose history of delinquency up to the age of 18 was studied.

In addition to the cohort studies reported above, other studies utilized the longitudinal approach to investigate the "age" and "period" effects that may be related to delinquency. Leslie Wilkins (1960) was concerned with whether children born in certain years (e.g., during wartime) are more likely to commit offenses than are others. The basic data of this study were obtained from official criminal statistics of persons convicted of indictable offenses in England and Wales from 1946 through 1957 and from the ages of 8 through 20. This focus on generational effects was replicated in Denmark by Christiansen (1964), in Poland by Jasinski (1966), and in New Zealand by Slater *et al.* (1966).

Despite the studies reviewed above, the research literature in criminology up to 1972 was mostly characterized by reports of studies that were not longitudinal in nature and were clearly not of the cohort design. That is, most studies of recidivism have been retrospective and were based on selected groups of offenders—such as juveniles committed to correctional schools, or persons convicted of crimes or committed to penal institutions—whose prior history of delinquency or crime could be analyzed. Prospective studies have been much less common. That is, studies of the conduct of selected groups of offenders during a period of considerable length—usually beginning at the adjudication of a person as a delinquent, his conviction of crime, or his commitment to or release from a correctional institution—have been neglected.

Because most previous research did not arrive at more than partial information about recidivism, Wolfgang, Figlio, and Sellin determined that it would be worthwhile to approach the problem in a different manner: namely, by a study of the history of the delinquency of a birth cohort—a population born in a particular year, whose conflicts with the



law could be examined during a segment of the cohort's lifetime, ending with entry into adulthood. An inquiry of this type, they said,

would permit us to note the age of onset and the progression or cessation of delinquency; it would allow us to relate these phenomena to certain personal or social characteristics of the delinquents and to make appropriate comparisons with that part of the cohort that did not have official contact with the law. (1972: 4)

The decision was made, therefore, to study delinquency and its absence in a cohort consisting of all boys born in 1945 and residing in Philadelphia from a date no later than their tenth birthday until at least their eighteenth. Girls were excluded, partly because of their low delinquency rates and partly because the presence of the boys in the city at the terminal age mentioned could be conclusively established from the record of their registration for military service. The fact that no large-scale study of this particular kind had been done previously in the United States gave an additional stimulus to the project.

### *Subsequent Studies of a Cohort Character*

Since the publication of the 1945 birth cohort study, there has continued to be interest in cohort studies concerned with crime and delinquency. Below we review this cohort-based research. Because our review is necessarily brief, and because it focuses on cohort research rather than all longitudinal studies, the reader is referred to an excellent review of the longitudinal approach in criminology available in Farrington *et al.* (1986).

Our own Sellin Center for Studies in Criminology and Criminal Law has completed the follow-up of the 1945 cohort into adulthood (Wolfgang *et al.*, 1987). We have completed a follow-up of the chronic recidivists (five or more officially recorded offenses) in the police files up to the age of 30 (Collins, 1977). In addition to our work on the 1945 cohort and the present research with the 1958 birth cohort, for the past 10 years we have been engaged in a longitudinal study of a variety of possible biological, sociological, and psychological correlates of delinquency and crime (see Denno, 1982). The project consists of seven consecutive birth cohorts of children, born in Philadelphia between 1959 and 1965, whose mothers had participated in the Collaborative Perinatal Project (a national biomedical project that was sponsored by NIH).

Several birth cohort studies have been conducted in the Scandinavian countries essentially to investigate biological theories, especially