

The author(s) shown below used Federal funds provided by the U.S. Department of Justice and prepared the following final report:

Document Title: Delinquency in a Chinese Birth Cohort, Final Report

Author(s): Paul C. Friday Ph.D. ; Xin Ren Ph.D. ; Elmar Weitekamp Ph.D. ; K. U. Leuven

Document No.: 195421

Date Received: April 2003

Award Number: 1999-IJ-CX-0048

This report has not been published by the U.S. Department of Justice. To provide better customer service, NCJRS has made this Federally-funded grant final report available electronically in addition to traditional paper copies.

Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

195421

PROPERTY OF
National Criminal Justice Reference Service (NCJRS)
Box 6000
Rockville, MD 20849-6000

DELINQUENCY IN A CHINESE BIRTH COHORT

FINAL REPORT*

Award # 1999-IJ-CX-0048

Paul C. Friday, Ph.D.,
University of North Carolina – Charlotte
Xin Ren, Ph.D.
California State University – Sacramento
Elmar Weitekamp, Ph.D.
University of Tübingen, Germany
K.U. Leuven, Belgium

Supported under Award # 1999IJCX0048 from the National Institute of Justice, Office of Justice Programs. Points of view in this document are those of the authors and do not necessarily represent the official position of the U.S. Department of Justice.

FINAL REPORT
Approved By: Margaret Battle
Date: 4/2/03

* Hans-Jürgen Kerner, University of Tübingen and Terrance J. Taylor, Georgia State University provided valuable assistance with creating data sets, analyzing data and interpreting results.

DELINQUENCY IN A CHINESE BIRTH COHORT

<u>Introduction</u>	3
<u>Project Description</u>	4
<u>Organization of this Report</u>	13
<u>Scope and Methodology</u>	14
<u>Original Location, Sample, and Method</u>	14
<u>Present Location, Sample, and Methodology</u>	16
<u>Detailed Findings</u>	19
<u>Small Data Set</u>	19
<u>Validity</u>	19
<u>Identifying Offenders</u>	24
<u>Criminal Law vs. the Regulation of Public Safety Administrative Penalty</u>	25
<u>The Offender Sample</u>	28
<u>Caveat</u>	28
<u>Basic Characteristics</u>	28
<u>Offender-Non-Offender Comparisons</u>	33
<u>School Variables</u>	34
<u>Family Factors</u>	40
<u>Social Control Factors</u>	43
<u>Multivariate Analyses</u>	55
<u>School Variables</u>	56
<u>Family Variables</u>	62
<u>Peer Variables</u>	66
<u>Gender</u>	67
<u>Conclusions from the small data set.</u>	70
<u>1973 Birth Cohort</u>	72
<u>Large Data Set</u>	72
<u>Method</u>	72
<u>Data Cleaning and Variable Transformations</u>	76
<u>Principle Findings</u>	77
<u>Basic Cohort Demographics</u>	77
<u>Offense Rate</u>	78
<u>Bivariate Examinations</u>	82
<u>Analysis and Discussion: Large Data Set (Cohort2)</u>	84
<u>Disadvantage Index</u>	88
<u>Factor Analysis</u>	95
<u>Conclusions from the Large Data Set (Cohort2)</u>	105
<u>Summary and Conclusions</u>	106
<u>References</u>	111

Introduction

In April 1998, the American Criminologist Marvin Wolfgang died. Prior to his death, he had initiated a replication of his famous studies on Delinquency in a Birth Cohort done in the US (Wolfgang, Figlio and Sellin, 1972; Tracy, Wolfgang, Figlio, 1990) in China. His work with the Chinese Society of Juvenile Delinquency Research (CSJDR) to study persons living in the city of Wuhan in Central China and born in 1973 was never completed.

The Wuhan Project was initiated as a cooperative collaboration between CSJDR together with the International Exchange Association of the Ministry of Education, The Public Security Institute of the Ministry of Public Security, The Public Security Department of Hubei Province and the Public Security Bureau of Wuhan City, and the Sellin Center for Studies in Criminology and Criminal Law, Wharton School, University of Pennsylvania. The project was under the leadership of Professor Guo Xiang with Prof. Zhang Liquin, Prof. Dai Yisheng, Prof. Zhang Panshi, and Prof. Xu Qiancheng. Data were collected in Wuhan under the direction of Prof. Xu Qiancheng. The study began in 1990 with a small amount of funding from Marvin Wolfgang, but it was never completed except for a few hand-tallied calculations on the percentage of juveniles with criminal records. This was the information in the NIJ Research Preview based on Wolfgang's presentation (NIJ, 1996).

In 1996, at a conference in Dalian, China, the leadership of the CSJDR expressed interest in completing the data collection process and subsequent analysis of the Wuhan Cohort and in 1998, after Wolfgang's death, decided to locate the original instruments and invited Professors Friday and Ren to assist and consult on the project. Professor

Weitekamp, who had done a re-analysis of the Philadelphia cohorts, was invited to complete the American Team. Subsequently, Professors Kerner and Taylor joined the team bringing their history and knowledge of longitudinal studies and their methodological and statistical skills.

Project Description

This project was originally designed to work collaboratively with the Chinese scholars to facilitate the completion and analysis of the birth cohort study started in Wuhan in 1990. It was a project designed to locate and determine what data had been collected, what data needed to be collected to complete the study, to gather the necessary data to draw conclusions regarding the accuracy of the original report of a delinquency rate of less than two percent, and to analyze the entire cohort data-set. The project was considered important since it would be the first contribution from a non-western society to the international literature on longitudinal and cohort research.

Birth cohort studies, a form of longitudinal research, offer unique data to better theoretically understand the factors associated with initial and continued involvement in crime and delinquency (Farrington, 1992a). Longitudinal research is a source of support for an integrated theoretical perspective in the fields of juvenile delinquency and criminology. This type of research strategy, with its emphasis on sequences of events in the life history of individuals born in the same year, provides more rigorous inferences about causation, and therefore prevention, than any other method in criminological science. Longitudinal research can provide information about cumulative phenomena, such as the cumulative prevalence of offending up to a certain age or the percentage of total crimes committed by "chronic offenders" (Wolfgang, Figlio, & Sellin, 1972).

Longitudinal research offers the opportunity to view the life history of the same individual over time and to study both changes within individuals and variations between individuals (Farrington, 1988).

There has been a long history of longitudinal studies both before and after the first Philadelphia study. The earliest work in the United States was by the Sheldon and Eleanor Glueck (1930, 1937, 1943, 1968) and the McCords (1959). A number of studies were published in the 1970s and 1980s in the U.S. (J. McCord, 1978, 1979; Robins and Wish, 1977; Blumstein and Cohen, 1979; Blumstein and Graddy, 1982; Blumstein, Farrington and Moitra, 1985; Elliott and Ageton, 1980; Elliott and Huizinga, 1984; Polk et al. 1981; Shannon, 1988).

The methodology and value of longitudinal research, and especially the value of the criminal career paradigm, have been mainly critiqued by Michael Gottfredson and Travis Hirschi (1986, 1988, 1990) who argue that the effect of age on crime is invariant. They argued that cross-cultural and historical research shows the age crime-curve in the past 150 years has almost been remained stable. Crime peaks at the age 16 or 17 and declines steadily thereafter. Gottfredson and Hirschi think that a maturational reform best explains this. Desistance of criminal behavior is "change in behavior that cannot be explained and change that occurs regardless of what else happens" (Gottfredson and Hirschi 1990: 136). In their general theory of crime they argue that delinquent and criminal behavior is a result of low self-control, which is according to them a relatively stable propensity that varies from individual to individual and explains differences in criminal behavior. Self-control is to a large degree a result of the child-rearing process and may or may not be inculcated early in the socialization process. Therefore, it is

necessary to examine early childhood experiences and individual self-control in order to understand the causes of crime.

In contrast Alfred Blumstein, Jaqueline Cohen and David Farrington argue in favor of the criminal career paradigm since careers can be measured in terms of the "longitudinal sequence of offenses committed by the offender who has a detectable rate of offending during some period (Blumstein et.al.1988: 2). They argue that longitudinal research is the most significant way to study criminal careers in terms of the key elements of initiation or onset, continuity, duration, frequency escalation and desistance and termination. The past decade clearly showed that there is a great need of elaborate longitudinal research and Farrington (2002) argues convincingly that the recently introduced developmental and life-course criminology is a further elaboration of the criminal career paradigm and is concerned with three main issues: the development of offending and antisocial behavior, risk factors at different points in time, and the effects of life events on the course of development.

Cohort and longitudinal studies have been conducted in a range of other countries including England, Wales and Scotland (Fergusson, 1952; Wilkins, 1960; West, 1969; Farrington and West, 1971; West and Farrington, 1973), Scandinavia (Christiansen, 1964; Guttridge, 1983; Magnusson, Stattin, and Duner,1983; Wickström, 1985) and Germany (Pongratz et al., 1977; Traulsen, 1976; Weschke and Krause, 1983; Kerner et al., 1997). Worldwide, findings from the original cohort studies in Philadelphia and elsewhere significantly affected the academic understanding of crime. The concept of the "chronic offender" has become part of the criminological lexicon since studies have consistently shown that a small proportion of the population perpetrates a

disproportionate amount of crime. Chronic offenders were first defined by Wolfgang as a person who had, at his/her 18th birthday, accumulated five or more police arrests and who resided between their 10th and 18th year of life in the city of Philadelphia (Wolfgang et al., 1972). However, the term was redefined as one having committed three or more offenses in the cohort research done in Puerto Rico (Nevores et. al.1990). That there exist problems with the concept of the chronic offender was revealed by the reanalysis of the Philadelphia birth cohorts by Weitekamp et al.(1995, 1996) and that criminal policies based on the concept of the chronic offender can be misleading has been pointed out by Weitekamp (1998, 1999).

The concept of the chronic offender implies that one who commits a high number of crimes has to be considered a more serious criminal than one who has committed a lesser number of crimes. In addition the implication is that the chronic offender concept an escalation in effect, meaning that as the number of offenses rises so, too, does the level of seriousness of the crimes committed. The discovery of the chronic offender in the Philadelphia 1945 birth cohort, which Newsweek in March of 1981 referred to as the "perhaps most influential piece of criminal justice research in the last decade", happened at a time when rehabilitation seemed to fail ("Nothing Works"). Soon afterwards Peter Greenwood (1982) announced that if one incapacitated those chronic offenders – selective incapacitation – one could drastically reduce the number of crimes being committed. However, there is one problem: one could identify the chronic offender retrospectively but not prospectively. A criminal policy based on the chronic offender and the selective incapacitation concept, and a call for getting tough on crime, had to fail since it created a new criminal policy which turned away from social conditions

amendable to crime and concentrated itself on "bad" individuals. Irvin (1985:5) described this the following way: "As societies pass through uncertain times, they often create myths of the bogeyman and persecute certain categories of persons whom they define as bogeymen. They do not call them that, but the concept fits because these are persons who are believed to be basically different than normal people and permanently evil." The resultant get-tough criminal policy in the United States was to ultimately send thousands of supposedly dangerous people into the prisons. But the career criminal concept was never validated. The re-analyses of the Philadelphia 1945 cohort showed that two thirds of the most serious crimes were actually committed as a first, second, third or fourth offenses, at a time when the perpetrators were not considered chronic offenders (Weitekamp et.al. 1996).

Longitudinal research has also introduced the important concept of "criminal careers" or the lifespan in which offenders are active. Of special interest are those who become known to the police for criminal activity after they reach adulthood and who had never had a police record as juveniles. Longitudinal research offers the opportunity to compare the social and demographic characteristics of the offenders and to consider the social and political changes during adolescence and post-adolescence.

The significant number of longitudinal studies conducted thus far and the different countries represented offer an important opportunity for comparison. However, no longitudinal or cohort research has previously been conducted in a developing country except the one by Nevares et al. (1990) in Puerto Rico. None has been done in a country with a communist economic system. This research is seen to add to the body of knowledge previously generated by utilizing similar methodology in a very different

social, political and economic setting. In so doing, the research falls within the general rubric of "Comparative Criminology".

Comparative Criminology attempts to go beyond the conclusions that can be drawn from a given indigenous study in order to determine the extent to which the findings in one setting are applicable to the findings from another setting. To take a comparative perspective, the larger question is why do some societies exhibit patterns of crime different from other societies? This perspective was introduced in a major volume published by the English scholar Hermann Mannheim in 1965. This work and those published around the same time served as a stimulus to scholars, who in the late 1960s and early 1970s looked to Europe and elsewhere to assess the applicability of American based theories (Clifford, 1964, 1976, Clinard and Abbott, 1973, DeFleur, 1969, Downes, 1966, Friday, 1972, Rosenquist and Megargee, 1969, Rad, 1967). It was rare to give any attention outside of the western world. However, there was a growing realization that much of the existing criminological knowledge at the time was skewed and theory was limited in its scope and explanatory power (Beirne and Hill, 1991; Clinard and Abbott, 1973). Scholars became increasingly aware that the definition, character and incidence of delinquency and crime were relative to the cultural, social, small-group, and personality factors, which produced and shaped them.

The explanatory power of theories and their extensions into policy can be enhanced considerably if the phenomenon of crime is systematically studied under diverse temporal and cultural conditions. Comparative research can take on four distinct modalities, depending on how the concept of country is used. Countries can be used as 1) the object of study; 2) the context of study; 3) the unit of analysis; or 4) components of

larger international systems (Kohn, 1989). For our purposes, and consistent with other comparative criminological research, China will be used contextually, i.e. how does crime and delinquency manifest itself in this non-western culture and Communist economic system? In answering this question, the ultimate objective to advance theory may be furthered (Oyen, 1990; Scheuch, 1990).

China offers an extremely unique setting for cohort analysis, especially since one-fifth of the world's population lives there. But China offers more than mere size and cultural difference; the country is experiencing major economic, social and demographic changes. According to Anderson and Gil (1998), China has experienced massive migrations, smaller families, liberalization and decentralization of state power and a globalization of tastes and lifestyles. China's overall crime rates, based on official statistics, jumped from 56/100,000 in 1978 to 200/100,000 in 1991 with the rate from 1988-1991 having quadrupled (Yu, L., 1993). It has been recently argued that this figure should be 800/100,000 based on crime victim surveys and the inclusion of public security or public safety violations as well as violations of the criminal law (Yu, O., 1999:256). Nonetheless, the figure is significantly lower than most Western rates. Germany, for example had a rate of 7,625/100,000 for all crimes in 2000 (Bundeskriminalamt, 2000) while in the United States the rate for index crimes only was 4,266.8/100,000 in 1999 (Maguire and Pastore, 2000:279).

Serious crimes in China appear to account for 30% to 40% (Dai, 1997). The total increase in the 1980s was 160 percent with the most predominant increases in the cities, which accounted for 47.5 percent of the nation's total in 1990. The regions with the greatest increase were those with thriving market economies, a greater concentration of

commercial goods, and the convenience of transportation (Yu, O., 1995). Transient crimes, crimes of drug trafficking, commercial fraud and counterfeiting have increased (Yuan, 1992). Experience with National Crime Victim Surveys around the world suggests that reported crime is always lower than the amount of crime experienced by the population (Alvazzi del Frate, 1998; Van Kesteren et al. 2000). There is no reason to believe that circumstances are different in China. The official rate, based on reported crimes, will be lower than the experienced rate. This suggests that while the Chinese rate of crime is low the reported increase is an indication of major social change and probably even higher involvement in crime than what is reported.

China has traditionally had a low rate of crime but current conditions are challenging that. What is also being challenged is the extent to which China's crime rate will be as susceptible to changes in development as has been seen in the former Soviet Union or whether there are indigenous factors which serve to mitigate development's negative impact (Friday, 1998). Discovering the development of criminal careers or the circumstances that increase the probability of offending under such conditions can have far-reaching implications for crime prevention and control.

China is at an important crossroads relative to its development and the potential for increasing crime. What happens there is of tremendous theoretical and practical importance. The country is cognizant of this and has initiated programs and policies to address the negative consequences traditionally associated with major economic change. The efforts appear to focus on the reinforcement of traditional and cultural values, norms and informal control mechanisms. It is especially important to follow this cohort to see if such social policies and the emphasis on informal control and re-socialization of deviants

are effective since they are quite different from the traditional Western approach to crime control, which emphasizes stronger legal and penal sanctions.

If one can accept the assertions above that crime, while perpetrated by individuals is committed within a social context and that individuals are both part of and independent of the social context, then the behaviors we define as criminal are the logical outcome of the interaction between individual and society. This interaction process creates both the crime and generates the seeds for its own prevention. In Western perspectives, social institutions such as the family and school play important roles and these roles must be reinforced. According to Ren (1997), the Confucian assertion dominant in China is that the will of the individual is not free but confined by his *obligations* to his family, clan, and society as a whole. While this is consistent with the Western image of China, the Chinese linkage of individual to family and group actually goes one-step farther: "To conform to law was not totally a self-motivated decision for one's personal benefit but was of an altruistic decision for the family's well-being (Ren, 1997:27)." When a crime was committed, "... the individual and the social institution to which he belongs are equally culpable of the wrongdoing" (Ren, 1997:21). It is the philosophy of this more intense reciprocal responsibility that holds the key to successful Chinese prevention programs. Such programs follow the Confucian principles of collective/group responsibility. There is, in China, an important interaction between the individual and the group that lies at the heart of primary prevention. Such a connection is conducive to the early recognition of high-risk youth and the resolution of conflict in an informal context. Completing this Chinese Cohort Study is an effort to gain greater insight into this. Furthermore, it would be also interesting to discover to what extent

such a traditional philosophy continues to hold power in an individual's interaction with family and other institutions and what social changes have occurred to reshape this social control mechanism under China's economic reform.

Organization of this Report

As will be discussed later, the initial effort to retrieve and analyze the original Chinese Birth Cohort started by Wolfgang was impossible and we soon discovered that there were problems not only with locating the data but also with its original design. We made a variety of decisions in the course of this research in order to best preserve the integrity of the original research and to then prepare and complete a complimentary study.

In short, this report consists of two different data sets. The original list of those born in 1973 as used by Wolfgang could never be located and, as we later discovered, no data were recorded for all 5,341 persons who were in the cohort. Instead, the researches when through all 5,341 records but recorded information only on those identified as offenders (N=81) and matched this group on basic demographic variables with eighty-one from the cohort who had no criminal history. This we call the "Small Data Set." The original 5,341 individuals constitute Cohort1. We later extracted from the civil files an independent cohort of persons born in 1973. While there may obviously be some overlap between the 5,341 Wolfgang's Team identified and the 5,384 we located, our cohort (Cohort2) is distinct.

Thus, this report has two major sections. The first section is our analysis of the information gathered on the small data set of 162 persons. Included are data from an extensive interview questionnaire. The second section is our analysis of Cohort2, which

includes all information on criminal activity from age 13 to 27 for those in the Wuhan register as having been born in 1973.

Scope and Methodology

Original Location, Sample, and Method

The research site, the city of Wuhan, and the birth cohort were selected by the Chinese Team and Wolfgang. Wuhan is the capital city of Hubei province and one of the most important industrial cities in central China along the Yangtze River and Hanjiang River. It is an urban, heavy industrial city with three distinct districts geographically divided by the two rivers. Hanyang, Hankou, and Wuchang, on the south of Yangtze River bank, were formed as a commercial center in central China about 1,000 years ago. The cohort consisted of all persons in the Wuchang District of the city of Wuhan who were born in 1973.

Wuchang is the most populous, major commercial and residential area of Wuhan. Wuchang has been the capital of Hubei Provincial Government since the Qing Dynasty. Thirty-four universities and colleges are also located in this district. Thus, Wuchang is the area seen most likely to experience the impact of the economic change in China. The district was also selected as the site because of the personal contacts of the Chinese Team with the authorities and access to all data and information were assured.

The date of the cohort birth is also significant because the sample population was born in the first year after China's major new open policy and the persons in the sample will be the first to experience the impact of major economic and social change. Since the district also has a somewhat higher economic and educational level than the other areas

of Wuhan, the rate of and changes in criminal activity can be seen across a broader spectrum of the general population.

From notes of the original data collection, the population of Wuhan was 6,532,563 in 1,736,160 households in 1989, the most recent census of the time. Within the urban centers, there were 3,706,693 persons of whom, 26,976 were born in 1973. The decision was made to restrict the data collection to the Wuchong District with 722,599 individuals in 204,254 households within twelve neighborhoods in 1990 (Guo et al., 2002). The original sample identified 5,341 persons who were born in 1973 and lived in the district from the age of 13 until the data collection period in 1990. Within this group were 2,700 males and 2,641 females (Xu, et al, 1994:26).

Between 1991 and 1992, the 722,599 individual residential registration files in each of the 12 neighborhood police offices were reviewed to identify those meeting the age and residency requirements who had records of delinquent or criminal behavior. Of the 5,341 born in 1973, the researchers identified 81 persons (1.5%) with records. 76 were male and 5 were female. This group became identified as Group A for research purposes. From the 5,341 in the cohort, a control sample of 81 was matched by gender, neighborhood background, parental economic status and occupation and neighborhood school district. This matched sample became identified as Group B and the combined sample of 162 is known as the "Small Data Set."

Groups A and B of the small data set were interviewed during this period. The charts presented by Wolfgang (NIJ, 1996) were based on the results of these interviews, which were tabulated by the Hubei Provincial Police Statistical Bureau with summaries given to the Wuhan Team. The originally coded data were never returned but the Wuhan

Team maintained the original hand-written survey instruments. Data from the original instruments were never computer coded or statistically analyzed independent of the Police Statistical Bureau's summaries. Once the reports were published in Chinese (Xu, et al, 1994, 1996, 1997) and summarized in English (NIJ, 1996) the original instruments were relegated to the storage bins of a number of the Chinese researchers. Even though the interviewers had traveled in Wuhan and seven other provinces to follow up the original subjects during 1994-95 the data they collected were never coded and analyzed because the team was dismissed due to lack of funding.

It must be noted that the detailed information from the residential registration cards from which the information on crime and delinquency among the original 5,341 in the cohort were not collected in the original study and thus no information was available on the entire cohort. The only available data from which to ascertain information was from the original and follow-up of the 162 in the small data set. Thus, while the original project was defined as a cohort study it was merely a study of the original 81 offenders and a matched sample.

Present Location, Sample, and Methodology

Because there were no data available to relocate the original birth cohort identified by Wolfgang and the Chinese Team, what we call Cohort1, it became necessary for us to re-select the cohort from the files. We call this newly selected identification of a cohort as Cohort2. We used the same criteria to collect data on the Chinese cohort – all persons in the Wuchang District who were born in 1973. Since China has rigorously enforced the very restricted residential registration system (Dutton,

1992), population mobility has been minimal until recently, but there has been some migration. It is likely, therefore, that a vast majority of those we identified as being in Cohort 2 were also in Cohort1 but there will also be some who left Wuhan and some who migrated-in since Cohort1 was identified. The district increased in size and complexity between 1990 and 2000 so that in 2000 Wuchang district was administratively re-divided into 15 neighborhoods with an equivalent number of neighborhood police precincts (Paichusuo) set up by the municipal government compared with twelve in the original investigation. The population in the district has also increased from 722,599 in 1990 to 821,115 in 2000, a near 100,000 increase in ten years (Guo et al, 2002:14-15).

The overall research strategy involved the following:

1. The first task was to locate the original hand-written data and interviews that constituted the small data set (N=162) from which the original statistics were generated. This proved somewhat difficult since they were never stored in a single location but were retained by those who worked on the project at the time. After searching storage boxes in a number of locations, they were eventually recovered.
2. All surveys needed to be translated and a codebook developed. The original surveys were exceptionally long. The translation was a joint endeavor by Professor Ren and a sociologist associated with the Wuhan Team. However, as will be noted later, translation of the original Chinese Characters used in the survey was difficult and resulted in some "awkward" English in order to maintain the intent of the survey questions. Once translated an SPSS file was created in English and the data entered.
3. We attempted to locate the original data from the 5,341 files, translate those data and enter them into our database. This proved not to be possible because demographic and other information on the all of the original cohort were never recorded as will be explained below. The data that were retained were the property of the Hubei Provincial Police Statistical Bureau, which generated the first tables. Whatever information that may have been collected on the entire cohort was not available in any format.
4. Consequently, we decided to re-do a birth cohort analysis of persons born in 1973 and who lived in the Wuchang District from age 13 to 2000. In this report, we will refer to these data as the "Large data set" or Cohort2.

When the data were collected the second time for those born in 1973, the Wuhan Team estimated, based on the 1989 census, the population to be approximately 5,400 and printed that number of data collection instruments. However, the 2000 census, which was released in 2002 after our data collection, indicates that the number born in 1973 to be around 6,000. Additional forms were never printed to accommodate the larger number because, we believe, each police station merely completed all of the forms provided and never requested additional forms. We therefore estimate that because the Chinese Team used only 5,400 forms, we lost between 10 and 15% of the actual cohort.

This means that since not everyone born in 1973 is included, our data set is not, technically, a cohort. We will use the term Cohort2, however, to indicate that it is not the original cohort used by Wolfgang. While this does not meet the formal definition of a cohort, we will treat it as such since it is close to the entire population and the missing data are, we assume, randomly distributed across the different police districts. Using the term also helps us to maintain consistency with Wolfgang's original use of "birth cohort".

5. It was then necessary to translate the information available from the residential registration files and to enter those data into an SPSS file.
6. Once the residential file information on Cohort2 was gathered, we then had a criminal history check completed on all persons in that population. The criminal history check included not only the officially registered crimes but also a check of the local police and community committee records of violations of the public safety violations. (See section Criminal Law vs. the Regulation of Public Safety Administrative Penalty below.)
7. The first part of the data analysis was on the data from the original small data set using the SPSS statistical package. Our first goal was to verify the previously released findings as generated by the statistical bureau in China and released by Wolfgang (NIJ, 1996).
8. Our second task was to analyze the new large data set using bivariate and multivariate statistics.
9. Finally, we compared the proportion of offenders found in the original review of files (1.5%) with that found in the Cohort2 data set (1.4%) up to age 18. We also endeavored to generate models to help explain who, in the Chinese population, were more likely to offend by 18 and then, who offended by age 27.

Detailed Findings

Small Data Set

Validity

All of the original files were located, translated and computer coded. The only way to check if the data we have been provided are, in fact, the original data, we compared our tabulations with tables presented by Wolfgang in a video presentation to NIJ. The data match on the most critical of indicators. The total sample size is 162 with 81 identified as offenders and 81 as the matched group. They also match, exactly, the data presented in terms of the sample's completed education. Parents' educational levels are nearly the same, the difference in numbers for each level is the greatest for mother's level, but the proportions are about the same. The numerical difference between the Statistical Bureau data and ours is that they have 13 offenders with fathers with a college degree but our data have 14. We have one more high school graduate and one less middle school graduate than the video reports. Therefore, while the exact numbers are slightly different, we conclude that we have located and coded the original interviews that were submitted to the statistical bureau from whom the descriptive statistics were received.

Due to the particular manner of coding the variables administered by the Chinese Team it could not be clearly determined in some instances whether the lack of answers was representing "missing data" or subjects deliberately chose not to answer in substance. Some other variables were sub-divided into several dimensions and had to be considered as separate variables in terms of their substantial content.

The research team decided to recode those variables in order to avoid any possible ambiguity of meaning, and in order to neutralize as far as possible the problem of

"missing data" vs. "substantial answer in the negative". The question of how to handle "missing values" is, of course, a particularly delicate one. Missing data is a major concern, which must be figured into all of the analyses conducted. If one is about to include missing values into the characteristics of a substantive variable, one has to check in advance whether excluding/including missing values will change, in effect, the "direction" of the results. Option 1 is to completely exclude those values.

Option 2, as widely used in social sciences, is to calculate at first the average value of only those answers actually provided by the research subjects, and then to assign every subject with a "missing value" this artificial average value. We refrained from this, however, on different reasons. One of them was/is that some original variables as constructed by the Chinese scholars contain both, negative and positive dimensions of the characteristics in substance whereas the scale shows only positive values, like (1) All are bad (2) some are bad (3) some are good (4) all are good. Only if all 4 characteristics were evenly distributed among those answering the question, the resulting "average" would also be somehow even. In case of skewed distributions some distortion may arise. One of the remedies, then, could be to transform the original scale in another, more suitable one, e.g. by assigning new negatively and positively poled values, then calculate the average, and eventually assigning this resulting negative or positive average value to the missing cases. We decided, however, to refrain also from such a solution, regarding the ambivalent hidden content of missing data, as mentioned above.

We choose instead another option, i.e. a three step procedure. This Option 3 examines the influence of excluding missing cases at all in the calculation versus including them with the value "0", in terms of theory falsification, when comparing

offenders with non-offenders. Only those variables should eventually be retained for further bivariate or multivariate analyses where the inclusion of the missing cases with "Zero" would produce either the same average as when excluding them or an average going comparatively against the general or one's own (explicitly stated) theoretical assumptions. To exemplify this: Negative peer group activities like hanging around, and delinquency are strongly correlated. So are family problems and delinquency. Consequently a bivariate calculation with the variables "peer group activities" and "parental educational style" will produce a rather clear cut distribution of cell values in the resulting cross-tabulations, and a at least moderate correlation coefficients. What about e.g. the 25 per cent of subjects not answering either to the question of their peer group affiliation and/or the questions of parents educational style?

Let us assume that all "silent subjects" are official non-offenders wishing to hide actual delinquency, problematic behavior with their peers and/or "shameful" family conditions. Then both, computer runs pertaining to (a) all subjects and (b) comparisons of non-offender and offender sub-groups may result in equal or lower correlation coefficients when including them in general calculations (peers x delinquency, educational style x delinquency, peers x educational style) as compared with calculations where they remain excluded.

Let us assume then, in the opposite, that all "silent subjects" were officially recognized offenders with similar motives than the non-offenders. Then both, computer runs pertaining to (c) all subjects and (d) comparisons of offender and non-offender sub-groups may result in equal or higher correlation coefficients when including them in calculations as compared with calculations where they remain excluded. Results (a), (b)

and (c) would "weaken" the usual evidence, result (d) would make it "stronger". Positive (hidden) attitudes/manners on the part of the official offenders are always objectively expected to work statistically in the direction of results (a) or (b) or (c).

So eventually, after a number of general discussions and a lot of time and energy consuming computer runs and inspections, all variables producing higher values of type (d) when using it in calculations with missing cases included were quashed for further (multivariate) analyses. Since nobody knows the actual distribution of positive vs. negative characteristics among "silent" offenders on the one side, and among "silent" non-offenders on the other side in our Wuhan sample, only variables producing "robust" data irrespective of whether or not missing cases are included seem sure enough in terms of avoiding potentially artificial results, and then theoretical conclusions.

There is, however, no "perfect" way of dealing with missing cases in social science research in general, and in criminology in particular. Every researcher or research group has inevitably to make, apart from technical considerations, some value decisions. We made the decision to proceed as we did in order to gain the most insight into this valuable and unprecedented data source. All the recodes and other data operations are documented. They are not published here in order to avoid huge appendixes to the report. They can be shown, however, upon demand. We are even eager to write some articles deliberately concentrating on the relevant methodological issues.

Other variables showing complete answers were also recoded when it seemed necessary to do so for clarifying the logical order of sequence. Just to provide an example: In Questionnaire A, item 8 is requesting from the subjects to answer the

question "How do you think about getting along with schoolmates?". The given order of sequence starts with (1) All are very friendly", and goes on with (2) all are very ordinary, (3) most of them are very good and individuals are ordinary, (4) most of them are ordinary and individuals are very good, (5) not in good terms with quite a few of them, (6) look upon relations with schoolmates with indifference, and do not care. It seems obvious in methodological terms that the sub-divisions are not 100 per cent exclusive of each other. However, re-arranging of the order of sequence helps to make the variable at least generally directionally consistent: (1), (3), (6), (4), (2), and (5).

We should point out at this time that we faced a major issue in translation. In this report we use a somewhat "awkward" English translation of the value labels. We do so because of the difficulty in having an accurate, literal translation from Chinese characters into English. The questionnaire was designed and translated by Wolfgang's original Chinese team and the questionnaire was approved by Wolfgang, himself. We could not change the instrument ex post facto. Our goal was to be open and clear about what we had to work with. There was no way to reconstruct the data. Rather, we desired to preserve and use it. The Chinese author on our team had a lot of difficulty in understanding the Chinese wording used in the instrument. We tried to be as faithful to the meaning of the Chinese even though the English translation might be somewhat awkward. To change many of these into perfect English may actually loose the relative nature of the relationship of words in Chinese. The Chinese characters must be interpreted more in terms of holistic rather than specific meaning. Chinese slang was also used making literal translation awkward so we tried to accommodate both the Chinese meaning and the English interpretation. There is always information lost in translation.

As for the translation, we could offer a translation re-edited to suit the English speakers' "taste" better, but we cannot guarantee it would be what Chinese team originally intended to ask. Our less-than-perfect English version is our way of staying as close to the original intent as possible.

Identifying Offenders

The offender sample was identified by reviewing two sets of available data. The first was the official criminal record, which includes what Americans would define as felony or heavy misdemeanor charges coming before the formal system of criminal justice. This is considered "committing a crime". The second was the record on so-called violations of public safety or public order regulations. Those violations fall under the jurisdiction of the local police. They represent either low-level misdemeanors not included in the Chinese penal code, or violations of social norms or disturbances of the public peace like "hooliganism". Neither type is considered a crime per se. However, on a scale of deviation they are "breaking the law", which is more socially problematic than just "deviant behavior". Violations of public safety regulations are often handled more informally, reflecting a long tradition in China's informal sanctions and control of deviance (Ren, 1997; Chen, 1973). However, the police can impose rather stiff administrative sanctions in particular cases (see below).

A survey instrument was developed and administered to the 81 known delinquents/offenders. This survey was designed to gather details about the specific characteristics of the offending group. A second survey was given to both the offending group and the sample of persons matched by gender and school district to determine

what, if any, differences might exist between the two groups on basic sociological variables including family, school and peer relationships.

Criminal Law vs. the Regulation of Public Safety Administrative Penalty

The original version of Criminal Law and Criminal Procedural Law of PRC was formulated and promulgated by Chinese National People's Congress in 1979 and subsequently underwent radical revision in 1997. It refines and categorizes criminal acts in ten categories: 1) crime against national security; 2) crime against public safety; 3) crime against socialist economic order; 4) crime infringing citizen's constitution and democratic rights; 5) crime against property; 6) crime against public order; 7) crime against national defense; 8) embezzlement and bribery; 9) corruption; and 10) violation of military servicemen's duties. The punishment ranges from criminal fines to probation, suspended sentence, to prison sentence including life imprisonment to death penalty. When an offender is accused of a crime that violate the criminal law, he/she is subject to judicial trail by either judge alone or by panel of three judges. The conviction will result in sentence ranging from fines to imprisonment.

The Regulations of Public Safety Administrative Penalty was originally formulated in 1986 as result of sharp increase in juvenile and youth crime in post-Mao reform in 1984. Later in 1986, the National People's Congress adopted the Regulations and subsequently amended them in 1994. The Regulations define 20 categories of violations that are subject to administrative penalties. If the following criminal acts are too trivial to be prosecuted at criminal courts, they may be punishable under the Regulations of Public Safety Administrative Penalty (Institute of Legal Reform of Fujian Province, 1992; Liao, 1997; Men, 1996):

- 1) Disturbance of public order
- 2) Disorderly conducts
- 3) Assault and battery resulting in major injury
- 4) Theft of property
- 5) Swindling property through deception
- 6) Robbery or mugging
- 7) Looting
- 8) Vandalizing private or public property
- 9) Gambling
- 10) Swindling money or property through superstition
- 11) Prostitution and solicitation of prostitutes
- 12) Production, sale and or advertise of pornographic materials
- 13) Manufacture and/or forge faked documentations, certificates, etc.
- 14) Violation of firearm and weapon control law
- 15) Planting and use of controlled narcotics
- 16) Endanger public safety
- 17) Interference with performance of public duty of government officers
- 18) Violation of control act of dangerous and hazard materials
- 19) Violation of residential registration act
- 20) Other violation of public safety.

Most of the above violations are subject to the administrative penalties ranging from mediation, warning, to administrative fines from 1 to 200 yuan, to detention of 1 to 15 days. Categories 9th, 11th, 12th, and 15th carry much heavier penalties than others.

For instance, prostitution is punishable by fines up to 5000 yuan, warning, detention up to 15 days or detention in educational camp through labor between 1 and 3 years (But detention in education camp through labor is not one of the administrative penalties mandated by the Regulation. It is defined under the Law of Education through Labor¹). Planting or use of controlled substances may subject to fines up to 3000 yuan, detention up to 15 days or detention in educational camp through labor between 1 and 3 years.

Mentally ill persons or children under age 14 are not subject to this administrative penalty. Youth between 14-18 are subject to lenient treatment if they violated the Regulations.

The data were originally collected by two different groups -police cadets and university students. They started at the 12 district police offices in the Wuchong District where both notes on criminal records and documents on public safety violations as handled by the police themselves, are usually kept. They then went to the neighborhood committees within the districts to double check registrations of public security violations. The reason for this was that in Wuhan, as elsewhere, the police followed the tradition of assigning individual neighborhood police officers to each neighborhood; and these officers might not have reported minor violations to the central office but just kept the notes on the local committee premises. Therefore, a complete record check was made.

¹ Law of Education through Labor was formulated in 1957 to dispose those politically reversionary of Guomindong (Republic government) and opposition against the people's government. Late this law was revised to dispose the petty criminals who were not qualified for criminal sanctions under the penal code. In 1983, the National People's Congress radically revised the law. The offenders subject to education through labors are mainly those judged to be guilty of violation of The Regulation of Administrative Penalty for Public Safety.

The Offender Sample

Caveat

These data are the data we were able to retrieve from China. The original process of selecting and identifying offenders and the data collection instruments were the sole decision of the Chinese Team in consultation with Professor Wolfgang. Some of those decisions now make analysis difficult if not, in some instances, impossible. For example, the original instrument *did not* collect the actual age at which the subject committed his/her first offense or the age at which they were first arrested. The data instrument has age collapsed into: 8-10, 11-14, 15-17! Likewise, offenses were placed into limited categories into which most offenders fall: burglary, fighting, and hooliganism. The offenses were thus categorized rather than reported verbatim.

Data collection procedures initially employed in China made it impossible to substantiate some data. Data on all of the individuals in the original cohort were never recorded. We have data only on those originally determined to have had a record and a matched sample from the total 1973 cohort. The substantial amount of missing data suggests the results should be viewed with caution. Nonetheless, as an exploratory study of Chinese criminality, the current project can be viewed as providing an important "first step" in understanding some of the dynamics of crime in this developing, communist society during a period of rapid social change.

Basic Characteristics

Offense Rate

Eighty-one of the 5,341 in the cohort represent 1.5% of the population coming before the authorities for delinquent/ criminal behaviors. Of these 81, 47 (58.1%) were

listed as having "broken the law", that is, having committed violations against the Regulation of Public Safety Administrative Penalty, the lower level offense type, and 34 (41.9%) are considered to have "committed a crime," a violation of the Criminal Law. The proportion of the male cohort with some type of record is 2.8% while the proportion of females is 0.2%. Because of the small number of offenders in general and the small number of females in particular, the offender group is comprised of both sexes. An analysis of gender is in a separate section below.

China's legal system is a centralized one. Under modern Chinese law there is a distinction between Penal Law Offenses and Public Safety or Public Security violations as indicated above. The details of that distinction are complicated (Ren, 1996). Basically, however, it is referring to a material concept of differentiating "true crime" (menacing the fundamental moral order of society) from mere "misconduct" disturbing public peace and safety. In consequence of that, criminal acts will be punishable under the Penal Code or types of misconduct may be penalized under Public Safety Regulations or by local or provincial regulations.

Crimes are dealt with by the criminal justice system. The police are but investigators/law enforcers in that respect preparing the cases for the prosecuting authority. Public safety offenses, on the other hand, are fully dealt with by the police. Central police authorities are empowered to impose rather stiff sanctions, up to putting the offender into a program of "education through labor," which may consist of sending him away for from a couple of months to up to three years from his residence in a remote camp where he has to work under close surveillance. According to Chinese law, such a camp is not to be considered a prison and the penalty is not considered as punishment,

merely “administrative discipline”, even if the individual is experiencing a deprivation of liberty. Imprisonment in formal terms, sometimes called “reform through labor”, is being reserved for those convicted of a crime in its absolute meaning.

Consequently, a person violating “only” a public safety regulation after having been released from prison may not be considered a recidivist in formal terms and is thus not counted in the official recidivism statistics (Li, Junren, 1992). He may, nevertheless, be considered a person strongly endangering public safety, and dealt with accordingly by the public safety organs.

For the purpose of this project, the most interesting issue is that the same physical act can be either a crime or a public safety violation depending on, the gravity of the act, the kind of its consequences for the victim or the public, and the motivation or social vs. anti-social orientation of the offender. This is analogous to the misdemeanor/felony distinction in the U.S. Therefore, for example, smashing a window of a school may be either an act of causing “criminal damage” (Penal Code offense) or an act of “destroying public property” (Regulation of Public Safety Administrative Penalty). Attacking another person in the public, just to give another example, may constitute the crime of “assault and battery on purpose” or just the administrative offense of “fighting”, depending on the situation, the objective circumstances of the behavior, and the persons involved.

Criminal Code Violation group (N=34). The following characterizes this group:

- 61.8% (N=21) committed burglaries (thefts)
- 20.6% (N=7) Fights and injuries
- 17.6% (N=6) Hooliganism (altercations)

Of these:

- 11 received imprisonment of 5 years or less
- 3 institutionalized in a juvenile institution
- 20 received detention

- None acted alone; 52.9% with 2-5 people, 47.1% with more than 6
- Previous arrests: 10 (12.3%) are repeat offenders with two arrests. None has more than two arrests.
- Age first committed a crime: 100% answered 15-17.
(This is not surprising since it is not legally possible to commit a crime before age 14.)
- Age first arrested: 97.1% answered 16-17; one no answer.

Violation of Public Safety Regulations Group (N=47)

- Age first broke the law: 100% answered 15-17.

No other data are available

The law breaking and crime committing groups differed in terms of the number of people they knew in their neighborhood block who had been detained or sentenced. While the response was missing or unclear for nearly 30% of the crime committing group and 34% of the law violating group, the crime committing group knew significantly more people ($X^2= 14.52, p<.006$).

Table 1 Number of Persons in the Block Known to have been Detained or Sentenced by Offender Type

Number of Persons	% Pubic Safety Violators	% Criminal Offenders
1 – 3	44.7	14.7
4 – 6	17.0	29.4
7 – 10	4.3	20.6
more than 11	0.0	5.9
not clear	34.0	29.4

chi-square=14.52, p<.006

The data instrument asked the offender population a series of questions regarding what they thought influenced their involvement in crime. Only one aspect distinguished between the two: loyalty to friends. Those who had committed crimes were more likely

than those merely violating the law to say that loyalty to friends influenced their behavior.

Table 2 Influence of Loyalty to Friends by Offender Type

Friends' Influence	% Pubic Safety Violators	% Criminal Offenders
no answer/not practicable	87.2	64.7
minor	0.0	11.8
major	12.8	23.5

chi-square=8.14, df=2, p<.017

The Chinese are very interested in attitudes and the influence of criminal justice intervention on individuals both in terms of deterrence as well as on internal, self-reform. The essence of Chinese law is to achieve social harmony through moral persuasion and thought reform (Ren, 1997; Deng and Cordilia, 1998). Thus, it is important information on how those who have received intervention for law violation and crime commission react and feel.

Differences revealed by the data are:

- Those who violated the of Public Safety Regulations were more regretful and fearful after their violations than those who committed crimes (violated the criminal law).
- 41.2% of those who committed crimes indicated that they had not carefully considered the impact and did not care.
- A fourth (26.5%) considered the penalty they received as too severe.
- 1.6% felt they were unlucky and treated somewhat unjustly.
- A fourth (23.5%) considered the penalty as well deserved.
- 17.6% felt that "everything was finished" but 32.4% indicated they felt there was still "hope".

Table 3

Questionnaire Item:	% Violating Public Safety	% Violating Criminal Law	X²	df	Sig.
What was your mood after					

breaking the law or committing crimes? (Choose two)					
Regret	55.3	26.5	6.69	1	.013
Fear	61.7	20.6	13.51	1	.000
Will never do again	63.8	50.0			
Don't care	17.0	38.2	4.62	1	.041
More audacious	2.1	14.7	4.55	1	.033
Happy and satisfied	0	0			

Because the total number of youth violation either section of the codes, criminal and public safety is small and because the offenses are in many respects a matter of degree, for analytical purposes we have combined the two offending groups into a single "offender" group to be compared with those not known to have committed either level of violation (non-offenders).

Offender-Non-Offender Comparisons

The historical accumulation of criminological research has identified a number of correlates to conventional street crime. One of the lessons learned in the course of doing comparative and international criminological research is just how common certain factors are as they relate to any criminal population. Historical and comparative summaries of delinquency related variables (Friday, 1980, Rutter and Giller, 1984, Loeber and Stouthamer-Loeber, 1986, Farrington, 1992b and Junger-Tas et al., 1994) stress the following:

- School variables
- Family variables including social class and parenting issues
- Social control and social integration factors including peer relations

The data that follow will show a high degree of consistency with data from Western studies.

School Variables

Jensen and Rojek (1992:283) have noted that "One of the most persistent findings concerning school and delinquency is that students who are not doing well in school have higher rates of delinquency than those who are faring better." Those doing well are more likely to remain in school while those not doing well are more likely to leave early. In this research we found:

- Non-offenders were more likely to have completed high school and/or college than offenders ($p < .000$).
- Educational expectations were higher for non-offenders than for offenders, and approximately 50% of offenders had no educational expectations whatsoever ($p < .000$).

Table 4 Level of Education Completed by Offender Status

Education	% Offender	% Non-Offender
Primary School	14.8	3.7
Junior Middle School	74.1	29.6
Senior Middle School	11.1	50.6
University	0.0	16.0

chi-square=54.3, df=3, $p < .000$

Table 5 Type of Student Wanted to Be by Offender Status

Type of Student	% Offender	% Non-Offender
Never Thought Of	50.6	13.6
Middle Level	34.6	44.4
Above Middle Level	14.8	24.7
The Best	0.0	17.3

chi-square=34.3, df=3, $p < .000$

- More than half of all offenders hoped to complete junior middle school, while more than 80% of all non-offenders hoped to complete senior middle school or higher ($p < .000$).

Table 6 Desired Educational Level by Offender Status

Desired Education	% Offender	% Non-Offender
Junior Middle School	51.9	16.0

Technical School	12.3	1.2
Senior Middle School	11.1	46.9
Specialized Secondary School	22.2	11.1
Majoring Field in College	2.5	8.6
University	0.0	14.8
Graduate School	0.0	1.2

chi-square=59.33, df=6, p<.000

Since interviews took place in 1991, when the samples were 18 years of age, information was gathered on their current work/student/life status. With this information we could compare what they indicated was their educational and occupational expectations with their status at the time. Using the numbers assigned to each survey item, reflecting higher degrees of education or achievement with higher point values (e.g. expected education 1 – Junior Middle School ... 7 – Graduate School), offenders and non-offenders were compared on their average responses. Non-offenders have achieved higher levels of education and occupation than offenders have and have a higher level of retrospective evaluation of their achievement in school and feeling of having reached their educational goals.

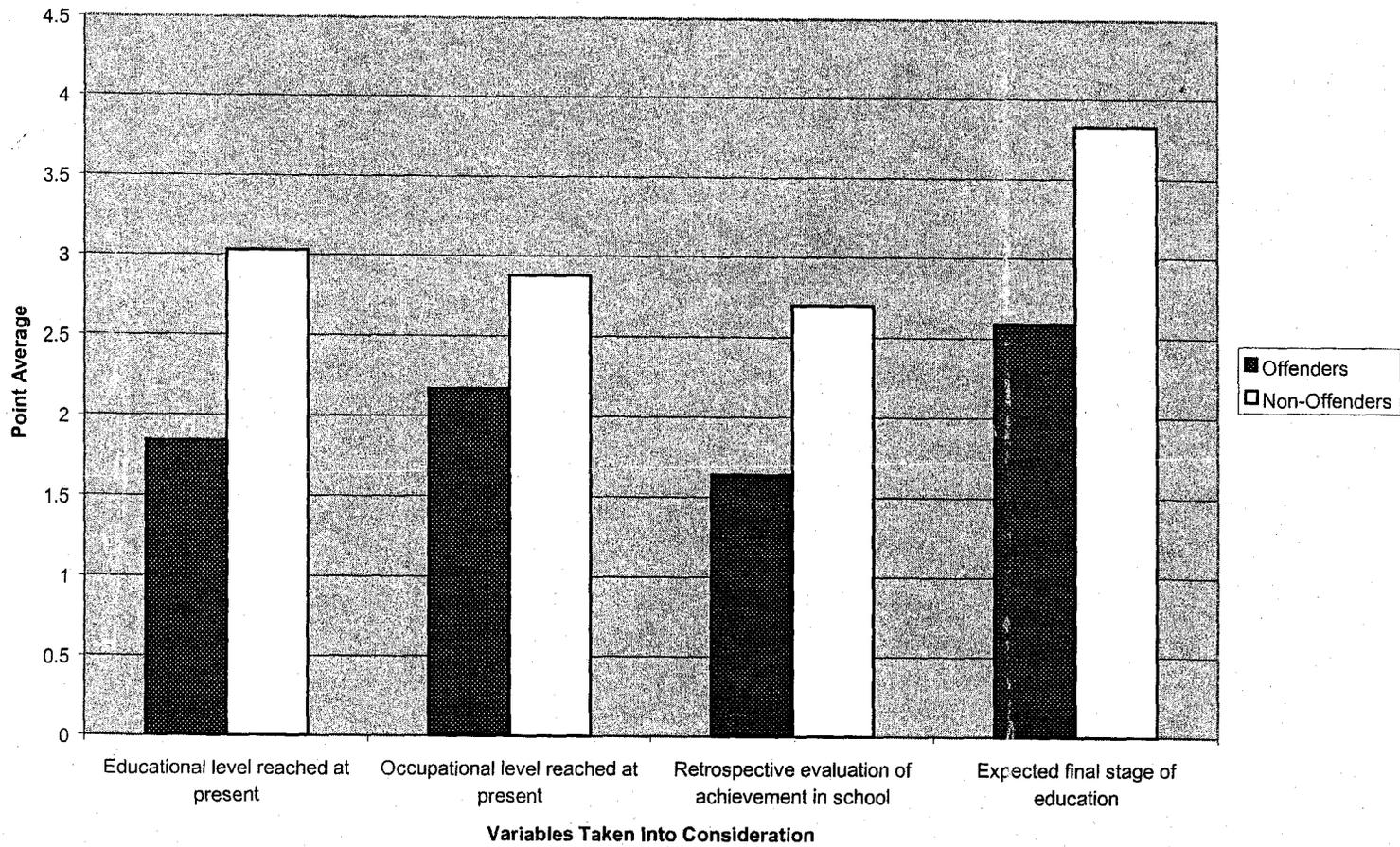
Table 7

Item	Non-Offenders	Offenders
Retrospective Evaluation: Achievement level (point average) in school as a student	2.70	1.64
Educational background: level (point average) reached up to now	3.03	1.84
Occupational level (point average) reached up to now	2.88	2.17
Expected final stage of education (point average)	3.83	2.59
Feelings about school life in general (%)		
Monotonous and flat	9.9	45.7
Other	4.9	12.3
Highly significant, but great pressure	61.7	42.0
Highly significant and rich and colorful	23.5	0
Attitudes toward getting along with schoolmates (selection, %)		
Positive	38.2	9.9
Indifferent or neutral at best or negative	61.8	90.1
Attitudes toward student-teacher relations (selection, %)		

Positive	32.1	7.4
Indifferent or neutral at best or negative	67.9	92.6
Taking part in lectures on "rejuvenation of Chinese nation" etc. (5)	60.5	0
Average time (in minutes) spent for reviewing school lessons after school at home		
More than 30 minutes	64.2	17.3
Zero to 30 minutes	35.8	82.7

Figure 1

Educational and Occupational Status, and Expectations



- non-offenders were more likely than offenders to report that they would be disappointed (34.6%) to need to quit school due to something unexpected, while nearly 31 percent of offenders reported they would be happy to do so ($p < .000$).

Table 8 Feelings if Forced to Quit School by Offender Status

Feeling	% Offender	% Non-Offender
Happy	30.9	7.4
Do Not Care	48.1	42.0
Disappointed	21.0	34.6
Very Sorry	0.0	16.0

chi-square=27.68, df=3, $p < .000$

Other significant differences include:

- o offenders were more likely than non-offenders to report having been expelled from school or they dropped out.
- o offenders were more likely than non-offenders to have received disciplinary measures in school.
- o Non-offenders were more likely than offenders to have had good relations with their teachers.

Table 9 School Experience by Offender Status

Questionnaire Item	% Offender	% Non-Offender	X ²	df	Sig.
School					
School Completion					
Expelled	17.3	0	27.03	3	.000
Dropped out	23.5	4.5			
Completed courses without graduation	11.1	14.9			
Graduated	48.1	80.6			
Disciplinary measures					
No	64.1	100	28.82	1	.000
Yes	35.9	0			
Good relationship with all teachers	7.4	32.5	38.89	3	.000

School climate has also been shown to be a factor in juvenile academic performance, attitudes and behavior (Elrod and Ryder, 1999). A few measures of school climate were significantly related to being an offender or non-offender:

- Offenders were more likely to indicate that students often fought in their middle school ($p < .000$)
- Offenders were more likely than non-offenders to feel that students were frequently truant ($p < .000$).
- Offenders were more likely than non-offenders to believe that other students had bad habits such as smoking and drinking ($p < .000$).

Family Factors

- Both father's and mother's educational levels are higher for the non-offending sample. Father's is statistically significant ($p < .035$) but mother's educational level is not.

Table 10 Father's Educational Level by Offender Status

Education	% Offender	% Non-Offender
Primary School or Less	22.2	16.0
Junior Middle School	40.7	24.7
Senior Middle or Specialized Secondary School	19.8	28.4
College or More	17.3	30.9

chi-square=8.4, df=3, $p < .035$

- Offenders were more likely than non-offenders to indicate that their parents were divorced or were often quarreling while non-offenders were more likely to indicate their parents' relationship was ordinary or good.

Table 11 Parental Relationship by Offender Status

Parental Relationship	% Offender	% Non-Offender
Divorced	6.2	3.8
Often Quarreling	53.1	31.3
Not Very Good	2.5	0.0
Fairly Good	29.6	38.8
Ordinary	8.6	26.3

chi-square=15.15, df=4, p<.004

Other significant findings related to the family

- o non-offenders were more likely than offenders to report that their fathers worked as technicians, or teachers, while offenders were more likely than non-offenders to report that their fathers were unemployed or worked as workers or business operators
- o non-offenders were more likely than offenders to report that their parents had high expectations of their education
- o non-offenders were more likely than offenders to report that their family subscribed to a newspaper and reported having more books
- o non-offenders reported having more people help in their education than offenders did
- o non-offenders reported more interactions with parents concerning things in school and learning to read, count, and recite poems prior to attending primary school
- o Offenders were more likely than non-offenders to report that their parents used beating and scolding as a method of discipline, while non-offenders were more likely than offenders to report that their parents used material incentives or moral persuasion

Table 12 Family Variables by Offender Status

Questionnaire Item	% Offender	% Non-Offender	X ²	df	Sig.
Father's Occupation					
Worker	43.8	33.3	31.36	6	.000
Self-employed	28.8	16.0			
Gov't. Employee	10.0	6.2			
Technician	3.8	19.8			
Teacher	3.8	13.6			
White collar worker	1.3	11.1			
Unemployed	8.8	0			
Expectations as student					
Did not care	17.5	8.6	28.76	3	.000
Middle level	58.8	27.2			
Above middle level	10.0	40.7			
Best in the class	13.8	23.5			
Family's Aspirations for Future					
Worker	48.7	30.0	8.80	3	.03
Worker - State Owned Enterprise	14.5	27.1			
Advanced secondary education	18.4	12.9			
University study	18.4	30.0			
Family subscribes to newspaper					
No	79.5	50.0	14.23	1	.000
Yes	20.5	50.0			
Books in the home					
Fewer than 50	53.1	25.9	17.57	2	.000
51-100	28.4	27.2			
Over 100	18.5	46.9			
Father help with school work					
No	81.5	55.6	12.62	1	.000
Yes	18.5	44.4			
Family assistance before primary school with:					
Reading	54.3	80.2	18.02	2	.000
Writing	56.8	70.6	6.94	2	.03
Math	57.9	81.5	12.68	2	.002
Poetry	24.3	61.5	12.78	2	.002
Family disciplinary method					
Beating/ scolding	36.3	0	58.77	4	.000
Reprimand	60.0	59.3			
Material incentive	0	32.1			
Moral encouragement	2.5	8.6			

- offenders are more likely than non-offenders to report that their fathers and mothers “care for nothing and I can do what I like” (18.5% v. 6.2%) while non-offenders are more likely to indicate that their parents “care for everything, but always consults you when something comes up” (28.4% vs. 2.5%, $p < .000$).

While we have no direct information regarding family income, we do have indications of living standard in terms of material goods in the home. Offender families tend to have fewer of the more advanced technological devices and other indicators of economic affluence than non-offenders.

Table 13

Possession of Household Items	Non-offenders	Offenders	$X^2 (df=3)$	Sig
Refrigerator	82.7 %	53.1 %	21.3	.000
Color TV set	81.5 %	58.0 %	17.2	.000
Washing Machine	80.2 %	54.3 %	18.6	.000
Tape Recorder	61.7 %	29.6 %	24.4	.000
Camera	49.4 %	17.3 %	27.3	.000
Black and White TV	16.0 %	28.4 %	14.6	.000
Video Recorder	4.9 %	0 %	16.4	.000
Motor Cycle	0 %	3.7 %	16.5	.000

Social Control Factors

While social control factors are most often identified with the specific variables of attachment, commitment, involvement and belief as articulated by Hirschi (1969), we use the concept to include variables that reflect an individual’s “integration” into the traditional value structure, their commitment to traditional long-term socially integrative

goals and their general belief about the social value placed on work, labor and service – important values within the Chinese society. Significant differences were found between Chinese offenders and non-offenders on a number of items that would reflect commitment to conventional social norms and expectations.

- o offenders were more likely than non-offenders to report that labor is tiresome and they do not like it.

Table 14

Labor Tiresome	% Offender	% Non-Offender
No	37.0	77.8
Yes	63.0	22.2

chi-square=27.49, df=1, p<.000

- o non-offenders, however, were more likely than offenders to report that participation in labor is a *waste of time for students* while in school, (p<.000)

- o non-offenders are also more likely to believe that students should participate in labor while growing up, but that such labor should be "self-service" rather than "productive" labor (p<.000).

This may be a reflection of a difference in long-term goals. Non-offenders were more likely than offenders to report that their ideal job would be higher status occupations such as administrative work, enterprise management, scientific research, political and legal work, or foreign business, while offenders were more likely than non-offenders to report more traditional and/or menial jobs as being a worker.

Interests and Activities

Differences were found between offenders and non-offenders in terms of the types of activities in which they participated.

- o Non-offenders were more likely than offenders to report that while in school they took part in social activities of public interest, visited historically relevant sites took part in lectures, and maintained public security and that these activities were rewarding in terms of broadening one's knowledge.

Table 15 Interests and Activities While in School by Offender Status

Questionnaire Item:	% Offender	% Non-Offender	X²	df	Sig.
Which of the following social activities did you take part in while in school?					
Public interest: support for renovation of the Great Wall, rescue of pandas, relief to people in disaster areas	84.0%	96.3%	6.94	1	.01
Visits to historical relics and heritage, displays on scientific and technological achievements	84.0	100	14.13	1	.000
Lectures on the Chinese nation etc	0	50.5	70.24	1	.000
Activities on maintaining public security, fighting against 'evildoers' and evil deeds, taking part in voluntary publicity activities	1.2	24.7	19.75	1	.000
How interested are you in these social activities?					
Very Interested	13.0	51.9	36.78	2	.000
Not Interested	37.7	4.9			
Do not care	49.3	43.2			

These differences were also evident in the fields of interest they had in reading books or newspapers or watching television.

Table 16 Reading and Television Interests by Offender Status

Item	Non-Offenders%	Offenders %
Scientific knowledge	46.9	18.5
Philosophy of life	46.9	1.2
Comedy	44.4	32.1
War stories	29.6	66.7
Historical stories	23.5	24.7
Detective stories	22.2	64.2
Martial arts / fairy tales	19.8	56.8
Local custom and practices	18.5	9.9
Contents reflecting social problems	13.6	11.1
Achievement of contemporary reformers	11.1	0
Biographies of famous persons	9.9	3.7
Love stories	7.4	11.1
Current affairs	2.5	0
Student life	0	0
Tragedy	0	0

Offenders' Priorities (Ranking)

- 1 = War stories (66.7 %)
- 2 = Detective stories (64.2 %)
- 3 = Martial arts / fairy tales ((56.8 %)
- 4 = Comedy (32.1 %)
- 5 = Historical stories (24.7 %)
- 6 = Scientific knowledge (18.5 %)

Non-Offenders' Priorities (Ranking)

- 1 = Scientific knowledge (46.9 %)
- 2 = Philosophy of life ((46.9 %)
- 3 = Comedy (44.4 %)
- 4 = War stories >/ fairy tales (29.5 %)
- 5 = Historical stories (23.5 %)
- 6 = Detective stories (22.3 %)

Occupational Goals

The survey asked the respondents to select two of a possible 26 future occupations. The selection is significant for a number of them. While neither offenders nor non-offenders wanted to engage in Party or Youth League work, their future occupational goals were significantly different on a few dimensions:

- non-offenders were significantly more interested in future employment in administration, business management, research, Sino-foreign ventures and political and legal work.
- offenders were more likely to identify their ideal job as being a worker or being in private business.
- Neither group had any interest in any level of education as a job

Table 17

Questionnaire Item:					
After finishing your study, what will be your ideal job?	% Offender	% Non-Offender	X ²	df	Sig.
Worker	81.5	29.6	44.1	1	.000
Private business	39.5	2.5	33.5	1	.000
Commerce and service	14.8	13.6			
Engineering	14.8	9.9			
Military	13.6	16.0			
Sino-foreign joint ventures	13.6	27.2	4.6	1	.05
Administrative work	11.1	27.2	6.74	1	.02
Finance and accounting	8.6	9.9			
Medical work	1.2	2.5			
Educational work – university	1.2	1.2			
Business management	1.2	12.3	7.9	1	.009
Political and legal work	0	14.8	12.96	1	.000
Research – social science	0	13.6	11.8	1	.001
Research- natural science	0	11.1	9.53	1	.003
Specialized household ⁺	0	8.6	7.3	1	.014
Educational work – primary school	0	0			
Literary creation	0	0			
Art work	0	0			
Organization and personnel	0	0			
Cooking	0	0			
Educational work – middle school	0	0			
Party work	0	0			
Youth League work	0	0			
Farmer	0	0			
Environmental protection	0	0			

+ Definition/translation is unclear.

Another way to look at the sense of social integration and commitment to the generally conforming and collectively oriented social values is to look at what the different groups see as valuable in life. Differences were found. Offenders were more likely than non-offenders to report that power and influence, money, freedom, enjoyment, and happiness in social contacts were the most important things in life. Non-offenders were more likely than offenders to report that reputation, knowledge, good behavior, career achievements, and a stable life were the most important things in life.

Table 18

Questionnaire Item: Which of the following do you think are the most important in life (select three)	% Offender	% Non- Offender	X ²	df	Sig.
Money	86.4	38.3	40.0	1	.000
Power and influence	75.3	28.4	35.7	1	.000
Freedom and enjoyment	61.7	21.0	27.7	1	.000
Position	35.8	39.5			
Happiness in social contacts	14.8	4.9			
Knowledge	11.1	50.6	29.63	1	.000
Strong and handsome body	4.9	4.9			
Happy marriage and family	3.7	4.9			
Achievement in career	2.5	29.6	22.1	1	.000
A stable life	2.5	30.9	23.51	1	.000
Reputation	1.2	24.7	19.75	1	.000
Good behavior	0	12.3	10.66	1	.001
Rich recreational activities	0	3.7			
Ideological work	0	0			

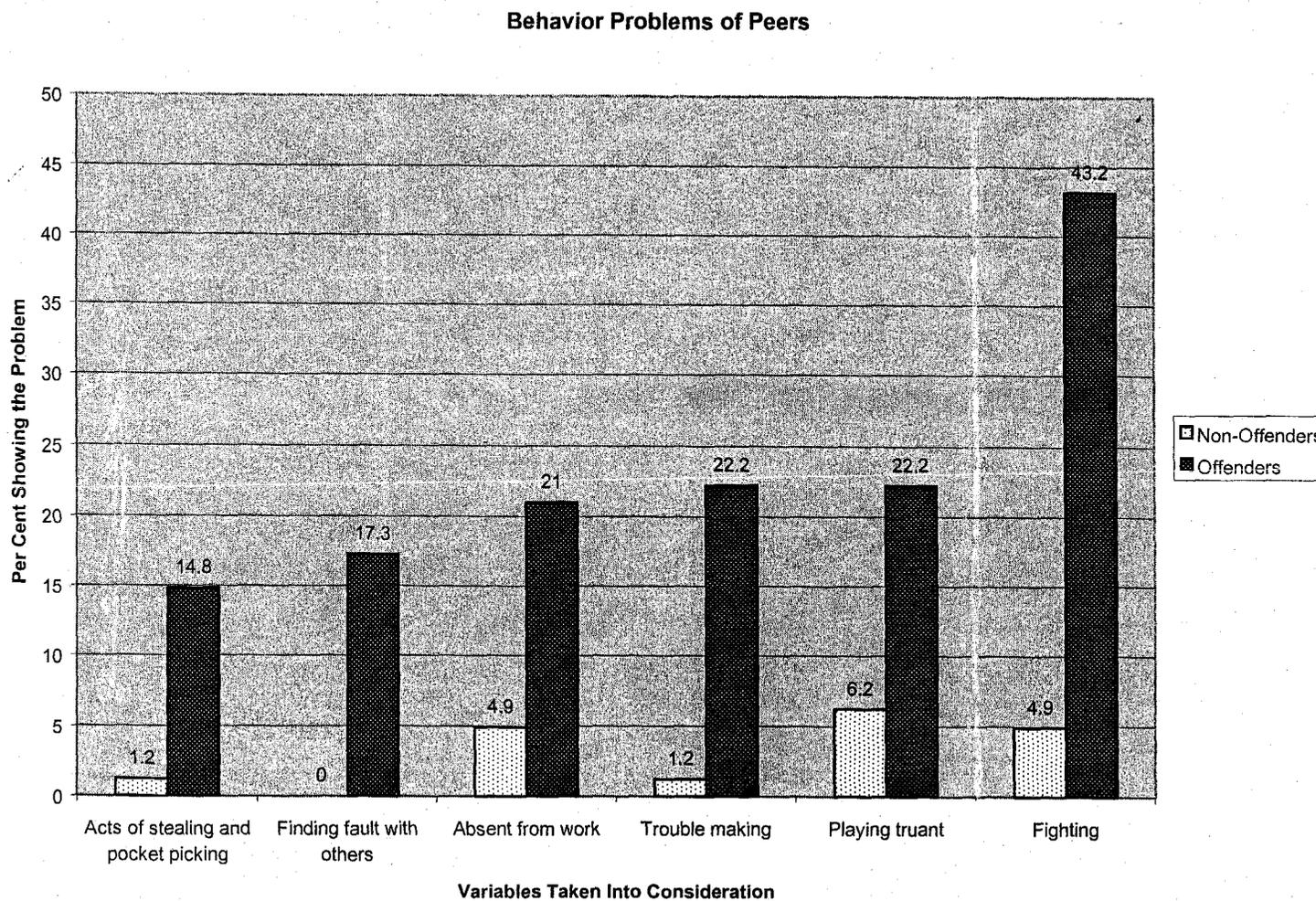
Peer Relations and Peer Influence

Ever since Sutherland (1947) proposed the theory of Differential Association, the influence of peers on attitudes, goals, motives and even the rationalizations and justifications for behavior have been well documented in the criminological literature. While delinquency and having delinquent peers is common, the importance of peer attitudes and the things peers do together, the role models they have, and how much they consider their friends influence them also differentiates between offenders and non-offenders. In the Chinese data, some significant differences between the groups were found in terms of:

- Negative peer influence: 83.7% of offenders but only 20.5% of non-offenders indicated that their friends had a negative influence on them (p<.000).

- Deviant behavior by peers: Using a variety of behaviors from stealing to fighting, deviant behavior of peers is greater for offenders than non-offenders (See Figure 2)
- How they characterize their friends:
 - Offender's friends: fight, make trouble, find fault with others, steal
 - Non-offender friends: abide by the law
- Reading/entertainment interests:
 - Offenders: martial arts, fairy tales, war stories and detective stories
 - Non-offenders: philosophy of life, science, local concerns, biographies

Figure 2



Role models also differentiate between the groups and are somewhat revealing of the differential attitudes with non-offenders more likely to model traditionally recognized "successful" persons – except, again, educators!

Table 19

Questionnaire Item: Whom do you see as a role model? (Select two)	% Offender	% Non- Offender	X ²	df	Sig.
Capable "buddy"	58.0	29.6	13.26	1	.000
Sport, film, TV star	45.7	45.7			
Advanced model worker	28.4	4.9	16.0	1	.000
Folk hero	25.9	3.7	15.84	1	.000
Chivalrous swordsman	11.1	2.5	4.78	1	.05
Famous scholar/ scientist	9.9	33.3	13.6	1	.000
Millionaire	0	18.5	16.5	1	.000
Teacher or medical doctor	0	3.7			
Party or government leader	0	7.4	6.23	1	.028
"Big Shot"	0	4.9			
National hero	3.7	13.6	5.0	1	.047

Differences are also evident in the amount of time that offenders and non-offenders spend doing different activities. A Difference of Means test was performed for those variables with less than 10% missing and shows that offenders spend, on the average, more time "hanging out" with friends, watching TV, and sleeping. Non-offenders, on the other hand, spend proportionately more time reviewing their school lessons.

Table 20 Mean Differences in Utilization of Time by Offender Status

Amount of Time spent (in minutes)	Mean	std.dev	t	Sign
"Hanging-out" with friends				
Offender	96.3	24.1	11.8	.000
Non-offender	51.7	23.8		
Watching TV				
Offender	69.3	34.9	4.2	.000
Non-offender	49.4	24.3		
Sleeping				
Offender	489.3	56.1	4.1	.000
Non-offender	403.7	177.6		
Reviewing school lessons				
Offender	27.5	12.4	2.3	.02
Non-offender	32.5	15.2		

Differences between the offender and non-offender samples can be seen in how they utilized their leisure time while they were in school. Offenders were more likely to spend that time "playing with friends" while non-offenders were more likely to work. Table 21 shows the basic differences.

Table 21

Item	Non-Offenders	Offenders
	%	%
Doing home work (> 30 Minutes)	70.4	77.7
Helping parents to perform their housework	6.1	7.4
Watching TV more than 1 hour	14.8	71.6
Watching TV up to one hour	85.2	28.4
Work and earning money	84.0	0
Playing out with friends or schoolmates (more than 1 hour)	26.1	88.9
Taking part in activities on maintaining public order etc.	24.7	1.2

On a variety of dimensions, non-offenders tend to be much more satisfied with their conditions and surroundings than offenders are.

- o offenders are less satisfied with their eating, living conditions, career or political future, and over-all security in life than non-offenders are.

Table 22

Questionnaire Item: How do you feel in the following aspects? (Satisfied, Relatively satisfied, not satisfied, not sure)	% Offender	% Non-Offender	X ²	df	Sig.
Eating					
Not satisfied	42.5	24.7	6.47	2	.039
Relatively satisfied, satisfied	57.5	75.3			
Residential condition					
Not satisfied	77.8	48.1	17.24	2	.000
Relatively satisfied, satisfied	21.0	51.9			
Not sure	1.2				
Career and political future					
Not satisfied	11.4	6.6	27.11	3	.000
Relatively satisfied, satisfied	5.1	36.8			
Not sure	83.5	56.6			
Security in life					
Not satisfied	36.0	22.4	29.09	3	.000
Relatively satisfied, satisfied	24.0	65.8			
Not sure	40.0	11.8			

The two samples were asked to assess their own characteristics. It is well known that self-concept is an important aspect of human behavior and that the Self is an important factor in subsequent behavior. Human identities evolve through the interaction they have with parents, family, peers, and all others - friends or foes - who help condition, affirm or refute the sense of their own existence (Mead, 1934; Blumer, 1962; Friday, 1983). As social animals, the human condition struggles to reach a balance between the sense of individualism and an expression of Self and the need and dependence of being part of the collective. This struggle is exacerbated or enabled by the immediate and wider social conditions within which the interaction takes place. One's self-concept and social identity influence the behaviors one sees as consistent with that self-image. The combination of personality and social role influence how any social situation is defined and the behaviors one defines as appropriate for the situation. Previous research has indicated that self-assessment is highly associated with delinquency (Dinitz et al., 1958, 1962; Scarpitti et al., 1960; Simpson et al., 1960; Kaplan et al. 1972, 1982, 1986).

The following shows that offenders see themselves as having more "bad habits" than non-offenders have. (Data are included if at least half of each sample responded).

- Offenders are more likely than non-offenders to consider they have the bad habits of being greedy, smoking, drinking, fighting and just being fond of "playing around".

Table 23

Questionnaire Item:	% Offender	% Non-Offender	X ²	df	Sig.
Please speak frankly. Do you have any of the following bad habits? (yes, a little, no)					
Greedy					
Yes	90.8	4.2	104.63	2	.000
A little	9.2	55.6			
No		40.3			
Smoking and drinking					
Yes	78.0	3.2	81.79	2	.000
A little	22.0	32.3			
No		64.5			
Fighting					
Yes	72.5	0	67.33	2	.000
A little	27.5	29.6			
No		70.4			
Fond of playing					
Yes	98.3	77.9	12.77	2	.002
A little	1.7	2.9			
No		19.1			

Offenders were also more likely than non-offenders to indicate that their peers engaged in deviant and criminal activities, specifically fighting and acts of stealing.

Table 24

Item	Non-Offenders %	Offenders %	X ² (df=2)	Sig
Finding fault with others	0	17.3	17.8	.000
Acts of stealing and pocket picking	1.2	14.8	36.8	.000
Trouble making	1.2	22.2	19.1	.000
Absent from work	4.9	21.0	16.5	.000
Playing truant	6.2	22.2	12.2	.000
Fighting	4.9	43.2	34.3	.000

The influence of peers is also strongly reinforced by the responses of offenders to the question, "Think it over; what are the main reasons why you committed crimes?" The possible responses were, for each option, Major reason, Minor reason, No reason. The distribution is shown in Table 25, with peer influence as the most often stated reason, major or minor. The influence of film and TV was mentioned by 21%.

Table 25

Item	Any mentioning	Major Reason	Minor Reason
	%	%	%
Influence of friends	37.0	17.3	19.8
Being fond of dressing, play, money	29.6	16.0	13.6
Influence of social mode	24.7	4.9	19.8
Being loyal to one's friends	22.2	17.3	4.9
Influence of film, TV	21.0	21.0	0
No idea of how and why	14.8	9.9	4.9
Abetted by others	11.3	8.6	2.5
No warmth with family	11.1	3.7	7.4
Fearing hardship and fatigue	9.9	0	9.9
Teachers not fulfilling their duties	7.4	3.7	3.7
Parents not fulfilling their duties	5.0	2.5	2.5
Other influence of parents	5.0	2.5	2.5
Having received not education	2.4	1.2	1.2
Revenge	2.4	1.2	1.2
Influence of literary work	0	0	0

Multivariate Analyses

The preceding section illustrated differences between offenders and non-offenders on a variety of school, family, and personal factors. Initially we had planned to enter each of these variables into a series of logistic regression equations grouped into separate conceptual domains (i.e., school factors, family factors, peer factors, etc.). In preparation, new variables were created by dichotomizing each of the variables shown to be significantly different for the offenders and non-offenders. Careful screening of the data, however, led to the realization that data considerations limited our analytic strategy.

Zero or low cell counts caused the problem, which most frequently affected these analyses. The problems associated with zero or low cell counts were caused by the clear differences between offenders and non-offenders. For several variables, few or no offenders or non-offenders indicated the response. For example, no non-offenders indicated that their fathers were unemployed and no offenders indicated that they had attended cultural lectures during school. Clearly, these variables differentiated between offenders and non-offenders

and would ideally be included in a multivariate analysis. This, however, causes a problem for estimation in the regression analysis, as the "variable" becomes a constant for one group (Menard 1995). In some cases, it was possible to address the issue by collapsing categories. For example, none of the offenders had indicated that they had wanted to be "the best" students in school. In this case, the four existing categories (never thought about it, middle level, and above middle level, the best) were collapsed into three (never thought about it, middle level, and above middle level/best). While such procedures do result in a loss of some information, we viewed this as an acceptable alternative to discarding the variables from the analysis. A similar system was used for the stage of education completed, stage of education the subject wanted to complete, feelings if forced to leave school, reason the subject left school, and relations with teachers.

For other variables, however, this was not possible. For example, none of the offenders indicated that they had received a monetary incentive as a family disciplinary measure. Because this was a dichotomous response (i.e., they had been disciplined in this manner or they had not), there was no way to recode this variable in a meaningful way (Menard 1995). Similar limitations led us to exclude a number of measures of subjects' ideal job (i.e., research in natural and social sciences, political and legal work, specialized household), role models (i.e., millionaire, party or government leader), and things deemed important in life (i.e., good behavior). Thus, the results from the regression analyses are to be viewed with these caveats in mind.

School Variables

The first set of regression analyses examined the effect of three types of school variables. The previous analyses suggested that offending status was linked to educational achievement, student aspirations, and the reason that subjects left school. In the following analyses, offender status was regressed on level of education completed (junior high or

less=1, senior high or higher=0), having dropped out or being expelled from school (yes=1), relations with teachers (not good or do not care, ordinary, and good or very good), type of student the subject had wanted to be (never thought about it, middle level, the best), and how the subject would feel if forced to quit school (happy; do not care; disappointed).

The regression analyses were conducted in a series of equations, each of which added a new variable to the equation. In Model 1, offender status was regressed on the level of education completed. As the variable was initially constructed, respondents were able to identify whether they had completed one of four educational levels: 1) primary school, 2) junior middle school, 3) senior middle school, or 4) university. After reviewing the descriptive statistics for these variables, however, it was clear that none of the offenders had completed the university and few (3.7%) of the non-offenders had completed primary school only, thus raising the problem of low cell counts described earlier. To compensate, we dichotomized the educational level variable into two categories: 1) completion of primary school or junior high school as highest level of education and 2) completion of senior middle school or university as the highest level of education. This allowed us to examine the influence of the theoretically important concept of educational attainment while also addressing the low cell-count problem existing in the data. As can be seen in Table 26, non-offenders were much more likely ($\text{Exp}(B)=16.300$) than offenders to have completed senior high school or university.

Next, a control for whether the student dropped out or had been expelled from school, regardless of the final level of education completed. This variable was included as a proxy for the reason a respondent left school to determine whether this reduced the effect of final educational level completed on offender status. Respondents who indicated that they had been expelled or dropped out were coded 1, while those who did not report having been expelled or dropped out were coded 0. Results from Model 2 show that dropping out of school increased the odds of being an offender approximately 10 times, while also slightly

reducing the independent effect of final level of education completed. Nevertheless, level of education completed remained a salient predictor of offending status, increasing the odds of becoming an offender by approximately 12 times.

A control for students' relationships with teachers was added to Model 3 to determine whether this conditioned the effects of level of education completed and reason for leaving school. Students were asked to describe their relations with teachers while they were in school. Respondents were asked to pick from four choices: 1) Very Good, 2) Good, 3) Ordinary, 4) Not Good, or 5) Do not care. For the regression analyses, we recoded Not Good/Do Not Care into a single category and Good/Very Good into a single category. Results from Model 3 show that the strength of relationships between level of education completed and offending and between drop out status and offending remain salient, even when the effects of student-teacher relationships are factored in. We also see, however, that the effect of educational attainment and drop out status are tempered somewhat when student-teacher relationships are introduced. Thus it appears that structural factors such as level of education completed and reason for leaving school have important effects on the likelihood that one will become an offender, but the strength of these effects can be mediated by the quality of student-teacher relationships while in school.

To determine whether it was having good relationships with teachers that prevented offending or having poor relationships that enhanced offending, we used "ordinary relations with teachers" as the reference category in these regression analyses. This approach allowed us to examine both "risk" and "protective" factors on offending behaviors (see, for example, Hawkins, Catalano, and Miller 1992 for a discussion of this approach). Looking closer at Model 3, we see that respondents with poor relations with teachers were more than seven times more likely to be offenders than respondents who reported ordinary relations with teachers, controlling for the effects of educational attainment and drop out status. When examining whether having strong relations with teachers insulated respondents from

becoming offenders (i.e., was a protective factor), this relationship was not supported. Compared with those who reported ordinary relations with teachers, respondents who indicated that their relations with teachers were strong were not significantly less likely to be offenders, controlling for the effects of educational attainment and drop out status. Thus, it appears that having poor relations with teachers is a risk factor increasing the likelihood of becoming an offender, but having strong relationships with teachers is not a salient factor protecting individuals from becoming offenders, once the effects of educational attainment and reasons for leaving school are taken into account.

Model 4 added student aspirations to the equation. Respondents were provided four categories—1) The Best, 2) Above Middle, 3) Middle Level, 4) Do Not Care—and asked to indicate where they had striven to be (relative to their classmates) while attending school. Based on the work of Hirschi (1969) and others, we hypothesized that respondents who had strong educational aspirations would be less likely to be offenders than other respondents. Reviewing the descriptive pattern of the data for this variable also illustrated the problem with low cell counts, necessitating our decision to combine responses of “the best” and “above middle” into a single category and used this category as the reference. The results of Model 4 illustrate that student aspirations were not significant predictors of offending status, controlling for the effects of educational achievement, reasons for leaving school, and student-teacher relations.

Finally, students' feelings if they had been forced to quit school were added to the equation in Model 5. Students were asked to indicate whether they would have felt 1) Disappointed, 2) Happy, or 3) Would Not Have Cared if they had been forced to quit school. We hypothesized that having been happy to quit school or not having cared if they were forced to quit school would increase the likelihood of becoming an offender relative to those who would have been disappointed to have had to quit school, even in the presence of other school-related factors. The results from the final model, however, show that students'

feelings if they had been forced to quit school did not significantly influence the likelihood of becoming an offender when the other school-related variables were included.

To summarize, the results from these analyses suggest that the most important school factors associated with offending are those relating to structural variables—level of education completed and drop out status—and interactions between students and teachers. The effects of these variables remained strong in each model: in the final model, dropping out or being expelled from school increased the likelihood of being an offender by more than eight-fold, while subjects having low educational achievement were more than nine times more likely to be offenders. Additionally, subjects who did not care about or had poor relations with teachers were more than seven times as likely to be offenders as subjects who had average relations with teachers. The relationship did not work the other direction, however, as having good relationships with teachers did not significantly reduce the likelihood that subjects would become offenders. Additionally, subjects' educational aspirations and feelings if forced to quit school also had no significant effect on offending status once the effects of the other school variables were controlled.

Table 26 School Factors Affecting Offender Status

	Model 1			Model 2			Model 3			Model 4			Model 5		
	B	SE	Exp(B)	B	SE	Exp(B)	B	SE	Exp(B)	B	SE	Exp(B)	B	SE	Exp(B)
Education															
-Primary or Junior High	2.791***	.427	16.300	2.491***	.448	12.069	2.036***	.501	7.657	2.237***	.560	9.365	2.231***	.590	9.307
-Senior or Higher (ref)															
Dropped Out				2.345***	.680	10.428	2.194**	.700	8.974	2.147**	.741	8.560	2.151**	.748	8.593
Relationships w/ Teachers															
-Very Good							-.143	.615		-.694	.762		-.611	.791	
-Ordinary (ref)															
-Not Good/Don't Care							1.998**	.793	7.732	1.983**	.803	7.267	2.020**	.817	7.539
Student Aspiration															
-Above Middle/Best (ref)															
-Middle Level										-.981	.734		-1.101	.800	
-Did Not Care										-.557	.831		-.816	.976	
Feelings if Forced to Quit															
-Disappointed (ref)													.466	.828	
-Do Not Care													.229	.653	
-Happy															
Constant	-1.773	.360	.170***	-1.970	.383	.139***	-1.897	.455	.150***	-1.323	.622	.266*	-1.398	.666	.247*
2 log likelihood		164.756			147.606			138.355			136.206			135.887	
Cox & Snell R ²		.300			.371			.406			.414			.415	
Nagelkerke R ²		.400			.495			.542			.552			.554	
% Correct		78.1			76.3			75.0			81.9			81.3	

* p<.05
 ** p<.01
 *** p<.001

Family Variables

Next, the influence of family factors on offender status were examined. For the regression analyses reported herein, three types of family factors were examined: 1) parental expectations of the subject, 2) parental-subject interactions, and 3) parental relations. The choice of these variables merits some discussion. As with the school-related factors, the data presented us with a number of challenges to overcome when conducting the multivariate analyses. Conceptual and empirical concerns severely hampered our options in this examination. We were again confronted with the empirical reality of striking bivariate differences between offenders and non-offenders on the family variables included in the survey. For example, parental disciplinary tactics, a variable found to be of considerable importance in previous studies (see, for example, Loeber and Stouthamer-Loeber 1986 or Gottfredson and Hirschi 1990 for reviews), showed that no non-offenders reported that parents used beating or scolding as a method of discipline, compared with more than one-third of offenders. (Also note the reverse pattern concerning use of material incentives as disciplinary method.) Clearly, these bivariate patterns differentiated offenders from non-offenders, but the pattern was so evident that it was not possible to enter this in the multivariate regression analyses. Also of concern was the fact that many of the variables included in the survey were asked in a manner that made it unclear which concepts were being measured. These difficulties ultimately led us to explore other avenues to examine the relationships in a multivariate setting (see the discussion of the disadvantage index described below).

As with the examination of the school-related factors, the regression analyses examining the relationships between family variables and offending status were conducted in a series of steps. First, offender status was regressed on parental expectations of the respondent's occupational future. Model 1 regressed offending status on the parental

expectation that the respondent would become a worker (yes=1). Consistent with the results presented earlier, respondents whose parents had wanted them to become workers were more than twice as likely as other respondents to be offenders. This factor, however, explained very little of the variance in offender status (Nagelkerke $R^2=.056$), and the effect became non-statistically significant once other family factors were introduced. Thus, it appears that the bivariate relationship between parent's occupational expectations and offending status is due to other factors.

Model 2 introduced a proxy measure of parent-subject interactions. Respondents were asked whether fathers had assisted in school-related studies. Respondents who indicated that their fathers had helped them were coded 1, while all other respondents were coded 0. Results show that offenders were significantly less likely non-offenders to report that fathers had helped them in their studies, controlling for parental expectations. When the parent-subject interaction variable was introduced, the previously observed significant effect of parental expectation that the subject would become a worker on offender status dropped to less than would be expected by chance. From these results, it appears that parental-subject interactions in homework activities, rather than parental expectations that one would become a worker, was an important predictor of offender status.

Fathers' expectations of respondents' school performance was then added to the equation (Model 3). Respondents were asked what type of students their fathers had expected them to be: (1) The Best, (2) Above Middle Level, (3) Middle Level, or (4) Did Not Care. We then examined whether respondents whose father had low (i.e., middle level) or no (i.e., did not care) expectations of them as students were more likely to be offenders than respondents whose fathers had higher expectations for them as students (i.e., above middle level or the best). Results of the analyses show that respondents whose fathers had no or low expectations of them as students were each more than five times as likely to be offenders as

those whose fathers had high expectations, when parents expectations of future occupational status and parental assistance in schoolwork were controlled.

The final model (Model 4) examined whether the quality of parental relations affected offender status once the effects of the other family variables were controlled. Respondents who indicated that their parents could be described as "often quarreling", "not very good", or "divorced" were coded as 1 (indicating poor parental relations), while respondents reporting relations were "fairly good" or "ordinary" were coded as 0. When entered into the logistic regression analysis, those with poor parental relations were no more or less likely to become offenders, when the effects of occupational and educational expectations by parents and parent-respondent interactions in schoolwork were controlled. Indeed, fathers expectations concerning what type of student would become was the only significant predictor of offending status. Respondents whose fathers had low or no expectations for the type of student they should be were more than five times as likely to be offenders than respondents who indicated their fathers had high expectations of them as students. Thus, these results suggest those fathers' expectations for youth is more important in determining offending status than are factors such as interactions within the family for these Chinese subjects.

Table 27 Family Factors Affecting Offender Status

	Model 1			Model 2			Model 3			Model 4		
	B	SE	Exp(B)	B	SE	Exp(B)	B	SE	Exp(B)	B	SE	Exp(B)
Parental Expectation: Worker	.877**	.338	2.403	.409	.382		-.268	.460		-.296	.469	
Parental Helps in Studies				-1.061**	.406	.346	-.314	.480		-.282	.491	
Parental Expectation: Type of Student												
Above Middle Level/The Best (ref)												
Middle Level							1.672***	.495	5.324	1.628**	.514	5.094
Does Not Care							1.689***	.662	5.416	1.646*	.676	5.186
Parental Relationship: Not Good										.138	.438	
Constant	-.310	.198		.177	.271		-.748	.397		-.783	.413	
-2 log likelihood	217.637			210.524			197.557			197.458		
Cox & Snell R ²	.042			.083			.154			.154		
Nagelkerke R ²	.056			.111			.205			.206		
N of Correct	59.9			63.0			69.8			69.8		

p < .05
 * p < .01
 ** p < .001

Peer Variables

The final set of regression analyses examined the effect of peer variables on offending status. We were again confronted with many of the same analytical issues that had plagued us in the multivariate analyses of school and family variables. Drawing from the prior literature, we chose to focus on three conceptual domains: importance of peer relationships, whether peers were delinquent, and amount of time exposed to peer influences. We again conducted these analyses in a series of steps.

The first model regressed offending status on whether a subject viewed a friend as a role model (yes=1). This measure was used as a proxy for the importance of friends in subjects' lives. The results of Model 1 show that respondents who viewed a friend as a role model were more than three times more likely to be offenders than were respondents who did not view a friend as a primary role model.

Next, a proxy measure of exposure to delinquent peers was entered into the model (Model 2). Respondents were provided a checklist of words and asked to select all that could describe their friends. One of the response options consisted of the words "cause trouble." For these analyses, all respondents who classified their friends as trouble makers were coded as 1, while those who did not select this option were coded as 0. Results from the analyses in Model 2 show that respondents who indicated that they were exposed to delinquent peers were nearly 7 times more likely to be offenders than those who were not exposed to delinquent peers, controlling for the importance of friends as role models. Having a friend as a role model remained a salient predictor of offending status, even in the presence of exposure to delinquent peers.

Table 28 Peer Factors Affecting Offender Status

	Model 1			Model 2			Model 3		
	B	SE	Exp(B)	B	SE	Exp(B)	B	SE	Exp(B)
Role Model: Friend	1.189***	.332	3.283	1.188***	.349	3.281	-.777	.661	
Peers: Cause Trouble				1.914***	.535	6.778	1.716*	.815	5.562
Time Spent w/ Peers (minutes)							.140***	.023	1.150
Constant	-.517	.217	.597***	-.822	.241	.440***	-10.377	1.576	.000***
-2 log likelihood	211.116			194.861			84.680		
Cox & Snell R ²	.080			.168			.578		
Nagelkerke R ²	.106			.223			.771		
% Correct	64.2			70.4			92.6		

* p<.05

** p<.01

*** p<.001

Gender

As previously noted, the proportion of the male cohort with some type of record is 2.8% while the proportion of females is 0.2%. With only five offending females and five matched non-offenders, little can be done in terms of analysis.

Generally, males and females were similar in terms of their background characteristics. Females did, however, report that their fathers had more education than males' fathers, as the majority of females' fathers (60%) had completed a specialized secondary school or college while the majority of males' fathers (53.3%) had completed primary or junior middle school (chi-square=9.385, p=.052). Perhaps of more interest here, males and females differed in the types of offenses for which they had been sentenced. All of the females had been sentenced for "breaking the law," while nearly half (44.7%) of the males had been sentenced for "committing a crime." This difference was statistically significant (chi-square=3.855, p=.050).

Table 29 Type of Offense by Gender

Offense Type	Percent Female	Percent Male
Violation of Public Safety Regulations	100.0	55.3
Violation of Criminal Law	0.0	44.7

chi-square=3.855, df=1, p=.050

Educational aspirations differed for males and female as well. When asked about what type of student they had wanted to be in school, a larger percentage of males than females fell in the extreme categories, never thinking about it (34.2% to 0.0%) or wanting to be the best (9.2% to 0.0%). Conversely, a larger percentage of females than males reported wanting to be average (60.0% to 38.2%) or above average (40.0% to 18.4%) in school. These differences were statistically significant (chi-square=7.687, p=.053). Females were also more likely than males to report that their fathers helped them study (60% to 29.6%, chi-square=4.018, p=.045). Nevertheless, no significant differences were found between males and females in terms of the stage of education, which they wanted to or actually did complete, their feelings if something unexpected would have caused them to discontinue schooling, or of their general perceptions of school or of relationships with teachers or other students.

There were no significant differences between male and female subjects and the activities in which they engaged in while in school. Nearly all subjects reported participating in visits to cultural places and engaging in social activities of public interest. Conversely, none of the students reported taking part in the social survey or looking after elderly persons.

Labor Outlooks and Participation

Perceptions of labor while in school revealed both similarities and differences between the sexes. For instance, 40 percent of the females but only about 14 percent of the males agreed, "It is good to build up the habit of participating in labor from childhood, so students should participate in labor." Conversely, a greater percentage of males than females (40.8% to 10%) agreed with the statement "students should participate in self-service labor and need not participate in productive labor." No significant differences between males and females, however, were found on the remaining perceptions of labor.

A list of fourteen items deemed by the researchers to be potentially important in life were then provided, and the subjects were asked to choose the three, which they felt, were most important. Results suggested that males and females differed in the importance placed on each of these areas. The difference between males and females who indicated that power and influence were most important was large and statistically significant (55.3% to 0%). Similarly, a greater percentage of males than females highlighted the importance of position and influence (39.5% to 10%), although this difference was not statistically significant at the .05 level. In contrast, females were more likely than males to select a strong or healthy body (80% to 0%) or happiness in marriage (70% to 0%) as being the most important.

Table 30 Value Difference by Gender

Option	Percent Female	Percent Male	X ²	df	Sig
Money	70.0	61.8	0.266	1	
Freedom and Enjoyment	30.0	42.1	0.567	1	
Position	10.0	39.5	3.472	1	
Power and Influence	0.0	55.3	11.478	1	.001
Achievements in Career	0.0	17.1	2.038	1	
Good Behavior	0.0	6.6	0.701	1	
Ideological Work	0.0	0.0	---	---	---

Differences between female offenders and non-offenders were not possible to calculate because of the small number.

Conclusions from the small data set.

The tables and figures above all lead to two over-arching conclusions:

- The differences between offenders and non-offenders are significant in terms of peer influences, family background and influences, and the role of school performance, expectations and goals. Offenders are more likely to have negative peer influence, poorer family backgrounds and relationships, and to have completed lower levels of education and have lower levels of educational expectations.
- Social integration and involvement in social and cultural activities related to culture and history distinguish non-offenders from offenders while offenders have a greater commitment to individual wealth, power, influence and

enjoyment. Consistent with research from the West and with control theory assumptions, non-offenders are more likely to express traditional social values, morals, and to have personal expectations reflecting greater social integration, achievement, cultural awareness. The non-offending population in China has greater social awareness and a greater orientation toward social conscience and Chinese society than offenders.

The findings above are consistent with the general findings found in the Western literature on the etiology of crime and delinquency.

1973 Birth Cohort

Large Data Set

Method

The original 1973 birth cohort was determined from 722,599 individual files in each of the 12 district census/police offices in the Wuchong District of Wuhan. Public Safety Regulation Violations and Criminal Law violations were checked starting in June 1991 for those meeting the birth year (1973) and residency requirements (lived in Wuhan from age 13 to 18), for offenses up to the age of eighteen. Of the 5,341 born in 1973, 2,700 males and 2,641 females, the researchers identified 81 persons (1.5%) with records. 76 were male and 5 were female. The characteristics of this group are described above in the analysis of the Small Data Set.

Our initial design was to track the original 5,341 in 2000, making the cohort 27 years old. Unfortunately, the original 5,341 files could not be located. As it turned out, the data collection process in 1991 included only the identification of offenders and they were then matched with non-offenders (the small data set). No information on the entire cohort was ever gathered or recorded. In short, we had no real cohort we could follow.

The decision was then made to go back to the existing files and re-select a cohort born in 1973. It was assumed that many of this cohort would be the same as in the original, but there was no certainty of that since there had been in and out-migration since the original study. However, we would, none-the less, have a 1973 cohort, which could be compared with the original in terms of the proportion offending. The process involved

checking all of the existing individual files in 2000, which were at this time now located in 15 Civil Service Offices, each with a police station.

On an estimate of the 1973 birth cohort made by the Chinese Team, 5,400 data collection instruments were generated and distributed to the offices to identify and record information on those born in the district in that year. The researchers then reviewed 821,115 files, completing the 5,400 forms. Unfortunately, at the time of the data collection, there was no accurate census available. The researchers completed all of their forms and then stopped. We estimate that, based on a report by Guo et al. (2002), that the 5,400 instruments were inadequate and that we actually only have a sample of the cohort that represents approximately 85-90 percent of the actual cohort. This, technically, does not meet the criterion of a birth cohort, but it does represent a substantial proportion, in essence randomly selected across all civil and police stations.

Nearly a thousand interviewers/surveyors were used for the data collection process (Guo et al., 2002) from three institutions: students from Central China Normal University and Wuhan College of Management of Public Safety and police officers selected from the 15 police stations.

Review of the data collected in 2000 showed considerable missing data. After eliminating the files with insufficient information, the 1973 cohort identified in 2000 is 5,338. The 2000 cohort is comprised of 2,883 males, 2,428 females and, while other data were available, 27 of our cases were missing information on gender.

Interestingly, the cohort sample identified in 2000 (which will be referred to as Cohort2 to distinguish it from the original used by Wolfgang) is not substantially different from the original group collected in 1991. While the gender proportions are

slightly different (50.5% male in 1991 and 54.0% in 2000), the proportion of offenders by the age of 18 is nearly the same. We selected only the files for those with recorded public safety regulation violations and/or criminal law violations prior to 1992, (which was the cut-off date of the original search). For the cohort identified in 2000 there are 46 violators of Public Safety regulations compared with 47 in the original report and 34 criminal code violations – the same as the original report. Rather than 81 offenders as reported in the original research, we found 76: 71 males (compared with 76 in the original) and five females (the same as the original).

Data from the files included only 27 items, which were eventually split into 48 separate variables. Several of those items are very important for determining the basic characteristics of the cohort. However, they do not serve further meaningful analyses of the data in terms of criminological questions/theories. For example, item 3 on the census data shows a rather equal distribution of the months of birth in the relevant year. Item 6 shows that 88.5 per cent of the subjects were born in Wuhan City (70.9 per cent) or around Wuhan City in some other place of Hubei Province (17.6 per cent). That means that the large majority of subjects were indeed “indigenous people”, and therefore comparable in terms of having been influenced by largely the same local socialization environment as we must assume for the original cohort.

This is additionally demonstrated by item 7 showing that at the time of checking the police archives 98.4 per cent of the subjects had their home address in Wuhan City (98.1 per cent) or near the city in some other place of Hubei Province (.3 per cent) in 1991. This does not mean, however, that all subjects stayed at the same place of living all the time. Many were moving to another place or a couple of other places in their home

region so the meaningful question of residential "stability vs. mobility" can and should be taken into consideration.

The only variables in addition to the ones identified above that were available to be utilized in analysis were: gender, religion (a census card item), educational level, marital status, military experience, occupation, moved or change of address, reason for moving, date of moves, cancellation of residence registration (usually an administrative sanction), and violations of public safety violations or criminal code violations and the subsequent penalties.

Unfortunately, these data are restricted to information collected at each district census and police office. Since the original study was done, China has restructured the nature of its local committees by making them more formal in structure and nature. Our intent was also to review the files of the local committees, which would have information on minor deviant acts and interventions, but the restructuring resulted in a change in the nature and function of these committees so that such data are no longer available. This also coincides with an increased sensitivity to the use and release of individual information. The result is that these data could not be used as a check of reliability for the findings. What we have for data, then, is information in the official files regarding both public safety regulation violations and criminal violations. Because we had to re-check the entire population to redefine a 1973 cohort, it is our belief that the comparison of results from the data first revealed in the Wolfgang (1996) report and the Chinese reports (Xu, 1994, 1996, 1997) will either validate the original findings or seriously question them.

Data Cleaning and Variable Transformations

Many of the key variables were recoded after the distributions of the key variables were examined. Religious affiliation, educational level, marital status, mobility, and offending variables were collapsed for the bivariate and multivariate analyses. Whenever possible, the variables were ranked in a theoretically meaningful manner. Variables theoretically classified as “protective” or insulating individuals from offending were assigned positive values, while variables classified as “risk” or enhancing offending were assigned negative values. Despite eliminating a number of cases due to nearly all information being missing, missing data still posed a problem for some of the variables (e.g., religion, where the religious affiliation of 29% of the sample was unknown). In these cases, the missing data were assigned a value of zero. For example, individuals who were known to have any religious affiliation were coded as +1, those for whom religious affiliation was undetermined (missing) were coded 0, and those with no religious affiliation were coded -1. This allowed us to include missing in the analysis and yet not have it confused with a no response.

We were also interested in residence changes or stability. Our data included information on residence changes and the reasons for those changes. Therefore, we were able to create “moving” variables. The “moving” variables were handled in a slightly different manner than the other recodes and transformations. First, they were dichotomized into having moved (i.e. moved in or out of Wuhan) or not moved. Next, ordinal moving variables (separate for having moved in and out) were created based on the reasons provided for moving. It was determined, for example, that some of the

reasons for moving (i.e., to enter a higher school, obtain a new job, or change an existing job) were for "positive" reasons, while others were for "negative" or at least not clearly positive reasons and could be seen as being more disruptive than stabilizing (i.e., following parents, changing a home address, or other reasons). The determining factor here was whether the move could be interpreted as for one's "advancement."

Finally, new variables were created from the public safety regulation violations, criminal law offending, disposition, and punishment information. Separate dichotomous variables were created to indicate whether or not one had committed a first, second, third or fourth public safety violation or criminal law offense or had received a first, second, third or fourth disposition or penalty (coded as 0=no, 1=yes). This resulted in the creation of 16 new dichotomous variables. These variables were then used to create composite measures for the total number of public safety regulation violations, criminal law offenses, public safety dispositions, and criminal penalties (four scores, each possibly ranging from 0-4). Finally, a general offender scale was created for the combined total number of public safety violations and criminal offenses for each individual in the sample (possible range: 0-8. This scale was eventually truncated at 2 because only four individuals had scores of three or higher).

Principle Findings

Basic Cohort Demographics

In Cohort2, 54% are male, and 70% of the cohort was born in Wuhan while the others resided there from the age of 13. In the 2000 check, members of the cohort were most likely to be married (52%) or single (47%), with few (less than 2%) divorced or widowed. More than half (56%) were living with parents. Being a member of an

organized religion was rare for members of the sample, with 81% classified as having "no religion" and less than 1% classified as either Christian, Buddhist, Islamic, or other religious affiliation.

Nearly equal percentages of the sample (37%) had completed college or more (more than 12 years of education) as had completed high school or vocational training (approx. 12 years of education); fewer of the sample had ended their studies at junior high school (24%, approx. 9 years of education) or elementary school or less (2%, less than 9 years of education). Only a few (4%) of the sample had military experience, and at the time of the study, members of the cohort were most likely to be employed as an employee in a state-owned industrial corporation (29%), a professional occupation (14%), or a state-owned retail or service entity (12.5%). An additional 21% of the cohort was currently unemployed.

Offense Rate

By age 18

Since the populations of the 1973 cohorts collected in 2000 and 1991 are different, the first comparison must be made between the two. As indicated above, Cohort1 (1991 data) had 81 offenders by the age of 18 (1.5%). The record checks at age 18 for the 1973 cohort identified in 2000, found 76 (1.4%). We cannot say with certainty how many of the original Cohort1 are, in fact, included in Cohort2. However, there exist good reasons to assume that Cohort2 includes most of the members, which were already included in Cohort1. With the basic offense rate the same and given the fact that both criminal law violations and public safety regulation violations were recorded, we feel that the results support the fact that one "can trust" the data collected from the Chinese police

stations. We have confidence in the finding that there is a low rate of involvement in crime in the cohort since the 1991 and 2000 collectors were different persons. There does not appear to be any way in which these data could have been “manipulated” to generate such a low rate. Speculation by some that the Chinese may have attempted to present an artificial picture must be rejected. What is missing from the data, however, is the involvement in crime by what is known as the “floating population” in China. There are the unregistered internal migrants who are frequently homeless, involved in low level labor and who are generally considered to be responsible for much of the crime (Ma, 2001) Since our task was not to measure crime in China but to follow a birth cohort, our findings apply only to the registered residents of Wuhan.

For Cohort2, from the 2000 census and legal checks, 57 or 1.1% of the sample members were recorded by the police as *criminal* offenders, and an additional 73, or 1.4% were recorded for public safety violations. None of the offenders was a “chronic offender” in the sense of the Philadelphia Birth Cohort Studies I and/or II. In fact, 45 out of 57 criminal offenders were registered only once, 10 persons twice, 1 person 3 times and 1 person 4 times. Out of the 73 public safety violators, 69 were registered only once, 2 persons twice, 1 person 3 times and 1 person 4 times. There is evidently much similarity in the distribution of both types of violation.

Eight (8) members of Cohort2 were registered for committing both, public safety and criminal offenses. **Therefore, the “actual” number of offenders in Cohort2 is 122 out of 5,338, or 2.3%, to age 27. The delinquency rate – to age 18 – was 1.4%**

The increase in offenders between ages 18 and 27 from the cohort selected in 2000 was an increase of 37 new offending males and 9 offending females. The finding

that 37.7% of the offending population started their criminal behavior after age 18 is consistent with the proportions found in other longitudinal studies (Sampson and Laub, 1993; Tracy et al., 1990).

At age 27

Looking at the 37 males and 9 females who started their criminal activity *after the age of 18*, the data show that all of the females who started their criminal activity as adults were charged with public safety regulation violations and none for criminal law violations. The age range of first public safety regulations violation for the new offenders is 19 to 27 (females 22-27) and the age at first criminal law violation for the males ranged from 19 to 25.

These results still seem as extraordinarily low as they did when the Cohort1 data were first released. Wolfgang et al. (1972) had found in the Philadelphia Cohort I Study that some 35 per cent of their subjects had come in contact with the police up to their 18th birthday. Several studies in industrialized western countries (e.g. England and Germany) easily replicated the Philadelphia findings.

However, the fact that we have rechecked the entire census population and have uncovered nearly exactly the same original distribution, suggests that the findings are real. The rate of criminal activity, whether measured by violations of public safety regulations or the commission of crimes, is exceptionally low in China.

For the cohort as a whole, the likelihood of being involved in public safety violations or criminal offenses more than once is also very rare, as second public safety regulation violations were uncovered for only 4 of the sample members and second criminal offenses for only 10.

Recall, from above, that the same physical act can be either a crime or a public safety regulation violation depending on the gravity of the act, the nature of its consequences for the victim or the public, and the motivation or social vs. anti-social orientation of the offender. An examination of first public safety regulation violations showed they were most likely to fall under the category of:

- theft or stealing (27.5%),
- fighting (15.9%),
- drug use (14.5%), or
- hooliganism (13%).

First criminal offenses were most likely to consist of larceny (60.7%) or disturbing the peace (17.9%).

Warnings, detentions, or other dispositions each accounted for approximately 1/3 of the dispositions in first cases of public safety violations. First criminal offenses were most likely to result in informal penalties (37.5%), official sentences (33.9%), or correctional labor camps (17.9%).

Age/Gender. While the variable age was collapsed in the original Cohort1 study and 100% indicated that they first engaged in criminal activity between 15 and 17, the follow-up Cohort2 study shows the following:

Table 31 **Age at First Violation – Cohort2**

Age	Public Safety Viol.		Criminal Code Viol	
	Male	Female	Male	Female
10	1			
11				
12				
13			1	
14	1		1	
15	2		1	
16	10	2	5	
17	12	2*	11	2*

18	15		11	1
Totals	41	2	30	3

* Same females

For those who initiated their criminal behavior after age 18, the age distribution is as follows:

Table 32

Age	Public Safety Viol.		Criminal Code Viol	
	Male	Female	Male	Female
19	5*		7*	
20	2		1	
21	1		5	
22	1	1	2	
23			4	
24	2	3	2	
25	2	1	1	
26	1	3		
27	2	1		
Totals	16*	9	22*	

* Same male committed both types of offenses

Bivariate Examinations

Cross-tabular analyses were conducted to determine whether offenders differed from non-offenders on the recoded theoretical variables. For analytical purposes, therefore, we created three categories – non-offenders, one-time offenders and repeat offenders. Tests of statistical significance (e.g., chi-square) were not conducted due to the large size of the sample, which would show significance with only minor variances, and because of the large number of empty cells in the tables. The results were examined visually, however, to determine if any emergent patterns could be surmised. The results

suggested that, while the number of variables is severely limited, five variables out of the whole data set appeared to differentiate between the three categories. These were:

- Educational level,
- Occupational status,
- Marital status,
- Religious affiliation, and
- Mobility.

Table 33

Recoded Variable: Educational Level			
	General Offender Scale (crimes + violations)		
	Non-Offenders (N = 5,216)	One time Offenders (N = 105)	Repeat Offenders (2+) (N = 17)
Elementary or less (1.5 %)	1.2 %	18.1 %	17.6 %
Level uncertain (2.0 %)	2.0 %	1.0 %	(0 %)
Junior High (23.2 %)	22.2 %	68.6 %	52.9 %
Senior High/Vocational (36.5 %)	37.0 %	10.5 %	29.4 %
College or University (38.6 %)	37.6 %	1.9 %	(0 %)

Table 34

Recoded Variable: Occupational Status			
	General Offender Scale (crimes + violations)		
	Non-Offenders (N = 5,216)	One time Offenders (N = 105)	Repeat Offenders (2+) (N = 17)
Unemployed (20.0 %)	19.4 %	41.0 %	70.6 %
Uncertain (3.8 %)	3.9 %	1.0 %	(0 %)
Employed (60.0 %)	60.2 %	56.2 %	29.4 %
Professional/Student (16.2 %)	16.5 %	1.9 %	(0 %)

Table 35

Recoded Variable: Marital Status			
	General Offender Scale (crimes + violations)		
		One time	

	Non-Offenders (N = 5,216)	Offenders (N = 105)	Repeat Offenders (2+) (N = 17)
Divorced (1.0 %)	1.0 %	2.9 %	5.9 %
Single (44.8 %)	44.9 %	41.0 %	58.8 %
Uncertain (3.9 %)	4.0 %	1.0 %	(0%)
Widowed (.4 %)	.4 %	(0 %)	(0 %)
Married (49.8 %)	49.8 %	55.2 %	35.3 %

Table 36

Recoded Variable: Religious Affiliation			
	General Offender Scale (crimes + violations)		
	Non-Offenders (N = 5,216)	One time Offenders (N = 105)	Repeat Offenders (2+) (N = 17)
No Religion (68.6 %)	68.2 %	85.7 %	76.5 %
Uncertain/missing (29.2 %)	29.5 %	14.3 %	23.5 %
Some Religion (2.2 %)	2.3 %	(0 %)	(0 %)

Table 37

Recoded Variable: Moving /Reasons for Moving			
	General Delinquency Scale (crimes + violations)		
	Non-Offenders (N = 5,216)	One time Offenders (N = 105)	Repeat Offenders (2+) (N = 17)
Moved: Neutral or possibly negative reasons (39.7 %)	40.0 %	23.8 %	47.1 %
Not Moved (23.7 %)	26.5 %	64.8 %	41.2 %
Uncertain (19.8 %)	20.0 %	11.4 %	11.8 %
Moved: Positive reasons = Achievement (13.3 %)	13.6 %	(0%)	(0 %)

Analysis and Discussion: Large Data Set (Cohort2)

The above variables were entered into a multiple regression equation. The results in Table 38 show that with the exception of marital status, each of the variables is

significantly related to being a recidivist offender. The model generated by the other variables is significant, ($F=53.823$, $p<.000$). The R , however is only .219 and $R^2 = .048$ and adjusted $R^2=.047$. Given the normal distribution, one would not expect a higher proportion of the variance to be explained.

Table 38

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
(constant)	4.972E-3	.005		.987	.324
Religion	1.852E-02	.005	.048	3.602	.000
Education	.266	.020	.184	13.623	.000
Marital Status	1.805E-03	.005	.005	.375	.707
Occupation	3.257E-02	.006	.073	5.349	.000
Moving – Achievement	-1.88E-02	.006	-.041	-3.037	.002

Dependent Variable: Repeat Offender

Another way of viewing these data is to put them into a theoretical concept that represents “being at risk” or, “being relatively disadvantaged”. This approach was previously used in the reanalysis of the original Philadelphia cohort (Kerner, Weitekamp and Schindler, 1995). While the variables we have to work with are extremely limited, we considered as “risk” the absence of bonds or rather loose bonds to conventional societal norms. This can be considered as reflective in the marital status and occupation variables. Likewise, risk might be considered in terms of being rather free of obligations for partners/children or at “disadvantage” in terms of having fewer life chances than others in society as would be reflected in the education variable.

Results from longitudinal studies show that offenders, and especially multiple offenders, are characterized by an accumulation of underprivileged and unstable life conditions. There is a continuity, and to some extent, an outgrowth of different problems. In early years they were more likely to suffer from harsh or erratic child-rearing practices

and disrupted family relationships (Farrington 1995). In school they tend to have low attainment, were rejected by conventional peers and associate with delinquent peers (Stelly et al, 1998). In adult years persistent offenders tend to have trouble in the world of work, in family relationships and during military service (Sampson / Laub 1993; Caspi et al. 1987). They experience downward occupational mobility, are more likely to be unemployed and/ or exhibit erratic work lives and were also more likely to divorce. Their lives are more unstable in terms of settlement as well, as they move more frequently (Farrington 1995).

Weitekamp and Kerner, (1994) at the Institute of Criminology, Tübingen, Germany, after a review of previous longitudinal research, have suggested that continuation or desistence in delinquent behavior is affected by the life chances a person has at different stages in his/her life course and that the consequences of crime, itself, contributes to these life chances. Life chances are due to available social resources. Weitekamp and Kerner argue that a variety of social factors, which criminological research has revealed to be linked to delinquent behaviour, could be interpreted as social resources. For example the level of education, the availability of social networks, family structure, capabilities of conflict management and life planning are components of life chances, which at the same time affect the probability of delinquent behaviour. These kinds of resources influence the normative orientation of an individual, the learning of socially competent behaviour and thereby are crucial as to whether and how an individual is socially integrated.

The impact of life chances on the probability of further crime results from the additional effects of single components of social resources. Caspi et al. (1987), who

looked at outcomes of early antisocial behavior in later life, found additive effects. They found that people with temper tantrums, whom we assume to have poor capabilities in conventional conflict management, showed, on the average, more poor school attainment than juveniles without that problem. This was true in general for those belonging to the working class and those of the middle classes. However, even students from the middle classes with a history of antisocial behavior were more successful in school than their more underprivileged classmates without that problem. The advantage of a privileged social origin outweighed the disadvantages associated with capabilities in conflict management at the time of leaving school, even though both factors appeared to be relevant. However, when people entered the working world the effects of class origin and capabilities in conflict management (early temper tantrums) as two components of social resources were about on the same level. Those with low class origin and low measures of temper tantrum had, on average, similar occupational status in the first job as those with higher origin status and high measures of previous handicap in conflict management. One advantage is now fully counter-balanced by another disadvantage (or vice versa). The additive effect holds in other subgroups of the sample, too. That is, individuals with privileged social resources in both of the aforementioned aspects have the highest and those with both underprivileged resources have the lowest occupational status.

Considering these factors, it is assumed that the more privileged social resources available, the more one has a chance of meaningful social participation and social integration and the lower the probability of multiple offending. In contrast, the more disadvantaged one is relative to social resources, the fewer life chances a person has and the higher the probability of multiple offending. Although social resources are

interrelated to each other, we expect that they are to a certain extent different aspects or components of life chances. To put it another way, life chances are an outcome of the accumulation of these social resources.

Disadvantage Index

For heuristic purposes, we used the variables which were available to construct a Disadvantage Index. No effort is being made to suggest that these variables are in and of themselves sufficient to explain who persists and who does not persist in criminal behavior. But the index does utilize previously documented indicators of social integration: education, occupation, and even religious affiliation.

In reality, not every person without religious affiliation would automatically be endangered to become deviant as compared to those who profess religious affiliation. He or she may instead have similar value-bonds in other respects. Likewise, not every person having only less than elementary education would automatically be predetermined for a criminal career. He or she may instead be just content with his/her position in society and be content doing a decent job at the lowest level of the economic hierarchy. So, for each variable for which we have data, there is no suggestion that scoring positive or negative is a determining factor in offending or not offending.

On the average, seen from a late-industrial western society's point of view, persons having poor education, being unemployed, living as singles or divorced, lacking religious affiliation, and residing in the environment into which they had been born without any experience of moving to another place for achievement objectives might/would be considered as being under "pressure" or under "heightened social stress"

or “in danger of anomia.” The question for us is whether a similar hypothesis can be found under the very different conditions of present day China, even when considering a big city like Wuhan.

Using only the variables available, the bivariate distributions show:

Table 39

Risk / disadvantage factors:	General Offender Scale (crimes + violations)		
	Non-Offenders (N = 5,216)	One time Offenders (N = 105)	Repeat Offenders (2+) (N = 17)
Education: Elementary or less	1.2 %	18.1 %	17.6 %
Occupation: Unemployment	19.4 %	41.0 %	70.6 %
Marital Status: Single/Divorced	45.8 %	43.8 %	64.7 %
Religion: No Religion	68.2 %	85.7 %	76.5 %
Moving: No Positive Moving Experience	84.2 %	100.0 %	94.1 %

The Disadvantage Index is generated by assigning “points” to each person. One (1) point was assigned if the individual’s situation could be seen as theoretically disadvantaged while zero was assigned if the condition was considered neutral or positive. Thus, for school, 1= elementary education or less; for occupation, unemployment = 1; for marital status, 1= single or divorced; and for religion, 1= no religion. Using these four variables, the distribution of points is as follows:

Table 40

DISINDEX: Four Variables			
	General Delinquency Scale (crimes + violations)		
(Number of Disadvantage Points Persons Are Accumulating)	Non-Offenders (N = 5,216)	One time Offenders (N = 105)	Repeat Offenders (2+) (N = 17)
One Point	46.3 %	37.1 %	17.6 %
Three Points	6.8 %	20.0 %	35.3 %
Total	100 %	100 %	100 %

Considering the findings of Farrington (1995) regarding special mobility as a factor, the disadvantage index was also generated using "moving" as a variable. Our data indicated each move of those in the sample and the reasons for those moves. For this variable we considered that 1= no positive moving. Calculating the accumulated points for non-offenders, one-time and repeat offenders show the following distribution:

Table 41

DISINDEX: Variables Including "moving"			
	General Offender Scale (crimes + violations)		
Number of Disadvantage Points Persons Are Accumulating	Non-Offenders (N = 5,216)	One time Offenders (N = 105)	Repeat Offenders (2+) (N = 17)
Zero Points	1.8 %	0 %	0%
One Point	18.5 %	1.9 %	0 %
Two Points	45.7 %	37.1 %	23.5 %
Three Points	27.4 %	36.2 %	35.3 %
Four Points	6.3 %	20.0 %	35.3 %
Five Points	.3 %	4.8 %	5.9 %
Total	100 %	100 %	100 %

Both calculations show that offenders are more likely to have a higher number of points on the Disadvantage Index. Since both solutions produce very similar results, the

findings suggest that even seemingly small differences between groups can contribute substantially to an accumulated total "effect".

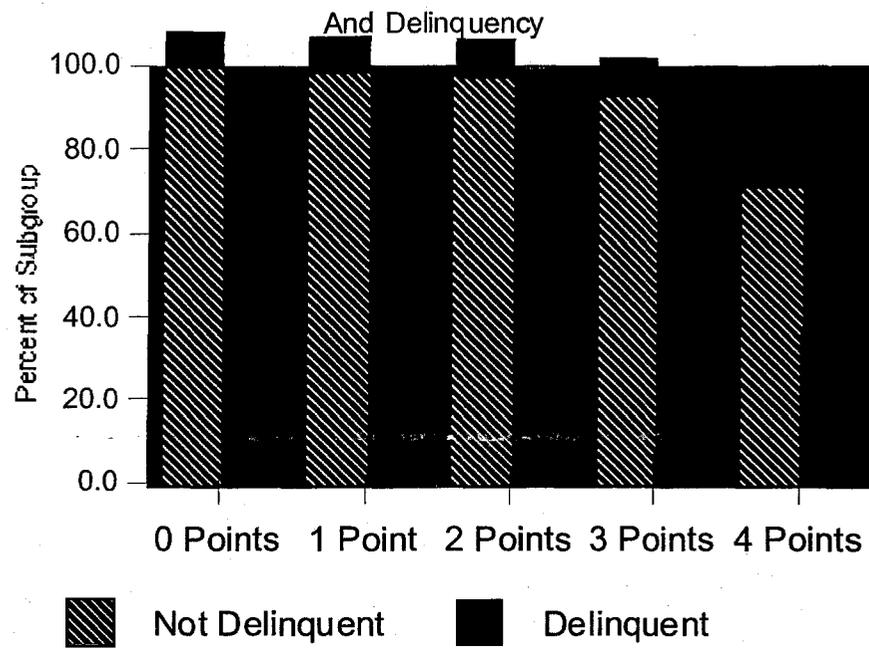
For the sake of demonstrating the basic picture, we decided to combine one-time offenders and repeat offenders together, and to calculate how many "offenders" would result in each category of the disadvantage index (excluding the moving variable). The rather clear cut and remarkable result is shown below:

Table 42

DISINDEX and Percentage of Offenders :			
	General Offender Scale (crimes + violations)		
Disadvantage Index POINTS	Members in the Sub-Group N	Members Registered as Offenders N	Members Registered as Offenders Per Cent of the Sub-Group
One	2,458	42	1,7 %
Three	383	27	7,0 %

What is evident from the data above is that as one accumulates "points" (in any combination of variables) on the Disadvantage Index, the proportion of offenders is greatest. Graphically the relationship of disadvantage to delinquency can be viewed as follows:

Disadvantage Index



Applying the Disadvantage Index in the reanalysis of the first Philadelphia Cohort (Kerner et al, 1998) shows results similar to those found in China. These results are in Figures 3 and 4. As one increases the Disadvantage points, the proportion of offenders and repeat offenders increases.

Figure 3

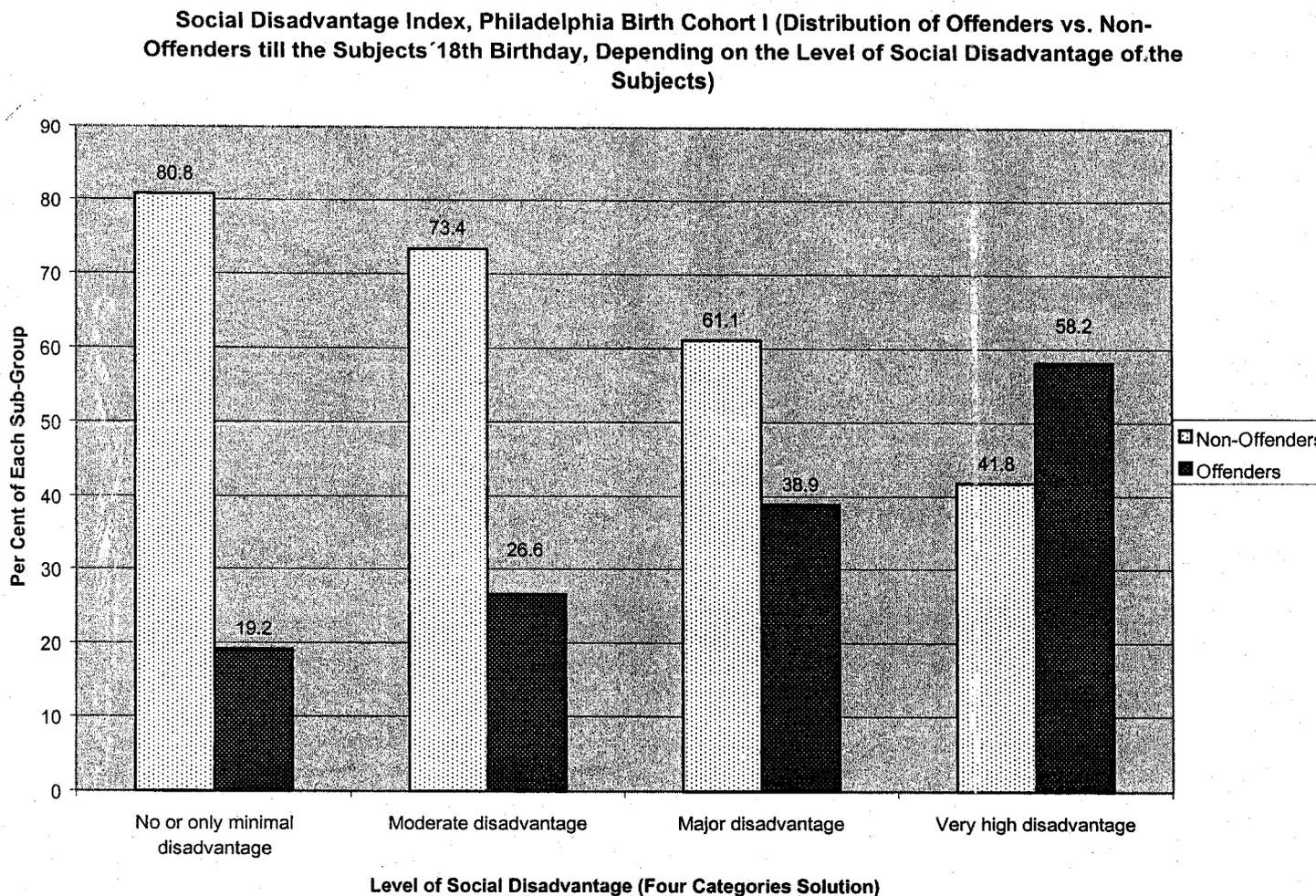
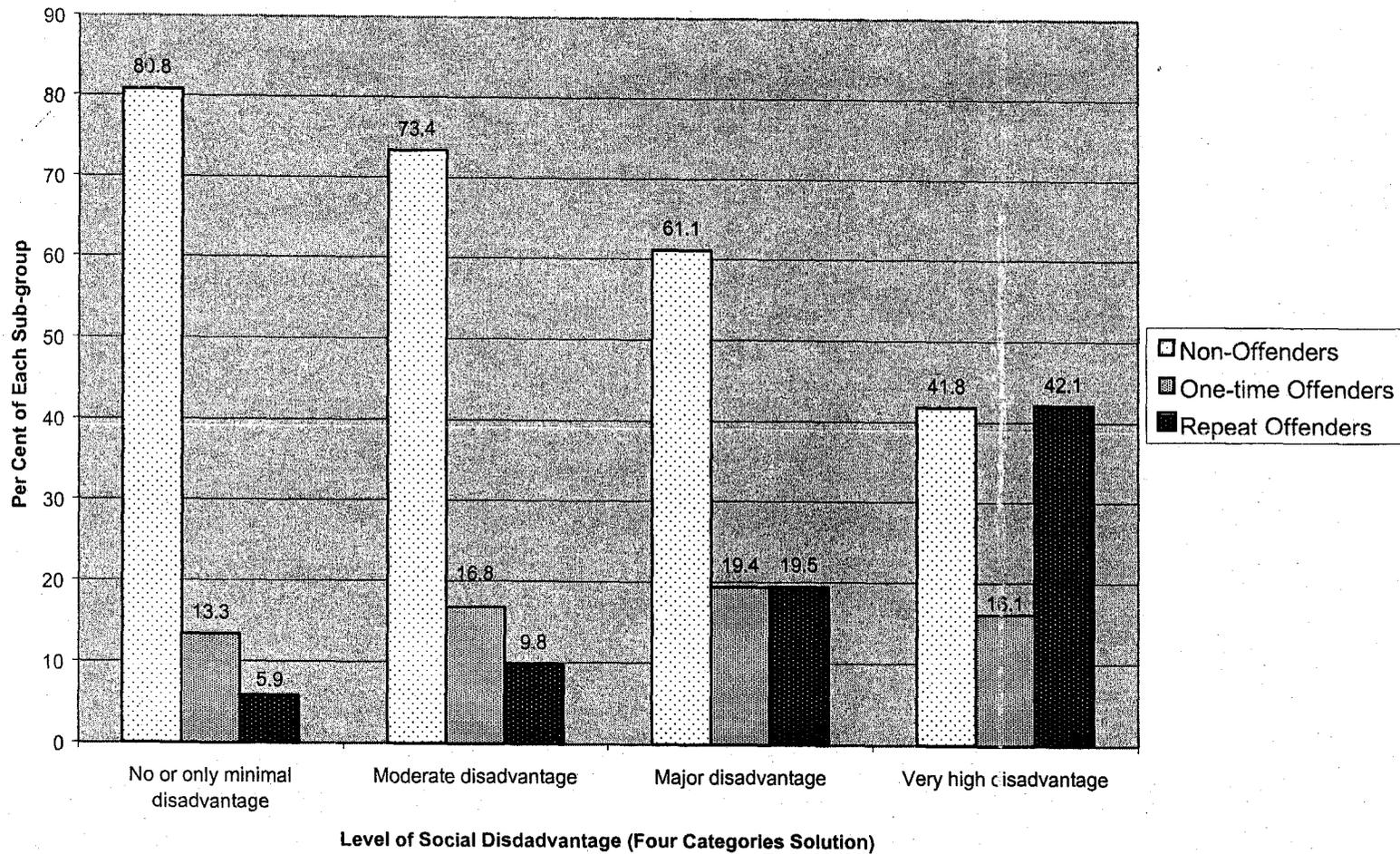


Figure 4

Social Disadvantage Index, Philadelphia Birth Cohort I (Distribution of Offenders vs. One-time Offenders vs. Repeat Offenders Depending on the Level of Social Disadvantage of the Subjects)



Factor Analysis

In order to double check the relevance of the variables included in the Disadvantage Index, and in order to test the stability of the results, we decided to perform a series of exploratory principle component Factor Analyses.

We began with looking for some other variables in the data set that could possibly help to differentiate further between offenders and non-offenders in a meaningful way, like the birthplace of the subject's father, the question whether or not the subject was still living with his or her parents or the question whether or not the subject had military service experience.

We then used the following procedures:

- a) we started with univariate and bivariate runs, filtering out variables with too many missings or showing no substantial variation at all,
- b) we then included the Index variables and the remaining additional variables in a common file, and made correlational analyses, including correlation matrices,
- c) we then took only those variables that came out with good or at least decent correlation coefficients ($>.25$) and put them in factor analyses,
- d) these factor analyses started with the Index variables all being qualified for inclusion, and then the other still relevant variables were added stepwise.

It turned out in this reanalysis that the Index variables as originally selected were the decisive ones. Using them only led to clearly distinctive three primary factors with methodologically sufficient Eigenvalues greater than 1, and also with the best results in terms of minimal loading of single variables on more than one factor at once.

These three factors were generated from the five primary variables "educational status", "occupational status", "marital status", "religious affiliation" and "(reasons for) moving".

For use in the factor analyses these variables were recoded like follows:

- (1) Employment 1 = unemployed; 0 = all other
- (2) Education 1 = elementary or less; 0 = all other respectively higher
- (3) Marital Status 1 = single/divorce; 0 = married
- (4) Moving 1 = moved for achievement; 0 = moved out of other reasons or not moved at all.
- (5) Religion 1 = Any religious affiliation; 0 = no indication.

Low education and unemployment loaded very high on the first factor we decided to call Social Position (24.7 % explained variance), single marital status and positive moving loaded high on the second factor we decided to call Social Stability (21.2 % explained variance), and lack of religious affiliation was the only variable determining with a very high loading the third factor we decided to call No religion ((20.6 % explained variance).

Table 43 shows the variables as they loaded on each factor for the entire population using the Principal Components Method of extraction and then, in the second step, the Varimax rotation with Kaiser Normalization.

Table 43

Variable	Factor I Social Position	Factor II Social Stability	Factor III No Religion
Employment	.742	-.0003	-.152
Education	.667	-.008	.301
Marital Status	.191	.852	-.188
Positive Moving	-.420	.571	.385
No Religion	-.005	-.008	.869
Variance explained	24.8%	21.2%	20.6%

In the next procedural step we calculated the individual factor scores for each and every subject in the cohort. These scores were then saved as variable, and a one-way ANOVA was conducted by offender type, namely:

- (1) those who had no criminal offenses and no public safety violations,
- (2) those who had either one criminal offense or one public safety violation, and
- (3) those who had more offenses or violations.

The analyses were finally replicated using only those individuals who had committed one or more public safety violations and/or criminal offenses (N = 122).

Results from these ANOVA runs, which will not be shown here in detail due to lack of space, suggest that non-offenders, one-time offenders and multiple offenders differ significantly ($p < .001$) on each of the three factors.

More specifically, multiple offenders had the highest scores (and the non-offenders the lowest) on the Social Position Factor (with unemployment and low education) and on the Social Stability Factor (with single or divorced marital status). On the No Religion Factors one-time offenders scored even a bit higher than multiple offenders whereas non-offenders

scored the lowest (meaning the latter group had in substance the highest percentage of religiously affiliated members).

To further elaborate on the utility of the Disadvantage Index, offenders (in common) and non-offenders were examined separately. The results confirmed that for both the non-offending and the offending samples, the three distinct factors were evident.

For the non-offenders, the Factor I explained 24.6 % variance and was mostly determined by a positive (average or even elevated) employment status, a high educational status, and a high religious affiliation score, but a rather low score on being married; Factor II explained 21.2 % variance and was mostly determined by a positive (more than average or even very high) educational status and married marital status, and even higher religious affiliation than in factor I; Factor III explained 20.4 % variance and was rather uniquely determined by the existence of an officially known religious affiliation.

For the offending sample, the Factor I explained 30.8 % of the variance with high factor loadings for lack of religious affiliation, a positive (rather average) employment status, and a high married marital status; the Factor II explained 21.3 % variance and was rather uniquely determined by moving out of reasons that had nothing to do with achievement orientation; Factor III explained 20.4 % variance and was rather uniquely determined by education, but achievement oriented moving (i.e. negative sign for not positive moving) took an additional role.

The moving variable loaded on all factors for both groups. The main (technical) reason seems to be that offenders and non-offender alike moved in and out of their district a couple of times and out of different reasons during the life period under consideration, and that only motives like "better educational opportunity" or "higher occupational position"

could be assigned a clear positive value. On the other hand, motives taken here as “neutral” like moving with the family could actually have had a negative implication (e.g. family left the place due to some deviance on the part of parents or children) or a positive implication (e.g. father gained a new prestigious job at another district). Accordingly: “not moving” does not necessarily imply not being an achiever. The quality of the data did not allow for adequate differentiation.

One can see in the following table 44 that the offender and non-offender samples separated internally into three sub-groups with rather similar structural distributions of variables, yet they showed different rankings of the values of the factor loadings of these variables.

Table 44

Variable	Factor I		Factor II		Factor III	
	Offender	Non-Offender	Offender	Non-Offender	Offender	Non-Offender
Employment	.731	.740	-.144	.210	.165	.272
Education	.410	.677	-.390	.860	.954	.272
Marital Status	.705	.183	.336	.849	.151	-.195
Not Positive Moving	.460	.385	.951	.574	-.460	.409
Religion	-.700	.630	.111	.840	.262	.866
Variance explained	30.79%	24.62%	21.33%	21.2%	20.07%	20.41%

In order to make it clear again: All factor analyses were, without any exception, only exploratory ones. In other words: We tried to determine if the utilization of multivariate statistical procedures would contradict the results of our first substantially promising but nevertheless methodologically modest approach to create an additive Index in order to come

to clear distinctions between the different sub-groups of our subjects in the cohort. In case of contradictions the approach would have to be considered leading only to artificial results and therefore futile. In case of confirmation of the basic tendency the multivariate procedures would contribute to a better understanding of the preliminary findings or could at least be considered as providing corroborate evidence for the existence of more than spurious relationships. However: even the strongest statistical results were to our opinion not to be considered as capable of "proving" a theory.

Our goal was to see if and how far some basic demographic and other variables could in any sound way differentiate between those who offended and those who did not in the Chinese cohort. We feel they can.

In order to better comprehend the structural similarities on the one hand, and the differences in the extension of the variable factor loadings on the other hand, we attempted a third approach to the data. We took the factor loadings for all variables of all subjects in the offender vs. the non-offender groups in each of the three factors, calculated the totals, and ranked them in order of their magnitude. The substantial meaning of the variables was additionally double-checked with the distribution of the categories in the recoded variables for each sample. The results can be neatly demonstrated in Figure 5. The left side of the figure looks at each variable using the non-offender as the reference group and the right side uses the offenders as the reference group. The factor loadings were multiplied by 1,000. The figure reflects the differences in the factor loadings when each group is used as the comparison group and is based on the following chart.

Table 45 Summing-up of Factor Loadings on All Factors for Different Variables

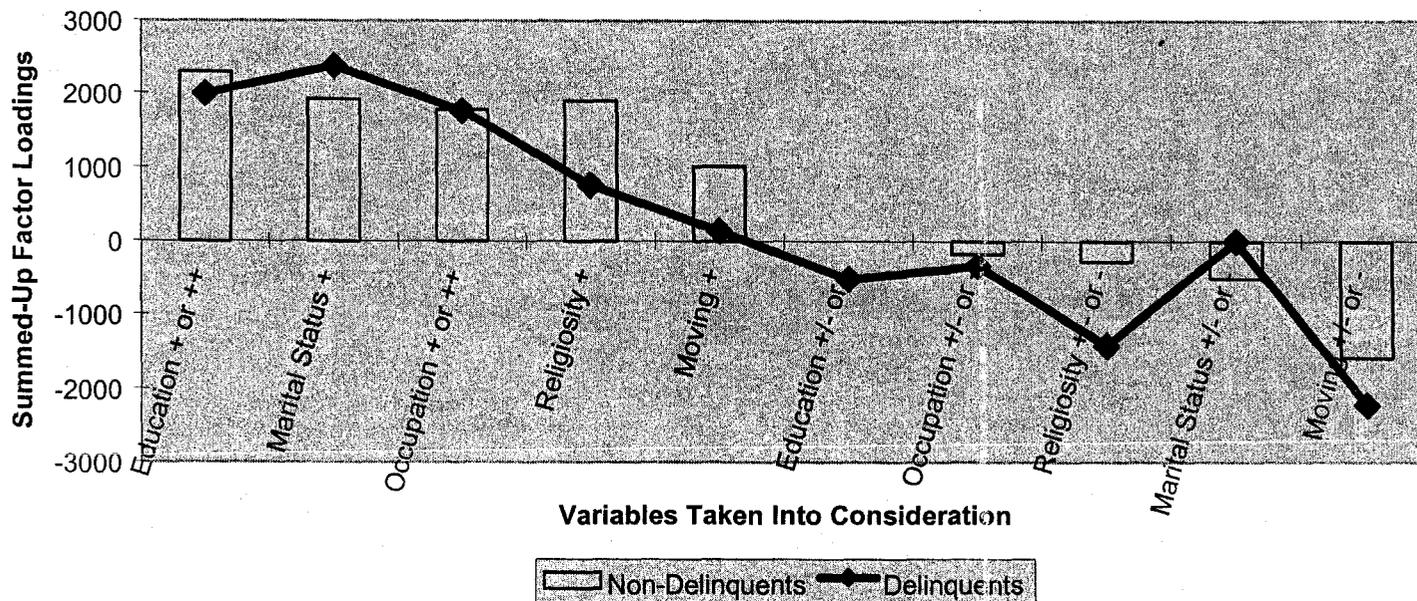
Variable	Non- Offenders	Offenders
<i>Non-Offender reference</i>		
Education (higher level)	2,288	1,996
Occupation (higher level)	1,774	1,759
Marital Status (married)	1,926	2,376
Religiosity (some religion)	1,900	757
Moving (with achievement motivation)	1,011	138
<i>Offender reference</i>		
Education (elementary or no education)	-/-	516
Occupation (low level or unemployed)	162	329
Religiosity (no religion)	270	1,420
Marital Status (single)	511	-/-
Moving (staying or moving out for other reasons)	1,574	2,223

Remarks:

- Seemingly similar high loadings among the sub-groups do not necessarily imply that they represent the same distribution or mixture of dimensions within variables.
No loadings do not necessarily imply that there are no subjects showing that dimension of the variable.

Figure 5

Differences Between Non-Offenders and Offenders (Exploratory Factor Analysis, Three Factor Solution)



The stability of the Disadvantage Index can be illustrated by looking at the magnitude of the differences between the two samples relative to the total of the factor loadings. We calculated both the differences emerging when using the non-offenders as reference group, and then the differences emerging when using the offenders as reference group. The following results show a rather clear-cut distinction that is consistent with the results we found previously:

(1) Factor loadings summing up to higher totals for non-offenders than for offenders:

Religious affiliation = 1, 143 points difference.

Having moved with achievement motivation = 873 points difference.

Still single at the age of 18 = 511 points difference.

Higher level of education = 292 points difference.

Student or, if already employed, rather high level of occupation = 15 points difference.

(2) Factor loadings summing up to higher loadings for offenders than for non-offenders:

Lack of religious affiliation = 1,150 points difference.

Not moving or having moved out of other than achievement motivations = 649 points difference.

Expelled/dropped out or having lower level of education = 516 points difference.

Married by the age of 18 = 415 points difference.

Unemployed or rather low level of occupation = 167 points difference.

Conclusions from the Large Data Set (Cohort2)

- Offending is low in our Chinese Cohort. We believe that we have validated the original finding that the proportion of the 1973 birth cohort in China who is involved in either criminal law or public safety violations is significantly small. While initially concerned about not having the original data, the collection of a second cohort using different people yet checking both official and neighborhood-based records, validates the low rate of crime in China.
- Even with small number of variables available for analysis, some factors can be associated with offending:
 - Mobility not associated with educational or employment opportunities.
 - Lower education and occupational status. Even though the district can be seen as, have a generally higher level of education and education than some other sections of Wuhan, lower SES is associated with offending.
 - While the vast majority of Chinese do not identify themselves as having a religious affiliation, those who do profess some philosophical belief have a lower likelihood in being delinquent/criminal.
 - The use of the Disadvantage Index is a useful tool in differentiating between offenders and non-offenders despite the very small number of offenders. This finding is compatible with notion that Chinese only

register most serious offenders. Normally one would not expect such variance, but the offending group, itself, is very distinctive and is reflected in Factors and the differences that emerged.

Summary and Conclusions

This project was initiated to locate the original birth cohort data collected by Marvin Wolfgang and the Chinese Team in 1991, to subject those data to analysis, and to follow the original cohort to age 27. The project became more difficult and more involved than initially envisioned. Data on the original cohort were never collected, only information on those identified as offenders and a matched sample by gender. These two groups, however, had been given a comprehensive survey. The data were never coded or computerized, but we were able to locate the original surveys and to perform analysis on them.

Since data were never collected on all of the original 5,340 in the Wuhan 1973 cohort, we initiated a new review of the census, police and neighborhood files to identify those born in 1973 and to track their criminal involvement until the age of 27. For logistic reasons the information gathered in 2000 on those born in 1973 and lived in Wuhan was incomplete relative to the census released in China in 2001. The result was a sample cohort of between 85 and 90 percent of the actual population.

The data used for analysis, then, was a small data set of the original 81 offenders and the matched set of 81 non-offenders. A second set of data, the large data set that we defined as Cohort2, included 5,338 persons. Collecting a totally independent cohort population from the same census and police files as the original was actually fortuitous in that it enabled us to

check the reliability and validity of the original data collection – a question often in the minds of western scholars who distrust official statistics.

From the analysis of both data sets, we can draw a number of primary conclusions.

From the analysis of the survey of offenders and non-offenders, we conclude that:

- The differences between offenders and non-offenders are significant in terms of peer influences, family background and influences, and the role of school performance, expectations and goals. Offenders are more likely to have negative peer influence, poorer family backgrounds and relationships, and to have completed lower levels of education and have lower levels of educational expectations.
- Social integration and involvement in social and cultural activities related to culture and history distinguish non-offenders from offenders while offenders have a greater commitment to individual wealth, power, influence and enjoyment. Consistent with research from the West and with control theory assumptions, non-offenders are more likely to express traditional social values, morals, and to have personal expectations reflecting greater social integration, achievement, cultural awareness. The non-offending population in China has greater social awareness and a greater orientation toward social conscience and Chinese society than offenders do.

These findings are consistent with the general findings found in the Western literature on the etiology of crime and delinquency. While the study was not designed to test and specific theoretical perspective, the significant differences between offenders and non-offenders lend support to propositions consistent with differential association,

control theory, and social integration models. Data from the large data set reinforce these variables by the emergence of social stability, social mobility, and philosophical (religious) identification.

- From the analysis of our Cohort2, we feel that we have validated to original finding of a low rate of delinquency and crime in China, or at least in Wuhan. We have done this not only with the officially registered crime, as is what is officially reported, but also from the local, neighborhood files of public safety violations, which often do not reach the official statistics. Official reports from China look only at crime. Even when we combine both crimes and public safety, the crime rate is low.
- Our data tend to support, or at least be consistent with, the way the criminal justice system is reported to function in China. The Chinese focus is on prevention, early intervention, and informal processing in the initial stages of criminal behavior (Ren, 1996). The system is also noted for being very hard on offenders once they engage in criminal violations and severe sanctions tend to be applied – contributing perhaps to the low rate of recidivism we found in our research. We did not find, however, harsh penalties applied to our offending population.
- With so few of those initially recorded as having violated public safety regulations “graduating “ to or involved in criminal violations, it suggests that the informal and community handling of the problems work in China.
- Since China handles many of its cases informally, when one is officially identified as an offender, the individual is very distinct. It is just the rarity of offending and the uniqueness of the offenders that lead us to believe that the Disadvantage Index

we have developed can, differentiate, in effect, between the very small number of offenders and the significantly large number of non-offenders in the cohort.

- We have not been able to identify what Wolfgang et al (1973) defined as the chronic offender. For whatever reasons – informal, community intervention or severe sanctions, we found very few repeat offenders, let alone, “chronic” offenders. Other longitudinal research actually had the same difficulty. In the first Philadelphia study, the chronic offender was defined as one having five or more contacts with the police by age 18 (Wolfgang et al., 1972). When the study was replicated in Puerto Rico (Nevares et al., 1990), the researchers could not identify a group with five or more contacts and re-defined chronic offender to mean 3 contacts. For our research in China, the closest we could come to a “chronic” offender would be a repeat offender, which, in essence, challenges to applicability of the concept as Weitekamp et al. (1995, 1996) did in their reanalysis of the 1945 Philadelphia cohort and the criminal policy based on the chronic offender concept (Weitekamp, 1998,1999).
- In 1991, registration requirements were relaxed to allow greater mobility of labor within the context of economic reform. We found higher mobility after 1991 and new forms of criminal behavior such as drug use and drug trafficking. There was also an increase in criminal behavior by those without delinquent records – comparable to the rate found in the West. Nonetheless, the rate of recorded criminal and public safety violations is low.

Overall, we believe that this research is unique and it is valuable. It is unique because it is the first time in our knowledge that a cohort study has been completed in

a developing country (unless one considers Puerto Rico as developing). It is definitely the first time such a study has been done in a Socialist/Communist economic system undergoing rapid social change.

The study is valuable because it reinforces the findings from the vast majority of previous literature on crime and delinquency: There is identifiable and critical sociological variables related to social integration, family and school experiences that significantly differentiate between those who become offenders and those who do not. We believe that the factors functioning to produce such a low rate of criminal involvement are social integration, moral value, cultural values, cultural pride, early community involvement, and family orientation.

References

Alvazzi del Frate, A. 1998. *Victims of Crime in the Developing World*. Rome: United Nations Interregional Crime and Justice Institute, Publication No. 57.

Anderson, A. F. & Gil V. E. 1998. China's Modernization and the Decline of Communitarianism: The control of Sex Crimes and Implications for the Fate of Informal Social Control. *Journal of Contemporary Criminal Justice*. 14: 248-261.

Beirne, Piers and Joan Hill. 1991. *Comparative Criminology: An Annotated Bibliography*. New York: Greenwood Press.

Bennett, R & James P. Lynch 1990. Does a difference make a difference? Comparing cross-national crime indicators. *Criminology* 28 153-181.

Blumer, Herbert. 1962. *Society as Symbolic Interaction*. Pp 179-92 in Arnold Rose (ed). *Human Behavior and Social Process*. Boston: Houghton Mifflin.

Blumstein, A., and J. Cohen. 1979. Estimation of Individual Crime Rates from Arrest Records. *Journal of Criminal Law and Criminology* 70 (1979): 561-85.

Blumstein, A., J. Cohen, D.P.Farrington 1988. Criminal Career Research: Its Value for Criminology. *Criminology* 26: 1-36

Blumstein, A., and E. Graddy. 1982. Prevalence and Recidivism in Index Arrests: A Feedback Model. *Law and Society Review* 16: 265-90.

Blumstein, A., D. F. Farrington, and S. Moitra. 1985. Delinquency Careers: Innocents, Desisters, and Persisters. Pp 187-219 in N. Morris and M. Tonry (eds). *Crime and Justice: An Annual Review of Research*, Vol. 6. Chicago: University of Chicago Press.

Blumstein, A., Cohen, J., Roth, J.A., Visher, C. (eds.) 1986. *Criminal Careers and Career Criminals*. Volume I & 2. Washington, DC: National Academy Press.

Bundeskriminalamt (BKA) 2001. *Polizeiliche Kriminalstatistik, 2000*. Weisbaden: Bundeskriminalamt.

Caspi, A. G. H. Elder, and D. J. Bern. 1987. Moving Against the World: Life-Course Patterns of Explosive Children. *Developmental Psychology* 23: 308-313.

Cebulak, W. 1997. Social turmoil in post-socialist Eastern Europe: A revolution gone astray? *East European Quarterly* 31, 111-120.

Chen, Phillip M. 1973. *Law and Justice: The Legal System in China 2400 B.C. to 1960 A.D.* New York: Dunellen Publishing Co.

Christiansen, K. O. 1964. Delinquent Generations in Denmark. *British Journal of Criminology* 4: 259-64.

Clifford, William 1964. Crime and Criminology in Central Africa. Pp 238-246 in T. Geiger, H. Jones and J.C. Spencer (eds). *Criminology in Transition*. London: Tavistock.

Clinard, Marshall B. and Daniel Abbott. 1973. *Crime in Developing Countries*. New York: John Wiley.

Dai, Y. (1977). Crime Wave and Relative Deprivation in China. Paper presented at the annual meeting of the American Society of Criminology, San Diego, November.

Deng, X., L. Zhang, and A. Cordilia. 1998. Social Control and Recidivism in China. *Journal of Contemporary Criminal Justice*. 14:281-295.

DeFleur, L. B. 1969. Alternative Strategies for the Development of Delinquency Theories Applicable to Other Cultures. *Social Problems* 17: 30-39.

Denno, D. W. 1990. *Biology and Violence*. Cambridge. University of Cambridge Press.

Dinitz, Simon, Kay, Barbara, And Reckless, Walter C. 1958. Group Gradients in Delinquency Potential and Achievement Scores of 6th Graders. *American Journal of Orthopsychiatry* 28 (July): 598-605.

Dinitz, Simon, Kay, Barbara, Reckless, Walter C. (1962). Delinquency Vulnerability: A Cross Group and Longitudinal Analysis. *American Sociological Review* 27: 515-17.

Downes, David M. 1966. *The Delinquent Solution: A Study in Subcultural Theory*. New York: Free Press.

Elrod, P. and R.S. Ryder 1999. *Juvenile Justice: A Social, Historical, and Legal Perspective*. Gathersburg, MD: Aspen.

Dutton, Michael R. 1992. *Policing and Punishment in China: From Patriarchy to 'the People.'* Cambridge, England: Cambridge University Press.

Elliott, D.S. 1994. Longitudinal Research in Criminology: Promise and Practice. In: Weitekamp, E.G.M. & Kerner, H.-J. (eds.). *Cross-National Longitudinal Research on Human Development and Criminal Behavior*. Dordrecht. Kluwer Academic Publishers.

Elliott, D. S., and S. S. Ageton. 1980. Reconciling Race and Class Differences in Self-Reported and Official Estimates of Delinquency." *American Sociological Review* 45: 95-110.

Elliott, D. S., and D. Huizinga. 1984. *The Relationship between Delinquent behavior and ADM Problems*. Boulder, Colo.: Behavioral Research Institute, National Youth Survey Report No. 28.

Elliott, D.S., Huizinga, D., Ageton, S.S. 1985. *Explaining Delinquency and Drug Use*. Beverly Hills. Sage Publications.

Farrington, D. 1988. "Studying Changes Within Individuals: The Causes of Offending." In M. Rutter (ed.) *Studies of Psychosocial Risk*. pp. 158-183. Cambridge: Cambridge University Press.

Farrington, D. 1992a. The Need for Longitudinal-Experimental Research on-Offending and Antisocial Behavior." In J. McCord and R. E. Tremblay (eds.). 1992. *Preventing Antisocial Behavior: Interventions From Birth Through Adolescence*. New York: Guilford Press.

Farrington, D. 1992b. Explaining the Beginning, Progress, and Ending of Antisocial Behavior from Birth to Adulthood. Pp .353-377. in J. McCord (ed.). *Facts, Frameworks, and Forecasts: Advances in Criminological Theory Vol. 3*. New Brunswick, NJ: Transaction.

Farrington, David P. 1992c. Trends in English Juvenile Delinquency. *International Journal of Comparative and Applied Criminal Justice* 16: 151-163.

Farrington, D. 1995. The Development of Offending and Antisocial Behavior From Childhood. *Journal of Child Psychology and Psychiatry*. 36:929-964.

Farrington, D.P. Developmental and Life-Course Criminology: Key Theoretical and Empirical Issues. Sutherland Award Address at the American Society of Criminology Meeting in Chicago, November 2002

Farrington, D. P., and D. J. West 1971. A Comparison between Early Delinquents and Young Aggressives. *British Journal of Criminology* 11: 341-58.

Farrington, D.P., & Wikstroem, P.-O. 1994. Criminal Careers in London and Stockholm: A Cross-National Comparative Study. In Weitekamp, E.G.M. & Kerner, H.-J. (eds.) 1994. *Cross-National Longitudinal Research on Human Development and Criminal Behavior*. Dordrecht. Kluwer Academic Publishers, 65-90.

Farrington, D., Ohlin, L.E., & Wilson, J.Q. 1986. *Understanding and Controlling Crime: Toward a New Research Strategy*. New York. Springer Verlag.

Ferguson, T. 1952. *The Young Delinquent in His Social Setting*. London: Oxford University Press.

Figlio, R.M. 1994. Self-Reported and Officially Defined Offenses in the 1958 Philadelphia Birth Cohort. 1994. Pp. 243-266: in E. G. M. Weitekamp, and H-J. Kerner, (eds). *Cross-National Longitudinal Research on Human Development and Criminal Behavior*. Dordrecht. Kluwer Academic Publishers,.

Friday, P.C. 1980. *International Review of Youth Crime and Delinquency*. pp.100-29 in G. Newman (Ed.), *Deviance and Crime: Comparative Perspectives*, Beverly Hills: Sage.

Friday, P. C. 1983. *Patterns of Role Relationships and Crime*. Pp. 61-73 in S. Giora Shoham (Ed.). *The Many Faces of Crime and Deviance*. New York: Sheridan House.

Friday, P. C. 1972. "The Applicability of Differential-Opportunity and Differential Association Theory in Sweden". *Quaderni di Criminologia Clinica* 14:279-304.

Friday, P. C. 1998. *Crime and Crime Prevention in China: A Challenge to the Development-Crime Nexus*. *Journal of Contemporary Criminal Justice* 14, 296-314.

Glueck, S., and E. Glueck. 1930. *500 Criminal Careers*. New York: Knopf.

Glueck, S., and E. Glueck. 1937. *Later Criminal Careers*. New York: Commonwealth Fund.

Glueck, S., and E. Glueck. 1943. *Criminal Careers in Retrospect*. New York: Commonwealth Fund.

Glueck, Sheldon and Eleanor. 1950. *Unraveling Juvenile Delinquency*. New York: The Commonwealth Fund.

Glueck, S., and E. Glueck. 1968. *Delinquents and Nondelinquents in Perspective*. Cambridge: Harvard University Press, 1968.

Gottfredson, Michael and Travis Hirschi. 1986. The True Value of Lambda Would Appear To Be Zero. *Criminology* 24, 213-233.

Gottfredson, Michael and Travis Hirschi. 1988. The Methodological Inadequacy of Longitudinal Research on Crime. *Criminology* 26, 37-55.

Gottfredson, M.R. and T. Hirschi (1990) *A General Theory of Crime*. Stanford, CA: Stanford University Press

Greenwood, P. and A. Abrahamse (1982) *Selective Incapacitation*, Santa Monica: Rand

Guo, Xiang, Qiancheng Xu, Xisheng Dia and Panshi Zhang. 2002. Longitudinal Survey Report of Delinquency Studies in a Birth Cohort in Wuhan. (In Chinese). *Journal of Juvenile Delinquency Research*. 223 (1):10-25.

Guttridge, P., W. F. Gabrielli, S. A. Mednick, and K. Van Dusen. 1983. Criminal Violence in a Birth Cohort." Pp 211-24 in K. Van Dusen and S. Mednick (eds). *Prospective Studies in Crime and Delinquency*. Boston: Kluwer-Nijhoff.

Hawkins, D. (Ed.) 1996. *Delinquency and Crime: Current Theories*. Cambridge. University of Cambridge Press.

Hawkins, J. D., Catalano, R. F. & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood. *Psychological Bulletin*, 112, 64-105.

Hirschi, T. 1969. *Causes of Delinquency*. Berkeley, CA: University of California Press.

Hirschi, Travis and Michael Gottfredson. 1983. Age and the Explanation of Crime. *American Journal of Sociology* 89, 552-84

Hirschi, Travis and Michael Gottfredson. 1995. Control Theory and the Life-Course-Perspective. *Studies on Crime & Crime Prevention* 4, 131-42

Howell, J.C., Krisberg, B., Hawkins, D., & Wilson, J.J. 1995 (Eds.). *A Sourcebook on Serious, Violent & Chronic Juvenile Offenders*. Thousand Oaks, CA: Sage Publications, Inc.

Huizinga, D., Esbensen, S.-A., & Weiher, A. 1994. Examining Trajectories in Delinquency Using Accelerated Longitudinal Research Designs. In Weitekamp, E.G.M. & Kerner, H.-J. (eds.) 1994. *Cross-National Longitudinal Research on Human Development and Criminal Behavior*. Dordrecht. Kluwer Academic Publishers.

Institute of Legal Reform of Fujian Province (1992) *Collections of Laws, Regulations, and Decrees of Comprehensive Management of Public Safety*. Beijing: Mass Publishing House.

Irvin, J. (1985) *The Return of the Bogeyman*. Keynote Lecture at the ASC Meeting in San Diego

Jensen, G. and D. Rojek. 1992. *Delinquency and Youth Crime* 2nd. Ed. Prospect Heights, IL: Waveland.

Joutsen, M. (1993). Social defense and crime in Central and Eastern Europe. *Cahiers de Defense Sociale* 92/93, 175-190.

Junger-Tas, J. G-J Terlouw and M.W. Klein (eds) 1994. *Delinquent Behavior Among Young People in the Western World*. Amsterdam: Kugler Publications.

Kaplan, Howard B. (1972). Toward a General Theory of Psychosocial Deviance: The Case of Aggressive Behavior. *Social Science and Medicine* 6 (October): 593-617.

Kaplan, Howard B., Martin, Steven S., And Johnson, Robert J. (1986). Self- Rejection and the Explanation of Deviance: Specification of the Structure Among Latent Constructs. *American Journal of Sociology* 92 (September): 384-411.

Kaplan, Howard B., Martin, Steven S., And Robbins, Cynthia (1982). Application of a General Theory of Deviant Behavior: Self-Derogation and Adolescent Drug Use. *Journal of Health and Social Behavior* 23 (December): 274-94.

Kerner, Hans-Jürgen, Elmar G.M. Weitekamp, Wolfgang Stelly, and Jürgen Thomas. 1997. Patterns of Criminality and Alcohol Abuse: Results from the Tuebingen Criminal Behaviour Study. *Criminal Behavior and Mental Health* 7, 401-20.

Kerner, Hans-Jürgen and Helmut Janssen. 1996. Rückfall nach Verbüßung einer Jugendstrafe - Langfristverlauf im Zusammenspiel von soziobiographischer Belastung und krimineller Karriere. In *Jugendstrafvollzug und Bewährung*, edited by Hans-Jürgen Kerner, Gabriele Dolde und Hans-Georg Mey. Bonn: Forum Verlag Godesberg.

Kerner, Hans-Jürgen, Elmar G. M. Weitekamp, and V. Schindler. 1995. Life Chances and Persistent Delinquent Behavior: Cumulative Effects of Social Disadvantage in the 1945 Philadelphia Birth Cohort. Tübingen, Germany: Institute of Criminology (Unpublished).

Kerner, Hans-Jürgen, Elmar G.M. Weitekamp, and Wolfgang Stelly. 1995. From Child Delinquency to Adult Criminality: First Results of the Follow-Up of the Tübingen Criminal Behavior Development Study. *EuroCriminology* 8-9, 127-62

Kerner, Hans-Jürgen. 1993. Jugendkriminalität zwischen Massenerscheinung und krimineller Karriere. In *Sozialarbeit und Kriminalpolitik*, edited by Werner Nikolai and Richard Reindl. Freiburg: Lambertus

Kohn, Melvin 1989. *Cross-national Research in Sociology*. Newbery Park, CA: Sage.

Laub, John H. and Robert J. Sampson. 1995. Crime, Conformity, and Death in Later Life: A 60 year perspective. Paper presented at the Annual Meeting of the American Sociological Association. Washington DC.

LeBlanc, M. & Loeber, R. 1998. Developmental Criminology Updated. Pp 115-198 in M. Tonry (Ed.). *Crime and Justice*. Chicago. University of Chicago Press.

Li, Junren. 1992. *Recidivism Research in China*. Beijing: Law Publishing Company.

Liao, Shihuai (1997). Application of Public Safety Administrative Penalty. Beijing, China: People's Public Security University Press.

Loeber, R. and Stouthamer-Loeber, M. 1986. Family Factors as Correlates and Predictors of Juvenile Conduct Problems and Delinquency. Pp. 29-149 in Michael Tonry and Norval Morris (eds.), Crime and Justice: A review of research, Volume 7. Chicago, Illinois: University of Chicago Press.

Loeber, R. & Farrington, D. (eds.) 1998. Serious & Violent Juvenile Offenders: Risk Factors and Successful Interventions. Thousand Oaks, CA. Sage Publications, Inc.

Loeber, R., Farrington, D., Stouthamer-Loeber, M., Van Kammen, W.B. 1998. Antisocial Behavior and Mental Health Problems. Mahwah, NJ. Lawrence Erlbaum Associates, Publishers.

Loeber, R. 1996. Developmental Continuity, Change, and Pathways in Male Juvenile Problem Behaviors and Delinquency. In: Hawkins, D. (Ed.) 1996. Delinquency and Crime: Current Theories. Cambridge. University of Cambridge Press.

Loeber, Rolf and Marc LeBlanc. 1990. Toward a Developmental Criminology. In Crime and Justice: A Review of Research, edited by Michael Tonry and Norval Morris. Chicago: University of Chicago Press.

Ma, Guoan. 2001 "Population Migration and Crime in Beijing, China." In Liu, J., L. Zhang, and S. F. Messner 2001 Crime and Social Control in a Changing China, Pp. 65-72. Westport: Greenwood Press.

Magnusson, D., H. Stattin, and A. Duner. 1983. Aggression and Criminality in a Longitudinal Perspective. Pp 277-301 in K. T. Van Dusen and S. A. Mednick (eds). Prospective Studies of Crime and Delinquency. Boston: Kluwer-Nijhoff.

Maguire, Kathleen and Ann L. Pastore. 2000. Sourcebook of Criminal Justice Statistics, 2000. Washington, DC: U.S. Department of Justice, Bureau of Justice Statistics.

Matsueda, Ross and Karen Heimer. 1997. A Symbolic Interactionist Theory of Role-Transitions, Role-Commitments and Delinquency. In Developmental Theories of Crime and Delinquency: Advances in Criminological Theory, Volume 7. Brunswick: Transaction Publishers.

Mannheim, Hermann. 1965. Comparative Criminology. New York: Houghton Mifflin.

Men, Shaoyang (1996). Explanation and Application of the Regulations of Administrative Penalty for Public Safety. Beijing, China: People's Public Security University Press.

Menard, S. 1995. *Applied Logistic Regression Analysis*. Thousand Oaks, CA: SAGE Publications.

McCord, J. (Ed.) 1997. *Violence and Childhood in the Inner City*. Cambridge: University of Cambridge Press.

McCord, J. (Ed.) 1992. *Facts, Frameworks, and Forecasts. Advances in Criminological Theory*. New Brunswick: Transaction Publishers.

McCord, J. 1979. Some Child-rearing Antecedents of Criminal Behavior in Adult Men. *Journal of Personality and Social Psychology*. 37:1477-1486.

McCord, J. 1978. A Thirty-Year Follow-Up of Treatment Effects. *Journal of Personality and Social Psychology* 37: 284-89.

McCord, J., and W. McCord. 1959. A Follow-up Report on the Cambridge-Somerville Youth Study. *The Annals* 322: 89-96.

Mead, George Herbert. 1934. *Mind, Self and Other*. Chicago: University of Chicago Press.

Menard, Scott. 1995. *Applied Logistic Regression Analysis*. Thousand Oaks, CA: SAGE Publications.

Moffitt, T.E. 1994. Natural Histories of Delinquency. In: Weitekamp, E.G.M. & Kerner, H.-J. (eds.) 1994. *Cross-National Longitudinal Research on Human Development and Criminal Behavior*. Dordrecht: Kluwer Academic Publishers.

Nevarés, D., Wolfgang, M.E., & Tracy, P.E. 1990. *Delinquency in Puerto Rico: The 1970 Birth Cohort Study*. New York: Greenwood Press.

NIJ (National Institute of Justice) 1996. *Delinquency in China: Study of a Birth Cohort*. Research in Brief. May.

Oyen, E. 1990. Imperfections of Comparisons. Pp1-18 in Else Oyen (ed), *Comparative Methodology: Theory and Practice in International Social Research*. London: Sage Publications.

Polk, K., C. Alder, G. Bazemore, G. Blake, S. Cardray, G. Coventry, J. Galvin, and M. Temple. 1981. *Becoming Adult: An Analysis of Maturational Development from Ages 16 to 30: Final Report*. Washington, D. C.: U. S. Department of Health, Education, and Welfare, National Institute of Mental Health, Center for Studies in Crime and Delinquency.

Pongratz, L., M. Schaefer, P. Juergensen, and D. Weisse. 1977. *Kinderdelinquenz: Daten, Hintergruende und Entwicklungen*. Munich: Juventa, 1977.

Ren, X. 1996. Peoples Republic of China. Pp.57-79 in D.J. Shoemaker (ed) International Handbook on Juvenile Justice. Westport, CT: Greenwood Press.

Ren, X. 1997. Tradition of the Law and Law of the Tradition: Law, State and Social Control in China. Westport, CT:Greenwood Press.

Robins, L.N. and E. Wish. 1977. Childhood Deviance as a Developmental Process: A Study of 233 Urban Black Menn from Birth to 18. *Social Forces*. 56:448-473.

Rosenquist, C. M. and E. I. Megagree. 1969. *Delinquency in Three Cultures*. Austin TX: University of Texas Press.

Rutter, M. & Giller, H. 1984. *Juvenile Delinquency: Trends and Perspectives*. New York: Guilford.

Sampson, Robert J. 1988. Local Friendship Ties and Community Attachment in Mass Society: A Multilevel Systemic Model. *American Sociological Review* 53 (October): 766-89.

Sampson, Robert J. and John H. Laub. 1993. *Crime in the Making: Pathways and Turning Points Through Life*. Cambridge, MA: Harvard University Press.

Sampson, Robert J. and John H. Laub. 1995. Understanding Variability in Lives Through Time: Contributions of Life-Course Criminology. *Studies on Crime & Crime Prevention* 4, 143-59

Sampson, Robert J. and John H. Laub. 1997. A Life-Course Theory of Cumulative Disadvantage and the Stability of Delinquency. In *Developmental Theories of Crime and Delinquency*, edited by Terrence P. Thornberry. New Brunswick: Transaction Publishers.

Scarpitti, Frank R., Murray, Ellen, Dinitz, Simon, And Reckless, Walter C. 1960. The 'Good boy' in a High Delinquency Area: Four Years Later. *American Sociological Review* 25 (August): 555-58.

Scheuch, Erwin K. 1990. The Development of Comparative Research: Toward Causal Explanations. Pp 19-37 in Else Oyen, *Comparative Methodology: Theory and Practice in Internatinal Social Research*. London: Sage Publications.

Shannon, L. W. 1988. *Criminal Career Continuity: 1st Social Context*. New York. Human Sciences Press, Inc.

Simpson, J., Dinitz, S. Kay, B. and Reckless, W. C. 1960. Delinquency Potential of Preadolescents in a High Delinquency Area. *British Journal of Delinquency* 10 (January): 211-15.

Sutherland, E.H. 1947. Principles of Criminology. Philadelphia: Lippincott.

Stelly, Wolfgang, Hans-Jürgen Kerner, and Elmar Weitekamp. 1998. Kontinuität und Diskontinuität sozialer Auffälligkeiten im Lebenslauf. MschrKrim 81. Jahrgang-Heft 2, pp 104-122.

Thornberry, T.P. (Ed.) 1997. Developmental Theories of Crime and Delinquency. New Brunswick. Transaction Publishers.

Thornberry, Terrence P. 1996. Empirical Support for Interactional Theory: A Review of the Literature. In Delinquency and Crime: Current Theories, edited by David Hawkins. Cambridge: Cambridge University Press

Thornberry, Terrence P. 1987. Toward an Interactional Theory of Delinquency. Criminology 25, 863-91

Tracy, Paul E., Marvin E. Wolfgang and Robert M. Figlio 1990. Delinquency Careers in Two Birth Cohorts. New York: Plenum Press.

Tracy, P.E. & Kempf-Leonhard, K. 1996. Continuity and Discontinuity in Criminal Careers. New York. Plenum Press.

Traulsen, M. Delinquente Kinder und ihre Legalbewahrung. Frankfurt: Verlag Peter Lang, 1976.

Van Kesteren, J., P. Mayhew, & P. Nieuwebeerta. 2001. Criminal Victimization in Seventeen Industrialized Countries: Key Findings from the 2000 International Crime Survey. The Hague: Research and Documentation Centre (WDOC) Netherlands Ministry of Justice Services, Onderzoek en Beleid, No. 187.

Weitekamp, E. G. M. 1998. And the Band Played On oder Wahnsinn und kein Ende: Amerikanische Kriminalpolitik. Pp 67-86 in Helmut Ortner, Arno Pilgram und Heinz Steinert (Hrsg.). Die Null Lösung: New Yorker "Zero Tolerance" Politik - das Ende der urbanen Toleranz? Baden Baden,DE: Nomos Verlagsgesellschaft.

Weitekamp, E. G. M. 1999. Die Repressive Kriminalpolitik der USA auf dem Vormarsch: oder wieviel davon hat England schon vom grossen Bruder übernommen? Pp150-186 in Werner Nicolai und Richard Reindle (Hrsg.) Die Renaissance des Zwanges: Konsequenzen für die Straffälligenhilfe. Freiburg, DE: Lambertus Verlag.

Weitekamp, Elmar G.M. and Hans-Juergen Kerner. 1994. Epilogue: Workshop and Plenary Discussions, and Future Directions" Pp 439-449 in Elmar G.M. Weitekamp and Hans-Juergen Kerner (eds.) Cross-National Longitudinal Research on Human Development and Criminal Behavior. Dordrecht, NL: Kluwer Academic Publishers.

Weitekamp, E.G.M. & Kerner, H.-J. (eds.) 1994. Cross-National Longitudinal Research on Human Development and Criminal Behavior. Dordrecht. Kluwer Academic Publishers.

Weitekamp, E.G.M., Kerner, H.-J., Stelly, W., & Thomas, J. 1998. Desistance from Crime: Life History, Turning Points, and Implications for Theory Construction in Criminology. In Karstedt, S. & Bussmann, K. (Eds.). Proceedings of the Onati October 1997 Conference on Theory Construction in Criminology. Dordrecht. Kluwer Academic Publishers.

Weitekamp, E.G.M., Hans-Jürgen Kerner, Axel Schubert and Volkhard Schindler 1996. "Multiple and Habitual Offending Among Young Males: Criminology and Criminal Policy Lessons From Re-Analysis of the Philadelphia Birth Cohort Studies". International Annals of Criminology 34, 9-54.

Weitekamp, E.G.M., Hans-Jürgen Kerner, Volkhard Schindler and Axel Schubert. 1995. On the "Dangerousness" of Chronic/ Habitual Offenders: A Re-Analysis of the 1945 Philadelphia Birth Cohort Data. Studies on Crime and Crime Prevention 4 (2): 159-175.

Weschke, E., and W. Krause. Auswertung Polizeilicher Unterlagen in Berlin uber Kinder, Jugendliche und Heranwachsende des Jahrgangs. Publikationen der Fachhochschule fuer Verwaltung und Rechtspflege Berlin Kriminalwissenschaften. Berlin, 1983.

West, D. J. 1969. Present Conduct and Future Delinquency. London, Heinemann.

West, D. J., and D. P. Farrington. 1973. Who Becomes Delinquent? London: Heinemann.

Wilkins, L. T. Delinquent Generations. London: Her Majesty's Stationery Office, 1960.

Wikström, P.O. 1995. Preventing City-center Street Crimes. In Tonry, M. & Farrington, D. (Eds.) 1995. Building a Safer Society: Strategic Approaches to Crime Prevention. Chicago. University of Chicago Press, pp. 429-468

Wikström, P.O. 1985. Everyday Violence in Contemporary Sweden: Situational and Ecological Aspects. Stockholm. The National Council for crime Prevention. Research Report No. 15.

Wikström, P.-O. (Ed.) 1990. Crime and Measures Against Crime in the City. Stockholm. National Council for Crime Prevention.

Wolfgang, M, R. M. Figlio and T. Sellin 1972. Delinquency in a Birth Cohort. Chicago: University of Chicago Press.

Wolfgang, M. E., R. M. Figlio, P. E. Tracy, and S. I. Singer. 1985. The National Survey of Crime Severity. Washington, D.C.: The Government Printing Office.

PROPERTY OF
National Criminal Justice Reference Service (NCJRS)
Box 6000
Rockville, MD 20849-6000

Wolfgang, M.E., T. P. Thornberry, R.M. Figlio. 1987. *From Boy to Man, From Delinquency to Crime*. Chicago. University of Chicago Press.

Xu, Qiangcheng, et al. 1994. Survey Report I of Delinquency Studies in a Birth Cohort in Wuhan. (In Chinese). *Journal of Juvenile Delinquency Research*, Vol. 142-43, No. 3-4, Pp.25-28.

Xu, Qiangcheng, et al. 1996. Survey Report II of Delinquency Studies in a Birth Cohort in Wuhan. (In Chinese). *Journal of Juvenile Delinquency Research*, 167 (4):8-12.

Xu, Qiangcheng, et al. 1997. Survey Report III of Delinquency Studies in a Birth Cohort in Wuhan. (In Chinese). *Journal of Juvenile Delinquency Research*, 182/183 (8-9):68-72.

Yuan, Y 1992. Shanghai's Transient Crime and Its Countermeasures. Pp 42-51 in A. Lodi and Z. Longuan, (eds). *Enterprise Crime: Asian and Global Perspectives*. Chicago: University of Illinois at Chicago, Office of International Criminal Justice.

Yu, L. (Ed.) 1993. *The study of the crime problem in modern China (General Volume)*. Beijing: Chinese People's Republic Security University Press as cited by Olivia Yu, *Crime in modern China and its approach to research and control*. Paper presented at the Annual Meeting of the American Society of Criminology, Boston, 1995.

Yu, O. 1995. *Crime in modern China and its approach to research and control*. Paper presented at the Annual Meeting of the American Society of Criminology, Boston.

Yu, O. and L. Zhang. 1999. The Under-recording of crime by police in China: A Case Study. *Policing: An International Journal of Police Strategies and Management*. 22 (3): 252-263.