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A STUDY OF A HIGH DELINQUENCY AREA

A Thesis

Presented to the

Department of Sociology

and the

Faculty of the Graduate College
University of Nebraska at Omaha

In Partial Fulfillment

of the Requirements for the Degree

Master of Arts

bу

Margaret Ensminger Grabill

June 1970

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Accepted for the faculty of The Graduate College of the University of Nebraska at Omaha, in partial fulfillment of the requirements for the degree Masters of Arts.

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I. INTRODUCTION

This is a report of an ecological study of delinquency in a Chicago neighborhood having the fifth highest rate of delinquency compared with the 75 other neighborhood communities in the city. Ecology, broadly defined, is the study of the interrelationships between an organism and the immediate environment in which it lives. In sociology, some ecological studies have been concerned with total urban areas. Others have investigated smaller areas such as neighborhoods or census tracts. The unit areas are compared with one another in terms of certain characteristics considered to be the independent variables such as housing, income, and mobility and certain conditions considered to be the dependent variables. The prevalence of mental illness or juvenile delinquency are examples of the latter.

In this report, an attempt is made to investigate the differences, if any, among unit areas within Woodlawn a high delinquency neighborhood. Comparisons are made between one or two-block areas which have a relatively low delinquency rate and those having a relatively high delinquency rate. Woodlawn meets the criteria (Kitagawa and Taeuber, 1963:xiii) for a neighborhood community established in 1930 by the Social Science Research Council of the University of Chicago. The 75 Chicago communities delineated

IThe criteria for the boundaries were based on the following consideration: (1) the settlement, growth, and history of the area; (2) local identification with the area; (3) the local trade area; (4) distribution of membership of the local institutions; and (5) natural and artificial barriers such as the Chicago River and its branches, railroad lines, local transportation systems, and parks and boulevards.

at that time in many cases remain meaningful local communities. Certainly this is the case with Woodlawn.

Juvenile delinquency has so often been studied ecologically because many theories and studies about delinquency indicate that the social and physical environments in which a youth lives influence whether or not he is delinquent. Miller (1958) argues that the distinctive culture in the lower-class neighborhood is the fundamental source of gang delinquency. Cloward and Ohlin (1960) state that the juvenile delinquency rate in a neighborhood is associated with the opportunity for crime that exists there. A study conducted by Reiss and Rhodes (1961) demonstrated that the "delinquency life chances" of boys tend to be the greatest in lower status areas and high delinquency areas. These conclusions concerning the conditions which contribute to the incidence of delinquency all suggest the importance of the immediate neighborhood living area.

II. LITERATURE REVIEW

The studies which established the importance of an area's ecological characteristics in relation to delinquency began with those of Clifford Shaw and Henry McKay (1942). Studying the relationships among juvenile delinquency rates and other ecological characteristics for large areas in Chicago, they found that (1) the highest rates of delinquency were in the areas with decreasing population and lowest rates of delinquency were in the areas with increasing population; (2) using the percentage of families on relief, median rentals, and frequency of home ownership as measures of the area's economic status, the delinquency rate of

the area was associated with these economic characteristics; (3) areas having a high concentration of foreign-born and Negroes had a high delinquency rate, but only when certain conditions were present such as crowding and heavy in migration. When these conditions changed, however, or when the population moved into areas with better conditions, the delinquency rates dropped.

Shaw and McKay concluded that social disorganization was the important common element responsible for high delinquency rates as well as for other social problems. Social disorganization was thought of as the declining influence of rules on the behavior of individuals resulting from change, disruption, conflict and confusion in the urban areas.

The findings, interpretations and research methods of Bernard Lander's study (1954) of delinquency in Baltimore are often cited (Reckless, 1955:56-57; Greenwood, 1956; Robison, 1960: 96-98; Gordon, 1967; Rosen and Turner, 1967) with regard to his conclusion that anomie was a primary cause of juvenile delinquency. The statistical technique employed by Lander in this study has also been the subject of some comment. Lander's study followed the approach of Shaw and associates (1942). Using 1939-42 juvenile court statistics and 1940 population data, Lander calculated the delinquency rates by race and sex for each of the 155 census tracts of Baltimore. For each tract he then studied the relationship of the delinquency rate with seven socioeconomic variables: (1) percentage of homes owner-occupied; (2) percentage of overcrowding; (3) percentage of nonwhites; (4) percentage of substandard housing; (5) median rental; (6) median years of educa-

tion; and (7) percentage of foreign-born. The first six variables had high correlation coefficients with the delinquency rates.

Lander was not satisfied with the linearity assumptions necessary in zero order correlation and so he used correlation coefficients which had been adjusted for curvilinearity and factor analysis techniques on the data. The factor analysis revealed two clusters. The first Lander called the economic cluster--overcrowding, substandard housing, median rental, and median education. The second he called the anomic cluster--home ownership, percentage of nonwhites, and the juvenile de-linquency rate. Only the second factor included delinquency. Lander concluded that the delinquency rate of an area was due to the degree of anomic in the area, and not to the area's economic characteristics. Lander's contention that economic variables are not an important factor in delinquency caused considerable stir among social scientists.

The Shaw and McKay (1942) and Lander (1954) studies established an association between the juvenile delinquency rate of a geographic area and ecological characteristics of the area. However, the conclusions of both Shaw and McKay and Lander with regard to the causes of delinquency are questionable. Shaw and McKay define their concept of social disorganization as a group of factors which include juvenile delinquency, crime, broken homes, and other social factors. To include a high juvenile delinquency rate as part of the definition of social disorganization, and then to attribute the cause of juvenile delinquency to social disorganization would not appear to

clarify either the phenomenon of juvenile delinquency or the concept of social disorganization.

Lander's (1954) conclusions about the relationship of anomie to delinquency also presents problems. In his study Lander defines anomie as two variables--percentages of homes owner-occupied and percentage of nonwhites. In a factor analysis, Lander found that these two variables are associated with juvenile delinquency. These two variables were designated as anomie after the factor analysis had been done. The basis on which Lander concluded that these variables indicated anomie seemed to be somewhat arbitrary.

It is not clear that there is a single cause or explanation for an area's high or low juvenile delinquency rate. Both Shaw and McKay and Lander indicated such a single cause or explanation. A better approach would have been to examine how the variables interrelate with one another and from these interrelationships to attempt to discern conditions rather than causes which are associated with high or low juvenile delinquency rates. Such an approach is followed in the study reported here.

Lander's study was replicated in Detroit by Bordua (1958-59) and in Indianapolis by Chilton (1964). Bordua added three more variables to his study--median estimated value of homes, median income, and ratio of unrelated individuals to total families. The first two were indicators of economic status, and the ratio of unrelated individuals was to be an indicator of anomie. Bordua found four independent correlates of delinquency: percentage of over-crowding, percentage of homes owner-occupied, percentage of unrelated individuals, and median education. He concluded that

while these variables were not the same as those Lander found, Lander's interpretations held for Detroit data also.

Depending on the statistical method which he used, Chilton (1964) in Indianapolis found several measures related to delinquency. Overcrowded housing, unrelated individuals, and mobility were found to be correlated with delinquency by regression coefficients. Factor analysis revealed delinquency was associated with overcrowding, substandard housing, mobility and moderately associated with percentage of married men, and median education. Chilton posed the obvious argument that there was little basis for labeling these variables as anomie.

The correlates of delinquency which have been found in these ecological studies may not all be important in the genesis of delinquent acts. Some may be correlated with delinquency only because of their high correlation with other factors which are also correlated with delinquency.

One other study which made use of census tract analysis deserves mention. Cartwright and Howard's study (1966) while ecological in approach, differs from the other four delinquency area studies mentioned because these investigators were interested in how areas with gangs differed from areas without gangs. Delinquency was treated as an independent rather than as a dependent variable.

Cartwright and Howard examined the neighborhood characteristics of sixteen delinquent gangs in Chicago in 1960. The census tracts which included the residences of at least 70 percent of the gang's known membership was the unit of study. These tracts were compared with the city-wide norms in order to determine whether or not these

variables differed: (1) population; (2) housing; (3) employment; (4) economic position; (5) family structure; (6) residential mobility; (7) individual psychopathology; and (8) crime and delinquency.

Cartwright and Howard compared their results with results of previous ecological studies of delinquency rates. Like rates of delinquency, gang neighborhoods were associated with more substandard housing, more renter-occupied homes and lower incomes. By contrast, higher delinquency was associated in other studies with lower rent, lower median education, more residential mobility and more overcrowding; however, Cartwright and Howard did not find such associations in gang neighborhoods.

A main goal of the study reported here is to learn if the factors which have been found to be related to juvenile delinquency in large urban areas are found still to be related to juvenile delinquency within a small high delinquency urban neighborhood. The five juvenile delinquency area studies discussed thus far have all been conducted in a large urban area and have compared either large community areas or census tracts with one another. The delinquency area study reported in this paper compares smaller aggregates within a high delinquency neighborhood. Such a study will help tease apart those factors which are more intimately associated with juvenile delinquency within the smaller social context of a high delinquency neighborhood. It is thus a continuation of past efforts to determine the association of delinquency with characteristics of living areas.

Besides differing in the size of the area studied, this research differs from earlier related work in that it focuses on <u>conditions</u> which are associated with juvenile delinquency, i.e., simple interrelationships of the variables with each other and with delinquency. Such an examination of how the variables interact is relevant to a meaningful interpretation of the association of delinquency and the variables.

The use of census tracts in urban research, a characteristic of each of the studies reviewed here, has been criticized on the basis of their non-homogeneity, which occasionally may be great (Foley, 1953). Each one or two-block area in Woodlawn, the site of this study, is relatively homogeneous while aggregates of census tracts across metropolitan areas include a much higher range of variation. This fact may influence the kinds of relationships found to exist between delinquency and the other variables.

There are five other studies concerning the relationship of juvenile delinquency to certain types of living area which should be discussed. Four of the studies deal with the same issue raised by Lander (1954), namely, the relationship between both anomie and economic characteristics and juvenile delinquency.

**Reiss and Rhodes (1961) conducted a study which focused on the patterned variation in community delinquency rates by social class categories. Each boy in the study was defined as delinquent on the basis of (1) self reports of acts which would have classified him as delinquent, or (2) a declaration by the court that the boy was delinquent. Three social status groups (low, middle, and high) were defined in terms of the occupation of the head of the

household. In order to measure the social status of the residential area in which the boys lived, schools in the area were categorized by seven levels of social status. The levels were determined by the social status of the students! families so that each school area was classified as homogeneous or mixtures of social status, as well as whether they were upper, middle, or low.

Reiss and Rhodes (1961) then compared the effect of the area's social status, the tradition of delinquency in that area, and the individual's social status on a youth's "delinquency life chances."

They found that all three were associated with delinquency. The largest proportion of delinquents for any status group came from the more homogeneous areas and the "delinquency life chances" of all status groups tended to be greatest in the lower status areas and in areas which had a tradition of delinquency.

John P. Clark and Eugene P. Wenninger (1962), however, found some contradictory results in their comparison of the juvenile delinquency rates of four communities with varied occupational composition—a rural farm area, a lower class urban area, an industrial city, and an upper class urban area. They found, as had Reiss and Rhodes (1961), that socioeconomic status of the community or area was inversely related to the juvenile delinquency rate, and that the same occupational classes in different areas show differences in delinquency rates. But Clark and Wenninger (1962) found also that within communities, differences among social classes were not significantly related to the juvenile delinquency rate. This result did not agree with those of Reiss and Rhodes (1961).

The study of a high delinquency neighborhood, such as the one reported here, provides an opportunity to explore this discrepancy. Is juvenile delinquency in a high delinquency neighborhood related to the socioeconomic variations within the neighborhood, or is the relationship between delinquency and socioeconomic characteristics which has been found in the past restricted to large community areas?

Further explorations in this direction have been made by two separate investigators who each tried to determine the relative contribution of family factors and socioeconomic factors on juvenile delinquency. Kenneth Polk (1967), using the Shevky and Bell method, categorized each census tract in Portland, Oregon in terms of economic, ethnic, and familism status. He then examined the delinquency rates found in each census tract. A typological rather than a correlational method was employed in looking at the relationship between delinquency and census tract characteristics. He concluded that family variables and economic variables related in different ways in different areas, and that the relationship between class and delinquency would be different in different kinds of specified situations. A similar approach has been followed in the Woodlawn study, although in this case an urban neighborhood is studied rather than a total city area.

Charles V. Willie (1967) conducted a delinquency area study in Washington, D.C. to determine the relative contribution of family factors and economic factors on the juvenile delinquency rate. He found that both correlated highly with juvenile

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delinquency rates, and that while the two factors were associated with each other, they each had an independent association with juvenile delinquency. In order to help tease apart the complex relationship among delinquency, family life and economic circumstances, Willie looked at the differences among the three in white and nonwhite areas. Both had similar delinquency rates for the extreme areas; the poor areas with many broken homes had higher rates for both whites and nonwhites and the affluent areas with few broken homes had lower rates for both. Among the affluent, however, the absence of one or both parents from the home tended to be associated with a higher delinquency rate for whites than nonwhites. Among the poor, the absence of a parent in the household tended to be associated with a higher delinquency rate among whites than nonwhites.

The studies of both Polk (1967) and Willie (1967) indicate, then, that the relationship among delinquency, family factors, and economic factors vary in different, specific areas. The relationship among the three will be examined in this paper for an urban, black, high delinquency area.

Finally the study conducted in an English town by Jephcott and Carter (1954) is noteworthy because it is one of the few in the literature which studied a high delinquency neighborhood. The families in the neighborhood all had similar socioeconomic status, and the study attempted to determine why some of the families had delinquents while others did not. All 325 families were interviewed and classified according to their prevailing practices and ideas. The families seemed to fit into three

major types which were labeled: (1) rough, (2) respectable, and (3) medium. The three groups differed in several important ways. The medium group differed from the respectable group in their more tolerant attitude toward the rough group. The respectable group were better managers of money, planned more responsibly for the future, had a more concrete concept of private ownership, and lived in nuclear rather than extended families more often than the rough families. The rough families contributed the greater number of delinquents. The Jephcott and Carter study illustrates the need for more specific investigations of the differences within other high delinquency communities.

The chart which follows gives a brief summary of the major findings and interpretations of the literature reviewed here.

Figure 1

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			SUMMARY OF LITERATURE	
40	Author(s), Date of Publication		Major Findings	Author(s) Interpretation
OĦ	Clifford Shaw Henry McKay 1942	1.	Highest rates of delinquency found in areas of decreasing population Lowest rates found in areas of increasing	Social Disorganization important common element responsible for high
			population Percentage of families on relief Median Rentals Home Ownership delinquency	delinquency rates.
<u> </u>	Bernard Lander 1954	1. 2.	Percent nonwhite, percent home ownership, overcrowding, median rent and median education correlated with juvenile delinquency. Percent nonwhite and percent home ownership	 Racial heterogeneity and percent home owner- ship indicators of anomie.
			only independent correlates of delinquency (Obliquely rotated factor analysis.)	 Other variables indicators of economic factor. Anomie important condition related to juvenile delinquency.
	David J. Bordua 1953-59	1.	Rates of overcrowding, home owner occupancy, unrelated individuals, and median education four independent correlates with delinquency.	 Education and overcrowding components of anomie as described by Lander. Anomie important condition related to juvenile delinquency.
K	Roland J. Chilton 1964	ŗ	Overcrowding, substandard housing, mobility, owner-occupied housing, income, married men, and education associated with delinquency.	Findings do not convincingly support Lander's conclusion that delinquency is more closely related to anomie than to area economic characteristics.

Author(s) Interpretation		There is no simple relationship between ascribed social status and delinquency.	Third finding listed contradicts the first finding listed under Reiss and Rhodes study.	A characteristic pattern of delinquency is to be expected within specific kinds of urban areas.
Major Findings	Gang neighborhoods were found to differ from the city as a whole in the following ways: younger population, lower income, working-class occupational predominance, more family disorganization, more deteriorated housing, higher proportion of renter occupied homes.	Social status of boys inversely correlated with delinquency within neighborhood areas. All socioeconomic groups have higher delinquency in low socioeconomic areas than in high socioeconomic areas. Individuals living in areas with a tradition of delinquency have a greater chance of becoming delinquent.	Community socioeconomic status inversely related to delinquency. Same classes in different communities show differences in delinquency rates. Within community differences among classes not significantly related to delinquency.	There is a general tendency for highest levels of delinquency to be found at the lowest levels of economic status and familism and the high levels of ethnic status. Specific areas have exceptions to this.
	÷	3. 2.	3. 2.	1.
Author(s), Date of Publication	Desmond Cartwright Kenneth I. Howard 1966	Albert Reiss Albert Rhodes 1961	John P. Clark ' Eugene Wenninger 1962	Kenneth Polk 1967

Author(s), Date of Publication		Major Findings	Author(s) Interpretation
Charles V. Willie	1	Family Factors and economic factors both	Family factors and
1967	2.	contribute to delinquency. The delinquency rates of whites more	economic factors have an overlapping but in-
	~	affected by family factors. The delinguency rates of nonwhites more	dependent effect on delinquency rates.
	•	affected by economic factors.	
A. P. Jephcott	ij	There were three types of families in a	
M. P. Carter		high delinquency area: rough, medium and	
1955		respectable.	
	2.	The rough families differed from the re-	
		spectable families in that they were less	
		middle class in their attitudes and be-	
		haviors.	
	ر س	The medium families differed trom respectable	AND DESCRIPTION OF THE PROPERTY OF THE PROPERT
		families in their more tolerant acceptance of	
		the rough families.	
-	4.	The rough families had higher delinquency rates	

III. DESCRIPTION OF WOODLAWN

Woodlawn is a black community on the south side of Chicago which in 1960 had a population of 81,279. In a recent edition of Clifford Shaw's and Henry McKay's <u>Juvenile Delinquency in Urban Areas</u> (1969), McKay indicated that Woodlawn had the fifth highest juvenile delinquency rate in Chicago. Charles Silberman (1964) in his book <u>Crisis in Black and White</u> describes Woodlawn as follows: "Woodlawn is almost a prototype of the disorganized anomic neighborhoods into which Negroes have been moving." Woodlawn, however, is not as homogeneous as interpretations of these statements might imply. This study explores some divergences which exist in Woodlawn. The following 1960 census data indicate wide ranges in the demographic indices:

- a. Home ownership ranged from ½ percent on some blocks to 40 percent on other blocks.
- b. The median rental ranged from \$65 on some blocks to \$115 on others.
- c. Crowding (defined by the U.S. Census Bureau as more than 1.01 person per room) was as low as 6 percent on some blocks and as high as 46 percent on others.
- d. The percentage of families having an income of less than \$2999 varied from 4 percent on some blocks to a high of 55 percent on other blocks.
- e. The unemployment rate was as low as 1 percent on some blocks to a high of 37 percent on another block.

f. The median education ranged from less than eight years to more than twelve years.

Further variation is indicated by police blotter information which indicates that the juvenile delinquency rate in 1960 ranged from over 36.2 percent on some blocks to 5.7 percent on other blocks. Various parts of Woodlawn have different histories, also. The western part has been predominantly black since the late 1920's, while the larger area in the east has been black only since the decade between 1945 and 1955. East Woodlawn has traditionally been a transitional area, serving as the first step out of the inner-city for a succession of ethnic groups. The western part has traditionally been more stable and middle-class.

Woodlawn is, of course, a part of the large south side black section of Chicago, and in great measure reflects fundamental characteristics of this larger black area. Chicago's south side is routinely contrasted with the large west side black area where the kind of diversity demonstrated in Woodlawn does not appear to exist. Suttles states, (1968:25)

"...In some areas of the South Side, the Negroes are in more dire economic straits than in the West Side. However, the South Side also includes well-to-do Negro communities and, besides, the Negroes on the West Side are simply regarded as more 'country.'"

In this paper, the enumeration districts² in Woodlawn are 'compared with one another with regard to the juvenile delinquency rates and various ecological indices. The police blotter is the source of data concerning the juvenile delinquency rate and the census data summarized by enumeration districts in Woodlawn is the source of data for the ecological indices.

IV. THE DEFINITION AND MEASUREMENT OF DELINQUENCY

No one denies that juvenile delinquency exists, but like many socially maladaptive states, its definition and measurement and difficult to make systematic. The likelihood of a juvenile being apprehended for a violation depends on the type of delinquent act, where the act occurs, and the social class and personal characteristics of the delinquent. Sophia Robison (1936) contended that many cases of delinquency in well-to-do areas were not referred to the police and courts, and that certain cases were handled by nonpublic agencies even though the offenses came within the legal definition of juvenile delinquency.

A study conducted by Edward A. Schwartz (1945) in Washington, D.C. showed that when the count of juvenile delinquency was limited to juvenile court records, it included only 43 percent of the actual total of known delinquent children. Schwartz identified delinquents

ZEach census tract is broken into smaller units called enumeration districts. Each enumeration district consists of a one, two or three-block area covered by one enumerator or census information gatherer.

through records of the juvenile court, divisions of the police department working with juvenile delinquents, two public welfare agencies, and a department of the Board of Education.

Almost one-third of the juvenile cases were handled by the Board of Education and were not registered by the other agencies.

According to Cavan (1962), there are four legally accepted definitions of juvenile delinquency in common use. The most inclusive defines delinquent children as children of juvenile age who have been picked up by the police and taken to the station. A second definition involves that percentage of children whom the police turn over to the courts. Of those referred to the courts, only a certain number are actually brought to trial as required by the third definition, the rest being handled informally by the authorities. The fourth and most restricted definition of delinquency includes those children who are brought to trial and institutionalized as delinquent.

All four ways of determining delinquency have as their base the juvenile delinquency laws of the state. Deviation from these laws, when it is detected and when the case is treated in one of the four ways mentioned, constitutes delinquency of a legal sort. Research may be based on any one or more of these definitions.

In addition to these legal views of delinquency, other nonlegal definitions have been developed by a number of investigators. For example, Porterfield (1946) conducted a well-known study in which he asked college students to list any illegal acts they had committed while in high school for which they had not been apprehanded. Self-reporting is not an uncommon measure used in delinquency studies (Short and Nye, 1958; Murphy, et. al., 1946; Reiss and Rhodes, 1961).

Ruth Cavan (1962) proposed another nonlegal way of considering delinquency in which juvenile behavior is arranged on a continuum with the most 'normal' or 'typical' behavior of the young people in a community as the standard. Extreme deviations from this behavior are considered deviant acts, whether or not they are defined as such by the law. Using this method, excessively "good" boys, as well as those who participate in more typical antisocial behavior, are considered deviant.

In the study reported in this paper, delinquency is measured by the police blotter records of juveniles who have been arrested. This is the broadest population of juveniles that can be considered legally delinquent, and represents that population of juveniles judged by the policeman on the beat to have committed an illegal act.

The police blotter is an important record not only because it is a legal judgement, but because it is a reflection of society's feeling that a juvenile is not behaving according to its minimum expectations. This is not to say that the policeman's judgement is necessarily objective or correct, but that his determination of delinquency is the initial legal judgement

and is therefore crucial.

The source for the measure of delinquency in this study was the Chicago police blotter for the year 1960. Residence in Woodlawn was determined by the addresses of the juvenile entered on the blotter. The address, race, age, sex, nature of crime, date of crime, action taken, and police district number in which the arrest was made were then noted. The delinquency rate for each enumeration district was calculated by totaling the number of deliquent acts committed by males from 6 years of age to 16 whose addresses were located in the enumeration district. This number was then divided by the number of males, 6 to 16, who lived in the enumeration district.

In considering the delinquency rates, it is important to remember that rates of delinquency have been computed primarily to indicate that differences in rates among different enumeration districts, and to establish the relative, rather than the absolute, magnitude of the rates in different districts.

V. HYPOTHESES AND QUESTIONS

The Shaw and McKay (1942) studies and later research referred to earlier have confirmed the association of juvenile delinquency with certain neighborhood characteristics. Does this relationship between delinquency and specific area characteristics still exist if the unit of study is one neighborhood community instead of a large urban area? If juvenile delinquency is related to specific social and economic characteristics, are

these the same characteristics as were related to juvenile delinquency in previous ecological studies? The first hypothesis related to these questions, stated in the null form, is Ho:

Census characteristics of enumeration districts indicating the family organization, socioeconomic status, and community rootedness of the enumeration districts will not be associated with the juvenile delinquency rate.

Family Organization



Many studies in the past have found that greater numbers of delinquents than nondelinquents have come from broken homes (Glueck and Glueck, 1950; Nye, 1958; McCord and McCord, 1959). Much of the literature on the Negro family in America asserts that many problems existing in Negro areas are due to the disorganization of the family and the absence of the father from the home. Thomas F. Pettigrew (1964) maintains that the high percentage of Negro fathers absent from the home is related to the high delinquency rates of Negroes in America.

The census data chosen to measure the family organization of enumeration districts in Woodlawn are as follows:

- 1. The percentage of unrelated persons
- The percentage of single, separated, widowed, and divorced (from now on unmarried) males 14 years and over
- The percentage of single, separated, widowed, and divorced females 14 years and over
- 4. The percentage of children age 18 or younger living with both parents.

Each of these variables can be seen as reflecting the stability of family organization in an area. A high percentage in the first three variables would indicate that an enumeration district had a high degree of family instability. A high percentage on the fourth variable, on the other hand, would indicate family stability. If the null hypothesis is supported, there would be no relation between these family organization variables and juvenile delinquency.

Socioeconomic Status

Merton (1957) in his classic discussion on anomie defined one of the causes of deviance as stemming from discrepancies which exist between the values regarding wealth and the means available to obtain it. The values in American society hold that anyone who works hard should be able to become rich and affluent. In our society, however, the opportunities for becoming wealthy are much more available to certain groups than to others. This discrepancy between the prescribed goal of affluence and the means to achieve this goal, according to Merton, may be a cause of deviance. Cloward and Ohlin (1960) and Cohen (1955) have used similar arguments. According to Merton's explanation, one could expect that low socioeconomic status would be associated with a high rate of juvenile delinquency.

In order to aid in the analysis and presentation of results, this category has been divided into the three subcategories--in-come variables, housing variables, and status variables--indicated below.

Income Variables

- 1: Median income
- 2. Percentages of families making less than \$2999
- 3. Percentages of families making less than \$3999

 Income is the most purely economic of the three socioeconomic variables. The first variable is most representative of the general economic status of an area.

 A high percentage on either the second or third variable indicates poverty. If the null hypothesis is
 supported, none of these variables would be related
 to the juvenile delinquency rates of an area.

Housing variables

- 4. Percentages of overcrowding (Overcrowding as defined by the Census Bureau is more than 1.01 person per room.)
- 5. Median rental
- 6. Percentages of dilapidated and deteriorating housing
 One of the most obvious characteristics of a low socioeconomic area is the poor quality of housing. High percentages of overcrowding, dilapidated and deteriorating
 housing, and low median rentals indicate areas of poor
 housing. If there are no relationships between the housing
 variables and the juvenile delinquency rates, then the null
 hypothesis is supported.

Status variables

7. Percentage of males 14 years and over in the civilian

labor force who are unemployed

- 8. Percentage of males employed in low status occupations
- Median school years of education for persons over 25
 years of age

Areas with low social status as measured by high percentages of both unemployment and low status occupations, and/or a low median school years of education might tend to be characterized by a low commitment on the part of the residents to the prevailing societal norms. Elliot Liebow (1967) describes this phenomenon in a Washington, D.C. low social status area. If there is no relationship between these three variables and the juvenile delinquency rates in Woodlawn, then the null hypothesis is supported.

Community Rootedness

Whether most people own their homes and have lived in the community a long time could represent an important characteristic of the community in regard to juvenile delinquency. A high percentage of home ownership and a high percentage of persons living in the same dwelling for five years can be seen as an indication of community stability. This category has been called rootedness and has been measured by two indices:

- 1. The percentage of owner-occupied homes
- The percentage of persons still living in the same house as in 1955.

The null hupothesis would be supported if there is no relationship

between either of the rootedness variables and juvenile delinquency rates.

The hypothesis just discussed dealt with the relationship between each of the thirteen variables and juvenile delinquency rates, while the second major area of interest is concerned with the interrelationships which exist among the variables and juvenile delinquency. If any two variables are related to the delinquency rate, what is the effect on delinquency rates in enumeration districts having the favorable dimension of one variable and the unfavorable dimension of the other variable?

For example, if both the percentage of unmarried males and the unemployment rate of enumeration districts are associated with the delinquency rate, what happens to the delinquency rate in enumeration districts having a high percentage of unmarried males but a low unemployment rate? Conversely, what happens to the delinquency rate in enumeration districts that have a low percentage of unmarried males but a high rate of unemployment? Answers to questions such as these should help tease apart the relationship of each of the two variables as it affects each of their relationships to juvenile delinquency.

In previous studies concerned with larger geographic areas, the delinquency rate has often been related to more than one variable. These variables may have been correlated with one another so that it was unclear whether the association between delinquency and any one of the variables was the result of that variable's association with another variable which was also

associated with delinquency, or whether the two variables were independently associated with delinquency.

A question related to the one posed above is What is the relative contribution of the three categories of variables—the family organization, the socioeconomic, and the community root—edness variables—to the juvenile delinquency rate? Those variables indicating family organization were investigated to determine whether they were more associated with delinquency than the socioeconomic variables or the community rootedness variables.

VI. METHOD OF ANALYSIS

In order to test the association of each variable to juvenile delinquency, six different chi square tests were performed for each variable. High and low delinquency were defined in three different ways (Delinquency A, Delinquency B, and Delinquency C) and each variable except one (median rental) was defined as high and low in two different ways. So for each variable except rental, six chi square tests were performed on two-by-two tables for the following combinations:

	Variable N ₁	Variable N ₂
Delinquency A		
Delinquency B		
Delinquency C		

In Delinquency A, the delinquency rates for the 83 enumeration districts were divided approximately in the middle to obtain

a category of 45 enumeration districts (from now on E D) of low delinquency and a category of 38 E D's of high delinquency. For Delinquency B and Delinquency C, a few of the E D's which had middle delinquency rates were eliminated. For Delinquency B, seven E D's were eliminated so that a category of low delinquency with 38 E D s and a category of high delinquency with 38 E D's were obtained. For Delinquency C, 18 E D's with middle delinquency rates were eliminated leaving a low delinquency category of 35 E D's and a high delinquency category of 30 E D's.

Similarly, each variable but median rental was defined in two different ways. In one, the incidence according to E D was divided approximately in half or in a logical manner depending on the distribution—one division being designated high and the other low. In the second instance, E D's which ranked in the middle on that variable were eliminated and a low designation and a high designation, which included the remaining E D's were obtained for the variable. Median rental was defined in only one way because the distribution on this variable did not lend itself to the elimination of middle ranking E D's.

However, only the chi square tests performed on Delinquency A and the variable category which was divided into half are presented here. This is the most inclusive test. Where these results differ substantially from the other five chi square tests for each variable, it is noted.

In order to investigate the second area of concern, the interacting effect of two variables on the juvenile delinquency rates, the following distributions of the rates were examined:

		High Variable X
Low Variable Y	Low Juvenile Delinquency (No. of ED's)	Low Juvenile Delinquency (No. of ED's)
	High Juvenile Delinquency (No. of ED's)	High Juvenile Delinquency (No. of ED's)
High Variable Y	Low Juvenile Delinquency (No. of ED's)	Low Juvenile Delinquency (No. of ED's)
	High Juvenile Delinquency (No. of ED's)	High Juvenile Delinquency (No. of ED's)

The relative contribution of the three major categories of variables (family organization, socioeconomic, and community rootedness variables) was determined by studying the results of the chi square tests for the variables and the juvenile delinquency rates, and by studying the interacting effects of variables from two different categories on the rates.

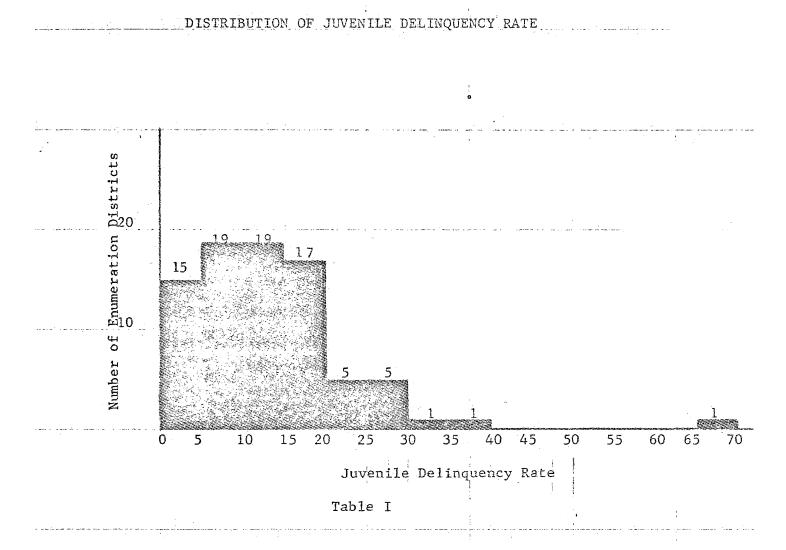
Even though there are a total of 83 enumeration districts in Woodlawn, for any variable the number (N) of ED's may be less than 83. In most cases census information for a particular variable was not available in one or more of the ED's. This was especially the case where a median was used rather than a percentage.

VII. RESULTS

Juvenile Delinquency Rate

Table I is a frequency histogram of the juvenile delinquency rate of the 83 enumeration districts in Woodlawn. The histogram shows that most of the 83 ED's had a juvenile delinquency rate between 0 and 20. Even though the range of juvenile delinquency





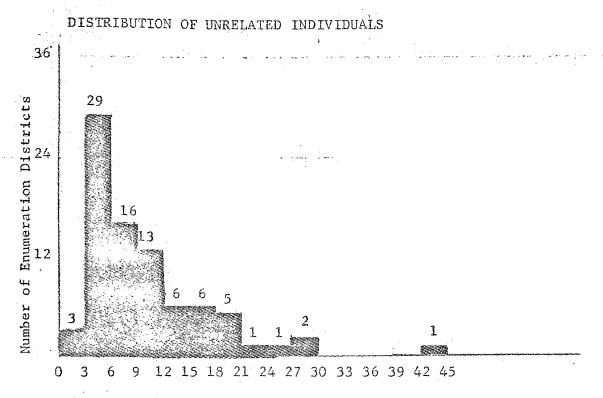
goes up to 70, only 13 ED's are shown to have a rate exceeding 20.

Family Organization

The percentage of unrelated persons ranged from 0 percent in one ED to 42 percent in another ED. As can be seen from the histogram in Table II, for this variable the distribution is heavily skewed to the right indicating that the majority of the enumeration districts in Woodlawn had less than 10 percent of persons living alone. Chi square tests were performed on tables of high and low percentages of persons living alone and on tables of high and low juvenile delinquency. No significant association was found between the two variables.

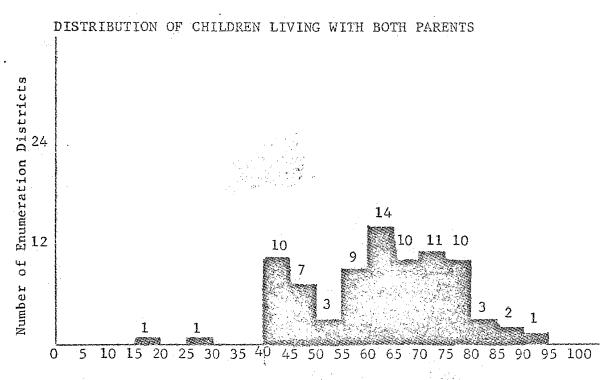
The percentage of children under 18 living with both parents had a range from 19 percent to 93 percent. (See Table III.) With the exception of 8, the ED's fall between 40 percent and 80 percent of children under 18 living with both parents. This is a wide range and seems to indicate that the family structure in Woodlawn varied from ED to ED.

Table IV shows the results of a chi square test of the relationship of the percentage of children living with both parents
and the juvenile delinquency rate of the ED's. When the percentage
of children living with both parents is divided into a high and
low category, and the middle category is not eliminated, the relationship with the juvenile delinquency rate is significant at the
0.05 level or below. With the middle category on this variable
eliminated, the chi square tests were not significant. The reason
for this discrepancy is not apparent.



Percentage of Unrelated Individuals

Table ÎI-



Percentage of Children under 18 Living with Both Parents

Table III

*	High Percentage of Children with Both Parents	Low Percentage of Children with Both Parents	Tota1
Low J. D.	67.6%	42.2%	44
Rate	25	19	
High J. D.	32.4%	57.8%	38
Rate	12	26	
Total	37	45 °	82

Significance Level of Chi Square 0.022 *

Table IV

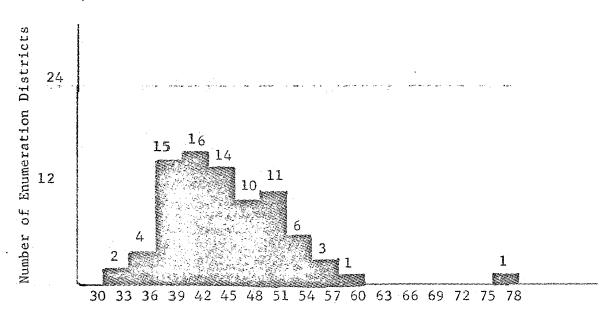
The percentage of unmarried males 14 years and over ranged from 32 percent to 78 percent. The distribution as shown in Table V again indicates a wide range among ED's relative to the marital status of the men. When the association between the percentage of unmarried males and the juvenile delinquency rate is tested to determine if the two are associated, the chi square level of significance indicates the two are associated at the 0.05 level or below. See Table VI for these results.

	Low Percentage of Unmarried Males	High Percentage of Unmarried Males	Total
Low J. D. Rate	66.7% 24	44.7% 21	45
High J. D. Rate	33.3% 12	55.3% 26	38
Total	36	47	83
Cionificanco To	rol of Chicagona O	01.64	

Significance Level of Chi square 0.046*

Table VI

DISTRIBUTION OF UNMARRIED MALES



Percentage of Males 14 years and over who are Single, Separated, Divorced or Widowed

Table V

1

The variable unmarried women ranged from 39 percent to 70 percent. These results are presented in Table VII. This range is not as wide as for the previous two variables, but indicates that the ED's in Woodlawn do vary some on this variable. The statistical significance of the association between the juvenile delinquency rates and the percentage of unmarried females was very strong. All six chi square tests that were done were significant at the 0.05 level or better, and two of the tests were significant at a level of less than 0.01. Table VIII contains a two-by-two table and the resulting significance level for one of the chi square tests.

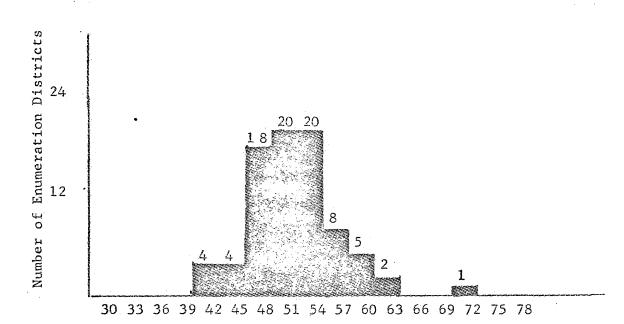
	Low Percentage of Unmarried Females	High Percentage of Unmarried Females	Total
Low J. D.	67.4%	36.1%	44
Rate	31	13	
High J. D.	32.6%	63.9%	38
Rate	15	23	
Total	46	36	82

Significance Level of Chi Square 0.005 **

Table VIII

These results indicate that most variables having to do with family structure and organization were significantly associated with juvenile delinquency. Enumeration districts which had a high percentage of unmarried men, a high percentage of unmarried women, and a low percentage of children under 18

DISTRIBUTION OF UNMARRIED FEMALES



Percentage of Females 14 years and over who are Single, Separated, Divorced or Widowed

Table VII

living with both parents had significantly higher juvenile delinquency rates. The percentage of unrelated persons was the only variable in the family disorganization category which was not significantly related to juvenile delinquency. These results indicate that in one or two-block areas, there is a relationship between the delinquency rate and family organization.

Socioeconomic Variables

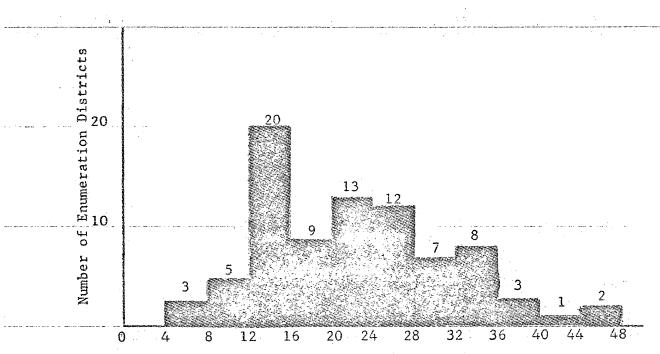
Following are the results of the three subcategories of socioeconomic variables described earlier.

Housing

The housing variables include the percentage of house-holds with more 1.01 persons per room, the percentage of dilapidated and deteriorating housing, and the medial rental. The distribution for the crowding variable ranged from 4 percent per ED to 48 percent per ED (See Table IX).

When chi square tests were performed on the association of crowding with the juvenile delinquency rate, statistically significant relationships were found at the 0.05 level in four of the six chi square tests. In the remaining two chi square tests, the significance level was between 0.05 and 0.10. (See Table X for one of these chi square tests.) These results indicate that in one or two-block areas, crowding is related to delinquency rates.

DISTRIBUTION OF OVERCROWDING



Percentage of Households with more than 1.01 Persons per Room

Table IX

	Low Percentage of Crowded Housing	High Percentage of Crowded Housing	Total
Low J. D.	65 . 1%	42.5%	45
Rate	28	17	
High J. D.	34.9%.	57.5%.	38
Rate	15	23	
Total	43	40	83

Significance Level of Chi Square 0.040 *

Table X

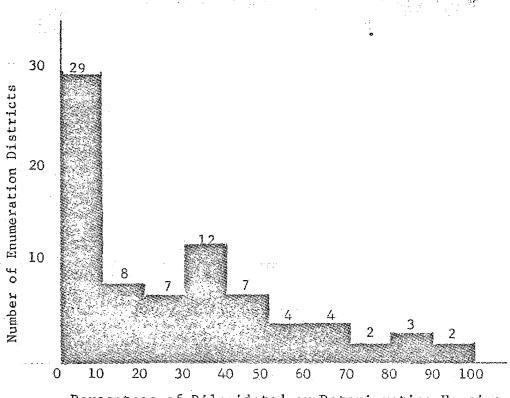
The percentage of deteriorating and dilapidated housing had a wide range from 10 percent to 90 percent. The distribution is skewed to the left with relatively few of the ED's having more than 50 percent dilapidated or deteriorating housing. (See Table XI.) This variable was not statistically associated with delinquency rates.

Median rental, the third housing variable, also was not associated with the juvenile delinquency rate. Information on the median rental of 20 ED's was not available, and of the 63 remaining, 54 had median rentals in the range of \$80 to \$110.

Income

Median income, the percentage of families making less than \$2999 per year, and the percentage of families making less than \$3999 per year are the three income variables. Originally, median income was the only income variable that was to be included. However, only 52 of the 83 ED's in Woodlawn had census information on median income. (The census did not report median incomes of

DISTRIBUTION OF DILAPIDATED OR DETERIOTATING HOUSING



Percentage of Dilapidated or Deteriorating Housing

Table

ED's which had less than 200 families.) In order to have more complete income results, the other two income variables were included.

As can be seen from Table XII, the distribution of median income in Woodlawn resembles the bell curve and the range was from \$3000 to \$7000. The six chi square tests performed on median income and the juvenile delinquenc rates were all significant—three at a level of less than 0.000. (See Table XIII.) These results indicate that there is a very strong association between these two variables.

	High Median Income	Low Median Income	Total
Low J. D. Rate	81.0% 17	29.0% 9	26
High J. D. Rate	19.0% 4	71.0%	26
Total	21	31	52

Significance Level of Chi Square 0.000 **

Table XIII

The histograms in Tables XIV and XV compare the distributions of families making less than \$2999 with the distribution of families making less than \$3999. Relatively few of the ED's have high percentages of families with incomes less than \$2999, while the distribution of families with incomes less than \$3999 resembles the normal curve.

DISTRIBUTION OF MEDIAN INCOME

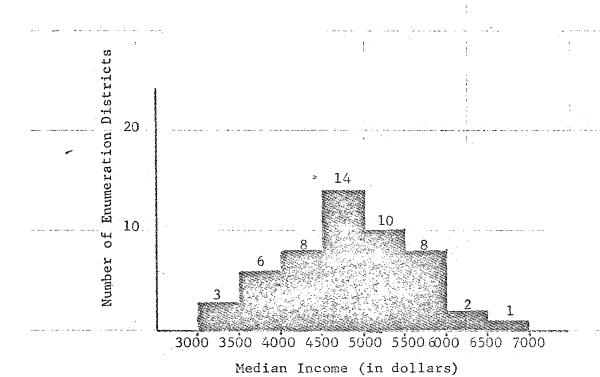


Table XII

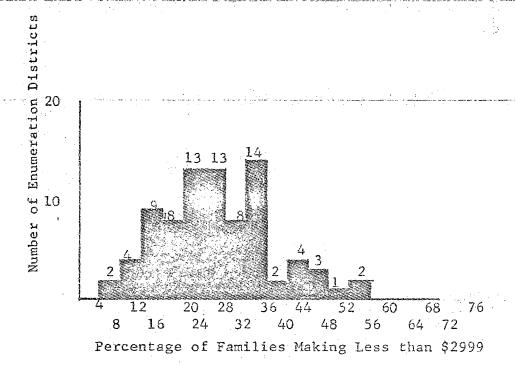


Table XIV.

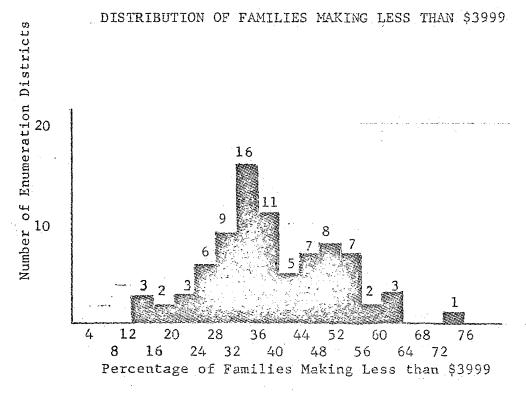


Table XV

These two variables were both significantly related to the juvenile delinquency rates. The significance level for the association between the percentage of families making less than \$2999 and the juvenile delinquency rate was never more than 0.002. The significance level for the percentage of families making less than \$3999 was never higher than 0.012. (See Tables XVI and XVII.) The three income variables indicate that ED family incomes are very related to the juvenile delinquency rate of the ED.

	Low Percentage of Families Making Less Than \$2999	High Percentage of Familes Making Less Than \$3999	
Low J. D.	72 . 5%	37.2%	45
Rate	29	16	
High J. D.	27.5%	62.8%	38
Rate	11	27	
Total	40	43	83

Significance Level of Chi Square 0.001 **
Table XVI

	Low Percentage of Families Making Less Than \$3999	High Percentage of Families Making Less Than \$3999	Total
Low J. D.	67 . 4% 29	40.0% 16	45
High J. D. Rate	32.6% 14	60.0% 24	38
Total	43	40	. 83

Significance Level of Chi Square 0.012 *

Table XVII

Status

The last three socioeconomic variables are the status variables—the percentage of male civilian unemployment, the percentage of males employed in low status jobs, and the median education. The percentage of male civilian unemployment ranged from under 4 percent per ED to 40 percent per ED. (See Table XVIII.) However, 49 of the 60 ED's on which there was information had less than 16 percent male unemployment. The unemployment rate was associated with the juvenile delinquency rate. Five of the six chi square tests were significant below the 0.05 level and the sixth chi square was significant at the 0.054 level. Table XIX contains these results.

_	Low Percentage of Males Unemployed	High Percentage of Males Unemployed	Total
Low J. D.	68.4%	31.8%	33
Rate	26	7	
High J. D.	31.6%	68.2%	27
Rate	12	15	
Total	38	22	60

Significance Level of Chi Square 0.006 **

Table XIX

The percentage of males employed in low status jobs varied from 15 to 80 percent among the ED's of Woodlawn. (See Table XX.) Most of the ED's had at least 40 percent of the males employed in low status jobs. This variable, as well as many of the others that have been discussed, varied from ED to ED in its prevalence. The percentage of males employed in low status jobs

DISTRIBUTION OF UNEMPLOYMENT

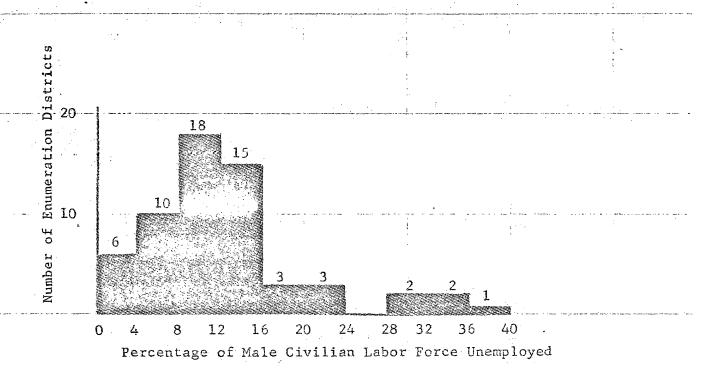


Table XVIII

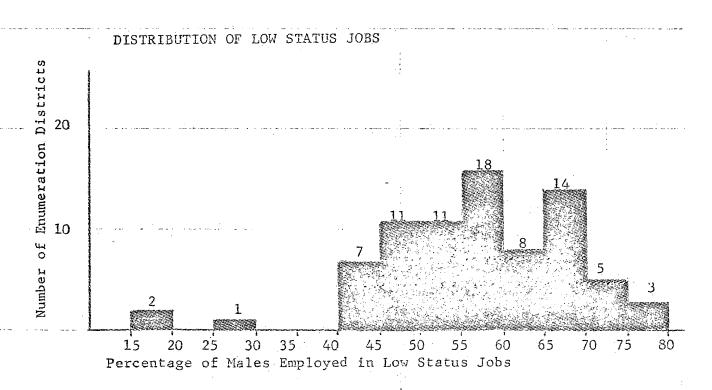


Table XX

was statistically associated with the juvenile delinquency rate in four of the six chi square tests. However, the chi square that is shown was significant at the 0.06 level. (See Table XXI.)

	Low Percentage of Males in Low Status Jobs	High Percentage of Males in Low Status Jobs	Total
Low J. D.	64.3%	43.9%	45
Rate	27	18	
High J. D.	35.7%	56.1%	38
Rate	15	23	
Tota1	42	41	83

Significance Level of Chi Square 0.063

Table XXI

Median education, which ranged from eighth grade to past high school, (see Table XXII.) was not significantly related to the juvenile delinquency rate. This is not a surprising result even though it supports the null hypothesis. Woodlawn ranks in the middle of the 76 Chicago communities on the median education index despite the fact that it ranks in the bottom ten on most of the other socioeconomic indices.

Rootedness

The two variables which have been categorized as community rootedness—the percentage of owner—occupied homes and the percentage of persons living in a different residence in 1960 than in 1955—are shown in Table XXIII. In Woodlawn this percentage varies extensively from ED to ED. In 22 ED's, less than 30

DISTRIBUTION OF MEDIAN EDUCATION

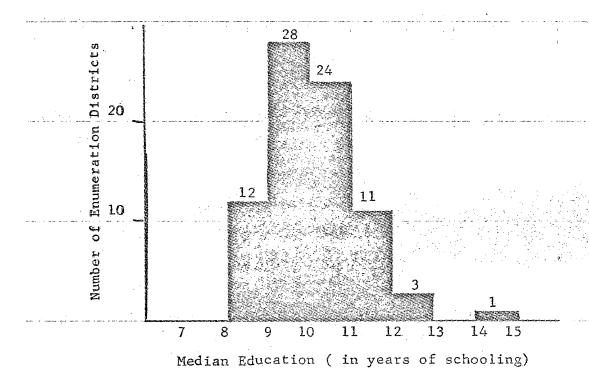
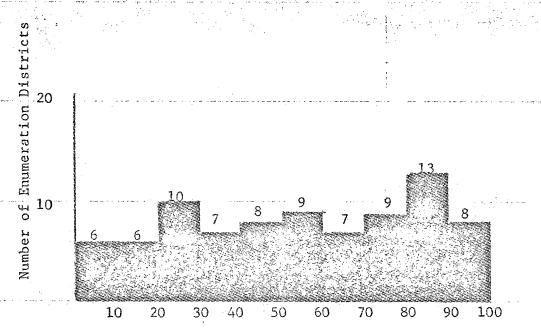


Table XXII

DISTRIBUTION OF MOBILITY



Percentage of Persons Not Living in the Same House in 1960 as in 1955

Table XXIII

1

percent of the population had remained at the same residence for the five year period. In 21 ED's, 80 percent of the population had moved.

The distribution of the percentage of owner-occupied homes is skewed to the left--41 of the ED's had less than 6 percent of the dwellings owner-occupied. (See Table XXIV.) The results of this quare tests showed that neither of these community rootedness variables were significantly related to juvenile delinquency rates.

A summary table (Table XXV) is included to show the results of all the chi square tests. Three of the four family variables were significantly associated with the juvenile delinquency rate as were six of the nine socioeconomic variables. Neither of the community rootedness variables was associated with the juvenile delinquency rate. These results indicate that in one and two-block areas in a high-delinquency community, there are specific ecological characteristics to which the juvenile delinquency rates are related.

In order to see how much correlation there was between juvenile delinquency and the other variables as well as among all the variables, correlation coefficients were obtained for each variable in relation to each of the other variables. A correlation matrix of the results is presented in Table XXVI. (Three variables were added later in the analysis and were not included in the correlation matrix-percentage of families making less than \$2999, percentage of families making less than

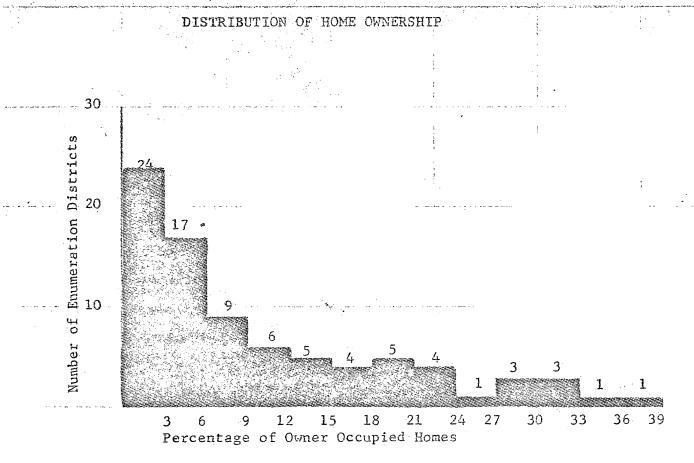


Table XXIV

JUVENILE DELINQUENCY - SUMMARY OF CHI SQUARE TESTS

Percentage of Unrelated Individuals

N. S.

Percentage of Single, Separated, Divorced or Widowed Males over the age of 14

0.046 *

Percentage of Overcrowding 0.040 *

Percentage of Dilapidated and Deteriorating Housing

Percentage of Families Making Less Than \$2999

0.001 **

Percentage of Males 14 years and over who are in the Civilian Labor Force who are Unemployed

0.006 **

Median Education of Persons over 25 years

N. S.

Percentage of Home Owner Occupancy

N. S.

** = Significant at 0.01

* = Significant at 0.05

N. S. = Not Significant

Numbers indicate actual p value

Percentage of Children under the age of 18 living with Both Parents 0.022 *

Percentage of Single, Separated, Divorced or Widowed Females over the age of 14

0.005 **

Median Rental

N.S.

Median Income

0.000 **

Percentage of Families Making Less Than \$3999

0.012 *

Percentage of Males Employed in Low Status Occupations

0.063

Percentage of Persons Not Living in the Same House in 1960 as in 1955

N.S.

Table XXVI

		·			1		·	1	· · · · · ·	Ī			
Mobility	su	su	su	su	ns	ç	113	su	su	su	su	su	
Substandard	su g	.361	.281	su	ns	٤		us us	sa	su	su		
ΩиєшЬјоλшє и с	33	su	su	ns	ns	.321	: 0	ns	su	su			
Median Education	.349	267	su	su	ns	354	: 0	ns	su				
Living Aith Parents	.414	su	267	.232	su	5	211	ns					
Median Rental	.573	**	**	.521 **	510	Ç	113	1115					
Juvenile Jelinquency	311	.362	.217	su	* 797•	.236	:						
gnibworJ	**	264 *	su	51 **	su				* . * * * .				
Unrelated Persons	346	.367	.775	522 **							-		
Home Ownership	.488	304 **	96 7.										
Unmarried Men	905**	* *											
Unmarried Women	484					,							
Median Income													
	Median Income	Unmarried Women	Unmarried Men	Home Ownership	Unrelated Persons	Crowding	Juvenile Delinquency	Median Rental	Living with Parents	Median Education	Unemployment	Substandard Housing	Mobility

CORRELATIONS AMONG ECOLOGICAL VARIABLES

\$3999, and percentage of males employed in low status jobs.) According to the correlation matrix, juvenile delinquency is significantly correlated with the percentage of unmarried women, the percentage of unmarried men, the percentage of unrelated persons, the median family income, and the percentage of crowding. All of these variables, except for the percentage of unrelated persons, were found to be significantly associated with delinquency when chi square tests were performed. In addition, the percentage of children under 18 living with both parents and the percentage of civilian male unemployment were associated with juvenile delinquency when chi square tests were applied, but were not significantly correlated in the correlation matrix. From the table it is clear that the variables are interdependent. For example, median income, the percentage of unmarried women, the percentage of unmarried men, the percentage of owner-occupied housing, the percentage of persons living alone, and median rental were all significantly correlated with one another.

The null hypothesis regarding family organization and socioeconomic status is rejected on the basis of these results. While not all of the variables in these categories are associated with juvenile delinquency, certain of them are. That part of the null hypothesis concerning community rootedness variables is, however, supported.

A factor analysis was done on most of the variables, including delinquency. The results were not meaningful and therefore are not presented here.

Combinations of the variables were studied in order to learn more about the relationship of each variable to delinquency, and to investigate how the interaction of the variables affects the delinquency rates.

For example, if enumeration districts have a high percentage of families earning less than \$2999 but a low percentage of unmarried women, how are the delinquency rates affected? This sort of examination can indicate whether two variables occur independently, or whether they are always found together.

Are these two variables—income less than \$2999 and high percentage of unmarried females—so correlated with one another that never or only rarely do enumeration districts have a favorable aspect of one variable and an unfavorable aspect of the other.

In addition, investigating the interaction of the variables may indicate their relative importance with respect to the juvenile delinquency rate. If most of the ED's which have a high degree of poverty and a low percentage of unmarried females have a high delinquency rate, and most of the ED's which have a low amount of poverty and a high percentage of unmarried females have a low delinquency rate, one might conclude that poverty, as compared to the percentage of unmarried females, is more independently associated with delinquency. Such an examination may also be informative about the social situation of delinquency. Both poverty and a high percentage of unmarried females may need to occur together in enumeration districts before there is a high delinquency rate.

Tables XXVII and XXVIII show percentages of families making less than \$2999 combined with the three family organization variables which were significantly associated with the juvenile delinquency rate. (Percentage of families making less than \$2999 was chosen as the income variable rather than median income because for 31 of the ED's there was no information available on median income.) Fifty of the 82 ED's had a congruent combination of the income variable and the percentage of unmarried males, i.e., 50 either had a low percentage of families making less than \$2999 and a low percentage of unmarried males (cell a), or they had a high percentage of low family income and a high percentage of unmarried males (cell d). In these two cells, the delinquency rates of enumeration districts is as one might expect: 16 of the 22 ED's with low poverty and low percentage of ummarried males had low delinquency rates and 21 of the 28 ED's with high poverty and high percentage of unmarried males had high delinquency rates. In a total of 74 percent of these cases, then, the delinquency rate is as one would predict.

The two remaining cells (cells b and c) are not so clear.

There are fewer ED's in these cells and the distribution between high and low delinquency is not so predictable. The cell with the enumeration districts which had low poverty but a high percentage of unmarried males (cell c), seems to have a distribution between high and low delinquency similar to that of the cell with low percentages of both variables (cell a).

This would seem to indicate that low poverty insulates ED's with a high percentage of unmarried males from high delinquency. One might expect that the cell with high poverty and low percentage of unmarried males (cell b) would have a distribution between high and low delinquency similar to that of the cell with high percentages of both variables. This was not the case. The distribution between high and low delinquency is nearly even. Both low poverty—and to a lesser extent low percentage of unmarried males—are independently present with lower delinquency even if the unfavorable aspect of the other variable is present. It should also be noted that it is relatively uncommon for there to be a favorable aspect of the income variable present with the unfavorable aspect of the unmarried men variable, or vice versa.

Percentage of Families Making Less than \$2999 Percentage Low J. D. 16 Low J. D. 8 of LOW High J. D. High J. D. Unmarried Men HIGH Low J. D. 13 Low J. D. High J. D. High J. D. 21

Table XXVII

The combination of the percentage of unmarried females and the percentage of families making less than \$2999 produced somewhat similar results. (See Table XXVIII.) Fifty-eight of the 82 ED's had either a low poverty index and a low percentage of unmarried females (cell a) or a high poverty index and a

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high percentage of unmarried females (cell d). Of these 58 ED's, 43 or 76 percent had the delinquency rate that would be predicted. In the cases where there was a favorable category of one variable present and the unfavorable category of the other variable present (cells b and c), very few ED's (24) fit into these two cells and those that did had about an equal chance of being either high delinquency ED's or low delinquency ED's. These results would seem to indicate that the two variables tend to exist together, but that they each have an independent and important association with the delinquency rate.

LOW
Percentage
of
Unmarried
Women HIGH

Percentage of Families	Making Less than \$2999
Low	High
a	Ь
Low J. D. 24	Low J. D. 7
High J. D. 7	High J. D. 8
	,
c ·	d
Low J. D. 5	Low J. D. 8
High J. D. 4	High J. D. 19

Table XXVIII

When the variables poverty and percentage of children under 18 living with both parents were combined, the results were again similar. Fifty-eight of the ED's were in the two congruent cells (cells a and d), and 69 percent of these 58 Ed's had the predicted juvenile delinquency outcome. Cells c and b had relatively few cases, and no clear trends were evident.

All three of the family variables which were found by chi square tests to be associated with juvenile delinquency were

studied in combination with the percentage of families making less than \$2999. The poverty variable and the family variables seem to occur together, i.e., if there was high poverty there tended to be a high percentage of the unfavorable category of the family variable. If there was low poverty the favorable aspect of the family variable tended to be present. The delinquency rates of the ED's in the congruent cells were, in at least 69 percent of the cases, as one would predict. When chi square tests were applied to cells a and d they were significantly different at the 0.01 level or lower for all three family variables. Enumeration districts were much less likely to have the favorable characteristics of one variable and the unfavorable of the other, but when they did the delinquency rate was as likely to be low as high. There was one exception -- the ED's which had low poverty and a high percentage of unmarried males were more likely to have a low juvenile delinquency rate. These results indicate that the poverty variable and the family variables were associated and that they both contributed independently to the delinquency rate. They need to occur together, however, before a high or low rate can be predicted.

The percentage of male civilian labor force unemployed variable was also combined with each of the family variables which had been associated by chi square tests with the delinquency rate. The combinations of the unemployment rate and the family variables had results similar to those obtained when the poverty variable and the family variables were

combined. The percentage of unmarried males and females in combination with the rate of unemployment had 39 and 38 ED's respectively which had either a low rate of unemployment and a low percentage of unmarried males/females or a high rate of unemployment and a high percentage of unmarried males/ females. Seventy-four percent of these 39 ED's for the unmarried males variable had the expected juvenile delinquency designation; this percentage was essentially the same for the unmarried females variable and the unemployment combination—76 percent. In each case, the two remaining cells (c and b) had few ED's and for these few there seemed to be equal chance that they would have a high or low delinquency rate.

The combination of the unemployment rate with the percentage of children who lived with both parents was slightly different. While 76 percent of ED's in the congruent cells had the expected juvenile delinquency designation, the tendency for the favorable aspects of the variables and the unfavorable aspects of the variables to go together was not as strong as in the previously presented combinations. There were an equal number of ED's which had low unemployment rate and a low percentage of children under 18 living with both parents as there were ED's which had low unemployment rate and high percentage of children living with both parents. In both of these situations more ED's had low delinquency rates than high rates, but this was more the case in the congruent cell (cell a). A low rate of unemployment seemed to compensate somewhat for a low percentage of children

living with both parents. (See Table XXIX.)

Percentage of Male Civilian Labor Force Unemployed

	HIGH
Percentage	
of Children	
Under 18	
Living with	
Both Parents	LOW

Low	High
	b Low J. D. 4 High J. D. 4
c Low J. D. 12 High J. D. 7	d Low J. D. 3 High J. D. 11

Table XXIX

VIII. DISCUSSION

In reviewing the results of this study of one and two-block areas in a high delinquency neighborhood, family structure, income, employment and crowding were related to the delinquency rates in such areas. Community rootedness, on the other hand, did not appear to be associated with delinquency, even though home ownership--one of the measures of community rootedness--correlated with most of the measures which were associated with delinquency.

The fact that community rootedness was not associated with juvenile delinquency was even more surprising because both measures of this variable--residential mobility and home ownership--have been found in previous delinquency area research to be related to delinquency. As mentioned earlier, Lander's (1954) study of delinquency in Baltimore found that home ownership was one of two variables which Lander thought to be most important in their association with delinquency.

There are several possible reasons why rootedness was not an important category in explaining the juvenile delinquency

rates of enumeration districts in Woodlawn. It is possible that in previous studies both home ownership and residential mobility were found to correlate with the delinquency rate because they were associated with other variables related to the delinquency rate. In this study, home ownership was correlated with five other variables which were associated with delinquency. Since census tracts are larger and more heterogeneous than enumeration districts, in previous studies the two community rootedness variables may have been spuriously related to juvenile delinquency. One reason for conducting a delinquency area study of a high delinquency neighborhood was to try and find those variables which were more closely associated with delinquency.

Another possible explanation for the fact that the results obtained in this study with regard to community rootedness differ from those of previous studies is that residential mobility and home ownership may reflect different conditions in study areas other than Woodlawn. A small percentage of home ownership and a high percentage of residential mobility in census tracts may represent areas which are in a state of transition such as those in which the population is changing from white to black or from one economic group to another.

In line with this, Lander's (1954) results showed that there was a curvilinear relationship between the delinquency rate and the percentage of nonwhites. Areas which had a low or a high percentage of nonwhites had lower delinquency rates.

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However, areas which had from 40 to 70 percent of nonwhites had higher rates. These were probably areas which were in a state of racial transition. Home ownership and residential mobility may have reflected the social disorganization which occurs in times of transition. In Woodlawn, however, if two ED's differ on the home ownership and residential mobility variables, this would not reflect that one enumeration district was undergoing a major transition while the other district was not. Woodlawn was not undergoing transition in 1960, and it is not likely that in a community neighborhood such as this that one or two-block areas would undergo a population change or major transition without concomitant change in the rest of the neighborhood.

On the basis of research conducted in Omaha on the relation of mobility to delinquency, T. Earl Sullenger (1950) indicated that there are two kinds of mobility and that each has a different relationship to delinquency. When intraurban mobility is accompained by vertical mobility, there is usually a low delinquency rate. However when there are high rates of horizontal mobility unaccompained by vertical mobility, there is a high incidence of instability, crime and delinquency. It is possible that much of the residential mobility which occurs in Woodlawn is accompanied by vertical mobility. The may be the case in Woodlawn which often serves as the first step out of the inner city.

Most of the delinquency area studies and many other studies

dealing with delinquency have been interested in the relative importance of socioeconomic factors in their association with delinquency. Often this question has been approached by comparing the association of socioeconomic factors with another category of characteristics such as anomie characteristics or family characteristics.

In this study of a high delinquency area, socioeconomic variables were highly associated with high and low delinquency rates. Areas with low income, high unemployment, low occupational status, and high crowding had higher delinquency rates. This was true even though the comparisons were being made within a neighborhood which, if compared to other neighborhoods in Chicago, would rank near the bottom on socioeconomic status. The findings in this study, then, agree with the findings of

Reiss and Rhodes (1961), but do not agree with those of Clark and Wenninger (1962). Socioeconomic differences within status areas were important for the delinquency rates in the Reiss and Rhodes study; in Clark's and Wenninger's study, such differences were generally insignificant.

Most contemporary sociological theories of delinquency attribute great importance to social class as a core factor that produces delinquency. In view of this, the findings of this study have important theoretical significance. Albert Cohen (1955) maintains that middle class success values are internalized by children of all social classes, but many lower class boys do not have the necessary skills and opportunities to attain success. In order to guard against a

negative self-concept growing out of his inability to reach goals based on middle class values, the lower class boy develops an aversion to middle class values and commits delinquent acts to show how little he cares for them. The delinquent subculture provides a solution to the status frustration of lower class boys when boys who are similarly frustrated interact together and confer status on each other.

Cloward and Ohlin (1960) stress the importance of the availability of illegitimate as well as legitimate means and learning environments in determining delinquency. These investigators have integrated the idea of differential association with the idea that deviant behavior is a reaction of discrepancies between goals and means in our society. According to Cloward and Ohlin, lower class youths become dissatisfied with their economic position, and depending on the availability of illegitimate means, may adopt such means to obtain success.

Walter Miller (1958) contends that the distinctive culture in the lower classes is the fundamental source of deviation in those classes. Miller sees street corner youth gangs as an agent of this culture that become the most important and most prevalent social structure in the lower-class community.

Some aspects of these theories need to be examined in light of the results of this study. Miller's implication that there are community-wide norms which are related to illegal behavior and to which juveniles adhere regardless of their social class was not borne out in this study. Socioeconomic class differences

within a high delinquency community were important in determining the delinquency rate in this study.

These findings also raise the question of what ecological characteristics, if any, would be associated with delinquency within a middle class neighborhood community. Would poorer one or two-block areas within a middle class area have higher delinquency rates, or would there be different ecological characteristics that would be associated with delinquency? Future studies could investigate these relationships within a middle class area.

A few studies have attempted to show that socioeconomic factors have been related to official reports of delinquency in that lower class persons are more likely to be reported than middle or upper class. In two separate studies, Nye (1958:24-31) and Akers (1964) each found very few significant relationships between self-reported frequency of delinquency and socioeconomic status. This study of delinquency within a high delinquency area raises questions about those findings. Socioeconomic variables were found to be associated with delinquency, yet it is doubtful that this difference can be explained by the reporting procedures. Woodlawn is a high delinquency area and when compared with other Chicago areas it would be considered lower class. If discriminatory reporting is practiced it is likely to be prevalent throughout the community rather than in selected parts.

Related to the question of socioeconomic factors and delinquency is the comparison of family structure with socio-

economic status and their relative effect on delinquency. family variables and socioeconomic variables were related to delinquency. Poor areas and areas with poor family structure had high delinquency, while less poor areas with less family disorganization had low delinquency. Between the two extremes, however, the relationship was less clear cut. In areas which had good family composition and poor economic circumstances, it appeared to be about equally probable that the area would have high or low delinquency. Apparently both the family composition of areas and their economic circumstances were both important in determining the juvenile delinquency rate. Socioeconomic and family status are phemonena that have overlapping but different ecological patterns of distribution in a high delinquency area, and they have independent as well as interdependent effects on whether an area is one of low or high delinquency.

Ecological studies have been impugned because often no distinction is made between characteristics of areas and characteristics of individuals (Robinson, 1950). Associations between two ecological characteristics are directly relevant to areas and not to individuals. In interpreting the results of ecological correlations this should be kept in mind.

In delinquency area studies investigators cannot interpret characteristics of urban areas as though they were characteristics of delinquents or their families. Robinson (1950) and Slatin (1969) have demonstrated that ecological correlations may differ in magnitude and possibly in sign from individual

correlations.

Is there a place, then, for ecological studies in explaining deviant behavior? The social context in which an individual lives may be a determining factor in the behavior of the individual, even though the distinctive characteristics of the social context may be absent in the individual deviant. The disparity which exists between the characteristics of the area in which the delinquent live and the characteristics of the delinquent may even be a cause of delinquency. How ecological correlations compare with individual correlations in a high delinquency community is an important area for future study and may help explain how the characteristics of areas influence delinquency rates.

Studies of the characteristics of areas in relationship to deviant behavior and other kinds of behaviors should be continued. If the relationship between delinquency and other characteristics is at all dependent upon the social context, then an analysis of individual characteristics would obscure this relationship. The association between the characteristics of a delinquent individual and his delinquent behavior does not exist in a vacuum--it occurs within the social contexts of the family, the peer groups, the school, and the community.

REFERENCES

- Akers, R. L.
 - "Socio-Economic Status and Delinquent Behavior: A
 Retest." Journal of Research in Crime and Delinquency 1:32.
- Bordua, D. J.
 - 1958-59 "Juvenile Delinquency and 'Anomie: An Attempt at Replication." Social Problems 6:230-238.
- Cartwright, D. S., and Kenneth Howard.

 1966 "Multivariate Analysis of Gang Delinquency: I.

 Ecological Influences." Multivariate Behavioral
 Research 1:321-371.
- Cavan, Ruth
 1962 Juvenile Delinquency. New York: J. B. Lippincott.
- Chilton, Roland J.

 1964 "Continuity in Delinquency Areas Research: A Comparison of Studies for Baltimore, Detroit, and
 - Indianapolis." American Sociological Review 29:71-83.
- Clark, John P., and Eugene P. Wenninger.

 1962 "Socio-Economic Class and Area as Correlates of
 Illegal Behavior Among Juveniles." American
 Sociological Review 27:826-834.
- Cloward, Richard A., and Lloyd D. Ohlin.
 1960 Delinquency and Opportunity, A Theory of Delinquent
 Gangs. Glencoe, Illinois: Free Press.
- Cohen, Albert K.
 - 1955 Delinquent Boys: The Culture of the Gang. Glencoe, Illinois: Free Press.
- Foley, D. L.
 - 1953 "Census Tracts and Urban Research." Journal of American Statistical Association 48:733-742
- Glueck, Sheldon, and Eleanor Glueck.
 - 1950 Unraveling Juvenile Delinquency. Cambridge, Massachusetts: Harvard University Press. Chapters 8-11.
- Gordon, Robert A.
 - "Issues in the Ecological Study of Delinquency." American Sociological Review 32:927-944.

Greenwood, Ernest.

'New Directions in Delinquency Research: A Commentary on a Study by Bernard Lander." The Social Service Review 30:147-157.

Jephcott, A. P., and M. P. Carter.

1954 The Social Background of Delinquency. (Privately printed, obtainable on loan from the University of Nottingham.)

Kitagawa, Evelyn M., and Karl E. Taeuber (eds.).

1963 Local Community Fact Book Chicago Metropolitan
Area 1960. Chicago: University of Chicago.

Lander, Bernard.

1954 Toward an Understanding of Juvenile Delinquency, New York: Columbia University Press.

Liebow, Elliot.

1967 Tally's Corner. Boston: Little, Brown.

McCord, William, and Joan McCord.

1959 Origins of Crime, A New Evaluation of the Cambridge-Somerville Youth Study. New York: Columbia University Press.

Merton, Robert K.

1957 Social Theory and Social Structure. Glencoe Illinois: Free Press.

Miller, Walter B.

"Lower-Class Culture as a Generating Milieu of Gang Delinquency." Journal of Social Issues 4:5-19.

Murphy, F.J., M. M. Shirley, and H. L. Witmer.

1946 "The Incidence of Hidden Delinquency." American Journal of Ortho-Psychiatry 16:686-696.

Nye, F. Ivan.

1958 Family Relationships and Delinquent Behavior. New York: John Wiley.

Pettigrew, Thomas F.

1964 A Profile of the Negro American. Princeton: D. Van Nostrand.

Polk, Kenneth.

1967 "Urban Social Areas and Delinquency." Social Problems 14: 320-326.

Porterfield, Austin L.

1946 Youth in Trouble. Forth Worth: The Leo Potishman Foundation.

Reckless, Walter.

1955 The Crime Problem. New York: Appleton-Century-Crofts.

Reiss, Albert J., and Albert Rhodes.

"The Distribution of Juvenile Delinquency in the Social Class Structure." American Sociological Review, 26:720-732.

Robinson, W. S.

Robison, Sophia.

1936 Can Delinquency be Measured? New York: Columbia University Press.

Robison, Sophia.

1960 Juvenile Delinquency, Its Nature and Control. New York: Holt.

Rosen, Lawrence, and Stanley H. Turner.

1967 "An Evaluation of the Lander Approach to Ecology of Delinquency." Social Problems 15:189-200.

Schwartz, Edward A.

1945 "A Community Experiment in the Measurement of Juvenile Delinquency." Yearbook, 1945 National Association of Probation.

Shaw, Clifford R., Henry D. McKay and Associates.

1942 Juvenile Delinquency and Urban Areas. Chicago: University of Chicago Press.

Shaw, Clifford R., and Henry D. KcKay.

1969 Juvenile Delinquency and Urban Areas. Revised edition. Chicago: University of Chicago Press.

Short, James F., and F. Ivan Nye.

1958 "Extent of Unrecorded Juvenile Delinquency: Tentative Conclusions." Journal of Criminal Law, Criminology and Police Science 49:296-302.

Silberman, Charles.

1964 Crisis in Black and White. New York: Random House.

Slatin, Gerald T.

1969 "Ecological Analysis of Delinquency: Aggregation Effects." American Sociological Review 34:894-907.

Sullenger, Earl T.

1950 "The Social Significance of Mobility." American Journal of Sociology 57:559-564.

Suttles, Gerald D.

1968 The Social Order of the Slum. Chicago: University of Chicago Press.

Willie, Charles V.

1967 "The Relative Contribution of Family Status and Economic Status to Juvenile Delinquency." Social Problems, 14:326-335.