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THE ECOLOGICAL PATTERNS OF RACIAL
AND SOCIO-ECONOMIC SEGREGATION

BY

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A Thesis
Submitted to the Faculty of
The University of Mississippi
in Partial Fulfillment of the Requirements
for the Degree of Master of Arts
in the Department of Sociology

The University of Mississippi

August, 1974

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ACKNOWLEDGMENTS

I wish to express my gratitude to many individuals who helped me in making this study possible.

I am especially appreciative of the guidance and constructive criticism offered by my research director, Dr. Max Williams, who guided my work with patience, understanding and skill at every level of this study.

I am thankful to my committee members, Dr. Columbus Hopper, Professor of Sociology and Dr. Larry DeBord, Associate Professor of Sociology, for their devotion of time and critical reading of this report.

I also wish to extend my appreciation to Professor Julien Tatum, Chairman of the Department of Sociology and Anthropology, for his encouragement throughout my stay at the University of Mississippi.

Samuel Walters, a graduate of the department, deserves my special thanks for his valuable suggestions and reading of the manuscript.

Finally, I owe thanks to the Institute of Urban Research, University of Mississippi, for granting me an assistantship during my graduate work at the University.

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CHAPTER I

INTRODUCTION AND REVIEW OF LITERATURE

Introduction

Segregation on the basis of race and socio-economic status is revealed through several characteristics of modern American social structure. Residential segregation has long been considered to be of central importance in understanding intergroup relations. Racially segregated neighborhoods have important consequences, such as segregated schools, playgrounds, theaters etc., and thus restrict the development of equal status informal relations between black and white Americans.

The sociological significance of the subject has attracted a number of researchers to the study of this crucial facet of human ecology. Geographical and spatial differences in the patterns of segregation should not be taken just as sociological curiosities for they have an important impact on the lives of individuals and are a key to understand interracial relations.

This study is concerned with the sociological aspects of patterns of residential segregation with

particular reference to race and socio-economic status. The 1970 Census for Jackson, Mississippi Standard Metropolitan Statistical Area, has been selected to provide the data for this purpose.

Being the state's largest commercial and cultural center, Jackson has always attracted members of both races and of different socio-economic status, and thus served as a common platform for all types of people. Therefore, it is believed that segregation can be studied well here both sociologically and statistically.

The segregation of residential units will be discussed in this study with reference to black and white inhabitants of the SMSA. The effects of occupation and education on residential segregation will also be statistically measured. All of the information used will be derived from census tract data.

Review of the Literature

The pattern of ecological segregation on the basis of race and socio-economic status has always been an interesting and important area of study for the social researchers. As it is a well established finding that the residential segregation is a principal barrier to racial progress in the United States, several studies have been

done in this area after the turn of the century, especially after the Second World War. Analyses of residential segregation in the United States show substantial differences between blacks and whites regardless of the population considered -- rural or urban, farm or non-farm, North or South.

In 1903, Hurd introduced his two patterns of urban growth: central growth and axial growth¹. By these growth patterns he meant that growth tends to occur in all directions outward from the center of the city, and it occurs most rapidly along major transportation routes. Hurd mainly discussed the areas of residence by income and rental value for his generalization. He did not use the principles of central and axial growth himself.

Burgess² classified the residential areas according to both the density characteristics of residential units and the socio-economic status of the residents. Burgess hypothesized that these two characteristics were negatively associ-

¹cited from Theodore R. Anderson and Janice A. Egeland, "Spatial Aspects of Social Area Analysis", American Sociological Review, XXVI (June, 1961), 392.

²Earnest W. Burgess, "The Growth of the City", in Robert E. Park, et al. (editors), The City, (Chicago: University of Chicago Press, 1967).

ated to each other, which means that the high status persons lived in low dwelling unit density areas and vice versa. This hypothesis later opened doors for a number of research projects based upon somewhat similar assumptions. It is not possible to compare the effectiveness of Burgess' hypothesis with any of the competing ones, mainly because the proportion of the total variance which is accounted for by the Burgess' hypothesis can not be estimated.

Paul Hatt studied an ethnically mixed residential unit of Seattle in 1945. A part of data came from the 1939 Real Property Survey of Seattle conducted by the W.P.A., and the rest was collected by the researcher himself. This study revealed that Negroes were the most segregated of the ethnic groups studied. Hatt suggested that "the block is an improper unit for the distinction of ethnic population"³. He rather recommended the use of streets so that 'across-the-street neighbors' would be seen as concentration just as 'next door neighbors'.

For their study of ecological segregation in 1947, Jahn, Schmid, and Schrag constructed four indexes for the

³Paul Hatt, "Spatial Patterns in a Polyethnic Area", American Sociological Review, X (June, 1945), 354.

measurement of segregation⁴. They maintained that any of the appropriate indexes can be used for a particular research and none can be labelled as the best one. The 1940 census tract data were used for this study. According to the authors a useful segregation index would be the one which meets two basic conditions: First, no segregation exists if any census tract has same proportion of Negroes as the total population of that city does. Therefore, the segregation score for that area should be zero. In the other case there would be a complete segregation "if the Negroes reside only in census tracts in which there are no non-Negroes"⁵. This area should have a segregation score of 100, which actually means the segregation score varies from 0 to 100. The authors also introduced another five standards for a 'satisfactory index', but, as Taeuber and Taeuber have criticized, "Unfortunately, they failed to give explicit attention to the degree to which their indexes meet their criterion that the measure should 'not be distorted by the size of total population, the proportion of Negroes, or the area of a city'"⁶.

⁴Julius Jahn, Calvin F. Schmid, and Clarence Schrag, "The Measurement of Ecological Segregation", American Sociological Review, XII (June, 1947), 293-303.

⁵Ibid., 294.

⁶Karl E. Taeuber and Alma F. Taeuber, Negroes in Cities: Residential Segregation and Neighborhood Change, (Chicago: Aldine Publishing Company, 1966), p.199.

Richard Hornseth⁷ criticized this article attacking the authors for focusing too much attention on operationalization, and thus ignoring the more important aspects of segregation. Hornseth also declared and demonstrated that three of the four indexes were 'logically redundant' because they all measured the same difference, and were different only in the convenience with which they measured the difference between properties.

Later on Jahn, Schmid, and Schrag rejoined to Hornseth's note maintaining their previous position in the original paper. They suggested two more criteria of prediction and reproducibility in order to select the usable index. The authors also defended their indexes as not being identical or interchangeable and not "reproducing the same data with same accuracy"⁸.

Josephine Williams also joined this discussion and brought forward a neglected point in both the papers, saying that those papers focused their discussion on

⁷Richard A. Hornseth, "A Note on 'The Measurement of Ecological Segregation' by Julius Jahn, Calvin F. Schmid, and Clarence Schrag", American Sociological Review, XII (October, 1947), 603.

⁸Julius A. Jahn, Calvin F. Schmid, and Clarence C. Schrag, "Rejoinder to Dr. Hornseth's Note on 'The Measurement of Ecological Segregation'", American Sociological Review, XIII (April, 1948), 216-217.

these four indexes, "but neither one mentions the classic measure of association, which is Chi square"⁹. Williams suggested several more criteria for the judgement of a satisfactory index. She recommended an index with the range of 0 to 1 for the convenience in intercity and intracity comparisons. She also agreed with Jahn, Schmid, and Schrag stating that since the choice of an index depends on our purpose, there cannot be a single index which fulfills all purposes and is good for all research situations.

Later, Jahn took his position in the discussion of the best or most correct segregation index. He rejected Williams' proposal of Chi-square because of its conventional usage and introduced another index saying: "The derived index, to be called 'index of segregation', differs also from the 'indices of ecological segregation' previously constructed and reported, particularly in the use of 'reproducibility' as an explicit assumption in its derivation"¹⁰. Here again Jahn did not propose this index as the best one, but

⁹Josephine J. Williams, "Another Commentary on So-called Segregation Indices", American Sociological Review, XIII (June, 1948), 299.

¹⁰Julius A. Jahn, "The Measurement of Ecological Segregation: Derivation of an Index Based on the Criterion of Reproducibility", American Sociological Review, XV (February, 1950), 101.

recommended it to be considered by the researchers studying the same problem under similar conditions.

Donald Cowgill and Mary Cowgill attacked all these indexes on the basis of their methodology of using census tracts rather than the block data. Cowgill and Cowgill criticized the indexes presented by Jahn, Schmid, and Schrag as just assumptive and hypothetical. But to refute the methodology presented by those three authors and also by Hornseth, the Cowgills have themselves demonstrated another hypothetical situation in their paper. They have presented another index of segregation to be applied and computed on block statistics. The authors claimed this index met "all of the other secondary specifications of Jahn"¹¹. The values of this index were applied to 187 cities using 1940 census data. The two authors concluded their report with the findings that the:

Measures of ecological segregation based on census tracts cannot accurately reflect the degree of segregation. Adequate measurement of segregation must be based on small areal units, such as blocks, which will reveal the real lines of division between majority and minority populations.¹²

¹¹ Donald O. Cowgill and Mary S. Cowgill, "An Index of Segregation Based on Block Statistics", American Sociological Review, XVI (December, 1951), 827.

¹² Ibid., 831.

Using the 1950 data, Cowgill later applied this test to 209 American cities, 185 of which were the same ones studied according to 1940 census figures. The comparison of these cities showed that within a decade "the average segregation score for these cities increased by +.033 from .734 to .767"¹³.

In 1962, Cowgill developed the composite indexes for whole metropolitan areas which he considered to be more meaningful than separate indexes for each municipality. This way only those municipalities with a population of 50,000 or over in 1940 or later were included. The combined segregation scores were computed for 21 metropolitan areas and it was concluded that the combined scores and the original scores for the central cities were not greatly different.¹⁴

Duncan and Duncan analyzed residential distribution in the Chicago Metropolitan District using the census tract data for 1950¹⁵. The Duncans' study finds a close association

¹³Donald O. Cowgill, "Trends in Residential Segregation of Nonwhites in American Cities, 1940-1950", American Sociological Review, XXI (February, 1956), 44.

¹⁴Donald O. Cowgill, "Segregation Scores for Metropolitan Areas", American Sociological Review, XXVII (June, 1962), 400-402.

¹⁵Otis Dudley Duncan and Beverly Duncan, "Residential Distribution and Occupational Stratification", American Journal of Sociology, LX (March, 1955), 493-503.

between spatial and social distances in a metropolitan residential area. To measure the social distance between different occupation groups, they computed the Index of Dissimilarity and also the Index of Segregation. The index of dissimilarity was used to measure the difference in areal distribution between two occupation groups while the index of segregation measured the areal distribution between one occupation group and all the remaining ones. Both the indexes were used on both the tract basis and the zone-sector segment basis in order to determine the effects of the size of the area unit on results. Very high product moment correlations (.96 and .98 respectively) assured that size of the unit does not affect the usefulness of the indices. While discussing their generalizations the Duncans expressed that:

In general it would appear that 'social status' or prestige is more important in determining the residential association of clerical with other white-collar groups than is income, although the latter sets up a powerful cross-pressure, as evidenced by the comparatively high rent-income ratio of clerical families...dissimilarity in occupational origins is more closely associated with dissimilarity in residential distribution than is any of the usual indicators of socio-economic status.¹⁶

Their three propositions, (1) that the most segregated groups are those at the extremes of socio-economic

¹⁶Ibid., 503.

scale, (2) that the concentration of residence in low-rent areas is negatively related to socio-economic status, and (3) that the centralization of residence is also inversely associated with the socio-economic status, were strongly supported in accordance with the accepted ecological theory.

Eugene Uyeki studied residential distribution and stratification in Cleveland Standard Metropolitan Statistical Area (SMSA) for 1950 and 1960¹⁷. This study was a replication in space and extension in time of the Duncans' study of metropolitan Chicago¹⁸.

The Duncans focused their attention on the close relationship between social and spatial distances for one big metropolitan community, while Uyeki selected a city about one-fourth the size of Chicago. Still the findings of both the Cleveland and Chicago studies are similar on many characteristics which are considered to somehow affect the residential distribution of urban areas. Both cities have experienced a somewhat similar pattern of industrial growth having diverse manufacturing, which includes heavy industry,

¹⁷Eugene S. Uyeki, "Residential Distribution and Stratification, 1950-1960", American Journal of Sociology, LXIX (March, 1964), 491-498.

¹⁸Duncan and Duncan, op.cit.

professional services, and public administration. Both had their urban renewal programs. In 1950, both the cities had almost same percentage of their population in different racial and ethnic status categories and also had the similar occupational composition of their male work force.

Uyeki also used the same indexes as did the Duncans and concluded that a great similarity existed in residential pattern of major occupational groups for Cleveland and Chicago in 1950 and that an accountable stability was demonstrated in residential pattern of the major occupational groups in Cleveland from 1950 to 1960. The researcher also maintained that:

... the details of socio-economic residential differentiation in Chicago are almost perfectly reproduced in Cleveland, a smaller city, but one whose growth history, industrial structure, and socio-economic stratification are similar; and that there is a strong persistence in the pattern of socio-economic differentiation within a city over the span of a decade. Finally, the results suggest that changes in residential pattern tend to occur for groups whose relative socio-economic status is changing¹⁹.

Shevky and Williams used three indexes in the creation of an Urban Typology. The indexes were: 1) Social Rank, "an average of the percentile scores of three

¹⁹Eugene S. Uyeki, op.cit., 498

variables; fertility, women in the labor force, and single-family dwelling units; and 3) The Segregation Index, the "percentage of the population represented by the five most highly isolated groups" in each social area²⁰.

The researchers used the census tract data as the basis of their analysis and were mainly concerned with the description and measurement of social differentiation associated with the urban phenomenon of Los Angeles. They demonstrated the use of their typology as an analytic method for the study of certain aspects of the social structure of large cities by applying it to the 1940 census data for Los Angeles county.

Wendell Bell commented on the typology and study offered by Shevky and Williams that:

Shevky and Williams do not devise any test to determine if their specification of economic status, as three factors of modern social differentiation, is empirically supported by the social relations in Los Angeles Area. Yet, the adequacy of their urban typology rests upon the extent to which these three factors do, in fact, account for the observed social differentiation between census tract population in the region under study²¹.

²⁰ Eshraf Shevky and Marilyn Williams, The Social Areas of Los Angeles, (Berkeley: University of California Press, 1949), pp.68-69.

²¹ Wendell Bell, "Economic, Family, and Ethnic Status: An Empirical Test", American Sociological Review, (February, 1955), 45.

Bell also developed an index which was based on a probability model that the next person one will meet in his neighborhood will be a Negro²². He explained the basic logic of Shevky-Williams index: "The measures allow the conception of ecological segregation as a function of probable interaction within and between members of racial, nationality, and cultural groups". He further stated: "However, minor modifications in the original indexes were suggested which will increase their utility as measures of residential concentration"²³.

These modified indexes were used for a comparative study of social structure of groups in ten cities of the San Francisco Bay Area as of 1940. This study by Shevky and Bell analyzed how the people of American cities are stratified and differentiated according to social rank, segregation, and urbanization²⁴.

²²Eshraf Shevky and Wendell Bell, Social Area Analysis, (Stanford: Stanford University Press, 1955), p.48.

²³Wendell Bell, "A Probability Model for the Measurement of Ecological Segregation", Social Forces, XXXII (May, 1954), 364.

²⁴Eshraf Shevky and Wendell Bell, op.cit.

While commenting on Donald Cowgill's article on residential segregation, Bell took the position of defending the use of census tracts rather than the block data as Cowgill did in his study. Bell explained the difficulties of using block statistics rather than census tract statistics, saying, "In their published form, block statistics do not report data for Negroes and other non-whites separately, so computation of Negro segregation scores apart from other non-white segregation scores and vice versa is impossible"²⁵. Bell went into some details giving figures and percentages and attacked the methodological procedure adopted by Cowgill for his research.

Anderson and Egeland in 1961 used the Shevky-Bell indexes to compare statistically Burgess' concentric zone and Hoyt's sector hypotheses of urban residential structure²⁶. Four cities (Akron and Dayton, Ohio, Indianapolis, Indiana, and Syracuse, New York) were selected for this study on the basis of having somewhat similar characteristics in regard to size, territory, and the over-all shape. The authors

²⁵Wendell Bell, "Comments on Cowgill's 'Trends in Residential Segregation of Nonwhites'", American Sociological Review, XXII (April, 1957), 221.

²⁶Theodore R. Anderson and Janice A. Egeland, "Spatial Aspects of Social Area Analysis", American Sociological Review, XXVI (June, 1961), 392-398.

concluded that the urbanization "varies primarily concentrically or by distance from the center of the city, while prestige value (or social rank) varies primarily sectorially, with very little distance variation"²⁷. These authors also thought that the Shevky-Bell social rank index, 'is not a general measure of the average socio-economic status of local residents'.

Oxford, England was the first town to be tracted for census purposes in that country. In 1951, Collison and Mogeey studies the thirty five tracts of Oxford as of 1951 census²⁸. The classification officially issued by the Registrar-General was used to measure the pattern of residence and degree of segregation among different social classes. This classification, which was confined to males of 15 years and over, divided occupation into following categories: Professional, etc; intermediate occupations; skilled; partly skilled; and unskilled. The conclusion revealed that the degree of segregation among classes and the social distance are positively related to each other.

²⁷Ibid., 398.

²⁸Peter Collison and John Mogeey, "Residential and Social Class in Oxford", American Journal of Sociology, LXIV (May, 1959), 599-605.

The ecological pattern of Oxford was found to be somewhat different from that of American cities: The highest social class was living closest to the center of the town and vice-versa. According to the indexes computed by Collison and Mogeey, the class of 'skilled occupation' had a higher index value than the class of 'partly skilled occupations', which was quite unexpected, and therefore did not form a U-shaped curve. The authors have explained the varying housing and accommodation policies of the municipalities in regard to lower class.

In a later study of occupation, education, and housing, Collison again analyzed the residential dissimilarity and segregation in Oxford, England²⁹. Again, the 1951 census data were used. The study was done among ten groups of occupation and of the male working force by the terminal age of education. The study found that the people at the top of occupational and educational hierarchies were highly different from the others in almost every style of life with housing being of special mention. The blue-collar-white-collar distinction also seems important in determining the residence and quality of housing, for

²⁹Peter Collison, "Occupation, Education, and Housing in an English City", American Journal of Sociology, LXV (May, 1960), 588-597.

the manual workers, as a group, were absolutely separated from the others.

Taeuber and Taeuber have come up with striking conclusions of their studies of racial segregation. While studying the basic factors of Negro segregation which is more acute than many other immigrant groups, the Taeubers have refuted a well established belief that the main reason of Negro segregation is their low socio-economic status. To defend their viewpoint, the authors refer to the most recent immigrant groups from Puerto Rico and Mexico, who, though, economically far below the American Negroes, are less segregated residentially. They have also demonstrated that only a small portion of Negro segregation can be attributed to their low economic status.³⁰

In another research report, Taeuber and Taeuber focused their attention upon housing, a critical feature of the current racial scene in American cities³¹. The authors constructed the Index of Dissimilarity that ranges

³⁰ Karl E. Taeuber and Alma F. Taeuber, "The Negro as an Immigrant Group: Recent Trends in Racial and Ethnic Segregation in Chicago", American Journal of Sociology, LIX (January, 1964), 374-382.

³¹ Karl E. Taeuber and Alma F. Taeuber, Negroes in Cities: Residential Segregation and Neighborhood Change, op.cit.

from 0 to 100. The findings generated by this index are important: "A high degree of racial residential segregation is universal in American cities"³². The comparisons between Negroes and other immigrants reveal that Negroes are more segregated residentially than Orientals, Mexican Americans, Puerto Ricans, or any other group of migrants into this country. Poverty is often regarded as contributory to Negro Segregation. Here the Taeubers again express that, "Economic factors, however, cannot account for more than a small portion of observed levels of racial residential segregation"³³. Consequently, "Improving the economic status of Negroes is unlikely by itself to alter prevailing patterns of racial residential segregation"³⁴.

The Taeubers have studied the situation of Negro housing in Northern and Southern cities and suggested that in Northern cities Negroes and whites respond in a similar way to the economic and social factors which produce general changes of residential neighborhood: whites and Negroes

³²Ibid., p.2.

³³Ibid.

³⁴Ibid., p.95.

living in racially mixed areas, tend to be of a somewhat similar socio-economic status. But on the other hand, Southern Negroes of even high socio-economic status prefer to live in predominantly Negro residential areas. The authors have concluded:

Patterns of residential segregation, however, have yet to show signs of significant weakening. Continuing conflict over residential segregation thus seems inevitable, not only because of Negro dissatisfactions over housing, but because residential segregation is a particularly tenacious barrier to the full participation of Negroes in the general society³⁵.

Schwirian and Rico-Velasco studied the residential distribution in Puerto Rico's three metropolitan areas: San Juan, Ponce and Mayaguez³⁶. Census tract data for 1960 were used for this study. The authors computed the indexes of dissimilarity to measure the degree of socio-economic segregation considering occupation, education, and income as indicators of social status. The propositions of this study were that, in all three cities, the status groups have dissimilar residential pattern; the degree of

³⁵Ibid., p.8.

³⁶Kent P. Schwirian and Jesus Rico-Velasco, "The Residential Distribution of Status Groups in Puerto Rico's Metropolitan Areas", Demography, VIII (February, 1971), 81-90.

segregation between two groups is function of the status distance between them; the groups at the top and bottom of status ranking are the most segregated ones; and finally, 'the highest status groups would be most centralized while the lowest ones being the least centralized'. The first three propositions were fully supported by the data for each index in each city. The last one was not upheld in the case of one city, San Juan, but was supported in the other two, Ponce and Mayaguez. The authors have skillfully handled and explained this complex situation.

Through the review of literature, it has been noticed that most of the studies related to racial and residential segregation have been concerned with description, methodology, or measurement of differences in the segregation of Negroes. These researchers have stressed the results more than the causes of differential segregation and have not offered concrete proposals to solve and workout the situation.

Researchers like Jahn, Schmid and Schrag, Cowgill and Cowgill, Bell, Kantrowitz³⁷, and many others have been

³⁷Nathan Kantrowitz, "Ethnic and Racial Segregation in the New York Metropolis, 1960", American Journal of Sociology, LXXIV (May, 1969), 685-695.

focusing their attention on somewhat the same subject matter. No doubt many new and valuable points were brought up. Hill's case study³⁸ was basically carried out to measure the 'attitude' of one racial group towards the other. Smith's work was another valuable addition towards segregation studies based upon attitude survey³⁹. Moskos' study on racial integration in the armed forces can also be referred in this context⁴⁰.

In this chapter we have discussed and reviewed some of the available literature related to the problem under study. In the proceeding chapters we will go into some more detail and discuss the special characteristics and variables used in this research.

In chapter two we will discuss the concepts and

³⁸Mozell C. Hill, "Basic Racial Attitudes Toward Whites in the Oklahoma All-Negro Community", American Journal of Sociology, XXXIX (May, 1944), 519-523.

³⁹Bulkeley Smith, Jr., "The Differential Residential Segregation of Working-class Negroes in New Haven", American Sociological Review, XXIV (August, 1959), 529-533., and "The Reshuffling Phenomenon: A Pattern of Residence of Unsegregated Negroes", American Sociological Review, XXIV (February, 1959), 77-79.

⁴⁰Charles C. Moskos, jr., "Racial Integration in the Armed Forces", American Journal of Sociology, LXXII (September, 1966), 132-148.

the methodological procedure used. The use of indexes of dissimilarity and segregation and the census tract data will also be rationalized. In chapter three the findings of this study will be presented and discussed. The fourth and the last chapter will be devoted to summary and conclusions of the study. In this chapter we will try to view our findings in relation to previous research and will also offer some suggestions for further research in this area of knowledge.

CHAPTER II

KEY CONCEPTS AND METHODOLOGY

In the previous chapter we have reviewed some of the studies done by scholars in the field of segregation and also the methodology used in those research projects. In this chapter we will discuss the basic units of our analysis and the methodology followed. We will rationalize the use of census tracts rather than any other unit for our purposes. The use of the Index of Dissimilarity will also be defended with reference to previous research.

For an analytical study of segregation, we have selected the Jackson, Mississippi Standard Metropolitan Statistical Area. Our study will mainly be concerned with the discussion and analysis of ecological segregation associated with race and socio-economic status within Metropolitan Jackson.

Units of Analysis

Sources of Data: The sources of data for this study were the published volume of 1970 Census tract statistics of population and housing for Jackson, Mississippi SMSA. All the analyses made in this study were based on the figures taken

from this most recent census report.

A Standard Metropolitan Statistical Area is a central city of at least 50,000 population with its ring of satellite communities. According to the census bureau:

... a standard metropolitan statistical area is a county or group of contiguous counties which contains at least one city of 50,000 inhabitants or more, or 'twin cities' with a combined population of at least 50,000. In addition to the county or counties containing such a city or cities, contiguous counties are included in an SMSA if, according to certain criteria, they are socially and economically integrated with the central city¹.

Although there may be several cities of 50,000 or more in an SMSA, not all are necessarily central cities. The largest city in an SMSA is always a central city. The 1970 census includes 243 Standard Metropolitan Statistical Areas within the United States, while Jackson SMSA is divided into 61 different tracts for the purpose of census tabulation; 51 of these tracts are in Hinds county and 10 are in Rankin county. Out of 61, 28 tracts are in the Central Business District and the remaining 33 are in the adjacent areas.

Census tracts are small, permanently established, geographical areas into which large cities and their adjacent

¹U.S. Bureau of the Census, U.S. Census of Population: 1970, Number of Inhabitants, Final Report, PC(1)-A 1, United States Summary, Washington, D.C: Government Printing Press, 1971, p.xiii.

areas have been divided for statistical purposes. Tract boundaries are declared by a local committee and are established with the final approval of Bureau of the Census. "The average tract has over 4,000 people and is originally laid out with attention to achieving some uniformity of population characteristics, economic status, and living conditions"².

Since the essential characteristics of this study are to measure the extent of segregation between two major racial groups with reference to the occupation and residence; it is methodologically desirable to understand the very nature of the population and inhabitants who occupy the houses in the area under study, and the type of occupation they hold. The 1970 census report presents a comprehensive and detailed picture of these phenomena, and therefore has served as the major source for this study.

Selection of Tract Statistics: The problem of selecting an areal unit for the measurement of segregation, has always led to discussions among researchers and investigators of residential segregation. As has been mentioned

²U.S. Bureau of the Census, Census Tract Manual, Fifth Edition, Washington, D.C: Government Printing Office, 1972, p.1.

in the previous chapter and is also discussed in detail in the following pages, this selection of a unit for analysis has mostly based on availability of data and convenience of handling³.

A variety of subareas have been discussed in this regard, i.e., the city blocks (or linear blocks --- facing each other), census tracts, and wards, etc. Among all these, city blocks and census tracts have quite widely been used for the statistical computations. The selection of an areal unit for this study was to be made on the basis of availability and usefulness. Both the city blocks and census tracts were reviewed and discussed for this purpose.

Cowgill and Cowgill have criticized the use of tracts and recommended the blocks as appropriate areal

³See for example, Donald O. Cowgill and Mary S. Cowgill, "An Index of Segregation Based on Block Statistics", American Sociological Review, XVI (December, 1951); Otis Dudley Duncan and Beverly Duncan, "Residential Distribution and Occupational Stratification", American Journal of Sociology, LX (March, 1955), 493-503; Wendell Bell, "Comments on Cowgill's 'Trends in Residential Segregation of Non-whites'", American Sociological Review, XXII (April, 1957), especially p.221; Peter Collison and John Moge, "Residential and Social Class in Oxford", American Journal of Sociology, LXIV (May, 1959); Paul Hatt, "Spatial Patterns in a Poly-ethnic Area", American Sociological Review, X (June, 1945); For critical comparison of city blocks and census tracts see, Karl E. Taeuber and Alma F. Taeuber, Negroes in Cities: Residential Segregation and Neighborhood Change, (Chicago: Aldine Publishing Company, 1966), especially pp. 220-231.

units for research on segregation. They presented a hypothetical situation of a four tract city where all the Negroes are centered around the intersection of tract boundaries, thus being equally distributed in all the four tracts. In this situation, the Cowgills maintain, we will get a segregation score of zero⁴. They also declare that "Adequate measurement of segregation must be based on small areal units, such as blocks, which will reveal the real lines of division between majority and minority populations"⁵.

Though this hypothetical situation of racial homogeneity may not be impossible, the assumption by the Cowgills as to its empirical consequences must be taken as undemonstrated hypothesis rather than a proved fact. Taeuber and Taeuber have observed that this same situation can also happen in the case of blocks⁶. While commenting on the Cowgills' proposal of using block statistics, Bell has also highlighted the difficulties of using block data

⁴Donald O. Cowgill and Mary S. Cowgill, "An Index of Segregation Based on Block Statistics", American Sociological Review, XVI (December, 1951), 825-826.

⁵Ibid., 831.

⁶Karl E. Taeuber and Alma F. Taeuber, op.cit., p.199.

instead of census tract statistics⁷.

Another major consideration in selecting the areal unit would be the size of the unit. City blocks are much smaller units, therefore it is quite possible that the handling and analyzing of mass data might lead to inaccurate and erroneous results due to limited time and funds. Tracts are fairly larger in size as compared to city blocks. On the average a census tract has about 4,000 residents. According to the census bureau, the census tracts are the "areas into which large cities and adjacent areas have been divided for statistical purposes"⁸. Tracts are generally designed to be somewhat uniform with respect of population characteristics, economic status and living conditions. Tract boundaries are established to be maintained over a long period of time, therefore comparative studies from year to year and also from census to census can be done. In each decennial census, the Bureau of the Census tabulates population and housing information for each tract.

⁷Wendell Bell, "Comments on Cowgills' 'Trends in Residential Segregation of Non-whites'", American Sociological Review, XXII (April, 1957), 221.

⁸U.S. Bureau of the Census, 1970 Census of Population and Housing, Census Tracts, Jackson, Mississippi Standard Metropolitan Statistical Area, Washington, D.C: Government Printing Press, 1972, p.App-1.

The selection of an areal unit was an important step in this study. After discussing both the city blocks and census tracts and reviewing the previous works, we selected the census tracts as these are the only units which provide data on socio-economic status of the residents. Once delimited, tract boundaries are designed to remain almost constant from census to census.

Census tracts provide many types of data that can be related to small sections of the city. For example, population statistics report about people -- age, sex, marital status, occupation, place of work, etc., while the housing census provides statistics on the homes of these people -- size, ownership, and condition, etc. In addition to intracity comparative studies, census tracts are the best source for intercity comparisons. Statistical distinctions can be made between old and the young, between areas of poor and the rich, highly educated and poorly educated population, executives and laborer, skilled and unskilled workers etc., etc.

More and more areas were tracted as their usefulness for statistical purposes was recognized. In 1910 only 13% of the total United States population was living in tracted areas. This figure changed to 36% in 1950 and to

59% in 1960. In 1970, the goal of tracting all the SMSAs was achieved and 238 SMSAs were tracted covering 73.2% population of the United States⁹. Moreover, for 1970 the tract program has been extended to cover the entire metropolitan areas, and this gives tracts an advantage over blocks for the study of segregation on a metropolitan basis.

When the data are compared from year to year or from census to census, the changes in population trend, housing conditions, and income standards can be noticed and would definitely be helpful for future planning and assistance to urban planners and welfare agencies. Since the areas are tracted on the basis of the size of population and do not vary much in regard to the number of people in it, the census tract data can also be combined for the studies which require larger areas and populations for their samples.

Measurement of Segregation: The analysis and explanation of ecological distribution are problems of the demographer, human ecologist and sociologist. It has always been a controversial point for the researchers to

⁹U.S. Bureau of the Census, Census of Population: 1970, Vol. I, Characteristics of the Population, Part 1, United States Summary - Section 1, Washington, D.C: U.S. Government Printing Office, 1973, pp.1-37 & 1-246.

agree on a comprehensive method for dealing with the subject. In recent years, however, sociologists and social demographers have proposed and demonstrated quite a number of logically sound and computationally feasible indexes which can be constructed to measure the ecological segregation. The definitions of 'complete segregation' and 'no segregation' are identical in each case.

While suggesting the basic conditions for a 'satisfactory index of segregation', Jahn, Schmid and Schrag have observed that if any census tract has same proportion of black population as that of the city, there exists no segregation, which will score zero on the index of segregation. The segregation score will be 100 if the Negroes live only in the areas where no non-Negro lives and thus forming a complete segregation¹⁰. This means that the segregation score varies from 0 to 100.

Jahn, Schmid and Schrag have also stated that there is no single index which can be labelled as the best one. We have to consider several points before making the final selection. If we wish to make our research contributory to the systematic body of knowledge, we choose an index that

¹⁰ Julius A. Jahn, Calvin F. Schmid and Clarence C. Schrag, "The Measurement of Ecological Segregation", American Sociological Review, XII (June, 1947), 293-294.

is comparable with measures used in the relevant research literature. We also look for an index which is applicable to general but related problems and is also easy to compute.

Shevky and Williams attempted to distinguish between segregation and isolation and developed an index of isolation¹¹. Bell, revising the Shevky-Williams scheme, developed another modified measure based on a probability model¹². Williams also had added two more criteria¹³ to the judgement list put forth by Jahn, Schmid and Schrag. Several criteria have, so far, been offered in literature for the selection of an index formula, with no concensus on the matter having been reached. Almost all the segregation indexes have one common assumption, that segregation can be measured without regard to the spatial patterns of white and non-white residence in a city.

¹¹Eshraf Shevky and Marilyn Williams, The Social Areas of Los Angeles, (Berkeley: University of California Press, 1949), p.49.

¹²Wendell Bell, "A Probability Model for the Measurement of Ecological Segregation", Social Forces, XXXII (May, 1954), 357.

¹³Josephine J. Williams, "Another Commentary on so-called Segregation indices", American Sociological Review, XIII (June, 1948), 300.

For measuring the racial residential segregation among the occupation and education groups, we computed the Index of Dissimilarity in a manner to that utilized in several recent studies. To compute this index, for example in the case of occupation, one calculates for each occupation group the percentage of all workers in that group residing in each census tract. The index of dissimilarity between two occupation groups is then one-half of the absolute values of the differences between the respective distributions, taken area by area. In other words we can present this procedure in the way of the following formula:

$$\sum |X_i - Y_i|/2$$

where X_i is the percentage of one group residing in area i and Y_i is the percentage of the second group residing in that area¹⁴. When the index of dissimilarity is computed between one specific group and all other groups combined, it is referred to as an Index of Segregation. The formula will be:

$$\sum |X_i - Y_i|/2(1-P)$$

where X_i is the percentage of the specific group in area i , Y_i is the percentage of all groups in that area, and P

¹⁴Kent P. Schwirian and Jesus Rico-Velasco, "The Residential Distribution of Status Groups in Puerto Rico's Metropolitan Areas", Demography, VIII (February, 1971), 84.

is the percentage of the total of all groups¹⁵. The indexes of dissimilarity and segregation were computed both for Occupation and Education groups, residing in the Jackson, Mississippi Standard Metropolitan Statistical Area on the census tract basis.

We believe that this index is a satisfactory measure of residential segregation for general research purposes and is more acceptable than any alternative index that is available, particularly for its relatively simple and rapid computation. This should also be noted that this index is an average measure representing the situation for an entire area and thus explains the complexity and details of a residential pattern which would, hopefully, be applicable to all the American residential areas with similar characteristics.

This index was used, in this study, to measure the residential pattern among whites and blacks of the Jackson, Mississippi SMSA with regard to their occupational and educational status. For occupation and education categories, those listed by the Census Bureau were used due to their convenience and the availability of data.

¹⁵Ibid.

In this chapter we have discussed the units of analysis and the variables used for the Index of Dissimilarity. The use of these particular formulae of measurement and the use of census tract data were also justified. The findings of this study will be discussed in the following chapter.

CHAPTER III

FINDINGS

In the previous chapters we have reviewed and discussed the relevant theoretical literature and methodology used by various researchers to examine and measure the degree of residential segregation between racial and social groups. We have also discussed the theoretical framework and methodology employed in this study. In this chapter we shall report our major findings based on the methodology selected and presented previously.

Racial Segregation

Racial residential segregation in American communities is not only a big social issue, it is also associated with many problems the urban society is facing to-day. A review of previous studies offers little assurance that patterns of residential segregation are giving way to a racially integrated urban society¹. It has been observed by several researchers that average levels of residential segregation are somewhat higher in Southern than in

¹See Karl E. Taeuber and Alma F. Taeuber, Negroes in Cities: Residential Segregation and Neighborhood Change, (Chicago: Aldine Publishing Company, 1966), especially pp. 2-4, 35-36.

Northern cities². Some of the factors which lend support to segregated living pattern come from inside the black community as has been suggested by Drake and Cayton:

Negro politicians and businessmen, preachers and civic leaders, all have a vested interest in maintaining a solid and homogeneous Negro community where their clientele is easily accessible. Black Metropolis, too, is an object of pride to Negroes of all social strata. It is their city within a city ... Yet they remain ambivalent about residential segregation: they see a gain in political strength and group solidarity, but they resent being compelled to live in a Black Belt³.

On the other hand Myrdal thought that it is the social pressure from whites which is the chief force in maintaining the residential segregation⁴. Taeuber and Taeuber have concluded that:

Whether a city is a metropolitan center or a suburb; whether it is in the North or South; whether the Negro population is large or small -- in every case, white and Negro households

²For example see, Karl E. Taeuber and Alma F. Taeuber, Ibid., pp.4-6; St. Clair Drake and Horace R. Cayton, Black Metropolis: A Study of Negro Life in a Northern City, Vol:2, (New York: Harper and Row Publishers, 1962), pp.756-758.

³Ibid., pp.114-115.

⁴Gunner Myrdal, An American Dilemma: The Negro Problem of Modern Democracy, (New York: Harper and Brothers Publishers, 1944), Vol.1, p.622.

are highly segregated from each other. Negroes are more segregated residentially than are Orientals, Mexican Americans, Puerto Ricans, or any nationality group⁵.

For this study we have followed the research pattern employed by the Taeubers in their study, Negroes in Cities⁶. We computed the Index of Dissimilarity to measure the degree of racial residential segregation in the Jackson, Mississippi SMSA. The calculated index value (70.2) denotes that a high degree of residential segregation is maintained in the SMSA and that race is an important factor in determining one's place of residence.

Social Segregation

The Schwirian and Rico-Velasco study of three metropolitan areas of Puerto Rico⁷ has been the basic source for derivation of hypotheses for this study. To measure the residential segregation in regard to socio-economic status, we have adopted the propositions used by Schwirian and

⁵Karl E. Taeuber and Alma F. Taeuber, op.cit., p.2.

⁶Ibid.

⁷Kent P. Schwirian and Jesus Rico-Velasco, "The Residential Distribution of Status Groups in Puerto Rico's Metropolitan Areas", Demography, VIII (February, 1971).

Rico-Velasco, which are:

- 1) status groups have dissimilar residential distribution;
- 2) the degree of residential dissimilarity between status groups is a function of the degree of status differences between them;
- 3) the most residentially segregated groups are those at the top and at the bottom of status pyramid⁸.

Occupation and education levels were used as measures for the social status and to determine the relationship between social status and residential location we have calculated the indexes of dissimilarity and segregation. Table I shows the major occupation groups in the Jackson SMSA*.

Our data suggest that people at the top of occupational hierarchy, especially the professionals and the sales group, are sharply differentiated from the remainder in the selection of their houses. The index value for professionals and managers is 29.1, while 64.8 for the professionals and household workers. The highest index value computed (80) among the occupation groups

⁸Ibid., p.84.

* See page 41 for this table and page 42 for the segregation curve.

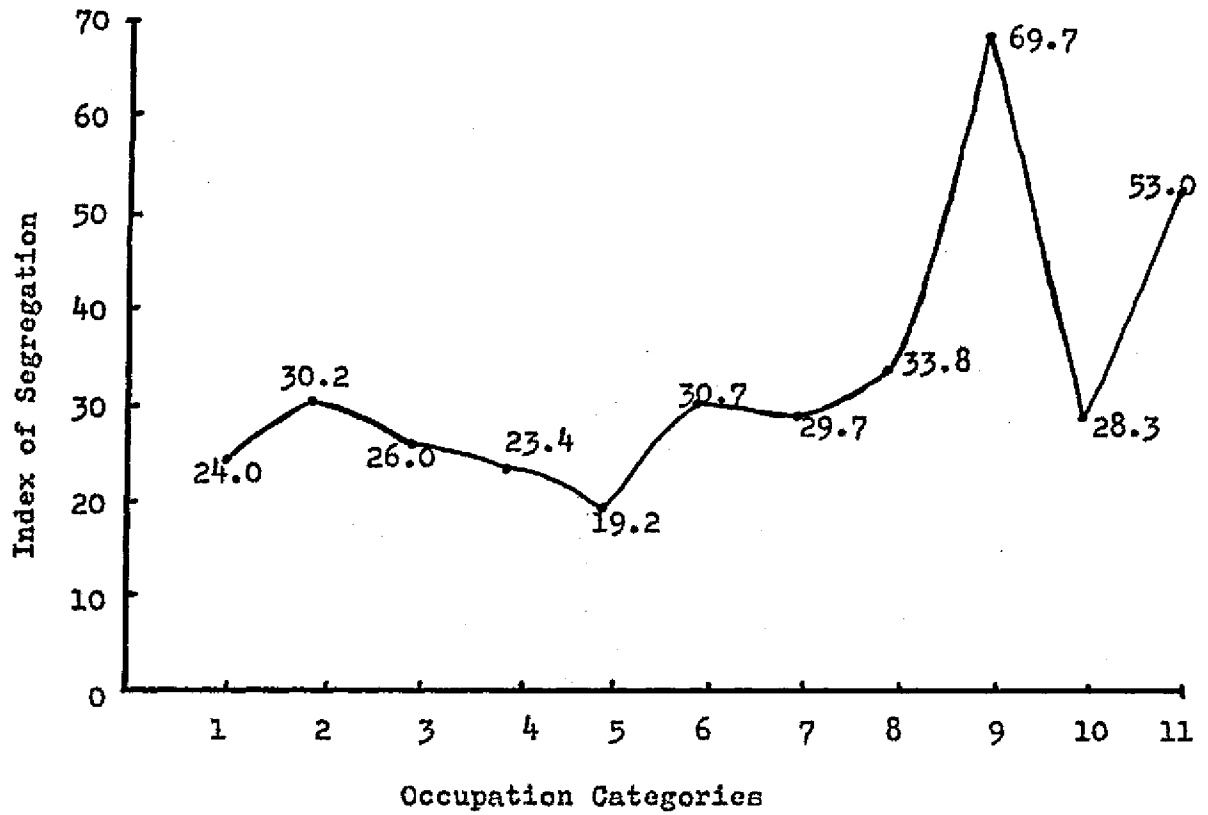
TABLE I
 INDEXES OF DISSIMILARITY AND SEGREGATION* FOR MAJOR OCCUPATION
 GROUPS TOTAL EMPLOYED, 16 YEARS OLD AND OVER,
 JACKSON, 1970

Major Occupation Group	Dissimilarity with Group											
	1	2	3	4	5	6	7	8	9	10	11	
1 Pvt. Household Workers	<u>24.0</u>											
2 Service Workers	17.3	<u>30.2</u>										
3 Farm Workers	17.5	14.3	<u>26.0</u>									
4 Laborers	20.9	23.3	13.3	<u>23.4</u>								
5 Transport	33.2	37.1	31.8	25.5	<u>19.2</u>							
6 Operatives	44.8	52.2	49.9	43.0	24.5	<u>30.7</u>						
7 Craftsmen	46.2	52.6	49.7	42.8	23.8	16.0	<u>29.7</u>					
8 Clerical	47.7	56.0	54.3	49.4	30.5	20.6	22.0	<u>33.8</u>				
9 Sales	76.9	80.0	79.8	76.8	69.0	66.3	65.8	60.2	<u>69.7</u>			
10 Managers	39.8	49.3	46.6	40.9	27.0	17.1	20.1	20.2	68.3	<u>28.3</u>		
11 Professional	84.8	73.6	72.7	67.8	50.6	33.5	35.0	27.6	65.9	29.1	<u>53.0</u>	

* Segregation indexes are on the diagonal.

GRAPHIC REPRESENTATION OF THE
INDEX OF SEGREGATION

FIGURE I - OCCUPATION



is for the sales group and the service workers. The sales group seems residentially quite isolated from almost all other occupation groups, they exhibit index values as high as 60.2 and 68.3 even with their immediate groups on the status hierarchy which are clerical and managers, respectively. They also show the highest value on the index of segregation (69.7) among all the occupation groups.

At the other end of occupational scale, there is comparatively little difference between all the groups of manual workers. Differences in skill at this part of the occupational hierarchy do not produce much difference in matters of housing. A general review of the table reveals that the manual workers as a group are set off from the remainder, while the people in the sales group are on the top of dissimilarity and segregation as well.

Table II displays the indexes of dissimilarity and segregation for the education groups in Jackson SMSA^{*}. The pattern of this table is closely similar to that of table I. Each group on the hierarchy is closer to the nearer ones. The residential pattern based upon educational achievement generally corresponds to the residential

^{*} See page 44 for this table and page 45 for the segregation curve.

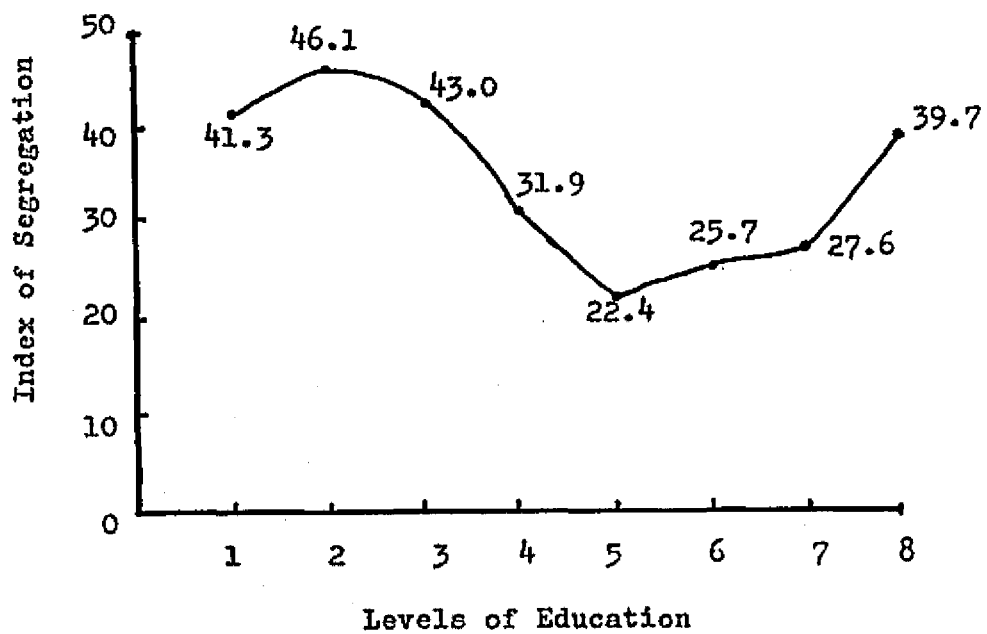
TABLE II
 INDEXES OF DISSIMILARITY AND SEGREGATION* FOR EDUCATION GROUPS
 OF PERSONS 25 YEARS OF AGE AND OVER,
 JACKSON SMSA, 1970

<u>Number of School Years Completed</u>	<u>Dissimilarity with Group</u>							
	1	2	3	4	5	6	7	8
1 None completed	<u>41.3</u>							
2 Elementary 1-4 years	20.5	<u>46.1</u>						
3 Elementary 5-7 years	19.4	13.9	<u>43.0</u>					
4 Elementary 8 years	25.4	24.1	18.3	<u>31.9</u>				
5 High School 1-3 years	31.3	32.1	25.4	15.3	<u>22.4</u>			
6 High School 4 years	55.6	58.7	53.8	42.1	31.4	<u>25.7</u>		
7 College 1-3 years	61.6	65.4	61.4	52.2	41.3	18.4	<u>27.6</u>	
8 College 4 years and +	64.8	68.5	65.2	58.9	50.5	35.4	20.2	<u>39.7</u>

* Segregation indexes are on the diagonal.

GRAPHIC REPRESENTATION OF THE
INDEX OF SEGREGATION

FIGURE II - EDUCATION



pattern based upon occupational status and it becomes evident that education contributes very highly and positively in locating one's residence in higher social status area. For example the index of dissimilarity for those who have 4 years or more of college education and those without any education is 64.8, while it is 20.2 for those with 4 years or more of college education and those with 1-3 years of college education. The highest index of dissimilarity is found in the case of most highly educated group in the hierarchy and the group with 1-4 years of elementary education. It is interesting to note that the persons without any formal education are less segregated from those who have some High school or more education, than those who have 1-4 years of elementary education. This may be due to the fact that uneducated people, forming the lowest occupation group, mainly are engaged in household jobs for the educated ones, who also hold the higher occupations and maintain the high status in society.

We also notice that those with 1-4 years of elementary education stand on the top of segregation curve with a score of 46.1 on the index of segregation. The next highly segregated group is formed of the ones with 5-7 years of elementary education, who score 43.0 on the said index, while 41.3 is secured by the uneducated ones.

22.4 is the lowest index of segregation computed for those with 1-3 years of high school education. It may be said that this group serves as a sort of bridge between the less educated and the well qualified.

The analysis has provided support for the propositions that status groups have dissimilar residential patterns; that the difference in status leads to the difference in residential pattern and that the people on the extremes of status hierarchy are the most residentially segregated ones.

In this chapter, we have discussed our major findings in regard to the analysis of variables described previously. The values of indexes of dissimilarity and segregation computed for different occupation and education groups were also discussed. In the last chapter, we will review our results in regard to the findings of previous research and will also offer suggestion for future research.

CHAPTER IV

SUMMARY AND CONCLUSIONS

Introduction

In this chapter we will summarize the findings of this study and relate them to the existing knowledge of racial and status segregation. We will also point out the limitations of our research and offer suggestions for the future research in this area of urban ecology.

This study is an outgrowth of an in-depth review and evaluation of theoretical literature relevant to our problem, specifically to the pattern of residential dissimilarity of the racial and status groups of the community. Though the basic units of analysis have been a debatable issue and several alternative methodological procedures have been adopted and utilized by the scholars, the urban ecological patterns remain an important source for understanding the segregation problems and for analysis in this regard.

Summary and Conclusions

Our basic intention in this study was to measure the residential segregation among the racial and status

groups, and to demonstrate the extent and degree of dissimilarity in the residential patterns of these groups. We were also interested in testing the Schwirian and Rico-Velasco¹ hypotheses in an American SMSA.

The sources of data for this study were the published volume of 1970 census tract statistics for Jackson, Mississippi Standard Metropolitan Statistical Area, which is spread into Hinds and Rankin counties of this state. The established indexes of dissimilarity were computed to measure the degree of segregation among different racial and status groups. The indexes of segregation were also used to compute the segregation of each grouping in the two status hierarchies.

In an attempt to get a clearer picture of segregation among the ethnic groups, the data used for computing the index of dissimilarity among racial groups were those for blacks and whites only. The census tracts were selected as the basic units for analysis and all the computations for this study were done on the tract data. The variables for socio-economic status refer to the occupation and education of the residents, and the categories used were those

¹Kent P. Schwirian and Jesus Rico-Velasco, "The Residential Distribution of Status Groups in Puerto Rico's Metropolitan Areas", Demography, VIII (February, 1971).

as adopted by the census bureau. Both patterns of segregation, racial as well as among the status groups, are briefly discussed in the following.

Racial Segregation: It has been observed that in recent years Negroes have made steady progress in economic and other fields. But still the patterns of residential segregation are quite prevalent in American cities. A study of ten cities, comparing the residential segregation of various ethnic and minority groups from each other and from whites, has demonstrated that current levels of Negro-white segregation are higher than those between any nationality group and native whites².

Any complex phenomenon, like the one under study, may be examined from a variety of viewpoints. Several philosophers and scholars have contributed to this and have offered suggestions for future policy makers. Many social scientists have directed their studies towards this touchy and sensitive issue and have come up with a number of findings and suggestions. In recent years many valuable discussions have appeared from a variety of viewpoints.

²Stanley Liberson, Ethnic Patterns in American Cities, (New York: Free Press of Glencoe, 1963), especially pp. 120-132.

Jahn, Schmid and Schrag, Cowgill and Cowgill, Bell, Kantrowitz, and many others have explored the subject quite well. Jahn, Schmid and Schrag presented and demonstrated four indexes to measure the ecological segregation. Most of the other researchers have utilized these indexes for their studies. Taeuber and Taeuber have mainly been concerned with the housing situation for Negroes. Their classic studies³ have keenly dealt with the prevalent Negro status and causes and effects of segregation, which is a particularly tenacious barrier to the full participation of Negroes in the general society.

Our findings as presented in the preceding chapter generally correspond with these general findings on residential segregation of racial groups and it permits us to conclude that racial residential segregation exists in Jackson, Mississippi Standard Metropolitan Statistical Area and is greater than the class segregation.

Status Segregation: Though the residential

³Karl E. Taeuber and Alma F. Taeuber, "The Negro as an Immigrant Group: Recent Trends in Racial and Ethnic Segregation in Chicago", American Journal of Sociology, LIX (January, 1964), and Negroes in Cities: Residential Segregation and Neighborhood Change, (Chicago: Aldine Publishing Company, 1966).

segregation of whites and Negroes was the main concern for this study, there are kinds of segregation other than between the racial groups. And moreover, segregation of racial groups is not independent of the residential segregation of status groups. We have chosen two indicators: occupation, and education, for the variable of socio-economic status. The indexes of dissimilarity and segregation were applied for both the indicators which produced quite high scores.

Perhaps the most suggestive finding of this study is that dissimilarity in occupations is more closely associated with dissimilarity in residential distribution than the other indicator of socio-economic status. The Duncans have also concluded that the occupation groups at the extremes of socio-economic scale are the most segregated. Schwirian and Rico-Velasco have found that the status groups maintain housing in the localities which fit to their socio-economic status and these groups are segregated from others in accordance to their social standing. Taeuber and Taeuber maintain that, "In practice, residential segregation by race and by economic status exist simultaneously, and it is something of a chicken-

and-egg problem to assign priority to one or the other"⁴.

Our findings, presented earlier, are in accord with these and other studies. Therefore, we conclude that dissimilarity in occupation and education levels is closely related to variation in residential patterns in the Jackson, Mississippi Standard Metropolitan Statistical Area.

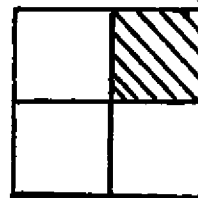
Limitations and Suggestions

Some limitations, however exist that might restrict the significance and interpretation of the findings. Most of the studies on residential segregation are based on data for wards, census tracts or other subareas within cities. We decided to rely on census tract data due to their size and comprehensiveness. A serious problem arises if and when the groups do not coincide with the tract boundaries. The following illustration from a hypothetical four tract city may help clarify this situation.

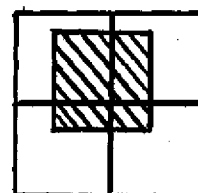
Figure III: Schematic Locations of a Negro Residential Area in a City.

⁴Ibid., 79.

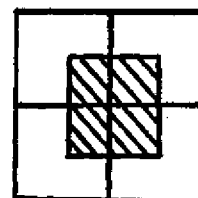
- A. The Negro residential area coincides with one tract



- B. The Negro residential area overlaps tract boundaries



- C. The Negro residential area overlaps tract boundaries, with equal parts in each tract



Source: Taeuber and Taeuber, Negroes in Cities, 222.

Now the Index of Segregation (and most of other segregation indexes) computed for the data of this hypothetical city would assign a value of 100 to the first case, 0 to the third, and some intermediate value to the second case. It is difficult to practically overcome this problem. Though the use of smaller and smaller subareas can increase the observable degree of racial homogeneity, dividing very large areas like Harlem or the whole city of New York into very small units may be confusing and misleading as well.

This investigation was limited only to the analysis of racial and status groups. It is suggested that further research should seek other forces producing residential segregation. For example the pattern of social class segregation within the white community itself would be an important factor to be studied. Ethnic categorization other than race, and income of the head of the household are extremely relevant to study, though difficult due to lack of data.

Finally, we would expect this study, serving as the bench mark, will clear the road for a comparative and more comprehensive investigation of residential segregation in the Jackson, Mississippi SMSA when the 1980 census statistics are available.

Summary Statement

The purpose of this study was to investigate the pattern of residential segregation of racial and status groups. The major contribution of the investigation is considered to be its approach and applicability to the study of ecological patterns of racial and socio-economic segregation in metropolitan communities. Our findings relate, of course, only to Jackson, Mississippi SMSA. There seems to be no reason for assuming that this SMSA

is greatly unlike other American urban areas, particularly those in the Southeast, in the amount of residential dissimilarity and segregation or in the way that occupation and education are related to the selection of residence.

Though it can not be claimed that this study added to the general theoretical orientations which have guided research in segregation, it does provide suggestions and grounds for comparative studies both with other metropolitan areas and in the Jackson SMSA with data from future censuses.

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