

Patterns of Puerto Rican Segregation and Mobility

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In this article patterns of Puerto Rican residential segregation and mobility within metropolitan areas are examined for the period between 1970 and 1980. Using a weighted OLS procedure, this study tests the effects of social status, ethnicity, racial heritage, discrimination, and housing market conditions on patterns of segregation between Puerto Ricans, Anglos, and Blacks. Census data for 49 metropolitan areas with 4,000 or more Puerto Ricans were used in this analysis. The findings suggest there was considerable variation in the level of segregation between Puerto Ricans, Anglos, and Blacks in terms of regional location, size of metropolitan area, and size of the Puerto Rican population. On average, 61% of all Puerto Ricans would have had to move from their place of residence in 1980 to achieve residential integration with Anglos. The average level of segregation between Puerto Ricans and Blacks was only 3% lower (58%). Although segregation between the three groups declined during the 1970s, the sharpest declines occurred in the level of Puerto Rican and Anglo segregation from Blacks, particularly in the suburbs. Further, Puerto Rican mobility within metropolitan areas via suburbanization actually declined during the 1970s. Multivariate analysis revealed that the low socioeconomic status of Puerto Ricans relative to Anglos was the most significant factor affecting the level of segregation between the two groups. High levels of segregation were also associated with older Puerto Rican communities, low levels of suburbanization and decentralization of employment. Puerto Rican segregation from Blacks was associated with residence in older Puerto Rican communities, high levels of housing demand and high vacancy rates.

Targeted labor recruitment practices and subsequent chain migration flows of Puerto Ricans to the continental United States, particularly during

AUTHOR'S NOTE: A preliminary version of this article was presented at the 1991 Annual Meetings of the Population Association of America, Washington, DC, March, 1991. This research has been partially funded by a NICHD postdoctoral fellowship at the Population Studies Center and a grant from the Rockefeller Foundation to the Research and Training Program on Poverty, the Underclass and Public Policy, whose support is gratefully acknowledged. Special thanks to Albert Anderson for technical support on this project and Reynolds Farley and Sheldon Danziger for comments on an earlier version of this article.

Hispanic Journal of Behavioral Sciences, Vol. 14 No. 1, February 1992 107-133
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the postwar period were the principal forces shaping patterns of Puerto Rican mobility and settlement in the continental United States. Locations on the Eastern Seaboard and in the Midwest experienced massive migration of Puerto Rican agricultural workers in the 1940s and 1950s (Fitzpatrick, 1987; Maldonado, 1979; Mills, Senior, & Goldsen, 1967; Nieves Falcon, 1975; Valdes, 1990). Industrial centers, particularly in the Midwest, were the points of destination for other groups of skilled and semiskilled Puerto Rican workers recruited by the foundries, tanneries, garment factories, and railroads during the late 1940s and throughout the 1950s (A. de Santiago, 1980, 1984; Maldonado, 1979; Senior, 1954). In the 1960s and 1970s, Puerto Ricans migrated to metropolitan areas in New Jersey, Connecticut, the Great Lake States, Florida, and Texas in increasing numbers (Ortiz, 1986, U.S. Commission on Civil Rights, 1976). By 1980, there were 49 metropolitan areas (SMSAs) in the United States with populations of 4,000 or more Puerto Ricans.

Concentrated primarily within inner city neighborhoods in declining urban areas, Puerto Ricans living in the United States have witnessed a sharp deterioration in their economic well-being since the 1970s (Tienda, 1989; Tienda & Jensen, 1988). Structural shifts in urban economies have changed the number and types of jobs available to Puerto Rican workers. Puerto Rican family incomes have declined considerably relative to those of Anglos, reflecting the growing proportion of female-headed households and the labor market disadvantages experienced by these households. By 1980, Puerto Ricans had the highest poverty rate for any racial or ethnic group in the United States. Tienda (1989) attributes the economic plight of Puerto Ricans to their disproportionate concentration in low-paying, unstable manufacturing and service jobs as well as their lower labor force participation. As a result, poor Puerto Rican households became more concentrated within the central city and were rapidly becoming spatially and socially isolated from mainstream society.

Previous research suggests that Puerto Ricans residing in U.S. metropolitan areas are highly segregated from both Anglos and Blacks, and they are moderately segregated from other Latino populations (Massey, 1981; Massey & Denton, 1989; Santiago, 1984, 1989). Massey and Bitterman (1985) attribute this to the relatively low socioeconomic status of Puerto Ricans, their relative recency of arrival, and African ancestry. Yet regardless of social status, Puerto Ricans continue to experience high levels of segregation from Anglos. Further, suburban residence has not substantially reduced the high levels of segregation from both Anglos and Blacks. This had led scholars (e.g., Massey & Bitterman, 1985; Massey & Denton, 1989; Massey & Eggers, 1990) to suggest that as a consequence of their continued social and

spatial isolation, "Puerto Ricans are in serious danger of becoming part of a permanent urban underclass" (Massey & Denton, 1989, p. 79).

Massey, Denton (e.g., Massey, 1985; Massey & Denton, 1987, 1988; Denton & Massey, 1989, 1991), and others have underscored the need to link underclass formation or the increased concentration of minority poverty within a framework that also stresses the importance of residential location as a determinant of access to jobs, schools and other amenities. In particular, this body of research highlights the role of residential segregation in shaping metropolitan opportunity structures (e.g. Massey & Eggers, 1990). Barriers to open access within the housing market are perceived to have a domino effect on the kinds and number of job opportunities that are available, the quality of schools, the availability of medical care, and the presence and quality of public services such as recreational facilities, police protection, and sanitation. Thus it is assumed that individuals living within highly segregated environments face serious constraints above and beyond their basic needs for shelter. In light of the recent evidence that suggests Blacks and Puerto Ricans face a similar set of constraints, it is imperative that we have a better understanding of how patterns of Puerto Rican migration and settlement with metropolitan communities are shaped within the context of continuing high levels of residential segregation.

In the present study, patterns of Puerto Rican residential segregation from Anglos and Blacks are analyzed, focusing on changes in these patterns occurring between 1970 and 1980 within a selected number of metropolitan areas. Then recent trends in Puerto Rican suburbanization are compared to those observed for Anglos and Blacks. Using a set of demographic, socio-economic, and housing market attributes, several theoretical explanations for the observed patterns of Puerto Rican segregation across metropolitan areas are tested. Finally, I discuss some of the implications of continued high levels of segregation and relatively low levels of suburbanization for the well-being of Puerto Ricans in these communities.

Have We Really Explained the Paradox of Puerto Rican Segregation?

There are still relatively few studies that examine patterns and trends in segregation for particular Hispanic subgroups (e.g. A. de Santiago, 1984; Massey, 1981; Massey & Denton, 1989). It is important to note that studies of Puerto Rican segregation have been generally restricted to a few cities (most notably, New York). For example, the recent study by Massey and Denton (1989) focused primarily on 10 SMSAs with sizable Puerto Rican

populations. Findings reported by Massey (1981), A. de Santiago (1984), and Massey and Denton (1989) suggest that although Puerto Ricans experienced high levels of segregation from both Anglos and Blacks, the level of Puerto Rican/Anglo segregation was considerably lower than the level of Black/Anglo segregation. In a study of 25 central cities, A. de Santiago (1984) found that during the 1970s, Puerto Rican segregation from Anglos and Blacks dropped sharply and the level of Black/Anglo segregation in these areas showed modest declines. Whether these patterns are upheld when examining entire metropolitan areas is one of the objectives of the current study.

However, despite the lack of a broader base of empirical evidence from which to make theoretical inferences, several strong assumptions have been made regarding the nature of Puerto Rican segregation in metropolitan America. Jackson (1981) speaks of a paradox — contrary to what is expected, Puerto Ricans are less segregated than Blacks although they are more economically disadvantaged. Moreover, Rosenberg and Lake (1976) suggest that unlike the case for Blacks, when Puerto Ricans “invade” new residential areas widespread residential turnover is not inevitable. Guest and Weed (1976) indicated, however, that Puerto Ricans resided in relatively separate communities within the cities they examined. Also, Massey and Bitterman (1985) argue that because of their African ancestry, Puerto Ricans are less likely to object to living in close proximity to Blacks. Indeed, they suggest that Puerto Ricans are drawn “strongly toward co-residence with non-Hispanic Blacks” (p. 326). They posit that Anglo avoidance of Puerto Ricans stems from their low socioeconomic status and close proximity to Black neighborhoods.

The most common explanation suggests that segregation occurs when minorities spend too little money on housing or differ significantly from the majority population in terms of the attributes that affect residential choice (see Taeuber & Taeuber, 1965; Massey, 1985). According to this “social status” argument, the spatial distance between groups is a manifestation of their social distance. As particular groups experience increased social mobility that will allow for their social integration (i.e. assimilation), a process of spatial integration is initiated. Individuals move towards residential areas where others of similar social status reside. This results in a reduction in the spatial isolation between groups. During this process, new groups “invade” established neighborhoods provoking the succession of old residents and the formation of new racial or ethnic enclaves.

Other potential explanations have focused on the “voluntary” aspects of segregation (Rosenberg & Lake, 1976; Massey & Bitterman, 1985). An “ethnic status or solidarity” argument has been posited that states that some ethnic groups remain highly segregated because they do not seek spatial

assimilation with Anglos or other groups (Lieberson, 1980). Instead, they prefer to seek out residential locations near other members of the same group. Ethnic enclaves are formed once critical population thresholds are met, which in turn facilitate the provision of goods and services to group members. On the other hand, an "Anglo prejudice" argument has been described by Massey and Bitterman (1985), among others, that suggests that when particular groups (i.e., minorities) attempt to assimilate, they encounter strong resistance by Anglos who want to avoid coresidence. Anglos may use individual or institutionalized mechanisms or discrimination in order to avoid sharing residential areas. A third argument has been posited by Massey and Bitterman (1985) to particularly address the issue of Puerto Rican segregation. This argument, which they call the "racial heritage" hypothesis, suggests that groups that are identifiable on both ethnic and racial grounds, are less resistant to living near other racial minorities because they share common ancestral ties. Thus, Puerto Ricans do not mind living with or near Blacks because so many Puerto Ricans consider themselves to be Black. Although this argument was specifically developed to look at the situation of Blacks and Puerto Ricans, it really can be (and in practice, has been) extended to examining segregation between distinct Hispanic or Asian groups. As a result of commonalities in history, culture, language, and the like, it is often assumed that Mexicans, Puerto Ricans and Cubans will share residential areas. However, the literature tends to gloss over the fact that Puerto Ricans, Blacks, and other minorities may not want to live in the same neighborhoods and may exhibit high levels of prejudice towards one another.

The social status, ethnic status, and racial heritage arguments have been criticized as explanations for Puerto Rican segregation from Anglos and Blacks (Kantrowitz, 1973; Rosenberg & Lake, 1976). In past studies of minority segregation from Anglos, differences in human capital have accounted for a small fraction of the observed extent of segregation (Galster, 1986; Galster & Keeney, 1988; Taeuber & Taeuber, 1965). Further, if socioeconomic differences were the primary determinants of segregation, what accounts for the relatively low level of segregation between poor and affluent Anglos? Why are poor Anglos less segregated than higher status minorities? Why is Puerto Rican segregation from Anglos seemingly insensitive to increasing socioeconomic status or shifts to suburban locations? Further, there is little empirical evidence to support the ethnic solidarity argument. Although there are no comparable studies of Puerto Rican preferences regarding neighborhood racial or ethnic characteristics, existing evidence for Blacks derived from public opinion polls suggest that there is little support for the notion that Blacks prefer to live in segregated neighborhoods (see Galster, 1986; Kain, 1986). Finally in terms of the racial heritage

argument, one might ask why Puerto Ricans are so highly segregated from Blacks, despite their African ancestry and similar economic conditions. Also, what happens with ethnic groups, such as Puerto Ricans, that are distinct from majority populations on a number of lines (i.e., ethnic, racial, linguistic, economic)? For example, is Puerto Rican segregation from Anglos and Blacks because of ethnicity or does it reflect that Puerto Ricans are perceived as being neither Black nor White? Are racial differences more important than economic differences? These are questions which have only received cursory attention in previous studies and warrant further consideration.

Additional problems arise when we consider that these arguments were developed to describe a process of urban growth and change that has been radically transformed in the postwar period. Contemporary patterns of social and spatial mobility are markedly different in metropolitan areas experiencing massive economic restructuring and decentralization. Further, earlier models failed to consider the impact of interminority competition in the housing market (Denton & Massey, 1991; Rosenburg & Lake, 1976). Prior work has focused on residential change as it occurs between two groups. Contemporary urban neighborhoods are multiethnic, so a number of groups may be competing for residential space in the same neighborhoods. Within this scenario, a number of factors come into play. In the case of Puerto Ricans, we see that also as people of color, they encounter restrictions in their residential choices and are often competing with Blacks (or others) for housing in the same or contiguous neighborhoods. Access to housing often becomes a game of roulette in the manner as Rosenberg and Lake (1976) describe, so that "majority group preferences for Puerto Rican versus Black tenants and neighbors are balanced against the relative socioeconomic standing of the minority groups to determine the outcome of interminority competition" (p. 1148). Yet in a multiethnic world, how are these scenarios weighed and balanced?

Massey and Bitterman (1985) claimed to have "explained" the paradox of Puerto Rican segregation, stating that Puerto Rican racial ancestry, in combination with their low socioeconomic status, formed the basis for high levels of segregation from Anglos. Yet we have just identified a few of the questions that they really have not been able to address completely. Additional factors that need to be considered include assessing the impact of annexation or incorporation within metropolitan areas, the effect of direct Puerto Rican migration to the suburbs, and the influence of labor recruitment activities on Puerto Rican mobility and subsequent segregation. For example, Puerto Ricans were recruited by agricultural concerns in southern New Jersey since the 1940s. Many of these migrants settled out in the Camden area —

technically a suburb of Philadelphia. But it could be argued that these Puerto Rican "suburbanites" were not living in areas that reflect higher socioeconomic status and access to higher quality of housing or services, nor did they come to reside in this area through the process of spatial assimilation.

Also, given the relatively few cities or metropolitan areas that have been studied to date, it seems highly unlikely that existing explanations for observed patterns of Puerto Rican residential segregation are complete. Given such vast differences in the magnitude and timing of Puerto Rican migration to various urban areas in the United States, it seems reasonable to expect that generalizations made from only a handful of the existing Puerto Rican communities seriously compromises our understanding of the process. As the Puerto Rican population continues to disperse away from the New York metropolitan area, knowledge about these secondary centers will be crucial.

Another dimension that needs to be incorporated within existing empirical models reflects the "involuntarily" aspect of segregation, stemming from institutionalized discriminatory behavior within urban housing markets, which places constraints on the residential choices available to minorities. In most empirical studies, the "unexplained" portion of the variance has been assumed to reflect the unmeasured effects of discrimination. However, greater attention is needed to model discriminatory acts by landlords, real estate agents, and mortgage lending institutions. Such practices exacerbate segregation if they are used to exclude minorities from nonminority neighborhoods (Galster, 1986; Galster & Keeney, 1988). Despite the open housing legislation of the late 1960s, discriminatory practices in both the rental and sales housing markets continue to exclude Blacks and Latinos from predominantly Anglo neighborhoods. Moreover, housing audits reveal that the severity of discrimination against Latinos is similar to that encountered by Blacks, especially among dark-skinned Latinos (Hakken, 1979; James, McCummings, & Tynan, 1984; James & Tynan, 1986; Wienk, Reid, Simonson, & Eggers, 1979).

In this study, I propose to examine the social status, ethnic solidarity, racial heritage, and discriminatory behavior arguments posited in previous empirical research. The impact of metropolitan housing market variables will also be examined. This analysis should provide additional insights regarding the factors driving Puerto Rican segregation from Anglos and Blacks, drawing on a sample of metropolitan areas that reflect the diversity of residential settings within which these phenomena occur. For illustrative purposes, the results of this analysis will be compared with patterns of Black segregation from Anglos.

Method

Data

Census tract data used in the calculation of segregation indices were drawn from the 1970 Fourth Count Summary Tapes (File A) (U.S. Bureau of the Census, 1973a) and the 1980 Summary Tape File (STF1A) (U.S. Bureau of the Census, 1983a). In addition, comparable area data for selected metropolitan areas were extracted from the data file prepared by Massey and Denton (see Massey & Denton, 1987, 1988). Socioeconomic indicators for Puerto Ricans, Anglos, and Blacks were derived using the 1970 Public Use Sample (5%) (U.S. Bureau of the Census, 1973b), the 1980 Public Use Microdata Samples (U.S. Bureau of the Census, 1983b), and published Census reports (U.S. Bureau of the Census, 1973c, 1983c). The study includes the 49 SMSAs that had Puerto Rican populations of 4,000 or more in 1980 and is part of a larger dataset of 142 communities with Latino populations exceeding 5,000 persons in 1980. Approximately 85% of all Puerto Ricans in the United States resided within these metropolitan areas in 1980.

Mutually exclusive racial and ethnic groups for 1970 and 1980 were defined using the conventions described in Massey and Denton (1987). In 1980, the 100% item on Spanish Origin was used to create these separate groups. For 1980, persons of Spanish origin were subtracted from the White and Black groups to create what is identified here as the Anglo and Black populations. Persons of Puerto Rican descent were self-identified using this item. For the 1970 data, White Spanish were subtracted from White totals and Black Spanish were subtracted from Black totals in each tract to create comparable Anglo and Black populations. In 1970, first- and second-generation Puerto Ricans were enumerated as persons of Puerto Rican birth or parentage. Because nine out of ten Puerto Ricans were either born in Puerto Rico or had parents who were born on the island, these items are very comparable.

Measures

Segregation was measured using the Index of Dissimilarity (D) which is described in detail in Taueber and Taueber (1965) and White (1986). The Index of Dissimilarity measures the overall unevenness in the distribution of subpopulations across areal units as census tracts. The index varies from a minimum of 0 (total integration) to a maximum of 1.0 (total segregation) and describes the minimum percentage of either subpopulation that would have

to move in order to achieve spatial integration. Scores between .00 and .29 reflect low levels of segregation, those between .30 and .59 are moderate, and those above .60 reflect high levels of segregation (Kantrowitz, 1973).

In order to test the social status, ethnic solidarity, racial heritage, and discrimination hypotheses as predictors of the patterns of Puerto Rican segregation observed in the sample of metropolitan areas in 1980, a multivariate model was developed and is described below. Metropolitan-level estimates were derived for Puerto Ricans, Blacks, and Anglos using the 1980 Public Use Sample Files (U.S. Bureau of the Census, 1983b) and U.S. Census published reports (U.S. Bureau of the Census, 1973c, 1983c). Social status is measured in terms of the income differential between Puerto Rican, Anglo, and Black households. As Puerto Rican and Black households approach parity with Anglos in terms of income, it is expected that segregation from Anglos will decline. Ethnic solidarity is proxied by three variables, proportion Puerto Rican, proportion island born, and a dummy variable for the recency of Puerto Rican migration to the metropolitan area. This measure focuses on the timing of migration and when the Puerto Rican population reached a minimum threshold of 4,000. It is coded 0 = principal migration after 1970, and 1 = principal migration before 1970. It is hypothesized that Puerto Rican segregation from Anglos and Blacks decreases as the size of the Puerto Rican population grows but increases in metropolitan areas experiencing recent Puerto Rican migration. Racial heritage is measured by the proportion of black Puerto Ricans in the metropolitan area. Because Anglos avoid coresidence with Blacks they should also avoid coresidence with Puerto Ricans who are black. However, it is expected that Puerto Rican/Black segregation should diminish if black Puerto Ricans seek coresidence with Blacks.

Additional variables incorporated in the model include several demographic and market indicators that provide us with a way of measuring the potential for spatial integration. Demographic variables include the total population of the SMSA, which is logged, and the proportion of Puerto Ricans residing in the suburbs. The greater the absolute size of the SMSA, the less likely Puerto Ricans or Blacks will have contact with Anglos or with each other. In light of continued suburbanization, the extent to which Puerto Ricans are able to locate within suburbs is a critical determinant of their ability to integrate with both Anglos and Blacks. Two housing market indicators measure the supply and demand for housing. The availability of housing is measured using the SMSA vacancy rate. Housing demand is measured through a proxy, what I call the crowding index, which is the

proportion of Puerto Ricans in occupied housing units with 1.01 or more persons per room. As the density of Puerto Rican neighborhoods increase, the average Puerto Rican will have fewer Anglo or Black neighbors. Also, in areas where the housing availability is high, Anglos are more likely to avoid coresidence with Puerto Ricans or Blacks; Puerto Ricans are more likely to avoid coresidence with Blacks. However, if the market is tight, multiple ethnic or racial groups will be competing for residential space in the same neighborhoods thereby promoting spatial integration.

Discriminatory behavior in the housing market is measured using an item constructed from the results of the 1977 Housing Market Practices Survey (Wienk, Reid, Siminson, & Eggers, 1979). The specific measure is an index of rental housing availability that compares the treatment accorded to Black auditors with that accorded to Anglo auditors. The gross measure reflects the proportion of audits where Anglos are favored over Blacks in terms of information about apartment availability, choices, apartments volunteered, and waiting lists. Data is available for the housing sales as well, but the information on rental housing was selected for this study because the majority of Puerto Ricans and Blacks are renters. The index is a conservative estimate of the "taste for discrimination" within a given metropolitan area. Unfortunately, national-level data from the recent HUD audits measuring the extent of housing discrimination against Blacks and Latinos are still unavailable. However, it is assumed that rental housing markets that highly favor Anglo renters would also be more likely to use institutionalized discriminatory practices against Puerto Ricans.

One control variable is incorporated as a predictor of segregation: the proportion of metropolitan employment located in the central city. Puerto Ricans and Blacks would be less able and willing to commute to suburban areas to live or work. Therefore, both groups would be more segregated from Anglos in SMSAs with high proportions of central-city jobs.

In order to address several methodological concerns that occur with these data, a weighted OLS procedure was used. First, because the index of dissimilarity is a limited range variable, the logit transformation of the segregation scores were used in the analysis. The logit is derived as follows: $\text{logit}(p) = \ln[p/(1-p)]$. Also, because the data are for metropolitan areas and not for individuals, the dependent and predictor variables need to be corrected to resolve the problem of heteroscedasticity. Therefore, each variable included in the three equations was weighted using the weight described in the Appendix.

Results

Residential Segregation Between Puerto Ricans, Anglos, and Blacks

One way to look at segregation is to measure the extent to which one group lives in neighborhoods separate from another particular group. The Index of Dissimilarity indicates the proportion of persons who would have to move in order to have an integrated residential area. According to the data presented in Table 1, the typical pattern of segregation in the majority of the metropolitan areas is one of high levels of segregation between Blacks and Anglos, generally high levels of segregation between Puerto Ricans and Anglos, and moderate levels of segregation between Puerto Ricans and Blacks. On average, 61% of all Puerto Ricans would have to move from their place of residence in 1980 in order to integrate with Anglos in their communities. Levels of Puerto Rican/Anglo segregation were highest in Hartford, Chicago, and Philadelphia ($> .750$). Segregation from Anglos was lowest in Anaheim, Orlando, and Riverside ($< .400$). Of interest, levels of Puerto Rican segregation from Anglos did not fall into the low range in any of the SMSAs in the sample. This finding is consistent with the experience of Blacks residing in the same areas.

Although Puerto Rican segregation from Anglos is considered to be high, it is still an average of nine points lower than the level of segregation between Blacks and Anglos. For the most part, Puerto Ricans are less segregated than Blacks. However, there are several metropolitan areas where Puerto Ricans are more segregated than Blacks. These include Allentown, Bridgeport, Hartford, Honolulu, Killeen, Lancaster, Lawrence, Lorain, New Britain, New Brunswick, Reading, Rochester, Springfield, Trenton, Vineland, Waterbury, Wilmington, and Worcester. In general, Puerto Ricans in these communities represent the predominant minority group and Black populations are generally smaller. Within the existing literature there is some discussion regarding the development of zones of minority residence which act to "buffer" Anglos from contact with less "desirable" racial or ethnic groups. It is possible that in areas of multiple minority groups, one group will serve as that buffer. In many communities, it is thought that Puerto Ricans serve as a buffer between Anglo and Black neighborhoods. In the places mentioned above, Black neighborhoods may serve that function of buffering Anglos from Puerto Ricans. Unfortunately, we do not know very much about this phenomenon at this time so these comments are merely speculative.

The average level of Puerto Rican/Black segregation is 12 points lower than the average Black/Anglo segregation scores (.58 and .70, respectively).

Table 1. Size of the Puerto Rican Population and Indices of Dissimilarity for Puerto Ricans, Blacks, and Anglos in Metropolitan Areas of 4,000 or More Puerto Ricans, 1980

Metropolitan Area	Index of Dissimilarity				
	Puerto Rican Population	% of Total Population	Puerto Rican/Anglo	Puerto Rican/Black	Black/Anglo
Allentown	10,317	1.7	.716	.435	.605
Anaheim	5,903	.3	.340	.388	.458
Atlantic City	6,033	3.1	.611	.696	.739
Boston	29,495	1.1	.763	.543	.775
Bridgeport	23,479	5.9	.781	.461	.759
Buffalo	8,729	.7	.679	.752	.801
Chicago	126,713	1.8	.795	.883	.883
Cleveland	14,153	.8	.721	.901	.877
Detroit	7,484	.2	.660	.817	.875
Ft. Lauderdale	8,865	.9	.374	.732	.839
Gary	10,117	1.6	.697	.648	.908
Hartford	27,023	3.7	.832	.576	.768
Honolulu	11,435	1.6	.465	.569	.449
Houston	4,035	.1	.389	.718	.756
Jersey City	55,476	9.9	.535	.737	.766
Killeen	4,246	2.0	.562	.296	.510
Lancaster	6,731	1.9	.756	.198	.687
Lawrence	6,809	2.4	.718	.467	.405
Long Branch	7,243	1.5	.500	.499	.667
Lorain	8,954	3.3	.703	.572	.651
Los Angeles	36,928	.5	.475	.712	.812
Miami	44,376	2.7	.461	.638	.805
Milwaukee	8,456	.6	.697	.754	.839
Nassau	50,642	1.9	.482	.647	.776
New Britain	5,804	3.9	.642	.305	.502
New Brunswick	20,001	3.3	.690	.572	.571
New Haven	9,779	2.2	.701	.569	.703
New York	877,907	9.7	.708	.574	.816
Newark	61,820	3.1	.760	.652	.819
Newburgh	6,459	2.5	.463	.374	.565
Orlando	8,864	1.3	.362	.799	.772
Paterson	36,465	8.1	.778	.464	.816
Philadelphia	78,767	1.7	.790	.803	.826
Providence	4,715	.5	.686	.443	.721
Reading	7,567	2.4	.765	.299	.658
Riverside	4,610	.3	.365	.441	.548
Rochester	13,180	1.3	.703	.487	.686
San Diego	5,485	.3	.402	.445	.640
San Francisco	19,402	.6	.506	.642	.721
San Jose	6,395	.5	.432	.299	.489
Springfield	19,990	3.7	.776	.691	.751

Table 1 Continued

Metropolitan Area	Index of Dissimilarity				
	Puerto Rican Population	% of Total Population	Puerto Rican/Anglo	Puerto Rican/Black	Black/Anglo
Tampa	10,777	.7	.454	.717	.789
Trenton	7,540	2.5	.717	.512	.710
Vineland	10,965	8.3	.537	.594	.437
Washington, DC	9,785	.3	.448	.684	.701
Waterbury	6,314	2.7	.710	.501	.643
West Palm Beach	4,507	.8	.523	.726	.842
Wilmington	4,713	.9	.657	.548	.643
Worcester	5,764	1.5	.731	.371	.556
Average	36,147	2.3	.613	.575	.701

Levels of Puerto Rican segregation from Blacks range from a low of .20 in Lancaster to .90 in Cleveland. In six communities, the level of Puerto Rican/Black segregation was the same or higher than the level of Black/Anglo segregation (Chicago, Cleveland, Lawrence, New Brunswick, Orlando, and Vineland). Moreover, Puerto Rican segregation from Blacks fell into the low range in only four communities—Killeen, Lancaster, Reading, and San Jose—indicating a fairly high degree of coresidence with Blacks.

Looking at the data presented in Table 2, we find that there is considerable variation in Puerto Rican segregation by regional location, size of metropolitan area, and size of the Puerto Rican community. For all groups, segregation scores were highest in the Midwest and lowest in the West. Of interest, the average level of Puerto Rican/Anglo segregation in the Northeast was slightly higher than that experienced between Blacks and Anglos. This may be attributed to the extremely low socioeconomic status of Puerto Ricans living in the Northeast. In the South and West, where Puerto Rican communities are generally small, Puerto Rican segregation from Anglos is substantially lower than Black/Anglo segregation. Several potential explanations for this come to mind to explain the patterns observed between Puerto Ricans and Anglos in these areas. On the one hand, Puerto Ricans may in effect become indistinguishable either through their relatively small numbers or by their integration with other Latino groups who have high levels of contact with Anglos. On the other hand, Puerto Ricans residing in these communities may have higher socioeconomic status and are able to socially and spatially integrate with Anglos.

Puerto Ricans were more segregated from Anglos in the midsize metropolitan areas, whereas Puerto Ricans living in the largest metropolitan areas

Table 2. Indices of Dissimilarity for Puerto Ricans, Blacks, and Anglos By Region, Size of Place and Size of Puerto Rican Population in 49 Metropolitan Areas, 1980

	<i>n</i>	Index of Dissimilarity			Proportion Puerto Rican
		PR/A	PR/B	B/A	
Average Region	49	.613	.575	.701	.02
Northeast	27	.686	.527	.686	.03
Midwest	6	.712	.763	.839	.01
South	9	.470	.651	.740	.01
West	7	.426	.499	.588	.01
Size of place					
< 249,999	5	.612	.478	.566	.04
250,000 - 499,999	10	.711	.429	.651	.03
500,000 - 999,999	13	.626	.595	.704	.02
1,000,000+	21	.557	.654	.755	.01
Size of Puerto Rican population					
< 4,999	6	.530	.529	.670	.01
5,000 - 9,999	21	.591	.525	.662	.02
10,000 - 19,999	9	.619	.632	.691	.02
20,000 - 39,999	6	.720	.555	.750	.04
40,000 - 79,999	5	.606	.695	.798	.04
Chicago		.795	.883	.883	.02
New York		.708	.574	.816	.10

were the least segregated from Anglos. This may reflect the recency of Puerto Rican migration to smaller SMSAs. In contrast, Puerto Ricans and Anglos were most segregated from Blacks in the largest metropolitan areas. Puerto Rican, Anglo, and Black segregation was lowest in Metropolitan areas with fewer than 10,000 Puerto Ricans. Puerto Rican segregation from Anglos generally increases in SMSAs with 40,000 or less Puerto Ricans but declines in SMSAs with more than 40,000 Puerto Ricans. Patterns of segregation between Puerto Ricans and Blacks are more varied, but generally reflect a trend towards increasing segregation in metropolitan areas with higher proportions of Puerto Ricans. However, this pattern does not hold in SMSAs with 20,000 to 40,000 Puerto Ricans or in New York City where Puerto Ricans are more likely to share neighborhoods with Blacks.

Previous research suggests that Puerto Rican segregation from Anglos is relatively insensitive to residential location. As shown in Table 3, the patterns

observed in 18 SMSAs generally tend to support this assumption. Regardless of residential location, Puerto Ricans experienced high levels of segregation from Anglos in both 1970 and 1980, although the levels of segregation declined during the 1970s. On average, Puerto Rican segregation from Anglos in these metropolitan areas decreased from .718 to .668. There was not much difference in the level of segregation from Anglos in either central cities or within the suburban ring. Within these central cities, Puerto Rican segregation from Anglos declined from .678 to .631; in the suburbs segregation scores dropped from .695 in 1970 to .608 in 1980. Of interest, Puerto Rican suburbanites had higher levels of segregation on average, than their central city counterparts in 1970. However, this had changed by 1980, with the substantial decline in segregation between Puerto Ricans and Anglos living in suburbs. Further, this decrease did not occur in all places. Puerto Rican segregation from Anglos actually rose in Boston, Newark, Paterson, and Philadelphia. The reasons for this increase are still not clearly understood but I would tentatively suggest the following. If we adhere to the social status argument, declining Puerto Rican socioeconomic status would produce a widening gap between them and Anglos thereby provoking Anglos to avoid residence with Puerto Ricans. This might adequately address the overall pattern of segregation within the metropolitan area, but I am not certain that this is an adequate explanation for the increasing segregation in the suburban ring. I would speculate that housing market factors would be crucial in trying to untangle what was occurring. Increased housing costs as well as intense discriminatory behavior by realtors and lenders may account for the increases observed in these areas. Thus even higher status Puerto Ricans faced greater constraints in residential choice.

In an analysis of Puerto Rican and Anglo segregation from Blacks, which is not presented here, I found that segregation from Blacks declined more sharply during the 1970s. By 1980, the average level of Puerto Rican/Black segregation had fallen from .736 to .673 — only slightly higher than the level of Puerto Rican/Anglo segregation. On average, Black/Anglo segregation scores declined from .827 in 1970 to .782 in 1980. Of interest, was the average nine point decrease in both Puerto Rican and Anglo segregation from Blacks in suburban areas by the end of the decade. In particular, Puerto Ricans residing in the suburbs were living in neighborhoods with higher proportions of Black residents.

Patterns of Suburbanization

The level of suburbanization experienced by Puerto Ricans, Blacks, and Anglos was measured using the proportion of residents living outside of the

Table 3. Puerto Rican Segregation from Anglos in Selected SMSAs, Measured by Index of Dissimilarity, 1970-80

SMSA	1970			1980		
	SMSA	CC	Suburban Ring	SMSA	CC	Suburban Ring
Boston	.781	.766	.745	.782	.746	.727
Buffalo	.778	.675	.793	.704	.670	.605
Chicago	.815	.756	.712	.805	.724	.602
Cleveland	.805	.665	.812	.748	.573	.590
Detroit	.827	.727	.861	.761	.691	.737
Gary	.826	.771	.889	.694	.576	.710
Jersey City	.613	.615	.618	.540	.460	.611
Los Angeles	.614	.648	.586	.538	.580	.506
Miami	.489	.500	.427	.449	.467	.406
Milwaukee	.808	.744	.867	.754	.694	.689
New York	.769	.745	.536	.724	.699	.489
Newark	.777	.747	.655	.763	.780	.656
Paterson	.733	.651	.768	.777	.706	.832
Philadelphia	.770	.800	.742	.789	.827	.741
Rochester	.773	.703	.725	.710	.645	.521
San Francisco	.656	.652	.636	.541	.579	.509
San Jose	.586	.523	.637	.500	.429	.575
Washington, DC	.505	.511	.507	.448	.518	.434
Average	.718	.678	.695	.668	.631	.608

central city in each of the census years. As shown in Table 4, we see that the proportion of Puerto Ricans living in suburbs declined from 43% in 1970 to 41% in 1980. The proportion of Puerto Ricans living in suburbs showed substantial variation across metropolitan areas. Relatively few Puerto Ricans were living in the suburbs surrounding cities such as Bridgeport, Hartford, Milwaukee, New Britain, New York, and Waterbury. However, Puerto Ricans living in places outside of the New York metropolitan area (i.e., New Jersey, California, and Texas) were more likely to be living in the suburbs. In part, I suspect that these patterns reflect labor recruitment practices. In the former SMSAs, Puerto Ricans were recruited to work in factories located in the central city and their residential location was in close proximity to the workplace. In the latter SMSAs, migration is more recent and may reflect the growing number of professional and skilled workers who were recruited in areas outside of the traditional Puerto Rican communities.

A number of SMSAs experienced a decline in the proportion of Puerto Rican suburbanites. In particular, Puerto Rican communities in the Northeast

Table 4. Changes in the Proportion of Puerto Ricans Living in Suburbs 1970-80

Metropolitan Area	Proportion of Puerto Ricans Living in Suburbs		
	1970 (n = 48)	1980 (n = 48)	% Change 1970-80 (n = 48)
Allentown	83.3	58.5	-24.8
Anaheim	83.5	84.8	+1.3
Atlantic City	74.1	68.1	-6.0
Boston	35.3	34.3	-1.0
Bridgeport	6.3	5.7	-0.6
Buffalo	29.9	21.4	-8.5
Chicago	9.4	11.6	+2.2
Cleveland	10.8	13.3	+2.5
Detroit	35.8	44.9	+9.1
Ft. Lauderdale	86.4	86.3	-0.1
Gary	43.9	27.4	-16.5
Hartford	7.5	8.9	+1.4
Honolulu	58.7	63.8	+5.1
Houston	35.5	35.5	0.0
Jersey City	50.7	51.6	+0.9
Killeen*	79.5	57.2	-22.3
Lancaster	17.3	11.4	-5.9
Lawrence	23.2	15.9	-7.3
Long Branch*	80.5	71.8	-8.7
Lorain	5.5	10.3	+4.8
Los Angeles	53.5	62.5	+9.0
Miami	81.0	72.2	-8.8
Milwaukee	15.4	8.8	-6.6
New Britain	6.3	7.7	+1.4
New Brunswick*	86.9	83.6	-3.3
New Haven	11.3	16.3	+5.0
New York	4.7	2.0	-2.7
Newark	26.3	35.7	+9.4
Newburgh*	61.4	64.0	+2.6
Orlando	85.8	83.2	-2.6
Paterson	50.0	33.3	-16.7
Philadelphia	37.5	40.3	+2.8
Providence	78.4	47.6	-30.8
Reading	13.4	8.1	-5.3
Riverside	91.6	84.1	-7.5
Rochester	17.3	20.0	+2.7
San Diego	52.6	46.3	-6.3
San Francisco	64.2	73.3	+9.1
San Jose	54.3	40.1	-14.2
Springfield	41.9	38.5	-3.4

(continued)

Table 4 Continued

Metropolitan Area	Proportion of Puerto Ricans Living in Suburbs		
	1970 (<i>n</i> = 48)	1980 (<i>n</i> = 48)	% Change 1970-80 (<i>n</i> = 48)
Tampa	42.3	62.5	+20.2
Trenton	14.2	18.5	+4.3
Vineland	14.3	18.1	+3.8
Washington, DC	82.1	85.4	+3.3
Waterbury	6.6	7.8	+1.2
West Palm Beach	84.6	84.7	+0.1
Wilmington	39.2	41.8	+2.6
Worcester	10.4	9.1	-1.3
Average	43.4	41.2	-2.2

NOTE: Excludes Nassau-Suffolk which does not have a central city.

* New SMSA in 1980. Calculations were based on matching 1970 geographical areas to 1980 SMSA boundaries.

and Midwest were likely to experience steep declines. Part of this decrease may reflect growth of the Puerto Rican population. For example, the Puerto Rican population rose sharply during the 1970s in places like New York, Paterson, and Springfield. However, other plausible explanations tie into the earlier discussion of housing market conditions and declining socioeconomic status of Puerto Ricans that have restricted access to suburban residential locations.

Suburban residence varied considerably by race, regional location, and size of the metropolitan area. As shown in Table 5, 72% of Anglos lived in the suburbs in 1980. This was more than twice as high as the proportion of Blacks living in suburbs and 30 points higher than the proportion of Puerto Rican suburbanites. Racial differences in suburban residence were substantially higher in the Midwest, where less than 20% of Puerto Ricans and 15% of Blacks lived in suburbs as compared to 72% of all Anglos. Lower than average levels of Puerto Rican and Black suburbanization were also noted for the Northeast. In contrast, these differences narrowed considerably in the South and West where the majority of Puerto Ricans lived in suburbs. Indeed, the proportion of Puerto Ricans living in suburbs was almost the same as the proportion of Anglos in suburbs. Although Blacks experienced lower levels of suburbanization in these regions, nearly 43% of Blacks in the South and 50% of Blacks in the West were residing in suburban areas. Further research is needed to unravel the reasons or these patterns of suburban residence. Again, a key element may be the labor recruitment practices that in large

Table 5. Proportion of Puerto Ricans, Blacks, and Anglos Residing in Suburban Areas by Region, Size of Place, and Size of Puerto Rican Population for 49 Metropolitan Areas, 1980

	<i>n</i>	Puerto Rican	Black	Anglo
Average	49	42.4	34.6	72.4
Region				
Northeast	27	33.3	29.0	71.2
Midwest	6	19.4	14.6	72.2
South	9	67.6	52.9	80.7
West	7	65.0	50.2	66.2
Size of place				
< 249,999	5	31.8	42.2	68.3
250,000 - 499,999	10	19.3	26.4	70.6
500,000 - 999,999	13	52.4	33.5	74.0
1,000,000+	21	49.8	37.4	73.2
Size of Puerto Rican population				
< 4,999	6	58.5	49.3	79.1
5,000 - 9,999	21	38.6	30.9	71.4
10,000 - 19,999	9	41.7	31.7	68.1
20,000 - 39,999	6	38.1	31.4	74.6
40,000 - 79,999	5	59.9	51.0	83.3
Chicago		11.6	15.8	73.6
New York		2.0	8.2	21.3

measure determined initial settlement within these metropolitan areas. These residential patterns were then altered by changing economic and demographic conditions as well as exclusionary practices that restricted access into suburban neighborhoods.

Puerto Ricans in large metropolitan areas (> 500,000) were more likely to live in suburbs than Puerto Ricans in small or midsize suburbs. More than half of all Puerto Ricans in larger metropolitan areas resided in suburban areas; in midsize suburbs this was less than 20%. The proportion of Puerto Ricans living in suburbs also varied by the size of the Puerto Rican community. Puerto Rican suburbanization was highest in SMSAs with 40,000 to 80,000 Puerto Ricans. However, within the largest Puerto Rican communities, relatively few Puerto Ricans lived in the suburbs.

Explaining Existing Segregation Patterns

The results of the weighted least squares regressions are presented in Table 6. Predictors of Puerto Rican, Anglo, and Black patterns of segregation

Table 6. Weighted Least Squares Regressions Predicting Levels of Segregation Between Puerto Ricans, Blacks, and Anglos—Full Sample

Variable	Equations Predicting Segregation Between					
	Puerto Ricans and Anglos		Puerto Ricans and Blacks		Blacks and Anglos	
	B	(SE)	B	(SE)	B	(SE)
SMSA demographic characteristics						
Ln (total population)	.019	(.068)	.178	(.073)	.230**	(.064)
% living in suburbs	-.017**	(.003)	-.013**	(.003)	-.017**	(.003)
Ethnic solidarity						
% Puerto Rican or Black	-.022	(.030)	-.008	(.031)	.042**	(.011)
Recency of migration	.367**	(.133)	.538**	(.141)		
% island born	.003	(.003)	-.001	(.004)		
% foreign born					.006	(.011)
Racial heritage						
% Puerto Rican Black	-.043**	(.016)	-.014	(.017)		
Social status						
Puerto Rican/Anglo income differential	-.650**	(.224)				
Puerto Rican/Black income differential			-.152	(.197)		
Black/Anglo income differential					-.083	(.446)
SMSA market indicators						
Crowding index	.007	(.008)	.019*	(.008)	.021**	(.007)
Vacancy rate	.007	(.016)	.053**	(.016)	.040*	(.017)
% employment in central city	-.117**	(.004)	-.011**	(.004)	-.012**	(.004)
Discriminatory practices in rental housing market	.001	(.010)	.005	(.011)	.001	(.012)
Intercept	1.360	(.930)	-2.059*	(.966)	-2.265**	(.847)
Adjusted R^2	.757		.566		.722	
F	14.277**		6.580**		14.578**	

NOTE: $n = 48$. Standard errors in parentheses. Logit transformations of segregation scores were used in the equations. Recency of migration dummy variable was coded 0 = threshold population of 4,000 reached after 1970; 1 = threshold population reached before 1970. Earnings differential reflects the ratio of Puerto Rican household income to Anglo or Black household income in the Puerto Rican equations. In the Black equation, it is the ratio of Black to Anglo household income.

* $p < .05$; ** $p < .01$.

were estimated for the full sample of SMSAs with 4,000 or more Puerto Ricans. Since a number of the SMSAs had relatively small proportions of Puerto Ricans, sensitivity analysis was conducted in order to examine the robustness of the findings. Although this analysis is not presented here, we found that the signs and magnitude of the coefficients remained relatively stable across all of the equations.

In the Puerto Rican/Anglo equation, the most significant predictor of Puerto Rican segregation from Anglos was the lower socioeconomic status of Puerto Ricans. Increasing Puerto Rican social status was associated with declining segregation from Anglos. Only one of the ethnic solidarity proxies was significant but the sign of the coefficient was in the opposite direction. Increases in Puerto Rican segregation from Anglos were associated with older, Puerto Rican communities. I suspect that this may reflect differences based on the size of the Puerto Rican population as well as the socioeconomic characteristics of the residents. Moreover, a number of these communities in the Northeast and Midwest were sharply divided along racial or ethnic lines prior to Puerto Rican migration. As Puerto Ricans moved to these areas, access to even poor Anglo neighborhoods was probably restricted.

Of interest, this analysis fails to support the racial heritage hypothesis that suggests Anglos avoid coresidence with Puerto Ricans who are also black. In part, this result may stem from a measurement problem reflecting different perceptions of race on the part of Puerto Ricans and Anglos. Racial heritage as perceived by Puerto Ricans is quite different from Anglo perceptions. In 1980, when Puerto Ricans were asked to identify themselves in racial terms, approximately 45% considered themselves to fall within the "other race" category. Less than 5% considered themselves to be black. Even if we use a non-White category, segregation from Anglos does not increase as the proportion of non-White Puerto Rican increases. This suggests that Anglo prejudice may be driven by something other than skin color.

Increases in the proportion of Puerto Ricans living in the suburbs was associated with declining segregation from Anglos suggesting that suburban neighborhoods are more integrated in these metropolitan areas. The extent to which Puerto Ricans are able to move into suburban subdivisions will have a tremendous impact on the degree to which they can spatially integrate with Anglos. However, given the trends that suggest greater concentration in central cities and the continued deterioration of Puerto Rican economic well-being, the likelihood of suburban residence seems to be limited.

Only one of the metropolitan market indicators was found to be a significant predictor of Puerto Rican/Anglo segregation: the proportion of employment in the central city. As might be expected, segregation decreased in areas with higher proportions of jobs in the metropolitan area. Decentralization of

employment is linked to Anglo suburbanization as Anglos also seek residence in close proximity to work.

Puerto Rican segregation from Blacks was particularly affected by the recency of Puerto Rican migration. Puerto Ricans were more segregated from Blacks in the older Puerto Rican communities. I would suspect that these patterns in part reflect that Puerto Ricans during the postwar period were moving into metropolitan areas that already had established Black neighborhoods and housing available for Puerto Ricans was located outside of the ghetto. However, one cannot discount the possibility that the high degree of segregation from Blacks reflects Puerto Rican prejudice and avoidance of Black neighborhoods. Segregation between the two groups is higher in the larger SMSAs but is declining in the suburbs. Again it seems that for the relatively small numbers of Puerto Ricans and Blacks that make it into the suburbs, suburban neighborhoods are more integrated. Housing market variables play an important role in Puerto Rican segregation from Blacks. Increasing Puerto Rican demand for housing results in greater spatial isolation from Blacks. This may reflect a filling in of residential areas that diminishes Puerto Rican contact with Blacks. In metropolitan areas with higher levels of available housing, Puerto Ricans tend to avoid coresidence with Blacks. However, segregation between Puerto Ricans and Blacks tends to decline in metropolitan areas that have high proportions of central city employment. It seems that both groups may be competing for housing in the same or overlapping neighborhoods.

In the Black/Anglo equation, demographic and housing market factors are also significant predictors of segregation. Blacks in larger metropolitan areas were highly segregated from Anglos. Anglo avoidance of coresidence also intensified in SMSAs with large Black populations. As has been the case for Puerto Ricans, Black suburban residence was associated with declining Black segregation from Anglos. It seems that spatial integration is fostered by the continuing development of multiethnic neighborhoods—many of which are located in the suburbs. Increasing Black housing demand and high rates of vacant housing units were associated with increased Black segregation from Anglos, suggesting that Black neighborhoods were becoming more Black and Anglos were able to avoid residing near Blacks where the housing supply was abundant.

The analysis confirmed that, except for the case of Puerto Ricans and Anglos, the level of segregation was insensitive to rising social status. Also, island-born Puerto Ricans or foreign-born Blacks were not more likely to be segregated from Anglos than their native-born counterparts. One of the most surprising results was the relatively weak association between segregation

and discriminatory behavior in metropolitan housing markets. In part, this may reflect a measurement problem because the Housing Market Practices Survey did not conduct audits in all of the SMSAs used in this study and regional averages were used for those areas. It should be noted, however, that in analyses not presented here, which examine predictors of segregation in the largest Puerto Rican communities, discrimination in the rental housing market is a significant predictor in the Puerto Rican/Black and Black/Anglo equations. This suggests that these behaviors may be particularly acute in the largest metropolitan areas.

Discussion

For Puerto Ricans living in the United States, the level of segregation from Anglos and Blacks varied considerably, but, on average, was quite high—61% of Puerto Ricans would have had to change their place of residence in 1980 in order to spatially integrate with Anglos. The average level of segregation between Puerto Ricans and Blacks was only three points lower. However, the level of Puerto Rican segregation from Anglos averaged 13 points lower than that for Blacks and Anglos. Segregation patterns also varied by region and size of place with Puerto Ricans experiencing the highest levels of segregation from Anglos in the Northeast and in smaller metropolitan areas. Further, levels of Puerto Rican segregation seem to be relatively insensitive to residential location within the metropolitan area. Puerto Rican segregation from both Anglos and Black remained high in both central cities and suburbs throughout the 1970s, although the evidence suggests that the levels of segregation declined, particularly in the suburbs.

In contrast to the high degree of the Anglo suburbanization, approximately 41% of all Puerto Ricans were living in suburbs—a proportion that, on average, declined in the 1970s. However, there was considerable variation in the proportion of Puerto Rican suburban residents ranging from less than 10% in areas such as New York City and Hartford to more than 80% in places such as Tampa and New Brunswick. In a number of SMSAs in the Northeast and Midwest, the proportion of Puerto Ricans living in the suburbs declined markedly in the 1970s.

Multivariate analysis reveals that high levels of Puerto Rican segregation from Anglos was associated with the lower socioeconomic status of Puerto Ricans, low levels of Puerto Rican suburbanization and residence in the older Puerto Rican communities. The racial heritage argument as an explanation of Puerto Rican segregation from Anglos was not supported as evidenced by the data. Of interest, higher concentrations of jobs within central cities were

associated with declining levels of segregation between all three groups, although the effect is strongest in the Puerto Rican/Anglo equation.

These findings still do not provide us with the answer to part of the paradox that Jackson (1980) and Massey and Bitterman (1985) previously described. We still have not adequately answered the question of why Puerto Ricans are less segregated from Anglos than Blacks — perhaps one of the reasons behind this reflects the historical context of their migration and settlement. Targeted labor recruitment practices not only had an impact on destination but also affected the residential location within particular SMSAs. I suspect that it is a significant factor linked to the higher levels of Puerto Rican suburbanization. Also in the interminority competition for coresidence near Anglo neighborhoods, Puerto Ricans may be considered more desirable neighbors by Anglos. Perhaps Puerto Rican neighborhoods do serve as buffer or transitional zones between Anglo and Black neighborhoods. Detailed ethnographic or historical studies of particular Puerto Rican communities are needed in order to fill in this vacuum of our knowledge.

Given the similarities in the economic status of Puerto Ricans and Blacks, we would not expect the high levels of segregation observed between these groups. Existing theoretical frameworks do not adequately account for why Puerto Ricans are so highly segregated from Blacks. Segregation between Puerto Ricans and Blacks declines in areas of more recent Puerto Rican migration, within the suburbs and in tight housing markets. It seems likely that both groups are constrained in their residential choices not only by their socioeconomic status, but also in terms of discriminatory behavior. In metropolitan areas, particularly in the Northeast, both groups are competing for housing in the same or contiguous neighborhoods. Yet in SMSAs where Puerto Rican demand for housing is high or where available housing is more abundant, Puerto Ricans maintain high levels of segregation from Blacks. High housing demand tends to result in a filling in of Puerto Rican neighborhoods and growing isolation from other groups. Greater selection in housing tends to promote selectivity in terms of residential location and it would seem that when given more housing options, Puerto Ricans do not select housing in Black neighborhoods. An important issue that needs to be addressed is the degree to which Puerto Rican prejudice against Blacks plays a role in these patterns. Studies that focus on measuring Puerto Rican prejudice against Blacks as well as attitudes regarding integration would help fill this void.

In the 1980s, the economic plight of Puerto Ricans worsened (Tienda, 1989). If, as our findings suggest, the possibility of residential integration with Anglos is limited by their low socioeconomic status, Puerto Rican segregation from Anglos most likely increased since 1980. Increased concentration in poor, inner-city neighborhoods can only exacerbate the precar-

ious status in which many Puerto Ricans find themselves. As Massey and Eggers (1989) suggest, segregation within neighborhoods that have inadequate schools, limited health facilities, few work opportunities and limited public services contributes to the increased impoverishment of Puerto Ricans and other minorities. Preliminary findings from the recent HUD audits suggest that discriminatory practices in the housing market continues to restrict minority access to housing in this country. Continued exclusion from nonminority neighborhoods will contribute to the continuing deterioration of Puerto Rican economic well-being.

Appendix. Equations for Deriving the Index of Dissimilarity and Weights

$$D = \left[\frac{1}{2} \sum_{i=1}^N \left(\frac{x_i}{X} - \frac{y_i}{Y} \right) \right] \quad [1]$$

where

- x_i = number of x in tract i
- X = number of X in metropolitan area
- y_i = number of y in tract i
- Y = number of Y in metropolitan area

$$S_j = \sqrt{\frac{1}{N_j \times P_j (1 - P_j)}} \quad [2]$$

where

- N_j = Total population in SMSA
- P_j = Relevant D score

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