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THE NEIGHBORHOOD DIVERSITY INDEX: A Complementary Measure of Racial Residential Settlement

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ABSTRACT: This article proposes another research approach available to researchers for studying racial and ethnic integration. The measure, called the Neighborhood Diversity (ND) index, allows researchers to include multiple racial and ethnic categories while adhering to a comparable understanding of integration. The value of the ND index is illustrated through an examination of residential settlement by race in Chicago neighborhoods in 1980 and 1990. Despite the limitations of the measure, the ND index provides an important tool for measuring and categorizing increasingly multiethnic and multiracial populations, and for broadening our understanding of neighborhood integration and transition.

Numerous scholars have dedicated time to developing the most appropriate way to examine racial and ethnic separation in neighborhoods, cities, and metropolitan areas (see Massey & Denton, 1989 for a review). Until very recently, little systematic, in-depth research has been conducted on the extent of racially and ethnically integrated residential areas. In the last decade, scholars have turned their attention toward racially mixed neighborhoods. For the most part, data suggest that racially and ethnically integrated areas can remain stable over time (Ellen, 1996; Lee & Wood, 1990, 1991; Maly, 1998; Ottensmann & Gleason, 1992).

In addition, scholars have critically examined the assumptions made in the quantitative measurement of such a complex social process as residential integration. Recent scholarship (DeMarco & Galster, 1993; Ellen, 1998; Galster, 1998; Ottensmann, 1995; Smith, 1993, 1998) reflects efforts (Helper, 1979; Saltman, 1990) to broaden the debate and develop measures for integration. The purpose of this article is to critically examine the issues, assumptions, and measures of integration that appeared in a recent volume of the *Journal of Urban Affairs*. A series of articles by Smith, Ellen, and Galster gave serious attention to the nature and operationalization of neighborhood integration, specifically delineating comparative and relative approaches to the measurement of racial integration. Smith's article is particularly pathbreaking in its comprehensive and balanced discussion of conceptions and measures of integration.

In this research note, I expand upon this recent scholarship by proposing another tool or approach available to researchers examining residential settlement patterns. I offer a complementary measure,

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entitled the Neighborhood Diversity index (ND), which allows researchers to include four main racial/ethnic categories while adhering to a comparable approach (outlined best by Smith, 1998). The ND index is a neighborhood-level measure that provides researchers more information on the nature of racial settlement patterns. Leaving some of its problematic assumptions aside, the ND index reveals the complexity of measuring racial mixing or separation. Below I explain the logic behind the measure, the strengths (e.g., comparing to its obvious competitor, the entropy index) and weaknesses of the measure, and demonstrate its use in a single city for the census years of 1980 and 1990.

CONCEPTUAL ISSUES IN MEASURING RACIAL AND ETHNIC INTEGRATION

Reviewing the vast literature on residential settlement by race reveals several patterns. First, most scholars focus on documenting the extent of racial separation in metropolitan areas, providing macrolevel information on segregation (and recently on racial integration, see Ellen, 1998). Second, measures of segregation and integration overwhelmingly rely on analyses of the residential separation of whites and blacks, while avoiding (for the most part) measures that consider multiple racial and ethnic groups. The Neighborhood Diversity index reverses these patterns and simultaneously offers a different view of residential settlement patterns. Before I describe the assumptions behind this measure and explain the value it adds, it is appropriate to address the assumptions central to the study of racial integration.

Conceptualizing and measuring something as tenuous as racial or ethnic integration requires answers to several important questions. What is the appropriate unit of analysis? Do we focus on neighborhoods, cities, counties, or metropolitan areas? What are the advantages of each level of analysis? What is an appropriate alternative to measure segregation? What would a measure of integration look like? Is there a set of numbers that a metropolitan area, city, municipality, neighborhood, or even block, must or should consist of in order to be considered integrated? Finally, who is involved? In other words, which racial or ethnic groups are to be included in defining racial integration?

These questions require confronting a series of assumptions. The most complicated involve defining racial integration, which by its nature means different things to different people. The articles by Smith, Ellen, and Galster comprehensively deal with these issues, with Galster categorizing approaches to defining integration as either relative or absolute (1998). The authors do a good job of weighing the strengths and weaknesses of each approach, and I will not revisit their arguments. I do, however, revisit several of the above questions, drawing from the work of Smith, Ellen, Galster, and others.

Unit of Analysis?

Most studies of residential settlement use the metropolitan area as the level of measurement. Tract-level data are relied upon to build estimates of the degree and extent of segregation or integration for the overall metropolitan area. This choice is usually justified as yielding "unambiguous cross-sectional and intertemporal comparability" (Galster, 1998, p. 44). In other words, the approach provides a beneficial portrait of areal units at distinct points in time, allowing for clear comparisons across time and space. By allowing scholars to generalize beyond the experience of a single geographic area, this approach has proven useful. This approach indicates the importance of systematically situated elements in examination of settlement patterns. It is also useful in documenting how economic and demographic conditions and changes affect the formation, maintenance, and reformulation of urban neighborhoods along racial lines.

Equally important, are studies and measures that permit an understanding of intraregional differences. While cross-sectional and intertemporal comparisons are important, they can reduce our understanding of how racial effects manifest themselves at the level of the neighborhood. According to Keller (1968), neighborhoods are pieces of urban territory whose residents and other users attribute an identity and that harbor specific economic uses, with physical boundaries, or social features. Neighborhoods, therefore, need to be the unit of analysis in studies of racial integration. This approach

would complement cross-sectional and intertemporal studies and bring research on racially integrated areas down to the neighborhood, an analytical unit more consistent with cultural and psychological definitions of urban space. Quantitative analyses of neighborhoods are a necessary beginning to increase our understanding of how to study the extent to which integrated places occur within the general urban landscape.

What is Integration?

What would an alternative measure to racial and ethnic segregation look like? I agree with Smith's comparative model where he defines integration by comparing the racial and ethnic proportions of a sub-unit to those of a larger unit. Integration should be conceptualized as a continuum ranging from close to the racial proportions found in the larger area to far from that proportion. While the argument for a statistical definition of racial integration has merit, I argue that it omits the cultural context in which residents and neighborhoods exist. This context not only matters for understanding the meaning people give to the social processes of integration, but also for constructing accurate measures of integration as a demographic condition. The comparative model suggested here presumes that there are different definitions and perceptions of what constitutes a racially integrated neighborhood. These perceptions and definitions are influenced by the context and history of the larger area (e.g., residents in Chicago or Detroit would naturally view integration differently than those in Minneapolis or Omaha).

Also, measures that only consider the even distribution of two racial or ethnic groups are problematic. On a practical level, such measures require successive two-group comparisons. From an efficiency angle, a single measure that includes multiple racial and ethnic groups is more comprehensive. On a substantive level, while measures that only consider an even distribution of two racial groups would work well in some cities (e.g., Detroit), such a measure would be less robust in multiethnic and multiracial cities. Intuitively, it makes sense to define integration based upon the available pool of residents from different racial and ethnic groups in an area. For example, consider a neighborhood with a racial composition in 1990 that was 50% white and 50% black. This neighborhood would not be racially and ethnically integrated if the city in which it was located had a multiracial and multiethnic mix of residents (e.g., 28% white, 43% black, 14% Hispanic, and 14% Asian). In a city with a white population that is less than one third of the total population, only a few neighborhoods could actually achieve the 50/50 split. Although a city's overall composition is an abstract number to use as a comparison, it does represent the available population, a fact that I address in the final section.

Who is involved?

One weakness of almost all measures of racial integration is the failure to include multiple racial and ethnic groups in a single measure. There is a tradition in measuring segregation and integration of focusing on analyses of the residential settlement patterns of whites and blacks. By his own admission, Smith's formulation does not include analysis across multiple groups. The methods he articulates "must still involve successive two-group comparisons" (1998, p. 22). Ellen attempts to include multiple groups, but her combination of Asians and Hispanics is problematic for several reasons.

Some researchers contend that the focus on black and white separation and integration is justifiable. The harsh and institutional discrimination that African Americans experience in the US housing and labor markets, according to scholars, clearly justifies focusing more closely on black and white integration and segregation in US metropolitan areas. The dramatic division between "Chocolate Cities" and "Vanilla Suburbs" (Farley, Steeh, Jackson, Krysan, & Reeves, 1993) and the fact that Hispanics and Asians experience lower levels of discrimination than African Americans (Yinger, 1996), may warrant an empirical focus on black and white settlement patterns.

There are limits, however, to this argument. According to Suro, it becomes clear that for much of our nation's history the law has only recognized two races, white and black, and has maintained lower-income Latinos as a separate and unequal group. Suro explains how in Texas and the agricultural areas of California and the Southwest, "the culture of discrimination against Latinos facilitated the use of Mexicans as a pool of cheap labor" (1998, p. 82). Similar trends appear when examining the history of Asian Americans in the US. Asian Americans have faced subjugation in a variety of forms, from forced Chinese labor, World War II—era Japanese internment camps, to other forms of discriminatory practices. This is not meant to downplay the pernicious discrimination against African Americans in the US. Regardless of the magnitude of discrimination experienced by African Americans, it is inaccurate to exclude other minority groups when studying integration.

Probably the most significant reason for expanding measures of integration to include multiple racial and ethnic groups is the tremendous population changes occurring in the US. Recent estimates suggest that the combined minority populations (e.g., Hispanics, Asians, and blacks) are increasing nationally at seven times the rate of non-Hispanic whites (Frey & Farley, 1996). Urban areas have dramatically displayed these changes. In the last two decades, America's cities have become more multiracial and multiethnic (Denton & Massey, 1991). While the impact of this growth has varied by urban area (Frey, 1995), the changing racial and ethnic character of the nation and cities, and the social impact of these changes, makes it difficult to focus only upon white and black residential settlement patterns in cities (Frey, 1995; Harrison & Bennett, 1995).

Finally, there is the issue of simplicity. Scholars who wish to include multiple groups must conduct rather laborious and successive two-group combinations. A single measure that allows multiple racial and ethnic groups offers a straightforward indicator of racial and ethnic integration. This proposition, however, is not new. Scholars have argued that the entropy index is the most appropriate and useful measure of diversity or integration (White, 1986). The entropy index assesses how evenly distributed a set of groups are in a geographical area, allowing the researcher to determine the number of different racial or ethnic groups to include. Thus, five groups could be included (e.g., black, white, Hispanic, Asian, American Indian), two (e.g., black and white), or twenty (e.g., various ethnic groupings). Whatever number is chosen, the measure reveals those areas where no one group is represented over others.

The entropy index corrects a limitation of most measures of separation or integration by allowing multiple groups to be examined in a single measure. However, use of the entropy index is problematic, because it does not consider the context of the larger geographic area. Again, we are faced with an absolute method for defining integration. Consider an examination of neighborhood racial integration where it is assumed (as the entropy index does) that all groups should be equal in their distribution (e.g., four racial groups, thus 25% each). In a city where one group is underrepresented in the overall population (e.g., in 1990, Asians made up around 3% of Chicago's population), a neighborhood will have a hard time meeting the integration requirement because the supply of individuals for that group is low. As stated earlier, this is a key limitation when studying neighborhoods because a city's overall distribution reflects the availability of the racial groups living there.

NEIGHBORHOOD DIVERSITY INDEX

I suggest that scholars should consider examining racial and ethnic integration with a measure that: (1) focuses on neighborhoods, (2) employs a comparative approach to define integration, and (3) includes multiple racial and ethnic groups. With these suggestions in mind, I propose a quantitative measure, referred to as the Neighborhood Diversity (ND) index, which combines the strengths of previous measures. The ND index considers four groups: white, black, Asian, and Hispanic. The first three categories include individuals who did not identify themselves as being of Hispanic origin. Also, individuals identifying themselves as American Indian or other are included in the white category. This procedure obviously creates a large umbrella group that masks cultural traditions and diversity.

The logic of the ND index is fairly straightforward. The population of the tract is compared to the city average for that year. The formula used to calculate spatial differentiation is:

$$ND = \frac{1}{2} \left(|C_W - T_W| + |C_B - T_B| + |C_H - T_H| + |C_A - T_A| \right)$$
 (1)

Where C is a racial group (i.e. W = white, B = black, H = Hispanic, A = Asian) percentage for the whole city and T is the racial groups percentage for the tract. Tracts are examined over ten years to uncover areas that have maintained some semblance of racial and ethnic diversity over time.

To illustrate the usefulness of the ND index, I examined residential settlement by race in Chicago neighborhoods in 1980 and 1990. The city of Chicago was selected to illustrate the ND index because it provided a single, unified governing jurisdiction. Chicago neighborhoods with a minimum of 100 residents and without large percentages of individuals living in group quarters (e.g., jails, mental institutions, homeless shelters, and other institutional homes) were selected. An ND index score was calculated for each neighborhood in both 1980 and 1990. This score represented a neighborhood's place along a continuum from racially or ethnically heterogeneous to homogenous, and indicated how close or far a neighborhood was from the city average of the four racial groups. The raw scores were divided into three categories: integrated, moderately integrated, and segregated. The categories are based on the median ND index score (in 1980 the median was 50.33 and 53.19 in 1990). Using the median as the basis, neighborhoods with a ND index score were categorized as follows: (1) 50% or less than the median were considered racially and ethnically integrated; (2) greater than 50% of the median were considered moderately integrated; and (3) greater than the median were considered segregated. As a measure of central tendency, the median was considered a good basis for division in that it reflects the overall environment in which neighborhoods are situated without being unduly influenced by outlying or anomalous tracts.

RACIAL INTEGRATION IN CHICAGO

As indicated in Table 1, in 1980, 5.3% of Chicago neighborhoods were racially and ethnically integrated. This percentage increased to 7% by 1990. The majority of Chicago neighborhoods in the 1980s were segregated, although over one third of the neighborhoods were moderately integrated. Table 2 provides detail on neighborhood movement and residential stability. In general, the racial composition of Chicago neighborhoods in 1980 was strongly associated with the racial composition in 1990 (gamma = .95, P < .001). However, segregated and moderately integrated neighborhoods were more stable (defined here as remaining in the same category over a 10 year period) than integrated neighborhoods (just over 60% of integrated neighborhoods in 1980 remained integrated by 1990).

Table 3 displays the relative stability of neighborhoods over the decade. While only 3.2% of all neighborhoods were stably integrated, over one third were moderately integrated, and nearly half were segregated. An almost even percentage of neighborhoods experienced transition, either moving toward or away from integration. While data confirm that Chicago neighborhoods categorized as segregated were most prevalent in the 1980s, there were two countervailing trends. First, roughly 12% of all Chicago neighborhoods were either integrated or moving toward integration during the 1980s. Second, over one third of moderately integrated neighborhoods remained stable. While over half of Chicago neighborhoods were either segregated or becoming less integrated, stably integrated

TABLE 1 Neighborhood Diversity Index by Year

	1980		1990	
	#	%	#	%
Integrated	44	5.3	58	7.0
Moderately Integrated	373	44.8	359	43.1
Segregated	416	49.9	416	49.9
N	833		833	

TABLE 2

ND Index—Stability of Integrated and Segregated Chicago Tracts

	1980			
	Integrated	Moderately Integrated	Segregated	N
1990				
Integrated	27	29	2	58
	61.4%	7.8%	5.0%	7.0%
Moderately Integrated	15	299	45	359
	34.1%	80.2%	10.8%	43.1%
Segregated	2	45	369	416
	4.5%	12.1%	88.7%	49.9%
N	44	373	416	833
	5.3%	44.8%	49.9%	100%
	*Gamma =	.95 (P < .001)		

^{*}Populations of 100 or more, 1980 to 1990

neighborhoods did exist and significant percentages were either moderately diverse or moving toward integration. These data support recent findings addressing the existence and stability of racially integrated neighborhoods (Ellen, 1998; Lee & Wood, 1991; Smith, 1998).

Neighborhood Geographic Patterns

A spatial analysis is useful to understand the prevalence and nature of integrated neighborhoods. In order to discuss and analyze neighborhood level data in Chicago, it is useful to refer to the city's 77 community areas. Figure 1 displays the racial character of Chicago neighborhoods in 1980 and 1990 (i.e., data presented in Table 3), according to these community areas. A list of community names is provided in Table 4.

During the 1980s, integrated neighborhoods in Chicago were concentrated in a few community areas: two northern lakefront areas (i.e., Uptown and Edgewater); sections of the near west side; the southern lakefront (Hyde Park); and several southwest side communities (Beverly). Figure 1 also shows the significant number of Chicago community areas that were categorized as moderately integrated during the 1980s. Moderately integrated neighborhoods were located in north side commu-

TABLE 3
Neighborhood Diversity Index—Indication of Stability, 1980–1990

	1980–1990	
	#	%
Integrated	27	5.3
Moving Toward Integrated	76	9.1
Moderately Integrated	299	35.9
Moving Away From Integrated	62	7.4
Segregated	369	44.3
N	833	

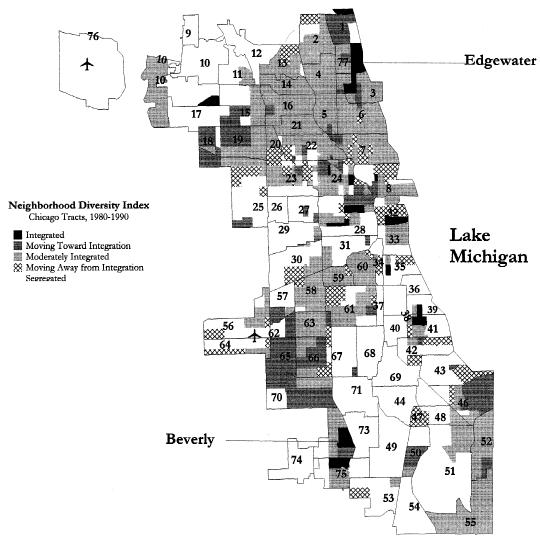


FIGURE 1 Neighborhood Diversity Index—Chicago Neighborhoods, 1980-1990

nity areas, numerous community areas south of the Loop and extending west, and in pockets on both the southeastern and southwestern edge of the city. Also, those neighborhoods that were moving toward integration on the north and south sides were in community areas adjacent to integrated or moderately integrated areas.

As indicated in Table 3, the majority of neighborhoods in the 1980s were either segregated or moving away from integration. The map clearly demonstrates solid and contiguous pockets of neighborhoods on the west side, the far northwest side, and the south side that were stably segregated throughout the 1980s. Also, neighborhoods in the community areas along the gentrifying lakefront, directly west of the Loop in Austin, southwest of the loop, and the far southwest side were moving away from diversity. It is interesting that neighborhoods defined as integrated, moving toward integration, and moderately integrated buffered segregated areas (majority white in the northwest and majority black to the south). From a macro perspective, areas with some racial mix act as buffers between segregated areas.

TABLE 4

Chicago Community Areas

	rage community raises		
1	Rogers Park	40	Washington Park
2	West Ridge	41	Hyde Park
3	Uptown	42	Woodlawn
4	Lincoln Square	43	South Shore
5	North Center	44	Chatham
6	Lake View	45	Avalon Park
7	Lincoln Park	46	South Chicago
8	Near North Side	47	Burnside
9	Edison Park	48	Calumet Heights
10	Norwood Park	49	Roseland
11	Jefferson Park	50	Pullman
12	Forest Glen	51	South Deering
13	North Park	52	East Side
14	Albany Park	53	West Pullman
15	Portage Park	54	Riverdale
16	Irving Park	55	Hegewisch
17	Dunning	56	Garfield Ridge
18	Montclare	57	Archer Heights
19	Belmont Cragin	58	Brighton Park
20	Hermosa	59	McKinley Park
21	Avondale	60	Bridgeport
22	Logan Square	61	New City
23	Humboldt Park	62	West Elsdon
24	West Town	63	Gage Park
25	Austin	64	Clearing
26	West Garfield Park	65	West Lawn
27	East Garfield Park	66	Chicago Lawn
28	Near West Side	67	West Englewood
29	North Lawndale	68	Englewood
30	South Lawndale	69	Greater Grand Crossing
31	Lower West Side	70	Ashburn
32	Loop	71	Auburn Gresham
33	Near South Side	72	Beverly
34	Armour Square	73	Washington Heights
35	Douglas	74	Mount Greenwood
36	Oakland	75	Morgan Park
37	Fuller Park	76	O'Hare
38	Grand Boulevard	77	Edgewater
39	Kenwood		

Note: The 77 community areas in Chicago were delineated more than 50 years ago by the Social Sciences Research Committee of the University of Chicago. Boundaries were based on the following criteria: (1) the settlement, growth and history of the area, (2) local identification with the area, (3) local trade area, (4) distribution of membership of local institutions, and (5) natural and artificial barriers (e.g., Chicago River, railroad lines, local transportation systems, and parks).

Source: Chicago Fact Book, 1995.

Finally, by focusing on neighborhoods and using a conditional measure of integration, it is possible to see the complexity of racial integration in neighborhoods. For example, after mapping the data and determining where diverse areas were clustered, it became possible to look more closely at these integrated areas. Once this was done it became clear that all racially and ethnically integrated neighborhoods were not the same in terms of racial composition, socio-economic distribution, and infrastructure. In fact, because the ND index measures integration at the neighborhood level, it is possible to differentiate types of stably integrated neighborhoods (e.g., different racial and class compositions, housing stock, etc.). For example, during the 1980s, Chicago's Edgewater and Beverly neighbor-

hoods had nearly the same ND index score, had a white majority, and were gaining minorities while losing white residents. Yet, in the 1980s, nearly a fifth of the residents in the Edgewater neighborhoods were Hispanic and Asian, compared to 1% in Beverly. In Edgewater, a quarter of the 19,000 residents were foreign born, and most were low- to moderate-income renters. In Beverly, only 2% of the 8,400 residents were foreign born, and most were middle-income homeowners. In the 1990s, both communities remained integrated according to the ND index, although they were very different in composition.

DISCUSSION

The aim of this article is to provide a critical understanding of residential settlement by considering the changing face of US urban areas. The ND index, a quantitative measure of diversity, is an effort to move beyond the traditional models of residential settlement that define integration or segregation in terms of black and white settlement patterns. Defining integration as the average of four principal racial and ethnic groups, this approach takes into account that central cities have become increasingly multiethnic and multiracial.

The ND Index provides an important tool for measuring and categorizing increasingly multiethnic, multiracial populations, and for broadening our grasp of the meaning of both neighborhood integration and transition. The measure honors the complexity of integrated neighborhoods by examining multiple groups and putting the meaning of integration in the context of the overall social environment.

However, I would be remiss if I did not address the limitations of the ND index. First, the ND index is biased toward tracts that have a homogenous racial composition of the group least represented in a city. For example, a Chicago neighborhood that was nearly all Asian or all Hispanic in 1980 or 1990 appeared more segregated than an all white area in either year. The ND Index is based on the city average and individual minority groups appear in smaller percentages. By the nature of the ND index, non-white homogenous neighborhoods will have higher ND scores. While this is a limitation, it should not undermine continued use of the measure. I argue that an all Asian or all Hispanic neighborhood in a city with less Asian or Hispanic residents should be considered more segregated. Concentrated in one area, residents have few options other than to be pioneers in neighborhoods where their racial or ethnic group is not present. Also, the aim of the ND index is to identify racially and ethnically integrated neighborhoods, not segregated ones.

Second, scholars have pointed out the limitations of a comparative model for defining integration, referring to it as atheoretical and arbitrary. For example, Galster argues that while the absolute approach (i.e., a predetermined range of racial composition used to indicate integration) is atheoretical and arbitrary in its "derivation of mixtures comprising integration . . . it is no more atheoretical and arbitrary than the relative approach" (1998, p. 44). I concur with Galster's analysis. A comparable model is limited, principally in the arbitrary and atheoretical nature of selecting a larger comparison area. However, it appears no more atheoretical or arbitrary than an absolute model. There is little agreement on a proper definition of integration. Integration, be it social or demographic, is a complex process, one not easily captured by a fixed statistical definition. While all definitions of integration are somewhat arbitrary and atheoretical, the case for one over another is not clear. Triangulating methods and models provides varying and complementary understandings of a complex world.

Third, the ND index is not standardizable. The measure is not well suited for cross-sectional and intertemporal comparisons. This is particularly true for cities with relatively homogeneous racial and ethnic populations. While this is problematic for those looking at patterns among cities, an equally salient argument can be made for an intralevel focus. As previously discussed, such a perspective can describe how integrated neighborhoods vary. This is important as residents living in areas with different social characteristics and dynamics have different needs and concerns. Low- to moderateincome renters may be more concerned with basic survival issues (e.g., jobs, safe schools, access to transportation and shopping). Middle- to upper-income homeowners are more concerned with quality of life issues (e.g., property values, sustaining a certain way of life). Acknowledging that not all integrated areas are the same requires sensitivity to the types of policies necessary to maintain racially integrated areas. These issues, however, are difficult to capture with any of the standard measures.

Fourth, the values of the ND index are not unique, nor do they tell us which group(s) are under-or over-represented within a given tract. This limits its usefulness as a measure for cross-sectional and intertemporal comparisons. The measure appears most useful for exploratory research, particularly for identifying multiethnic and multiracial communities within a geographical context. This quality is useful for providing context for qualitative studies of racially and ethnically integrated neighborhoods (Maly, 1998; Nyden, Maly, & Lukehart, 1997).

Finally, the ND index should not be viewed as the one measure of demographic integration, but rather as another tool for measuring racial integration. Obviously, there are additional issues to consider. For example, Smith (1998) developed a measure based upon the degree to which the housing characteristics of a tract match the income and rent paying abilities of different racial groups. In the same issue of the *Journal of Urban Affairs*, Galster offered a more complex conception of such a market approach (1998). Smith and Galster do an excellent job of describing the different dimensions of demographic diversity. In addition, quantitative measures alone are incomplete. Qualitative analyses must also be included in order to understand the conditions under which racially integrated neighborhoods occur and the forces that help maintain them. There are recent qualitative studies that provide a better understanding of racially integrated neighborhoods (Maly, 1998; Nyden et al., 1997). These various measures and methodologies only serve to emphasize the reality that triangulation is the most judicious approach to examining racial and ethnic integration. Scholars should use various methodological tools to examine the demographic presence and social nature of racial integration.

In conclusion, the ND index is a complementary measure that allows researchers to include multiple racial and ethnic groups while adhering to a comparable approach. The application of the ND index in an examination of Chicago neighborhoods offers an illustration of the value added by the measure. The data also confirm previous research, verifying that despite the prevalence and persistence of segregation, stably integrated neighborhoods did exist. For example, in 1990, 7% of Chicago neighborhoods were racially and ethnically integrated (an increase from approximately 5% in 1980). While only 3% of neighborhoods in Chicago were stably integrated during the 1980s, their presence questions the presumed inevitability of segregation in urban America. "Stable diverse communities are not a figment of a progressive policy researcher's imagination"; stably diverse communities are not uncommon, and they deserve scholarly attention (Nyden et al., 1997, p. 534). In fact, during the 1980s, close to 100,000 individuals in Chicago lived in neighborhoods labeled as stably diverse and in 1990, 231,103 lived in integrated neighborhoods. Most policy efforts are aimed at preventing discrimination rather than providing support for communities working to maintain the racial and ethnic mix of their communities. Indeed, if support was given to promoting and maintaining racially and ethnically mixed neighborhoods this number might be higher.

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