

## **Racial Residential Segregation in South Africa and the United States**

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### **Abstract**

This paper compares the historical context of segregation in the United States and South Africa. We examine the antecedents of segregation in the US from slavery (mid 1800s) through the Civil Rights era, and in South Africa from segregation (in the early 19<sup>th</sup> century) through apartheid. Next, we compare the degree of racial residential segregation of blacks from whites in the US since the passage of the 1968 Fair Housing Act, to that of Africans (Blacks) from whites in South Africa since the election of the African National Congress in 1994. To measure the current patterns of racial residential segregation, we calculate the Racial Index of Dissimilarity (RID) and the Index of Dissimilarity (ID) using post apartheid and post civil rights data in South Africa and the US. Finally, we explore the various explanations for racial residential faced by blacks in South Africa and in the US.

## Introduction

The vast majority of research on residential segregation focuses on the United States. However, in one of the most influential books on racial residential segregation in recent years, *American Apartheid*, Massey and Denton (1993) assert that the impact of racial residential segregation in the US is similar to the impact of racial residential segregation in South Africa (1993, p.15). The authors contend that the consequences of segregation in the United States are that blacks have been forced to reside in poverty stricken neighborhoods, where crime and violence are widespread, which has led to "fragmented families" and a lack of access to educational, economical, and health institutions for blacks in the United States and South Africa (Massey and Denton 1993). This comparison provides the basis of our examination to understand whether the patterns of residential segregation of blacks from whites in the United States are the same for Africans in South Africa.

There is a dearth of empirical evidence on racial residential segregation in South Africa, both prior and post apartheid (Evans 1997, Christopher 1992, and Khalfani et. al 2005). The current research project is motivated by the lack of research on South Africa, which impedes our ability to make accurate comparisons between the two countries. In this paper, we present a critical analysis of Massey and Denton's (1993) hypothesis. We begin by reviewing the existing literature on racial residential segregation in the United States and South Africa. First, we compare the historical context of segregation in the United States and South Africa. We examine the antecedents of segregation in the US from slavery (mid 1800s) through the Civil Rights era, and in South Africa from segregation (in the early 19<sup>th</sup> century) through apartheid. Next, we compare the degree of racial residential segregation of blacks from whites in the US since the passage of the 1968 Fair Housing Act, to that of Africans (Blacks) from whites in South Africa since the election of the African National Congress in 1994. The comparative analysis is necessary to address the enduring patterns of racial residential segregation which will directly address the statement by Massey and Denton (1993) that apartheid in South Africa is a mirror image of the past experiences in racial residential segregation in the United States. Additionally, a comparative analysis is worth studying because no such empirical study exists which specifically addresses the racial process of segregation in South Africa and the United States. Specifically, our analysis addresses the following research questions: 1. Are there lessons that South Africa can learn from US and/or vice versa by comparing post-apartheid South Africa to the post-Civil Rights US data? What explanation for segregation is most applicable in the post apartheid period in South Africa? 2. What are the levels of residential segregation in post-Apartheid South Africa, by estimating the racial index of diversity (RID) and index of dissimilarity (ID) by examining "post apartheid" data? 3. Finally, is it accurate and/or useful to liken blacks' residential segregation from whites in the US to that of apartheid-era South Africa?

To answer these research questions, we provide a brief historical overview of the emergence of black- white segregation in both the US and South Africa, as well as a review of existing literature related to residential segregation in both countries. Next we describe the data and methods we will employ to address the gaps in the existing literature on South African racial residential segregation. For comparative purposes, we will also review the historical trends in residential segregation in the United States and

South Africa.<sup>1</sup> Finally, after analyzing the current trends in South African residential segregation and a discussion of the similarities and differences between the experiences of blacks in South Africa and the US, we conclude with a consideration of the limitations to our methodology and suggestions for future research.

### **Historical Background of Racial Residential Segregation in the United States and South Africa**

There are several key historical moments that provide the historical context for racial residential segregation of blacks from whites in the US: 1) the enslavement of Africans; 2) the Reconstruction era and establishment and enforcement of Jim Crow laws for the newly-freed blacks, and 3) the Civil Rights Movement, culminating in the passage of the Civil Rights Acts of 1964 and 1965 and the Fair Housing Act of 1968. The earliest forms of segregation in the United States began with the enslavement of Africans, beginning in 1502. In an evaluation of the construction and continuation of racial stratification in the US, Lyons (2002) demonstrates that the “peculiar institution” of slavery afforded the essentials for contemporary residential segregation. Although slavery ended in 1865, blacks still remained second-class citizens during Reconstruction and the Jim Crow era (Lyons 2002). During Reconstruction, blacks sought to insure rights—both economic and political—denied to them under slavery. The Jim Crow era emerged following the Reconstruction period, in which laws restricted blacks from owning land, traveling, holding political office and voting—the same rights they were denied as slaves. Jim Crow segregation survived well into the second half of twentieth century, but was ultimately eradicated as a result of the Civil Rights era, though blacks’ continued struggle for equality in institutions, such as churches, government, school systems, and the employment sector. One legislative enactment, which culminated the Movement, was the Fair Housing Act of 1968 to assure unbiased housing practices and lessen the levels of residential segregation. Together, these three historical periods—slavery, Reconstruction and the advent of Jim Crow, and the Civil Rights Movement—provide a basis for understanding current patterns of racial residential segregation in the US. Thus, the prejudice and discrimination of the past are responsible for the emergence of racially segregated neighborhoods and set the stage for present-day residential segregation (Massey and Denton 1993; Meyer 2000).

Massey and Denton (1993) contend that South Africa's apartheid is a mirror image of discrimination in the United States. However, South Africa can be characterized as having experienced only two key periods: 1) segregation as a product of the exploitation of diamonds and gold in the early 19<sup>th</sup> century; 2) Apartheid as a result of the election of the Nationalist party in 1948. In Beinart and Dubow's (1995) historiography of segregation and apartheid, the authors maintain that segregation began during the Dutch rule, dating back to 1652. However, modern segregation is a result of industrialization of South Africa which was a result of the exploitation of gold and diamonds during the 19<sup>th</sup> century. Segregation transformed into apartheid in 1948 and continued until 1990. After the election of the Nationalist Party in 1948, laws were passed, in which individuals were characterized at birth as White, Asian, Coloured or African. Apartheid forbade interracial sexual relationships and marriages and social institutions, such as schools, restaurants, and libraries were firmly divided by racial

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<sup>1</sup> This section will be discussed thoroughly in the paper due to page restrictions of the extended abstract.

boundaries. Following the election of 1948, Africans were allowed to work in white designated areas but citizenship into larger South Africa was a dream. Africans were forced to live far from the center of the city and migrated into the city for work only and thus the city was "white by night" by returning to their homelands (Seidman 1999).

### Data and Methods

A current analysis of racial residential segregation in South Africa requires data collected in the post-apartheid period (see Zuberi et al. 2004). Therefore, this study employs a 30 percent sample of the 1996 South African Population Census. The 1996 census provides information on age, sex, race, religious affiliation, fertility measures, and economic and educational attainment on all individuals in a household. This census is especially useful and interesting because it also includes information on Africans, who had previously been excluded from censuses. There are approximately 10,516,225 valid cases include in this analysis of the Republic of South Africa. The 1996 Census of South Africa includes the category for "African/Black" instead of just "Black". Khalfani et. al notes that the "1996 census may have been the most complete enumeration ever taken in South Africa."(pg, 19), thereby providing justification of our use of these data.

To compare the United States<sup>2</sup> and South Africa, several measures of segregation are computed. First, the basic index of segregation—the index of dissimilarity, a measure of evenness—was introduced by Duncan and Duncan in 1955, and is calculated according to the formula:

$$ID_{xy} \equiv \sum (x_i - y_i) \div 2 \quad (1)$$

where  $ID_{xy}$  is the index of dissimilarity between the spatial distribution of the X and Y populations within the city. Scores on this index range from 0 (complete integration of the two populations) to 100 (complete segregation), and are interpreted as the percentage of each group that would have to move in order to create neighborhoods with racial compositions identical to that of the metropolitan area (Duncan and Duncan 1955).<sup>3</sup>

Secondly, the interaction and isolation indices are computed to further capture the exposure aspect of residential patterns. The first measure of exposure is the interaction index which estimates the degree to which members of minority group X are exposed to members of the majority group Y. Thus, the interaction index is an averaged weighted by the minority group of each residential unit's majority population. The interaction index (Lieberson) as defined by

$${}_x P_y^* \equiv \sum (x_i \div X)(y_i \div t_i) \quad (2)$$

where  $x_i$ ,  $y_i$ , and  $t_i$  are the numbers of X members, Y members and total population of unit i and X represents the number of X members city wide. The second measure of exposure is the isolation index (Lieberson), which estimates the degree to which members of minority group X are exposed to one another rather than to members of the majority group Y. Thus, the isolation index is an averaged weighted by the minority group of each residential unit's minority population. The isolation index as defined by

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<sup>2</sup> This portion of the analysis is obtained from secondary sources, primarily Massey and Denton 1(1993) and Charles (2003).

<sup>3</sup> The paper will also incorporate the racial index of diversity (RID). RID is computed using data from the enumeration area level for the fifty largest magisterial districts.

$$P_x^* \equiv \sum (x_i \div X)(x_i \div t_i) \quad (3)$$

Both of the exposure measures vary between 0 and 1.00 and are interpreted as the probability that a randomly drawn X - individual shares an area with a member of Y ( the interaction index) or the probability that X individual shares an area with a member of his or her own group ( the isolation index).

The index of dissimilarity, interaction and isolation indices are computed for the fifty largest magisterial districts in South Africa by using data at the enumeration area level to achieve an index for each district. The smallest geographic level of analysis available from the census is the enumeration area. There are 82,799 enumeration areas within South Africa according to the 1996 census. Within each magisterial district are enumeration areas, in which the size of each district varies, with no more than 2 percent of the total population living in one district. Additionally, there are 354 magisterial districts within South Africa according to the 1996 census. However, the range of the total population living with those magisterial districts varies from 1.9 to 20.3 percent. By computing the indices at the magisterial districts in South Africa, we are able to compare residential segregation patterns to the United States.

### Preliminary Findings

Our preliminary findings are based on post apartheid and post civil rights data.<sup>4</sup> Table 1 shows blacks segregation from whites in the 50 largest metropolitan areas, which provide empirical evidence of the level of racial evenness in the United States (Charles 2003). Based on these data, the index of dissimilarity between black and whites is high for all regions in the United States. For example, on average, in the Midwest, 74 percent of blacks would have to move in order to achieve an even or "integrated" region. The major conclusion of the index of dissimilarity, in the post civil rights era is that in relations to whites, blacks are less evenly spatially spread throughout the country, than Asians and Hispanics<sup>5</sup>. Furthermore, in Table 1, the interaction and isolation indices indicate that segregation between blacks and whites remains high. Additionally, blacks are less likely to residentially to interact with whites and more likely to be isolated from whites than their Hispanics and Asian counterparts.<sup>5</sup>

Table 2 presents the level of contemporary segregation in South Africa in the 50 most populous magisterial district, which provides the degree blacks and whites are spread throughout each magisterial district. The dissimilarity index gives the percentage of a particular population that must move to represent an even residential population in comparison to another group. Based on Table 2, black - white segregation remains high in all magisterial districts, ranging from 62.8 to 99.9 percent. Thus, meaning on average, in Soweto, 99.2 percent of the black population would have to move in order to achieve

<sup>4</sup> In addition, the paper will include an analysis of data collect prior and during Apartheid in South Africa and Civil Rights in the United States.

<sup>5</sup> Data are not showed on Hispanics and Asians; refer to Charles( 2003) The Dynamics of Racial Residential Segregation Annual Review of Sociology vol. 29 pg 167- 207 U.S. Bureau of the Census and The Lewis Mumford Center for Comparative Urban and Regional Research.

an even or "integrated" magisterial district. Overall, the comparison of the index of dissimilarity reveals that blacks in South Africa are more segregated from whites than their United States counterparts.

Table 2 also provides the isolation and interaction indices for the 50 most populous magisterial districts in South Africa. The interaction indices are not surprising and are congruent with the other measures of residential segregation. For example, an average interaction index based on magisterial level data between whites and blacks is 4.56. Therefore, there is a 4.56 probability that a randomly drawn white individual will share a residential area with a member of the black racial group. However, there is a .06 probability that a randomly drawn Coloured will share an area with a member of the white racial group (not shown in the table). Therefore, our preliminary conclusion is that on average in South Africa, Africans/Blacks are more likely to share a residential area with Whites, than Coloureds. Therefore, we disagree with the hypothesis of Massey and Denton (1993) that South Africa's apartheid is a mirror image of discrimination in the United States; additionally that the residential experience of blacks in the United States are comparable to African/ Blacks in South Africa.

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