ABSTRACT

PERMUT, TESSA. Ethno-Racial Diversity and Racial Hierarchy in Neighborhood Opportunity. (Under the direction of Dr. Kim Ebert.)

Scholars interested in racial and ethnic inequality have long focused on how residential segregation affects variation in opportunity across neighborhoods, including the presence of poverty and jobs, yet the effects of residential ethno-racial diversity on neighborhood wellbeing remains under-examined. This study responds to this gap with two primary objectives: 1) to explore neighborhood opportunity measures popularized by segregation and neighborhood scholars in diverse ethno-racial neighborhood compositions, thereby extending the study of jobs and poverty beyond a black-white dichotomy; and 2) do so with consideration of racial and ethnic theories of a restructured color line/racial hierarchy. To accomplish these objectives, I investigate how the presence of poverty and jobs spatially varies by ethno-racial composition across neighborhoods in the formerly hyper-segregated Cook County, Illinois with a series of Poisson and Negative Binomial regression models. My findings reveal that, although some ethno-racially diverse neighborhood compositions see greater opportunity than neighborhoods with limited ethno-racially diversity, the presence of jobs and poverty depends largely on what combination of ethnic and racial groups are present in a neighborhood. This complex relationship between ethno-racial diversity and neighborhood opportunity has considerable implications for studies on spatial stratification and the future of the color line.
Ethno-Racial Diversity and Racial Hierarchy in Neighborhood Opportunity

by
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A thesis submitted to the Graduate Faculty of
North Carolina State University
in partial fulfillment of the
requirements for the degree of
Master of Science

Sociology

Raleigh, North Carolina

2016

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DEDICATION

To my parents, Barry and Judy Permut, who somehow always believed I would turn out okay.
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ACKNOWLEDGEMENTS

I would first like to thank my committee chair, Kim Ebert. I am forever indebted to her for the insight and guidance she has provided me both academically and personally. Her generosity, positivity, and encouragement have been invaluable not only to this project, but also my trajectory in graduate school and surely beyond. Thank you for being my mentor. I am also grateful to Martha Crowley, whose knowledge and valuable feedback assisted in the framing and organization of this project. Thank you to Aaron Hipp, who kindly agreed to serve on my committee from outside the sociology department and encouraged a clear and concise explanation of my methodological approach. I would also like to thank my partner throughout this time, Philip Patton, whose approach to science and confidence in my abilities have shaped me considerably. Finally, thank you to my fellow graduate students at NC State who have provided academic and emotional support throughout this process and Jordan Holley, Tim Clark, and Michael Brinkman in particular for providing a substantial amount of that support.
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INTRODUCTION

In his seminal work *The Souls of Black Folk* (1903), W.E.B. Du Bois declared the color line—the physical and social segregation of blacks from whites—the problem of the twentieth century. For most of the twentieth century, research in racial and ethnic inequality largely reified the conception of the color line as a black-white dichotomy through investigations into black-white segregation and its consequences in neighborhoods, work, relationships, and education (Oliver and Shapiro 1989; Massey and Denton 1993; Sigelman and Welch 1993; Rivkin 1994; Anderson and Shapiro 1996). The relevance of this binary historical conception has declined for various reasons, not the least of which is that demographically, the United States is progressing toward a majority-minority nation. In-migration, shifts in Latino and Asian settlement areas, and a growing population of second and third generation Latino and Asian American populations have changed the demographic picture of the United States (Marrow 2009; Logan and Zhang 2009; Hirschman and Massey 2008).

As the United States as a whole has diversified, neighborhoods have likewise grown more diverse. In places with rapid nonwhite population growth, white neighborhood isolation has declined significantly (Turner and Rawlings 2009), the number of neighborhoods without a racial or ethnic majority is increasing (Logan and Zhang 2010), and even suburbs, once a symbol of white flight, have become increasingly nonwhite (Timberlake, Howell, and Staight 2010). That many studies examine demographic trends in neighborhoods is unsurprising, as neighborhoods have long received attention in sociology as sites for the study of racial and ethnic stratification. As early as the 1940s, urban sociologists at the Chicago school studied variation in disadvantage across neighborhoods as a potential cause of spatially patterned delinquency in racial and ethnic minority neighborhoods (Shaw and McKay 1942). Since then,
many scholars have linked neighborhood disadvantage to racial residential segregation (Massey and Denton 1993). Findings from these studies have provided support for the thesis that black residential segregation is positively associated with two common indicators of neighborhood disadvantage: concentrated poverty and limited proximal jobs (Wilson 1987).

Because of the established relationship between black residential segregation and neighborhoods disadvantage, many view increases in racial and ethnic diversity in neighborhoods as an avenue for positive change. Indeed, some scholars suggest that racial and ethnic diversity is a harbinger of segregation’s demise and therefore growing neighborhood equality (Turner and Rawlings 2009; Vigdor and Glaeser 2012). Media sources have touted the benefits of this newfound diversity, noting that immigration has weakened racial biases through contact in diverse neighborhoods (Orfield 2012), improved quality of services and economic opportunity (Florida 2011), and increased school integration and nonwhite educational achievement (Wells, Fox, and Cordova-Cobo 2016). Proponents of diversity may assume its association with greater opportunity (Turner and Rawlings 2009), but, regarding neighborhoods, work has remained relatively exploratory. Focus has been on the demographic patterns of diversification and the interactional experience of diversity rather than structural indicators of opportunity of concern to neighborhood and segregation scholars: poverty and job presence.

In this study, I address this limitation through an examination of the structural conditions of diverse neighborhoods. I investigate how ethno-racial composition of diverse neighborhoods affects the presence of opportunity, as measured in poverty and jobs, across neighborhoods in Cook County, Illinois. I rely on theories of the restructured color line to predict how different ethno-racial groups in diverse neighborhood compositions might affect opportunity. In the
process, this study expands upon two literatures: spatial stratification and the future of the U.S. color line.

Toward this end, I begin with background on development of black residential segregation and seminal studies that focus on the effects of the physical black-white color line. I subsequently detail extant work that explores the differential experience of neighborhood poverty and jobs by race and ethnicity. I continue with a discussion of the trends towards ethno-racial diversification nationally and in neighborhoods and the effects of neighborhood ethno-racial diversity at an interactional level. Then, I discuss my theoretical framework using contemporary theories of the color line/racial hierarchy; specifically noting how these theories can inform demographic trends across physical space. Next, I explain my chosen measures of ethno-racial diversity and neighborhood opportunity, my selection of Cook County, and data utilized in analysis. I then detail my hypotheses and analytic plan for their testing, a series of Generalized Linear Models with a spatial component. Finally, I discuss the results of these analyses and subsequently conclude with a discussion of implications and limitations of this research for the future of the color line and racial stratification.

BACKGROUND AND LITERATURE REVIEW

In 1965, president Lyndon Johnson charged the assistant secretary of labor, John Patrick Moynihan, with the task of exploring “urban ghettos” and their concentration of joblessness and poverty in the U.S. The resultant publication, the Moynihan Report, focused not on the opportunity structure—the means for upward mobility—in urban areas, but on what he perceived as cultural deficits and faulty family structure of black Americans. The report led to considerable public alarm. Since its publication, many social scientists have shifted attention away from cultural deficits and family dysfunction and towards investigations of the relationship between
the residential segregation of black Americans and racial disparities in poverty and joblessness (Kain 1968; Wilson 1987; Massey and Denton 1993; Wilson 1996).

To this day, findings gleaned from the causes and consequences of black residential segregation remain essential to the investigation of the relationship between race and neighborhood poverty and jobs. Black Americans, due to institutional and interpersonal racism and discrimination, have disproportionately resided in segregated neighborhoods rife with disadvantage for nearly a century. White Americans, in contrast, have inhabited spaces with comparatively concentrated affluence. The persistent, pernicious connections between skin color, the conditions of one’s neighborhood of residence, and the consequences of living in disadvantage, has made neighborhood opportunity of black and white neighborhoods—the physical manifestation of the black-white color line—a topic of continued scholarly concern. Accordingly, to illustrate the relationship between race and neighborhood opportunity, I begin by detailing the history of black residential segregation.

*History of Black Residential Segregation*

From 1910-1930, labor shortages in northern cities coupled with racial violence against blacks in the South led to a massive relocation of the Southern black population to the north, what came to be known as “the First Great Migration.” Black residential segregation amassed during this time, as whites in northern cities who experienced sudden demographic changes took action to prevent racial integration through formation of racial covenants and racially exclusionary neighborhood “improvement associations” and even organization violence directed at new-coming black residents that forced them into increasingly segregated neighborhoods (Massey and Denton 1993). In short, by the start of World War II, nearly every city in the U.S. was characterized by at least moderate black residential segregation from whites. The Second
Great Migration from 1940-1970, which saw more than five million blacks migrate from the South to now-segregated inner cities in the Midwest and Northeast, reinforced this pattern, and the status of many black Americans as a physically isolated, central-city population was cemented (Wilson 2009).

In the early 1970s, concern over urban areas in the United States was high. Passage of the Fair Housing Act two years earlier brought public attention to housing discrimination and black segregation, but images of “the ghetto” and its ills were commonplace. At the same time, neoliberalism⁠¹ became the prominent form of political economy, allowing policy-makers to justify mounting income inequality as an expected consequence of welfare trimming (Harvey 2005). This created a symbiosis between race and class that streamlined and rationalized poverty in segregated black neighborhoods (Wilson 1987). These practices concentrated black populations in segments of metropolitan areas characterized by concentrated poverty for the next two decades, when the rate of black Americans in poor, isolated neighborhoods nearly doubled (Massey and Fischer 2003; Wilson 2009).

Racial Hierarchy in Neighborhood Poverty

The relationship between race, residence, and poverty remains salient in the contemporary United States. Black Americans continue to live in neighborhoods with an average income 31 percent below whites, are also more likely to grow up and continue to live in impoverished neighborhoods as adults, and are more likely to experience poverty than whites even in suburban neighborhoods (Massey and Denton 1992; Sharkey 2009). Because blacks earn less than their white counterparts, their residence in impoverished neighborhoods is often attributed to their income. While the symbiotic relationship between black income and residence

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¹ Neoliberalism is an economic model characterized by privatization of formerly public services, limited protectionism, and open trade markets. For a more thorough explanation, see Harvey (2005).
in high-poverty neighborhoods is worth noting, it does not account for the disproportionate experience of neighborhood poverty by blacks. Even middle class blacks are more likely to reside in close proximity to high-poverty neighborhoods than whites of the same income bracket. Indeed, both historically and contemporarily, findings suggest that blacks are far more likely to experience neighborhood poverty than whites, even when controlling for other socio-economic factors (Squires and Kubrin 2005).

The study of racial inequality in neighborhood poverty has largely focused on its differential experience by blacks and whites, but as the U.S. has diversified, scholars have begun to explore the experience of neighborhood poverty for other ethno-racial groups. A bulk of this research focuses on Latinos—now the largest ethno-racial minority group in the U.S.—and their experience of neighborhood poverty relative to blacks and whites. At the neighborhood level, some scholars find more similarity than difference between majority black and majority Latino neighborhoods, particularly when compared to majority white neighborhoods. For instance, Osypuk and colleagues (2009) and Logan (2010) find that compared to majority white neighborhoods, majority black and majority Latino neighborhoods have similarly greater rates of poverty. Others find that the poverty rates of majority black and majority Latino neighborhoods appear similar in their volatility over time compared to majority white neighborhoods, such that even black and Latino neighborhoods with limited poverty are more likely to become impoverished over a ten-year period than neighborhoods inhabited predominantly by whites (Galster et al. 2003). However, some scholars find that despite the similarity between Latino and black neighborhoods when compared to those that are non-Latino white, individual Latinos remain less likely to reside in high-poverty neighborhoods than blacks (Yancey 2003; Lichter, Parisi, and Taquino 2011). The different conclusions regarding neighborhood poverty for Latinos
may be due to the importance of geographic and neighborhood context, as findings indicate that Latinos in suburbs are more likely to see levels of neighborhood poverty similar to white neighborhoods than those Latinos in urban or rural contexts or places where there is a sizable, pre-existing black population (Santiago and Wilder 1991; Lichter et al. 2010).

In an examination of the likelihood of residence in high-poverty neighborhoods from 1990-2010, Firebaugh and Farrell (2015) provide further insight into the experience of neighborhood poverty by race and ethnicity. Their findings show a narrowing between the share of whites and blacks who reside in high-poverty neighborhoods, especially in those places where black segregation declined. In the same period, the gap in likelihood of residence in a high-poverty neighborhood between white and Asian Americans narrowed to a point of near nonexistence. While temporal trends might indicate reduced neighborhood inequality to a degree, the remaining gaps between ethno-racial groups temper optimism about its complete elimination. The difference in the experience of poor neighborhoods between non-Latino whites and blacks remains considerable despite its narrowing, largely due to the size of the original disparity. Furthermore, although smaller than the residual gap between blacks and whites, the difference in neighborhood poverty between Latinos and non-Latino whites remains similarly pronounced.

Taken together, recent findings on the experience of neighborhood poverty for different ethno-racial groups suggest that a racial hierarchy could be emerging wherein blacks remain the ethno-racial group most likely to experience high-poverty neighborhoods and majority black neighborhoods remain the most impoverished, while Latinos are less likely to experience neighborhood poverty than blacks but more so than Asians, and whites and majority white neighborhoods remain the least likely to experience neighborhood poverty.
Racial Hierarchy in Neighborhood Jobs

In the U.S., the second-highest car dependent nation in the world, proximity to jobs is crucial for assessing a neighborhood’s well-being. The presence of jobs in a neighborhood increases its ability to provide goods and services to residents, suggests a strong tax base, and indicates its economic viability (Immergluck 1998). Unfortunately, as is true of poverty, the presence of jobs in U.S. neighborhoods been inexorably tied to race and residential segregation. In his research on the “underclass,” Wilson (1987, 1996) focused on the role of decentralized employment and its corresponding spatial constraints on inner-city blacks, alluding to the theory of “spatial mismatch.” As jobs decentralized in the late 1960s and early 1970s, members of the black middle class with the capability for residential mobility left their former urban neighborhoods to follow middle class whites out of urban centers in decline. Without the tax base of middle class blacks and access to manufacturing jobs, housing values declined, poverty compounded, and working class blacks experienced increasing intersectional disadvantage in inner-city neighborhoods (1987, 1996).

The concept of spatial mismatch popularized by Wilson assumes that the distribution of jobs and industry unequally burdens populations with limited residential choice, such as black Americans who are often relegated to segregated neighborhoods. The foundational spatial mismatch paper by John Kain (1968) found that black residents of Detroit and Chicago experienced spatial disadvantage in job access because of their relegation to particular neighborhoods, affecting their employment outcomes. Subsequent research has supported the spatial mismatch assumption of unique disadvantage in the proximity of jobs for black residents. Even in studies that include other ethno-racial minorities, residential segregation appears to most affect job proximity for blacks (Farley 1987; Stoll and Covington 2011). In these studies, black
residents in highly segregated areas experienced the greatest spatial mismatch, while non-Latino whites experienced the least, with Latino job proximity between the two.

Previous work has provided an overview of the experience of neighborhood poverty and jobs by race and ethnicity, but analyses have focused on the experience of high-poverty or spatially mismatched neighborhoods for individual racial and ethnic groups rather than the structural conditions of neighborhoods of diverse ethno-racial compositions. This study contributes to this extant work by focusing on neighborhood level ethno-racial composition. Rather than predicting the chance of experiencing low opportunity neighborhoods by individual race or ethnicity, I use ethno-racial compositions of whole neighborhoods to explore the association between different combinations of racial and ethnic groups in a neighborhood and the presence of jobs and poverty.

*Ethno-racial Diversity and Declining Residential Segregation*

In recent years, due to immigration, intermarriage, and reproductive patterns, the non-Latino white share of the U.S. population has declined significantly, Latinos have surpassed black Americans as the largest racial or ethnic minority group, and Asians have become the fastest growing ethno-racial group (Brown and Posts 2014). This ethno-racial diversification has been met with trepidation and fear by much of the public, as seen in rising xenophobia and even a return to “old fashioned racism” in some instances (Massey and Pren 2012; Tesler 2013). As a response to the rising concern over the “browning” of the United States, scholars have directed their attention to how ethno-racial diversity affects workplaces, the economy, and schools. In these areas, the empirical findings suggest cause for optimism. Ethno-racial diversity in the workplace increases company profit and worker productivity, labor positions held largely by immigrants play an integral role in industry, and interaction with students of different ethno-

Place-based research, in contrast, has primarily tracked demographic trends in diversification and its relationship with residential segregation rather than its consequences for neighborhoods. In the 1990s, White and Glick (1999) and Frey and Farley (1996) found places where Latino and Asian populations grew most rapidly were also those that saw the greatest decline in black residential segregation, a pattern also reflected in more recent work (Turner 2009). In response to these trends, some have hypothesized a “buffering effect” of other nonwhite minorities, such as Latinos and Asians, on black residential segregation, such that other nonwhites “buffer” the stigma associated with blackness once central to the development of black residential segregation, precipitating declining levels of black isolation. In a nationwide study of the “buffering hypothesis” in 12,002 census-designated places (cities, suburbs, and rural communities), Parisi, Lichter, and Taquino (2014) find those places with present white and black populations that gained a sizable Latino presence (25 percent of the population) had the greatest decrease in black-white residential segregation in the twenty-year period. At a smaller geographic scale, scholars find that whites, blacks, Latinos, and Asians are increasingly present in the same neighborhoods (Logan and Zhang 2010) and the number of multiracial and multiethnic neighborhoods with no majority racial or ethnic group is increasing, especially in those metropolitan areas with a sizable Latino population (Farrell and Lee 2011).

Overall, these studies suggest growing racial and ethnic diversity corresponds with lower levels of black segregation, but the findings show only demographic trends, not the experience of diverse places. In this regard, extant work has focused primarily on what ethno-racial diversity means for interaction in neighborhoods, including its effect on interpersonal relationships,
attitudes, prejudice, and stereotypes. Unlike the positive findings concerning diversity in work and school, these studies have yielded mixed results (Lichter 2013). Some find white residents in diverse neighborhoods express increased distrust in neighbors (Hou and Wu 2009), engage in patronizing and paternalistic interactions (Mayorga-Gallo 2014), and avoid forming connections with nonwhite residents because of racial or ethnic intolerance (Putnam 2007).

Some qualify these findings with suggestions that diversity’s effects depend on the context of the neighborhood, as negative outcomes of contact may be unique to “incidentally diverse” neighborhoods under transition, while positive outcomes from interracial interaction, including more diverse social networks, relationships, and organizations, are evident in neighborhoods formed with the intention of integration (Nyden, Maly, and Lukehart 1997). Yet, even studies exploring intentionally diverse neighborhoods have found an uncertain relationship between diversity and racial equality. In neighborhoods that market themselves as diverse in Chicago, Illinois and Durham, North Carolina, Berrey (2013) and Mayorga-Gallo (2014), conclude that, although diversity is framed as part of neighborhood identity, those in positions of power do not interpret it as a mandate for racial equality. Rather, diversity is a tool wielded for benefits of white residents that has limited effects on racial equality stratification patterns, especially for disadvantaged black residents.

The diverse demographics of the U.S. may indeed portend lower levels of black residential segregation and increased contact between whites and minority racial and ethnic groups, but whether all diverse neighborhoods experience structural realities distinct from those with minimal ethno-racial diversity is unclear. Is all ethno-racial diversity associated with greater opportunity, or is the particular ethno-racial composition of a neighborhood consequential? To
answer this question, I consider the three predominant theories of the color line for the contemporary U.S.: the black-nonblack, white-nonwhite, and tri-racial hierarchies.

THEORETICAL ELABORATION

In this study, I shed light on the relationship between ethno-racial diversity and neighborhood structural conditions by examining how multiple combinations of racial and ethnic groups in a neighborhood are differentially associated with job presence and poverty. This task requires theories that speak to how advantage in American society varies by race and ethnicity. Accordingly, in this section I detail theories of the color line/racial hierarchy that provide insight into how the presence of different racial and ethnic groups in a neighborhood might affect opportunity. Each color line theory considers the effect of racial and ethnic identification on the hierarchical experience of opportunity, but the most salient predictors of ethno-racial group position in the hierarchy differ between the theories.

The Color Line and Racial Hierarchy in an Increasingly Diverse America

At the first pan-African convention, W.E.B. Du Bois aptly elucidated the relationship between the color line and opportunity, that “the color line, the question as to how far differences of race…will hereafter be made the basis of denying to over half the world the right of sharing to their utmost ability the opportunities and privileges of modern civilization” (1900:125). The importance of the color line is thus that its existence implies a racial hierarchy wherein the opportunities of some racial groups are restricted on the basis of their skin color.

Since Du Bois’ prophetic claim, the color line and its hierarchical structure have been a point of debate in studies of race and ethnicity. For the majority of the twentieth century, race and ethnicity scholars conceptualized the color line as black and white. This black-white binary assumed whiteness allowed for a position at the top of the racial hierarchy representative of the
experience of advantage, while blackness, a position at the bottom, aligned with the experience of persistent discrimination and denial of equal opportunity. As detailed in the preceding section, the United States has undergone significant diversification. Unlike the black-white binary of the past, emergent theories of a restructured color line are able to account for growing populations of Latino and Asian Americans in their hierarchical structures. In this regard, emergent theories of a restructured color line have substantial relevance to the current study, which explores opportunity in places with demographics indicative of a changing color line: different ethno-racially diverse neighborhoods. In exploring the relationship between different combinations of ethnic and racial groups in a neighborhood and the primary concern for the color line—opportunity—the findings of this study thus require and inform theories of a restructured color line.

The first alternative color line theory, the black-nonblack color line, assumes the sustained salience of blackness and persistent social distance between black Americans and not only non-Latino whites, but also other ethno-racial minority groups (Alba 1990; Gans 1999; Gans 2005 Marrow 2009). In this conception of the color line, blacks experience unique disadvantages and stratification compared to other ethno-racial minorities (Warren and Twine 1997) such that advantages associated with whiteness becomes increasingly available to non-black ethno-racial minorities and those not associated with blackness. The black non-black color line has found considerable empirical support. Compared to other sizable ethno-racial minority groups in the U.S., blacks experience the most discrimination, are the least likely to have interracial marriages and friendships, are least likely to live in ethno-racially integrated neighborhoods, and are most likely to live below poverty (Pager and Shepherd 2008; Qian 2005; Logan 2013; Sharkey 2014).
From the black-nonblack perspective, ethno-racially diverse neighborhoods should demonstrate the continued salience of blackness. That is, economic activity and household wealth that lead to reduced poverty and increased job presence should be similarly sparse in diverse neighborhoods with a present black population as segregated black neighborhoods. Contrarily, the benefits of whiteness should be open to those ethno-racial minority groups not associated with blackness by residence, therefore diverse neighborhoods without a present black population should be more similar to homogenous white neighborhoods in terms of opportunity than segregated black neighborhoods.

Alternatively, some have theorized the emergence of a “white-nonwhite” color line, also known as the “people of color” perspective. In this conception, the most important predictor of position in the racial hierarchy is whiteness rather than blackness, therefore most Asians and Latinos are classified as “nonwhite” and experience a position closer to blacks than to non-Latino whites in the racial hierarchy (Lee and Bean 2007; Marrow 2009). While it has not found the same empirical support as the black-nonblack color line, there are some indications of shared experiences for all nonwhites that could lead to a binary white-nonwhite divide, such as similar external racialization, civic ostracism, potential discrimination, and relative material disadvantage for all groups of color (Kim 1999; Skrentny 2002).

From the white-nonwhite perspective, the presence or absence of non-Latino whites in a neighborhood should be more consequential than black presence. Therefore, neighborhoods without a significant non-Latino white presence should be similarly disadvantaged because the benefits of whiteness are not open to groups of color. Following this, the conditions of diverse neighborhoods without a sizable non-Latino white population should be more similar to segregated black than non-Latino white neighborhoods. Conversely, non-Latino white
neighborhoods with a present Latino or Asian population, though less advantaged than
homogenous non-Latino white neighborhoods, should see some “benefits” of whiteness due to
the presence of non-Latino whites.

Finally, some scholars point to movement towards a tri-racial hierarchy, wherein non-
Latino whites remain at the top of the racial structure and blacks at the bottom but an
intermediary, or “honorary white,” group that consists of some Asians and Latinos associated
with whiteness and most multiracials emerges between them, as non-Latino whites become
increasingly tolerant of non-black minority groups. In this conception of the color line, the
bottom of the racial hierarchy will expand to incorporate ethnic groups externally racialized as
black by non-Latino whites, creating a “collective black” category that experiences similar
outcomes to black Americans (Gans 1999; Bonilla-Silva 2004). Those theorizing the tri-racial
color line point to the greater incorporation of non-black minorities with non-Latino whites in
measures like rate of intermarriage compared to the persistent social distance between non-
Latino whites and black Americans (Bonilla-Silva 2004).

Whiteness and blackness are both salient predictors of opportunity in the tri-racial
conception of the color line. In regard to neighborhoods, the tri-racial color line is distinguished
by its multi-tiered hierarchy. Consequently, neighborhoods with a Latino or Asian population
present but without a black population present should show evidence of residents’ “honorary
white” status with greater opportunity than those neighborhoods without a present non-Latino

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2 Those theorizing the tri-racial hierarchy emphasize that position in the hierarchy is not the result of racial or ethnic
identification alone, but how skin color correlates with association with whiteness or blackness through factors like
intermarriage and nation of origin. It thus draws on context of reception (see Portes and Rumbaut 2006) and
assimilation (Waters et al. 2010) literature in addition to skin pigmentation to understand the differential treatment
of ethno-racial groups. Because this is an exploratory study, I rely on a loose interpretation of the tri-racial hierarchy
wherein more than two tiers (white-nonwhite, black-nonblack) are evidence of a tripartite hierarchy. The more
complex delineations of many tri-racial theorists are outside the scope of this study.
white population. At the same time, diverse neighborhoods without a present white population should differ little from those that are segregated black, as Latino and Asian populations who reside near blacks experience U.S. society as the “collective black”. The most integrated neighborhoods—those containing white, black, and Latino or Asian populations—should fall somewhere between diverse white and diverse black, as they contain residents who normally increase racial hierarchy position—non-Latino whites—as well as those who remain the most disadvantaged—blacks. Thus, diverse neighborhoods occupy a tier of opportunity that significantly differs from both segregated black and homogenous white neighborhoods.

It remains unclear what effect different combinations of ethno-racial groups have on neighborhood opportunity. This study examines whether the poverty and job presence of ethno-racially diverse neighborhoods imply a black-nonblack, white-nonwhite, or tri-racial color line by comparing them to each other and to those neighborhoods with minimal ethno-racial diversity. In the next section, I use the assumptions of the theories of the future color line as a guide for predicting neighborhood opportunity (i.e. presence of jobs and poverty) for the multiple ethno-racial compositions across Cook County.

**HYPOTHESES**

In the “white-nonwhite” color line conception, whiteness is more consequential than blackness for position in the racial hierarchy. Consistent with this conception, Hypothesis 1 and H1A predict greater levels of opportunity with higher shares of non-Latino whites in a neighborhood:

Hypothesis 1: the predicted low skill job and total job counts will be greatest for diverse neighborhoods with a dominant non-Latino white population and all-white
neighborhoods, in contrast to other neighborhoods (see Table 1 for full ethno-racial composition descriptions).

Hypothesis 1A: the predicted number of households below poverty will be lowest for diverse neighborhoods with a dominant non-Latino white population and all-white neighborhoods, in contrast to other neighborhoods.

In contrast to H1 and H1A, H2 assumes the persistent salience of blackness and continued black disadvantage, consistent with the “black-nonblack” conception of the color line:

Hypothesis 2: the predicted number of low skill and total jobs will be lowest for diverse neighborhoods with a dominant black population and segregated black neighborhoods in contrast to other neighborhoods.

Hypothesis 2A: the predicted number of residents below poverty will be greatest for diverse neighborhoods with a dominant black population and segregated black neighborhoods in contrast to other neighborhoods.

The tri-racial hierarchy conception of the color line is unique in that its structure is non-binary. Unlike the preceding theories of the future color line, it predicts an emerging intermediary category and an expanding “bottom” of the hierarchy for groups of color associated with blackness. Following this:

Hypothesis 3: the predicted low skill and total job counts will be greatest for all white neighborhoods and lowest for all black neighborhoods and those diverse with a black population and without a non-Latino white population. The predicted low skill jobs for all Latino neighborhoods and diverse neighborhoods containing non-Latino white population will be similar, constituting an intermediary category between the top and bottom of the
hierarchy that is significantly different from both segregated white and segregated black
neighborhoods.

Hypothesis 3A: the predicted number of people below poverty will be lowest for all white
neighborhoods and greatest for all black neighborhoods and those diverse neighborhoods
with a black population, but without a non-Latino white population. The predicted
number of people below poverty for all-Latino and diverse neighborhoods containing a
non-Latino white population will be similar, constituting an intermediary category
between the top and bottom of the hierarchy that is significantly different from both
segregated white and segregated black neighborhoods.

If supported, H3 and H3A will not evidence the tri-racial hierarchy in its strict interpretation, as
doing so would require specific nation-of-origin delineation and inclusion of those who identify
as multi-racial, among other factors. However, support of H3 or H3A would be consistent with a
loose interpretation of Bonilla-Silva’s (2004) version of the tri-racial color line. As approximated
here, H3 and H3A predict opportunity for many of those Bonilla-Silva deemed “honorary
white”\(^3\) (All Latino, Diverse White) in between the top of the racial hierarchy (All White) and
the bottom, “collective black” (All Black and Diverse Black neighborhoods).

In sum, my hypotheses predict neighborhood opportunity (measured in poverty and job
presence) by ethno-racial composition consistent with the three theorized restructurings of the
racial hierarchy. The primary distinction between each conception is the hypothesized
opportunity of those neighborhoods with an ethno-racial composition that indicates an
increasingly ethno-racially diverse U.S.: Diverse White, Diverse Black, Integrated, and All

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\(^3\) In Cook County, a majority of the Latino population is Mexican-American at 18.8%, Puerto Rican is a distant
second at 2.6%. According to Bonilla-Silva, both Mexican and Puerto-Rican origin Latinos are expected to become
part of the “honorary white” because they are comprised of mostly “light-skinned Latinos” (Bonilla-Silva 2004:932).
Latino neighborhoods, for it is the ethno-racial complexity of these neighborhoods that necessitate a newly theorized color line. In the next section, I describe how I measure ethno-racial diversity and opportunity and discuss the sample, data, and methods utilized to explore neighborhoods across Cook County.

**DATA AND METHODS**

*Sampling*

The present study examines the relationship between neighborhood ethno-racial composition and opportunity by comparing various ethno-racially diverse neighborhoods to each other and to those with minimal ethno-racial diversity. A case study approach allows for close examination of different neighborhood compositions across the entirety of a metropolitan area while controlling for geographic variation in political, economic, and historical factors that could affect jobs and poverty, but requires that the selected case be both “typical” and a conceptual exemplar (Ragin 1993). Therefore, for the present study, the selected case must be a formerly hyper-segregated place—where black Americans sought industrial employment but became increasingly residentially segregated by 1970—but also ethno-racially diverse, with sizable Latino, white, and Asian populations.

Cook County, Illinois, is ideal for these purposes. Its central city, Chicago, embodies the characteristics of a “typical” case of a formerly hyper-segregated place in its industrial history, geographic location, and racial past. Moreover, it has been the focus of many previous neighborhood studies, including those on residential segregation (Hirsch 1983), neighborhood effects (Sampson 2012), and spatial mismatch (Kain 1968). However, like many other metropolitan areas in the Rust Belt, a significant number of non-black residents reside outside the central city. Accordingly, to satisfy the diversity requirement of my case selection, I broaden
the scope to Chicago’s entire county, Cook. Summary statistics for Cook County reflect its suitability for this purpose: from 2000-2010, Cook saw a population growth of 24 percent for those identifying as Asian American and 16.14 percent for those of Hispanic or Latino origin. Yet even with the growth in Latino and Asian populations, it retained sizable black and white populations.

A comparison of the social characteristics of Cook County to the counties surrounding other large Rust Belt cities of Pittsburgh, Philadelphia, Cleveland, Detroit, and Milwaukee\(^4\) confirms Cook’s suitability as a representative case. Its black population size, non-Latino white population size, and poverty rate are markedly similar to other regional counties (see Table 2). However, Cook exhibits larger Latino and Asian populations that make it unique in its degree of ethno-racial diversity. This particular departure from other Rust Belt counties actually reinforces Cook’s suitability as a case for this study. As a formerly hyper-segregated place distinguished in its degree of ethno-racial diversity, analysis of Cook County allows for an exploration of what is likely forthcoming for other formerly hyper-segregated Rust Belt counties as they diversify in coming decades (Vey 2007; Wainer 2013).

The census tract is the most commonly used proxy for neighborhoods in sociological literature and therefore the unit of analysis in this study (Iceland 2002). The Cook County census tract and corresponding population characteristics are obtained from the most recent five-year estimate (2013) of the American Community Survey (ACS). To determine the number of jobs in each census tract in Cook County by type, I utilize the 2013 Longitudinal Employer-Household Data (LEHD) gathered by the Census Bureau. The LEHD provides delineated employment data

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\(^{4}\) Because Baltimore and St. Louis are independent cities, their central city population estimates are not included in estimates for their surrounding counties. Exclusion of the primary areas of interest—central cities—makes comparison to Cook County of little use.
by industry and workplace location and is conducted annually like the ACS, which allows for estimates of jobs data by census tract in the same year as the ACS data in this study. The original sample of merged ACS and LEHD data by census tract for Cook County consisted of 1320 observations, but I dropped 15 from the sample because of missing LEHD data required for analysis.

MEASUREMENT

Operationalizing ethno-racial diversity and opportunity to answer the research questions of this paper requires careful consideration of the literature on residential segregation, its consequences, and theories of the color line. Below, I detail the most commonly implemented measure of multi-group diversity in segregation literature, my alternative measure of ethno-racial diversity that captures the different groups present in a neighborhood, and my three measures of opportunity: low skill jobs, total jobs, and households below poverty. Table 3 contains the descriptive statistics for all variables detailed in this section.

Dependent Variables

Opportunity in neighborhoods is a long-standing concern because of the potentially devastating effects of its absence on residents. When neighborhoods experience structural barriers to opportunity, disadvantage compounds and leads to harmful “neighborhood effects” (Sampson and Wilson 1994). In the broadest terms, neighborhood effects are geographic, institutional, environmental, and social-interactive advantages or disadvantages that “act back” on residents, which, at their worst, can lead to consequences such as poorer school quality,

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5 The LEHD does not provide average five-year estimates as the ACS does, the 2013 LEHD data is a one-year estimate.
6 The census tracts containing Chicago O’Hare and Chicago Midway airport are outliers in total jobs and low skill jobs. While outliers can bias results and restrict generalizability in some cases, analysis conducted with and without inclusion of the two airport tracts suggests that these extreme observations have no effect on the substantive conclusions of this paper, although their inclusion does affect the predicted number of jobs for All Latino neighborhoods.
crime, psychological and physical distress, devalued housing stock, and limited economic mobility (Sharkey 2009).

The most publicized exploration of neighborhood effects, The Moving to Opportunity (MTO) study, relocated 4,600 mostly black and Latino families living in impoverished communities to “greater opportunity” neighborhoods. Families were randomly assigned to one of three groups: a traditional voucher group, an experimental group relocated to an MTO selected neighborhood, and a control group. To explore the effect of neighborhood opportunity, the MTO-selected neighborhoods were low poverty (less than 10% of the census tract population below poverty) and a majority were “high job density” neighborhoods (over 200,000 low-wage jobs located within five miles of the neighborhood center) (Turner et al. 2011). I use job presence and concentrated poverty as measures of neighborhood opportunity like those in the neighborhood effects tradition for a total of three dependent variables of interest.

Specifically, I derive my first dependent variable, low skill jobs, from previous spatial mismatch literature primarily concerned with the loss of manufacturing and blue-collar employment in urban neighborhoods (Wilson 1983; Kasarda 1986). I calculate low skill jobs using the total count of low skill jobs in a census tract (those in service, construction, and production; see Table 4 for all categories) from the LEHD offset by the total working age (16+) population in the census tract (see Table 4 for detailed description of all jobs and industries included). Because even jobs outside low skill sectors cause positive neighborhood effects due to the visibility of economic vitality, I am not concerned exclusively with low skill jobs, but also with the total job presence. For this reason, I examine Total jobs, the total count of jobs in each census tract offset by its working age (16+) population, in addition to low skill jobs. The final dependent variable, households below poverty is the number of households below poverty in a
census tract offset by the total census tract population. The US Census Bureau determines whether a household is below the poverty threshold based on family income, family size, number of children, and age of householder.

*Independent Variables*

In accordance with the scholarly justification and research questions of this work, my independent variables capture various combinations of ethno-racial groups that constitute diverse and segregated neighborhoods. The most commonly implemented measure of ethno-racial diversity, the entropy index, provides a broad measure but fails to capture which specific ethno-racial groups are present in a particular place (Timberlake 2004). To capture which groups are present for tests of my hypotheses, I must instead employ a measure of ethno-racial composition. Ethno-racial composition is a categorical variable designated using a typology from Logan and Zhang (2010) later adapted by Parisi and colleagues (2014) wherein a racial or ethnic group is present if it accounts for 25 percent of a place’s population and denoted in order of abundance. The census tracts in this study are a smaller unit of analysis than Parisi and colleagues’ census-designated places, making for a finer granularity of racial patterns that requires a lower racial threshold to detect racial and ethnic variation (Reardon et al. 2008). To account for this, I adapt their typology by lowering the racial presence threshold to 15 percent to determine if a group has a “present” population in a neighborhood. Further, I reduce the number of predictors from their typology by only ordering ethno-racial groups in order of abundance in two ethno-racial compositions: Diverse White and Diverse Black (for full description of the typology see Table 1 in appendix).

This results in seven predictor variables which effectively characterize all but five census tracts in my sample (for a map of the ethno-racial compositions of neighborhoods across Cook
County see Fig. 1): All White, All Black, All Latino, White and Black, Diverse Black, Diverse White, and Integrated. An examination of the remaining census tracts reveals two ethno-racial compositions outside this typology: 1) three predominantly Latino census tracts with a present Asian population just over the “present” threshold (15-16%) and no black or white population present, which I recode as Latino; 2) two segregated Asian census tracts with no other ethno-racial population present, which I exclude from analysis because of their uniqueness in my sample (see Table 1). Because most formerly hyper-segregated Rust Belt cities have an even smaller Asian population than Cook County, the decision to exclude the two all-Asian census tracts should not affect generalizability to Cook County’s geographic region, however, it does limit generalizability to counties in the U.S. where the Asian population is sizable, such as those in the West and Pacific Northwest.

It is important to note a weakness of this typology that many quantitative race and ethnicity studies suffer: my use of ethnic and racial categories designated by the U.S. Census Bureau. Because racial categories are not based in biological distinction, there is no fixed definition of what different racial categories mean; racial self-identification, external racialization, and associated racial boundaries change over time. As such, the use of Census Bureau racial categories to create my ethno-racial composition typology does not account for the variable nature of racial identification and its relationship to social, legal, and political forces (Perez and Hirschman 2009). Consequently, I cannot know whether a person identifies as a particular group on the census but experiences advantages or disadvantages associated with another racial or ethnic group due to different external racialized by others. Despite this weakness, Census racial categories remain useful for analysis of broad trends, even if individual discrepancies between identification and experience exist.
Control Variables

I also draw on the neighborhood effects literature (O’Campo et al. 2015) to incorporate several predictor variables associated with neighborhood socioeconomic status that function as controls: *percent with less than high school education, share of female-headed households, percent persons under age 18, share of housing units owner-occupied, median age, and percent foreign-born.* In those models without poverty as the dependent variable, *percent below poverty* is also included as a control variable. Controlling for these exogenous factors associated with neighborhood socioeconomic status allows for better examination of the effect of racial composition on neighborhood opportunity.

Because the research questions of this study concern opportunity across geographic units, there is an additional concern for spatial dependency of census tracts upon one another—spatial autocorrelation—that could potentially bias results with violation of the independent errors assumption of linear regression. To examine spatial autocorrelation on all dependent variables across Cook census tracts, I implement Moran’s I, the most common method of detection, wherein a statistically significant p-value indicates that the spatial distribution of the variable under analysis is not the result of a random spatial pattern. For all three dependent variables, the Moran’s I indices are positive and statistically significant, indicative of positive spatial autocorrelation of each dependent variable. These results suggest that the poverty and jobs in neighboring census tracts could significantly bias my results.

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7 The standard deviation nearly exceeds the mean in the variables percent female households and percent with less than a high school degree (see descriptive statistics in Table 3), an indication they may have potential outlying data points. Closer examination reveals a number of data points in both are more than one and a half IQRs below their first quartile. To cope with this, I run analysis with and without them as control variables. The substantive findings and statistical significance of the predictors remain the same.

8 Collinearity diagnostics reveal a mean vif of 2.16 for all control variables, far below the standardly accepted threshold of 10.

9 Moran’s I on each dependent variable was conducted using Euclidean inverse distance and produced the following: 1) Moran’s I=0.105 , z =20.01, p < .001 for low skill jobs; 2) Moran’s I=.031683, z=9.11, p<.001 for total jobs; 3)
To account for this, I incorporate a spatially lagged predictor variable directly into my models. The spatial lag averages the value of the neighboring census tract values of the dependent variable across a spatially weighted matrix. In this case, I utilized the Queen’s contiguity weighting matrix, wherein the values of a census tract are weighted by shared census tract boundaries. The full spatial lag term is thus expressed as:

$$\sum_i w_{ki} p_i$$

where $w_{ki}$ is the element of the weighting matrix (Queen’s contiguity)

$p_i$ is the count of the dependent variable of each neighboring census tract as defined by the matrix (Anselin 2010).

The spatial lag coefficient contained in the results of these models indicates the impact of the presence of the dependent variable in neighboring census tracts on the focal census tract such that a coefficient of .012 indicates that the focal tract’s count of the dependent variable would be 12% higher if boundary-sharing census tracts had the highest possible value of the dependent variable.

**ANALYSIS**

*Model Estimation*

The research questions of this study require I investigate if all types of ethno-racial diversity experience equal opportunity, or if the combination or presence of particular ethno-racial groups is consequential. To compare the effects of various neighborhood ethno-racial compositions on the presence of poverty and jobs, I fit a series of Generalized Linear Models (GLMs). GLMs are a more appropriate choice than Ordinary Least Squares regression because

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Moran’s I=.49; z= 91.41; p<001 for households below poverty. Positive scores indicate a positive spatial autocorrelation. Combined with the positive z-scores of each test and the resultant p-values, the likelihood that these patterns are the result of random chance is minimal.
the dependent variables—total jobs, low skill jobs, and households below poverty—have a concentration of data points near zero that result in an extreme right skew and non-constant variance. However, variance tests on each dependent variable reveal over-dispersion only in the case of number of households below poverty. Thus, I implement two different GLMs. The first is a Poisson model with a log-link function which transforms low skill and total jobs to a more normal distribution:

$$\log \mu_x = \log t_x + \beta_0 + \beta_1 x$$

where $\mu_x$ is total jobs or low skill jobs in a census tract and $\log t_x$ is the log of the offset (workers 16+ in a census tract) of the job count.

The second is a negative binomial model with a log-link function, which has the same equation as the Poisson regression but additionally incorporates an estimated over-dispersion parameter into the model to account for error over-dispersion in the number of households below poverty.

For all models, I determine if inclusion of the spatial lag term improves prediction by using a likelihood-ratio test, wherein a statistically significant difference between a model without and a model with the spatial lag term indicates that the inclusion of the spatial lag is necessary to account for the presence of the dependent variable in neighboring census tracts. After determining the best-fit model for each dependent variable, I standardize the coefficients and convert them to percent difference from the omitted category (All Black neighborhoods) for ease of interpretation and tests of my hypotheses.

Results

To evaluate whether all ethno-racially diverse neighborhood compositions experience equal opportunity or if the size and presence of particular groups is consequential, I proposed six hypotheses. H1, H2, and H3 predict that low skill and total jobs in a neighborhood will vary by
ethno-racial composition according to the three conceptions of the future color line. To test hypotheses H1, H2, and H3, I fit Poisson models predicting low skill and total jobs with ethno-racial composition (see Table 5) with and without the spatial lag predictor. The statistically significant difference in log likelihoods indicates that inclusion of the spatial lag term improves prediction, but also that low skill and total jobs differ by neighborhood ethno-racial composition even when accounting for the presence of jobs in neighboring census tracts.

Specifically, the low skill jobs model indicates that the greatest predicted number of low skill jobs is in Diverse White neighborhoods followed by Integrated and All White neighborhoods (see Figure 2 for marginal effects of neighborhood ethno-racial composition on low skill jobs). All Black neighborhoods have the lowest predicted number of low skill jobs, followed by All Latino. The total jobs model produces slightly different results. It predicts Integrated neighborhoods have the greatest number of total jobs followed by Diverse White neighborhoods, while Diverse Black neighborhoods have the lowest number of total jobs followed by All Black neighborhoods. All Latino neighborhoods have a predicted number of total jobs in the middle of the ethno-racial compositions.

To test hypotheses H1, H2A and H3A, I fit negative binomial regression models predicting households below poverty with ethno-racial composition (see Table 6) with and without the spatial lag term. Again, the statistically significant difference in log likelihoods indicates that inclusion of the spatial lag term improves prediction, but also that poverty varies by neighborhood ethno-racial composition even when accounting for poverty in neighboring census tracts. The best-fit poverty model predicts the lowest number of households below

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10 Although I present the best fit model, there are some issues of note. A number of variables that were statistically significant in predicting low skill and total jobs are no longer statistically significant, including the percent of households with a child under 18, the percent foreign-born, percent female headed households, and the Diverse Black ethno-racial composition. Given the overlapping confidence intervals and the changes in statistical
poverty in All White neighborhoods, followed by Diverse White neighborhoods. All Black neighborhoods are predicted to have the greatest number of households below poverty, followed closely by Diverse Black neighborhoods, with All Latino neighborhoods in between (see Table 7 for standardized coefficients and Figure 4 for marginal effects of ethno-racial composition on poverty). Taken together, these results suggest that not all ethno-racially diverse neighborhoods experience equal opportunity. Below, I use the standardized coefficients of the ethno-racial composition variables from the best-fit models to evaluate my six hypotheses within the context of the color line.

*The “White Non-White” Color Line*

H1 and H1A, consistent with the predictions of the “white-nonwhite” color line, assume a dominant population of non-Latino whites is most consequential for low skill job presence, total job presence, and households below poverty for neighborhoods. The standardized coefficients comparing neighborhood ethno-racial compositions in predicted number of low skill jobs show support for H1 and the white-nonwhite color line (see Fig. 2 for predictive margins). As seen in Table 7 column 1, Diverse White and All White neighborhoods have a far greater predicted number of low skill jobs than those neighborhoods without a present non-Latino white population. Moreover, although there are 27.6 percent more low skill jobs in All Latino neighborhoods than All Black neighborhoods, of all the ethno-racial compositions, All Latino neighborhoods have a predicted number of low-skill jobs closest to All Black neighborhoods. Coupled with the coefficients for All White and Diverse White, the similarity between All Latino neighborhoods...
and All Black neighborhoods in low skill jobs supports the assumption of H1 that a dominant non-Latino white population makes a significant difference for neighborhood low skill job opportunity.

Although the findings support H1, the results show it is not the neighborhoods with the highest shares of whites (All White) that have the greatest predicted number of low skill jobs. In fact, the low skill job estimates for Diverse White neighborhoods exceed All White neighborhoods. This unexpected finding may be explained by local land use conditions that affect low skill jobs. All White neighborhoods are more likely to be low-density, residentially zoned, suburbs where homeowner’s associations limit economic development associated with the presence of low skill and total jobs (Rothwell and Massey 2009; Glaeser, Gyourko, and Saks 2005), thus reducing the concentrated advantage of whiteness in these neighborhoods for the jobs measures of opportunity. This interpretation is made more viable by the negative association between the percent owner-occupied units in a census tract (a measure of socio-economic status associated with low-density development) and low skill job presence (see Table 5).

_The “Black-NonBlack” Color Line_

In contrast to the “white-nonwhite” hypotheses, H2 and H2A are consistent with the “black-nonblack” color line and assume a dominant black population is the most consequential predictor of neighborhood opportunity. Accordingly, the predicted number of low skill, total jobs, and households below poverty in All Latino neighborhoods should be similar to that of Diverse White neighborhoods because of the absence of a black population. Furthermore, All Latino neighborhoods should present opportunity greater than any ethno-racial composition with a present black population—including Diverse Black—according to H2 and H2A. H2 and H2A are not supported by the results, and the jobs’ models suggest the opposite: in their predicted
number of low skill and total jobs All Latino neighborhoods are not most similar to Diverse White neighborhoods, but rather All Black neighborhoods (see Table 7 columns 1 and 2).

*The “Tri-racial” Color Line*

Finally, H3 and H3A are consistent with a three-tiered racial hierarchy and distinguished from H1/H1A and H2/H2A by their prediction of an intermediary tier between dominant white (Diverse White, All White) neighborhoods and a more expansive bottom tier (Diverse Black and All Black). While the results of the low skill job model support H1 and the white-nonwhite hypothesis, the standardized coefficients predicting total jobs by neighborhood ethno-racial compositions (see Figure 3 for a graph of the predicted marginal effects of each ethno-racial composition on total jobs) support H3. Table 7 column 2 shows that Diverse Black neighborhoods fare even worse than All Black neighborhoods in predicted number of total jobs, consistent with H3’s expanding bottom tier. Also consistent with H3, All Latino neighborhoods occupy an intermediary position between black neighborhoods with no white population (Diverse Black and All Black) and All White neighborhoods.

The poverty model provides further support for the three-tiered hierarchy (see Figure 4 for a graph of the predicted marginal effects of each ethno-racial composition on households below poverty). Consistent with H3A, the predicted number of people below poverty in All Latino neighborhoods is between All White and All Black neighborhoods, suggesting an intermediary position. Furthermore, although the predicted number of households below poverty in Integrated neighborhoods is the least different from All Black neighborhoods, the predicted number of households below poverty for Integrated neighborhoods is lower than All White but greater than All Black neighborhoods and is therefore still in an intermediary position, as predicted by H3A. The results regarding households below poverty in Integrated neighborhoods
nonetheless tempers the optimism regarding opportunity in ethno-racially diverse neighborhoods that is suggested by the results of the models predicting jobs.

**DISCUSSION**

The findings of this study indicate that not all types of ethno-racial diversity provide the same opportunity benefit to neighborhoods. The presence and size of particular ethno-racial groups appears consequential for predicting neighborhood opportunity, revealing a persistent racial hierarchy. In particular, the support for H1 indicates that a sizable white population is consequential for predicting low skill jobs, whereas the support for H3 and H3A indicates that there is not one ethnic or racial group that proves most consequential for predicting the total jobs and the number of households below poverty in diverse neighborhoods, but rather several factors that make for a multi-tiered hierarchy of opportunity by neighborhood ethno-racial composition.

The support for H1, H3, and H3A over H2 and H2A allows for several important inferences. Consistent with previous research on black residential segregation, of all the ethno-racial compositions, All Black neighborhoods are associated with lower levels of opportunity across all measures. Together, my findings of greater disadvantage in All Black neighborhoods and the support for the black-nonblack color line in the race and ethnicity literature (Lee and Bean 2007; Marrow 2009) might lead some to point to the superseding significance of blackness for predicting neighborhood opportunity. However, Diverse Black neighborhoods fare better than All Latino neighborhoods on some measures of opportunity, which suggests that the presence of a black population is not the only consequential factor in predicting neighborhood opportunity. On the contrary, it is not those neighborhoods without a present black population that are associated with greater opportunity, but rather those neighborhoods with a present white population. This leads to the second important finding of this study: diverse neighborhoods with
a present non-Latino white population are associated with more neighborhood opportunity than other diverse neighborhoods on all three measures. Why would the presence or absence of a white population—rather than a black population as would be consistent with the black-nonblack color line—be significantly associated with opportunity in diverse neighborhoods?

To understand the significance of a white population for predicting neighborhood opportunity, I return to the other two theories of the restructured racial hierarchy: white-nonwhite and tri-racial. The tri-racial and white-nonwhite models predict the future of the color line for nonblack ethno-racial minorities differently. These distinct predictions are significant for understanding my findings on opportunity in ethno-racially diverse neighborhoods. As previously detailed, white-nonwhite and tri-racial models both maintain that the “white” racial category is the top of the racial hierarchy and therefore of the most consequential aspect advantage and opportunity in American society. The support for H1 supports this assumption in the case of low skill jobs. However, the white-nonwhite model additionally posits that all “people of color” will begin to experience similar disadvantages in American society.

In contrast, the tri-racial model does not assume similar disadvantage for all “people of color.” Tri-racial theorists predict that blacks will be at the bottom in an expanding category of “collective blacks” that includes those racial and ethnic groups associated with blackness, and some ethno-racial minorities not associated with blackness will experience advantages between whites and blacks in an “honorary white” position. The primary distinction, then, between the white-nonwhite and tri-racial hierarchies is not which ethno-racial group is at the top of the racial hierarchy, but whether there is a middle group occupied by additional ethno-racial minorities (as the tri-racial color line holds), or if all “people of color” experience similar opportunity (as the white-nonwhite color line holds).
The results of this study suggest that neighborhoods inhabited predominantly by “people of color”, are not associated with the same neighborhood opportunity,\(^\text{11}\) as the white-nonwhite color line predicts. Although H1 was supported in the case of low skill jobs, Diverse Black and All Latino neighborhoods, two neighborhood types without a non-Latino white population present, are not associated with the same opportunity on the other two measures in this study. Moreover, Diverse White neighborhoods—neighborhoods composed of populations the tri-racial hierarchy predicts are at the top of the racial hierarchy (non-Latino whites) and associated with whiteness by residence near a sizable white population—have the greatest or second greatest predicted opportunity across all measures. These findings indicate that not all “people of color” experience the same opportunity in diverse neighborhoods, rather, there is a middle, or intermediary, “honorary white” position in the racial hierarchy, as tri-racial theorists predict.

**CONCLUSION**

Previous studies have found a racial hierarchy associated with opportunity across space, wherein black Americans experience neighborhoods with less opportunity largely because of residential segregation. For this reason, recent work showing declining numbers of segregated black neighborhoods, ethnic “buffering” of black residential segregation, and more “multiracial” neighborhoods with no racial or ethnic majority has led to some optimism about the potential for improved neighborhood conditions in formerly hyper-segregated places. Yet evidence of how different ethno-racially diverse neighborhoods compare to each other and to those that lack ethno-racial diversity has been minimal.

The present study investigated the relationship between neighborhood ethno-racial composition and opportunity in Cook County, Illinois. Motivated by an interest in the yet

\(^{11}\) See Tables 5-7. All Latino neighborhoods fare better than all-black neighborhoods on all three measures of opportunity and Diverse Black neighborhoods fare better than all-black neighborhoods on two of the measures.
unexplored structural conditions of ethno-racially diverse neighborhoods, I sought evidence that neighborhoods differ in their experience of opportunity by ethno-racial composition. Using an adapted ethno-racial composition typology from Parisi and colleagues (2014), I was able to examine the relationship between the presence of different ethno-racial groups and opportunity within and between neighborhoods, whereas the more commonly implemented multi-group diversity index only provides a broad index of diversity without indication of which ethno-racial groups are present.

My findings show that the strength of the relationship between ethno-racial diversity and opportunity depends upon the combination of ethnic and racial groups present and the measure of opportunity considered. More specifically, diverse neighborhoods with a non-Latino white ethno-racial population are associated with the most jobs and the fewest households below poverty, but those neighborhoods without a non-Latino white population can also benefit from ethno-racially diversity, albeit it to a lesser degree. This is evident in the case of Diverse Black neighborhoods—diverse neighborhoods with a majority black population but with another minority ethno-racial group present—which are associated with more low skill jobs and fewer households below poverty than All Black and All Latino neighborhoods, which lack diversity.

Overall, these findings indicate that the relationship between ethno-racial diversity and neighborhood opportunity is complicated and requires continued consideration of color line theory and its predictions of shifting racial hierarchy for conceptualization. If my findings showing potential movement towards a tri-racial hierarchy are an indication of what is to come for other ethno-racially diverse places, there will be significant implications for racial and ethnic stratification. According to Bonilla-Silva (2004), movement towards the tri-racial hierarchy will better maintain white supremacy, as ethno-racial minorities in the intermediary position, such as
Latinos, will be provided enough benefits of whiteness that they will not recognize their position in the racial hierarchy. Following this, it is possible that the opportunity of Diverse White neighborhoods could maintain or even increase the number of All Black neighborhoods, as the residents of currently All Latino and Diverse Black neighborhoods see the benefits of association with whites in those neighborhoods and attempt to relocate near whites rather than into those neighborhoods that include other ethno-racial minorities. The potential for this outcome has already begun to surface in the literature for particular groups of Latinos, which show relocation into predominantly white neighborhoods (spatial assimilation) with increased social capital for those Latinos with lighter skin (South, Crowder, Chavez 2005).

Theoretically, this work is the first to connect neighborhood opportunity to emergent theories of the color line and racial hierarchy. In doing so, it provides analysis of the relationship between different diverse ethno-racial compositions and neighborhood conditions, rather than those studies focused solely on black-white segregation, but it is not without limitations that provide opportunities for future research. My use of the census tract as a unit of analysis comes with issues long identified in the literature, such as the assumption of unnatural neighborhood boundaries (Hipp and Boessen 2013). While my findings paint a picture of the relationship between ethno-racial composition and opportunity across Cook County, the boundaries of census tracts are not necessarily representative of actual social communities. Thus, the residents of the neighborhoods in this study might traverse areas outside their census tract boundary, which could lead to experiences of opportunity uncaptured by this study. Future work should aim to measure neighborhoods differently—perhaps using the more natural “egohoods” measure created by Hipp and Boessen (2013), which allows for overlapping neighborhoods—to compare the findings to those of this study.
Relatedly, I adapted Parisi et al.’s (2014) place-level ethno-racial composition typology for the census-level scale of analysis in this study. Because racial patterns vary by scale, my findings are wholly dependent on the fact that I created a typology specifically for census-tract level analysis (Iceland 2004). Future work should explore whether findings change with racial residential patterns observed at the block-group or Metropolitan Statistical Area level. In addition, the adapted ethno-racial typology was unique to the sample size and the ethnic and racial composition of Cook County. While I attempted to maximize generalizability by selecting a city closely representative of diversifying formerly hyper-segregated cities in the Rust Belt region, a case study still lacks generalizability that a nation-wide multi-city analysis would possess. Additional case studies and nationally-representative work is necessary to determine if these patterns hold true for other formerly hyper-segregated places that have seen an influx in ethno-racial diversity.

Perhaps most importantly, this study provides only a snapshot of the current realities of diverse neighborhoods. There remain unexplored questions concerning the effects of ethno-racial diversity from a longitudinal perspective. What socio-economic qualities and demographics characterized the neighborhoods that diversified? Future research should seek to explore how the relationships observed in this study came to be through longitudinal analysis of the process of diversification and neighborhood opportunity over time. Correspondingly, some scholars have found that ethno-racially diverse places eventually transition to become racially homogenous, such as in the case of gentrification (Freeman 2009) or racial tipping (Massey and Denton 1991). Future work should also explore ethno-racially diverse neighborhoods in the coming decades to determine whether they remain stably integrated with matched stable opportunity or if the findings here, which suggest movement towards the tri-racial hierarchy, are only temporary.
Qualitative work similar to that of Berrey (2013) and Mayora-Gallo (2014) can be especially helpful in this regard, as examining the dynamics within diverse neighborhoods can help differentiate between those neighborhoods that are “accidentally diverse” and “intentionally diverse”, a distinction supposedly instrumental to long-term integration. Such identification can help policy-makers target those neighborhoods most at risk for losing their diversity with policies proven to aid integration, such as implemented and enforced fair housing law and investment in neighborhood coalitions and jobs programs that allow for more active participation in the community (Nyden, Maly, and Lukehart 1997).

In opposition to those who fear the growing ethno-racial diversity of the U.S. is a sign of inevitable decline as well as those who see it as the potential end to unique disadvantage for black Americans, the relationship between neighborhood ethno-racial diversity and jobs and poverty is neither wholly positive nor wholly negative. Rather, the findings of this paper suggest not only the continued salience of whiteness and blackness for predicting opportunity in an increasingly diverse country, but also the role of association with either whites or blacks through residence for other people of color. Indeed, although it may be more complex than the binary color line of the past, this study suggests a racial hierarchy continues to characterize the relationship between neighborhoods and opportunity.
REFERENCES


Waters, Mary C., Van C. Tran, Philip Kasinitz, and John H. Mollenkopf. 2010. "Segmented assimilation revisited: Types of acculturation and socioeconomic mobility in young

doi:10.1080/01419871003624076.


APPENDIX
<table>
<thead>
<tr>
<th>Table 1. Census Tract Ethno-racial Composition Typology</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>All White</strong></td>
</tr>
<tr>
<td>Non-Latino white majority and no other ethno-racial group with 15% or more of census tract population</td>
</tr>
<tr>
<td><strong>Diverse White</strong></td>
</tr>
<tr>
<td>Non-Latino white majority group by percent of census tract population, Asian or Latino population comprises at least 15% of census tract population, black population less than 15% of census tract population</td>
</tr>
<tr>
<td><strong>Diverse Black</strong></td>
</tr>
<tr>
<td>Non-Latino black majority group by percent of census tract population, Asian or Latino population comprises at least 15% of census tract population, non-Latino white less than 15% of census tract population</td>
</tr>
<tr>
<td><strong>All Latino</strong></td>
</tr>
<tr>
<td>Latino population (of any race) majority, no other population with 15% or more of census tract population</td>
</tr>
<tr>
<td><strong>All Black</strong></td>
</tr>
<tr>
<td>Non-Latino black majority, no other ethno-racial group with 15% or more of census tract population</td>
</tr>
<tr>
<td><strong>Integrated</strong></td>
</tr>
<tr>
<td>Each ethno-racial group constitutes at least 15% of census tract population</td>
</tr>
<tr>
<td><strong>Black and White</strong></td>
</tr>
<tr>
<td>Non-Latino white and black population both consist of at least 15% of census tract population, no other population with at least 15% of census tract population</td>
</tr>
</tbody>
</table>
Table 2. Comparison of Cook County, IL to other Rust Belt Counties

<table>
<thead>
<tr>
<th></th>
<th>Cook County, Illinois (includes Chicago)</th>
<th>Wayne County, Wisconsin</th>
<th>Allegheny County, Pennsylvania</th>
<th>Cuyahoga County, Ohio (includes Cleveland)</th>
<th>Milwaukee County, Wisconsin (includes Milwaukee)</th>
<th>Allegheny County, Pennsylvania (includes Pittsburgh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Population</td>
<td>5,212,372</td>
<td>1,804,507</td>
<td>1,272,533</td>
<td>122,693</td>
<td>1,536,704</td>
<td>590,027</td>
</tr>
<tr>
<td>Population Density (per sq. mile)</td>
<td>5,513.8</td>
<td>2,948.2</td>
<td>2,783.4</td>
<td>1,680.6</td>
<td>11,459.3</td>
<td>3,937.5</td>
</tr>
<tr>
<td>Area (Land)</td>
<td>945.33</td>
<td>612.08</td>
<td>457.19</td>
<td>730.07</td>
<td>134.1</td>
<td>241.4</td>
</tr>
<tr>
<td>White Alone</td>
<td>2,955,886 (0.567)</td>
<td>962,000 (0.053)</td>
<td>816,138 (0.641)</td>
<td>99,8456 (0.814)</td>
<td>637,842 (0.415)</td>
<td>593,691 (0.625)</td>
</tr>
<tr>
<td>Black or African American Alone</td>
<td>1,272,312 (0.244)</td>
<td>954,450 (0.529)</td>
<td>377,415 (0.297)</td>
<td>159,750 (0.13)</td>
<td>665,332 (0.433)</td>
<td>251,082 (0.264)</td>
</tr>
<tr>
<td>Asian Alone</td>
<td>336,055 (0.065)</td>
<td>48,823 (0.027)</td>
<td>33,714 (0.027)</td>
<td>36,286 (0.030)</td>
<td>99,962 (0.065)</td>
<td>33,244 (0.035)</td>
</tr>
<tr>
<td>Some Other Race Alone</td>
<td>529,889 (0.102)</td>
<td>31,469 (0.017)</td>
<td>14,481 (0.011)</td>
<td>4,749 (0.004)</td>
<td>88,827 (0.058)</td>
<td>36,226 (0.038)</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>104,414 (0.2)</td>
<td>41,948 (0.023)</td>
<td>28,008 (0.022)</td>
<td>41,014 (0.034)</td>
<td>11,000 (0.07)</td>
<td>7,980 (0.07)</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>1,262,156 (0.242)</td>
<td>96,314 (0.053)</td>
<td>62,778 (0.049)</td>
<td>20,358 (0.017)</td>
<td>194,714 (0.127)</td>
<td>128,643 (0.135)</td>
</tr>
<tr>
<td>Households below poverty level</td>
<td>155,981 (0.132)</td>
<td>81,600 (0.193)</td>
<td>43,781 (0.141)</td>
<td>26,987 (0.089)</td>
<td>12,000 (0.08)</td>
<td>1,800 (0.11)</td>
</tr>
</tbody>
</table>

Note: Proportions in parentheses. Data from American Community Survey, 2013.
Table 3. Descriptive Statistics of Cook County Census Tract Ethno-Racial Composition Variables and Variables Controlling for Socio-economic Status

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>min</th>
<th>max</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Black</td>
<td>0.21</td>
<td>--</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Integrated</td>
<td>0.06</td>
<td>--</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Diverse Black</td>
<td>0.05</td>
<td>--</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>Diverse White</td>
<td>0.32</td>
<td>--</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>All Latino</td>
<td>0.07</td>
<td>--</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>White and black</td>
<td>0.06</td>
<td>--</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>All White</td>
<td>0.23</td>
<td>--</td>
<td>0.0</td>
<td>1</td>
</tr>
<tr>
<td>% residents with no high school degree</td>
<td>16.51</td>
<td>13.19</td>
<td>0.0</td>
<td>76</td>
</tr>
<tr>
<td>Share census tract units owner-occupied</td>
<td>.56</td>
<td>.24</td>
<td>0.0</td>
<td>.99</td>
</tr>
<tr>
<td>Median age of residents</td>
<td>36.10</td>
<td>6.72</td>
<td>15.4</td>
<td>62</td>
</tr>
<tr>
<td>% households with children under 18 years of age</td>
<td>33.63</td>
<td>13.01</td>
<td>1.2</td>
<td>100</td>
</tr>
<tr>
<td>% households female-headed</td>
<td>8.99</td>
<td>8.05</td>
<td>0.0</td>
<td>57</td>
</tr>
<tr>
<td>% foreign-born</td>
<td>19.39</td>
<td>15.33</td>
<td>0.0</td>
<td>67</td>
</tr>
</tbody>
</table>

N 1303
Table 4. Longitudinal Employer Household Dynamics Industries

Low Skill Job Industries (industries with jobs that do not typically require a college degree according to the Bureau of Labor Statistics)

<table>
<thead>
<tr>
<th>Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture,</td>
</tr>
<tr>
<td>Forestry, Fishing</td>
</tr>
<tr>
<td>and Hunting</td>
</tr>
<tr>
<td>Mining, Quarrying, and Oil and Gas Extraction</td>
</tr>
<tr>
<td>Utilities</td>
</tr>
<tr>
<td>Construction</td>
</tr>
<tr>
<td>Manufacturing</td>
</tr>
<tr>
<td>Wholesale Trade</td>
</tr>
<tr>
<td>Retail Trade</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
</tr>
</tbody>
</table>

Total Jobs Industries (in addition to above industries)

<table>
<thead>
<tr>
<th>Industries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Administration</td>
</tr>
<tr>
<td>Real Estate</td>
</tr>
<tr>
<td>Company</td>
</tr>
<tr>
<td>Management</td>
</tr>
<tr>
<td>Healthcare</td>
</tr>
<tr>
<td>Professional, Scientific, and</td>
</tr>
<tr>
<td>Technical</td>
</tr>
<tr>
<td>Education</td>
</tr>
<tr>
<td>Information</td>
</tr>
<tr>
<td>Finance and Insurance</td>
</tr>
</tbody>
</table>
Table 5. Poisson Models Predicting Low Skill and Total Jobs in Cook County Census Tracts by Ethno-Racial Composition

<table>
<thead>
<tr>
<th></th>
<th>Low Skill Jobs</th>
<th>Total Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integrated</strong></td>
<td>0.948***</td>
<td>1.938***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.003)</td>
</tr>
<tr>
<td><strong>Diverse Black</strong></td>
<td>0.533***</td>
<td>-0.384***</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.005)</td>
</tr>
<tr>
<td><strong>Diverse White</strong></td>
<td>0.963***</td>
<td>1.154***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.003)</td>
</tr>
<tr>
<td><strong>All Latino</strong></td>
<td>0.244***</td>
<td>0.343***</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.005)</td>
</tr>
<tr>
<td><strong>White and Black</strong></td>
<td>0.631***</td>
<td>1.104***</td>
</tr>
<tr>
<td></td>
<td>(0.006)</td>
<td>(0.004)</td>
</tr>
<tr>
<td><strong>All White</strong></td>
<td>0.669***</td>
<td>1.073***</td>
</tr>
<tr>
<td></td>
<td>(0.005)</td>
<td>(0.004)</td>
</tr>
<tr>
<td><strong>% no high school degree</strong></td>
<td>-0.010***</td>
<td>-0.017***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td><strong>% of units owner-occupied</strong></td>
<td>-0.530***</td>
<td>-0.430***</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.005)</td>
</tr>
<tr>
<td><strong>Median age</strong></td>
<td>0.016***</td>
<td>0.007***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td><strong>% households child under 18</strong></td>
<td>0.004***</td>
<td>0.013***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td><strong>% foreign born</strong></td>
<td>-0.006***</td>
<td>-0.011***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td><strong>% female headed households</strong></td>
<td>0.007***</td>
<td>-0.002***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td><strong>% below poverty</strong></td>
<td>0.009***</td>
<td>0.006***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td><strong>Spatial lag</strong></td>
<td>0.001***</td>
<td>0.330***</td>
</tr>
<tr>
<td></td>
<td>(0.000)</td>
<td>(0.000)</td>
</tr>
<tr>
<td><strong>Constant</strong></td>
<td>-2.901***</td>
<td>-1.301***</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.006)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Low Skill Jobs</th>
<th>Total Jobs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations</td>
<td>1302</td>
<td>1302</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-919428.149</td>
<td>-2264807.994</td>
</tr>
<tr>
<td>chi2</td>
<td>327155.867</td>
<td>1264980.633</td>
</tr>
<tr>
<td>Degrees of freedom</td>
<td>14.000</td>
<td>14.000</td>
</tr>
<tr>
<td>AIC</td>
<td>1838886.298</td>
<td>4529645.989</td>
</tr>
</tbody>
</table>

Note: N= 1,303. Table entries are unstandardized regression coefficients (standard errors of estimates are in parentheses). *indicates p<.10 **p<.05 ***p<.01
Table 6. Negative Binomial Regression Model Predicting Households Below Poverty in Cook County Census Tracts by Ethno-Racial Composition

<table>
<thead>
<tr>
<th></th>
<th>Below Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated</td>
<td>-0.193*</td>
</tr>
<tr>
<td></td>
<td>(0.093)</td>
</tr>
<tr>
<td>Diverse Black</td>
<td>-0.034</td>
</tr>
<tr>
<td></td>
<td>(0.095)</td>
</tr>
<tr>
<td>Diverse White</td>
<td>-0.568***</td>
</tr>
<tr>
<td></td>
<td>(0.069)</td>
</tr>
<tr>
<td>All Latino</td>
<td>-0.257**</td>
</tr>
<tr>
<td></td>
<td>(0.091)</td>
</tr>
<tr>
<td>White and Black</td>
<td>-0.384***</td>
</tr>
<tr>
<td></td>
<td>(0.090)</td>
</tr>
<tr>
<td>All White</td>
<td>-0.712***</td>
</tr>
<tr>
<td></td>
<td>(0.075)</td>
</tr>
<tr>
<td>% no high school degree</td>
<td>0.011***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
</tr>
<tr>
<td>% of units owner-occupied</td>
<td>-0.449***</td>
</tr>
<tr>
<td></td>
<td>(0.132)</td>
</tr>
<tr>
<td>Median age</td>
<td>-0.012**</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
</tr>
<tr>
<td>% households with child under age of 18</td>
<td>-0.002</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
</tr>
<tr>
<td>% foreign born</td>
<td>-0.001</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
</tr>
<tr>
<td>% female headed households</td>
<td>-0.010*</td>
</tr>
<tr>
<td></td>
<td>(0.004)</td>
</tr>
<tr>
<td>Spatial lag</td>
<td>0.012***</td>
</tr>
<tr>
<td></td>
<td>(0.002)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.969***</td>
</tr>
<tr>
<td></td>
<td>(0.176)</td>
</tr>
</tbody>
</table>

Observations: 1302
Log likelihood: -9445.508
Chi2: 683.941
Degrees freedom: 13.000
AIC: 18921.015

Note: N= 1,303. Table entries are unstandardized regression coefficients (standard errors of estimates are in parentheses). *indicates p<.10 **p<.05 ***p<.01
### Table 7. Standardized Coefficients of Ethno-Racial Composition Variables for all models as Percent Difference from All Black Census Tracts

<table>
<thead>
<tr>
<th></th>
<th>Low Skill Jobs</th>
<th>Total Jobs</th>
<th>Below Poverty</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Integrated</strong></td>
<td>158.0%</td>
<td>594.6%</td>
<td>-4.4%</td>
</tr>
<tr>
<td></td>
<td>(0.95)***</td>
<td>(1.93)***</td>
<td>(-0.19)**</td>
</tr>
<tr>
<td></td>
<td>70.5%</td>
<td>-31.9%</td>
<td>-3.3%</td>
</tr>
<tr>
<td><strong>Diverse Black</strong></td>
<td>161.9%</td>
<td>217.2%</td>
<td>-43.3%</td>
</tr>
<tr>
<td></td>
<td>(0.53)***</td>
<td>(-0.38)***</td>
<td>(-0.03)*</td>
</tr>
<tr>
<td></td>
<td>27.6%</td>
<td>40.9%</td>
<td>-22.7%</td>
</tr>
<tr>
<td><strong>Diverse White</strong></td>
<td>217.2%</td>
<td>40.9%</td>
<td>-22.7%</td>
</tr>
<tr>
<td></td>
<td>(0.96)***</td>
<td>(1.15)***</td>
<td>(-0.57)***</td>
</tr>
<tr>
<td><strong>All Latino</strong></td>
<td>88.0%</td>
<td>201.7%</td>
<td>-31.9%</td>
</tr>
<tr>
<td></td>
<td>(0.24)***</td>
<td>(0.34)***</td>
<td>(-0.26)***</td>
</tr>
<tr>
<td><strong>White and Black</strong></td>
<td>192.4%</td>
<td>95.2%</td>
<td>-50.9%</td>
</tr>
<tr>
<td></td>
<td>(0.63)***</td>
<td>(1.10)***</td>
<td>(-0.38)***</td>
</tr>
<tr>
<td><strong>All White</strong></td>
<td>192.4%</td>
<td>95.2%</td>
<td>-50.9%</td>
</tr>
<tr>
<td></td>
<td>(0.67)***</td>
<td>(1.07)***</td>
<td>(-0.71)***</td>
</tr>
</tbody>
</table>

Note: N= 1,303. Table entries are percent difference in expected count compared to All Black (raw coefficients of estimates are in parentheses). *indicates p<.10 **p<.05 ***p<.01
Fig 1. Map of Ethno-Racial Composition of Census Tracts in Cook County
Fig 2. Predicted number of low skill jobs (see Table 5) by census tract ethno-racial composition (does not include offset by workers over the age of 16)
Fig. 3 Predicted number of Total Jobs (see Table 5) by Ethno-Racial Composition (does not include offset of workers over age of 16)
Fig. 4 Predictive Margins of Households Below Poverty (see Table 6) by ethno-racial composition (does not include offset by total population)