BOSTON COLLEGE School of Social Work

RACIAL CHOICE PATHWAYS TO DISTRESS: THE RACIALIZATION OF LATINX MENTAL HEALTH

A dissertation by

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Abstract

Racial choice, an aspect of racialization via racial categorization, may position Latinx individuals into differential pathways to well-being or distress. The psychological distress rates of Latinxs differ by ethnic group, racial choice and Medicaid coverage. However, little is known about how these factors relate to one another to impact psychological distress. The three studies of this dissertation use nine years of pooled data (N=34,201) from the National Health Interview Survey (NHIS), 2010-2018. The NHIS is a national and annual survey that is telephonically administered to track the health and mental health status of individuals living in the United States. Study 1 examined the relationship between racial choice (Black, Other vs. White) and psychological distress (moderate, serious levels vs. low) among panethnic and ethnic group (Mexican, Cuban, Puerto Rican, Dominican) samples of Latinx individuals. Findings revealed that Black racial choice is significantly related to higher levels of distress for Mexicans and Cubans, but not for Puerto Ricans and Dominicans. Study 2 examined the moderating role of ethnic group in the relationship between Medicaid coverage, racial choice and psychological distress. Findings revealed that Medicaid coverage decrease the odds of distress for Black-Puerto Rican and -Dominican respondents compared to Black-Mexicans and -Cubans. Study 3 examined whether immigrant status and socioeconomic

status (SES) are significant correlates to racial choice. Findings revealed that immigrant status and low SES have significant but different associations with choosing Black as a race over White. These findings show that racial choice matters in the lives of Latinxs and may create pathways to different levels of distress. Special attention on the reasons behind Latinx racial choice is needed to further understand the impact of racialization on Latinx mental health. The findings of each study are further discussed in their corresponding chapters.

DEDICATION

This project is dedicated to:

My Lord and Savior, Jesus Christ, from whom I seek my strength.

My beloved partner, Karen Alvarado, whose unconditional love fuels my heart and spirit and who reminds me that my identity is beyond my work.

My lovely mother, Ines Figuereo ('Cion Mami!), whose passion for education flows through me.

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Finally, I would like to thank the future readers of this project. May it raise consciousness of your race, racial choices, and identities in your survival from White Supremacy.

With endless gratitude and in kindness and love,

Victor Junior Figuereo

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CHAPTER I. INTRODUCTION

Omi and Winant (2015) define racialization as "the extension of racial meaning to a previously racially unclassified relationship, social practice, or group" (p. 111). One aspect of racialization is racial categorization, which may occur among Latinx¹ individuals when completing the United States (U.S.) Census. In the *Framework for the Effect of Race on Latinos/as' Health and Well-Being*, Luisa Borrell (2005; Crawford, 2006) posits that categorization into 'White', 'Black', or 'Other' races may position Latinxs into pathways of differential health and well-being outcomes. I refer to this aspect of racialization as racial choice, the race Latinx select when prompted.

Racialization has yet to receive sufficient attention to further understand Latinx mental health disparities. The majority of Latinx mental health literature traditionally use aggregated panethnic Latinx respondent samples, which may mask within-group differences by racial choice (López et al., 2018). One disparity in particular that is related to mental health outcomes is psychological distress. There is evidence that shows psychological distress among Latinxs differs by ethnic group (Puerto Ricans vs. Mexicans and Cubans; Lucas et al., 2016) and by race (Black-Latinx vs. White-Latinx; Mena et al., 2019). However, it is not fully understood how Latinx ethnic groups may experience psychological distress differently by their racial choices.

Another mental health disparity among Latinxs and within their ethnic groups is low access to care. Though the Affordable Care Act (ACA) helped reduce this disparity through the expansion of Medicaid, studies on the effects of Medicaid coverage on psychological distress are few and limited to large non-Latinx White or undersized panethnic Latinx respondent samples (Winkelman, Segal & Davis, 2019). The lack of

1

racial choice and ethnic group stratification in such studies hinders efforts to reduce and eliminate Latinx mental health disparities, particularly among underrepresented Latinx racial choice groups (i.e., Black-Latinxs).

Additionally, examining of what factors are associated with Latinx racial choice may help provide context to the relationships between racial choice, ethnic group, Medicaid coverage, and psychological distress. However, researchers traditionally use cultural theories (e.g., acculturation and assimilation) to try understanding Latinx mental health disparities and interpret the racial choices of Latinxs (Tafoya, 2003; 2004; Yancey, 2003). Using such theoretical assumptions does not allow for structural interpretations of how immigration and socioeconomic status relate to Latinx racial choice. This dissertation project consists of three individual studies that address these topics guided by the following aims.

Study Aims

Study 1 Aim: Examine The Association between Racial Choice and Psychological Distress Levels among U.S. Latinxs and Within Their Ethnic Groups

Research on the mental health of panethnic Latinx populations reveal ethnic group and race differences in psychological distress (Lucas et al., 2016; Mena et al., 2019). How higher levels of psychological distress (moderate and serious levels) differs by White, Black, and Other racial choices among Latinxs and within their ethnic groups (Mexican, Cuban, Puerto Rican, and Dominican) remain unexplored. This study aimed to address this gap in knowledge by examining the relationship between racial choice, ethnic group and psychological distress.

Study 2 Aim: Assess The Moderating Role of Ethnic Group in the Relationship between Medicaid Coverage, Racial Choice and Psychological Distress

Medicaid enrollment has been linked to reductions in psychological distress among panethnic Latinx populations (Winkelman, Segal & Davis, 2019). However, the roles that racial choice and ethnic group play in the relationship between Medicaid coverage and psychological distress remain unknown. This study aimed to examine whether Medicaid coverage is associated psychological distress and whether this relationship is dependent upon racial choice and ethnic group.

Study 3 Aim: Identify the Factors of Racial Choice among Latinxs and Within Their Ethnic Groups.

Researchers find immigrant status and socioeconomic status may be linked to White or Other racial choices (Tafoya 2003; 2004; Rodriguez, 2000). However, it is unknown how these factors are associated with a Black racial choice. A limitation in studies that examine the health and well-being of Black-Latinxs including the first two studies of this dissertation (Figuereo, n.d.) is the lack of knowledge on why Latinxs choose Black as their race. What factors might be associated with choosing a Black or Other racial choice over White? This study aimed to investigate what factors typically associated with the racialization of Latinxs (i.e., immigrant status and socioeconomic status) relate their racial choice among a panethnic sample and ethnic group samples.

Literature Review

The Latinx population in the United States (U.S.) is the largest and one of the fastest growing U.S. minority groups, representing 18.1% of the total U.S. population (U.S. Census Bureau, 2017) with a projection to increase to 33% by 2060 (U.S. Census

Bureau, 2016). The Latinx population has a very heterogeneous sociodemographic profile. They differ by nativity (67% U.S. born; 33% foreign-born), language (English proficient 70%, non-English proficient 30%), and U.S. citizenship (citizen 79%, noncitizen 21%; Noe-Bustamante & Flores, 2019). By ethnic group, Mexicans and Latinx Caribbean groups (Puerto Ricans, Cubans, and Dominicans) make up the majority of the U.S. Latinx population (62%, 10%, 4%, 4%, respectively; Noe-Bustamante & Flores, 2019). Many differences can even be found within these ethnic groups. Mexicans, Cubans, Puerto Ricans, and Dominicans differ in their cultures, colonization histories, immigration and socioeconomic profiles. It is well known that Latinx immigration related factors are associated with various mental health-related outcomes, such as psychiatric diagnoses and psychological distress (Alegría et al., 2007; 2008).

One of the more overlooked aspects of Latinx heterogeneity is race, specifically racial choice. According to a report from the 2010 census (Ennis, Rio-Vargas, & Albert, 2011), 53% of Latinxs chose "White", 3% chose "Black or African American", and 37% chose "Some other race" as their race. From W.E.B. Du Bois to David Williams, researchers have provided extensive empirical evidence that race is a determinant of health, particularly among non-Latinx Black and African Americans (Du Bois, 2003; Williams & Mohammed, 2009). Preliminary and emerging findings suggest that race also matters in the lives of Latinxs (Cuevas, Dawson, & Williams, 2016; Mena, Durden, Bresette, & McCready 2019). However, many studies of Latinx mental health use acculturation theoretical frameworks that limit the focus of Latinx mental health experiences to ethnic group, immigration, and acculturation differences.

Latinx Mental Health

Researchers find that Latinxs from panethnic samples are more likely to report psychological distress than non-Latinxs (e.g., Lucas, Freeman & Adams, 2016), but are less likely to report lower lifetime prevalence rates of psychiatric disorders than non-Latinx whites (e.g., Alegría et al., 2007). This may be due barriers of access to healthcare many Latinx communities face, such as high uninsured rate of health coverage (De Jesus & Xiao, 2014). Latinxs without coverage may be more likely to delay care due to lack of affordability (Nguyen & Sommers, 2016). Therefore, their distress may be likely to goes undiagnosed. Another explanation may be that the inclusion of a panethnic sample is masking ethnic group differences of psychiatric disorder rates. When stratified by ethnic group, Alegría and colleagues (2007) analyzed data from the National Latino and Asian Study (NLAAS; N=2,554 Latinxs) found that Puerto Ricans held the highest lifetime prevalence rate of any psychiatric disorder compared to Mexicans, Cubans and undefined "other" Latinx groups. Researchers (e.g., Lucas, Freeman & Adams, 2016) have also found that Puerto Ricans reported higher psychological distress than their ethnic group counterparts. Though psychological distress is not a mental health outcome, it may increase the risk of developing anxiety and depressive disorders if unaddressed (Ross, 2017). Researchers have linked immigration-related factors to Latinx mental health outcomes.

The Hispanic Health Paradox (HHP) is a collection of findings based on immigration factors that reveal foreign-born Latinx migrants report better physical and mental health than their U.S.-born counterparts despite lower income (e.g., Acevedo-Garcia, et al., 2010; Alegría et al., 2008; Cook et al. 2009; Dominguez et al., 2015; Singh, Rodriguez-Lainz, & Kogan, 2013). Being born in the U.S. and being third generation has been linked to anxiety and depression (e.g., Alegría et al., 2007). Less length of time living in the U.S. was linked to more positive mental health outcomes. One study in 2009 found that Latinx immigrants living in the United States for 0 to 10 years were significantly less likely to have a psychiatric disorder and depressive disorder compared to U.S. born respondents (e.g., Cook et al., 2009). Cultural explanations, such as acculturation and assimilation have been used to understand these Latinx immigrant health patterns. Researchers believe the health advantage Latinx immigrants hold over their U.S. born counterparts may be due to their adherence to traditional cultural values that serve as buffers to stress, such as familism (Calzada, Tamis-Lemonda, & Yoshikawa, 2012). As Latinx immigrants spend more time living in the U.S., they are found to be more distant with family and engage in unhealthy behaviors on par with U.S. born Latinxs, including high fast food consumption and high levels of substance use (Abraido-Lanza, Chao, & Flores, 2005; Dubowitz, Bates, & Abraido-Lanza, 2010; Singh, 2013), placing them at risk of distress, anxiety, and depression.

Some scholars express caution that focusing on culture can lead to essentialization and homogenization of Latinxs, defining them by specific cultural beliefs and thus risking the perpetuation of racial and ethnic stereotypes (e.g., Viruell-Fuentes, Miranda, & Abdulrahim. 2012). Therefore, scholars such as Viruell-Fuentes, Miranda, and Abdulrahim (2012) call on researchers to go beyond cultural explanations (e.g., familism, acculturation) of immigrant health outcomes to examine structural factors, including racialization. Without accounting for racialization and within-group differences of mental health outcomes by racial choice, the mental health experiences and disparities of underrepresented Latinx racial choice groups, including Black- and Afro-Latinxs, will continue to go unseen and unaddressed (Cuevas, Dawson, & Williams, 2016).

Theoretical Framework

One of the ways racialization occurs is the process of racial categorization through federally mandated surveys, such as the U.S. Census (Omi & Winant, 2015). Unlike race taxonomies based on a spectrum of skin color and phenotype in Latin America (Roth, 2012; Telles, 2014), the Census categorizes Latinxs as an ethnic group that can be of any race (Grieco & Cassidy 2001; Humes, Jones & Ramirez, 2011). According to Luisa Borrell's Framework for the Effect of Race on Latinos/as' Health and Well-Being (see figure 1; Borrell, 2005; Borrell & Crawford, 2006), an individual's indicated race on the Census corresponds to their self-perceived and ascribed skin color. If Latinxs chose Black as their race, it is a reflection of how they perceive their skin color that gets reinforced by others' perceptions. The framework outlines the relationship between racial choice (e.g., White, Black) with Latinx health and well-being, which is linked through intermediating channels of individual (e.g., socioeconomic status), psychosocial (e.g., social support, financial strain, racial discrimination), contextual factors (e.g., U.S. state), and access to care factors (e.g., health insurance). Borrell hypothesized Black-Latinxs would experience similar social determinants of health (e.g., quality education, employment, income) as African Americans and thus result in unfavorable health outcomes. According to Borrell, this would be more apparent among Puerto Ricans and Dominicans because they have significant African ancestry and are more likely to report Black as their race compared to other Latinx ethnic groups (e.g., Mexican and Cuban; Ennis, Rio-Vargas, & Albert, 2011).

Several studies have since supported some of Borrell's expected racial choice and well-being pathways. Studies on Black- and White-Latinxs show Black-Latinxs share similar sociodemographic profiles and physical health outcomes as non-Latinx Blacks, inducing lower income, higher poverty, lower homeownership, and more arrests by police than their White and lighter-skinned counterparts (Kizer, 2017; LaVeist-Ramos, Galarraga, Thorpe, Bell, & Austin 2012; Logan 2003; White, 2015). Cuevas, Dawson, and Williams (2016) highlighted that Black-Latinxs experience worse physical health than White Latinxs, including greater hypertension and fair/poor self-rated health (Borrell, 2009; Borrell & Crawford, 2006; Borrell & Dallo, 2008). Low socioeconomic status and poor physical health may position Black-Latinxs to be more vulnerable to experience psychological distress.

The Present Dissertation

The present dissertation will use an adapted framework (see figure 2.) based on *Borrell's Framework for the Effect of Race on Latinos/as' Health and Well-Being* to meet the aims of the three conducted studies; 1) examine the association between racial choice and psychological distress levels among U.S. Latinxs and within their ethnic group, 2) assess the moderating role of ethnic group in the relationship between Medicaid coverage, racial choice and psychological distress, and 3) identify the factors of racial choice among Latinxs and within their ethnic groups. The following includes the methodology details of this dissertation's three studies.

Figure 1. Borrell's Framework for the Effect of Race on Latinos/as' Health and Well-Being



Figure 2. Adapted Framework: Racial Choice Pathways to Distress



Methodology

Extant Data

The author utilized extant data collected by the National Center for Health Statistics (NCHS), housed in the Center for Disease Control and Prevention (CDC), a federal agency under the United States Department of Health and Human Service (HHS). The NCHS telephonically administers the National Health Interview Survey (NHIS) to track the health and mental health status of U.S. residents. The utility of NHIS is its ability to stratify physical and mental health characteristics by a variety of demographic and socioeconomic factors. By sample design, the NHIS is an annual cross-sectional population survey that undergoes a multistage sampling procedure to achieve a representation of individuals in households within state counties across all 50 U.S. states, including territories such as Puerto Rico. As a result, each year receives an expected household sample of 35,000 and individual sample of 87,500. Multiple sampling panels were produced (i.e., Household, Family, Person, Adult, and Child) with each panel receiving different sets of survey questions. For the scope of this study, the author merged the Adult and Person panels, and kept observations only from respondents 18 years or older who identified as Latinx with an ethnic group background of either Mexican, Puerto Rican, Cuban, or Dominican and with a racial choice of either White, Black or Other. To obtain a larger sample of Dominicans, the author pooled together nine years of the dataset (2010-2018), which resulted in a final sample size of N = 34,102. Appropriate weights were created and applied to the final sample. For detailed complex sampling and weighting procedures, refer to the NHIS design and estimation documentation from 2006-2015 and 2016 and beyond. Each study in this dissertation utilized this method and weighted dataset with mostly similar sets of measures/variables described in each chapter of those studies.

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CHAPTER II: THE ASSOCIATION BETWEEN RACIAL CHOICE, ETHNIC GROUP AND PSYCHOLOGICAL DISTRESS

Abstract

Objective: Research shows that non-Latinx Blacks experience more psychological distress than non-Latinx Whites. How 'Black' and 'Other" racial choices relate to higher levels of distress among Latinxs remains unexplored. The study's purpose was to address this knowledge gap by investigating the association between racial choice and psychological distress among Latinxs and within their ethnic groups. **Design:** Using data from the National Health Interview Survey (NHIS) 2010-2018, I conducted multinomial logistic regressions and displayed the adjusted odds ratio (aOR) of reporting moderate or serious psychological distress among 'White'-, 'Black'- and 'Other'-Latinxs from Mexico, Cuba, Dominican Republic, and Puerto Rico. Results: Black racial choice (vs. White) was significantly associated with moderate psychological distress compared to low psychological distress, even after adjusting for immigrant status, SES, age, sex, marital status, U.S. region, and NHIS survey year (aOR= 1.38, 95% CI [1.07-1.78]). This was also the case for Mexicans (aOR= 1.72, 95% CI [1.06-2.79]) and Cubans (aOR= 2.11, 95% CI [1.12-3.98]), but not for Dominicans and Puerto Ricans. Conclusions: Research that accounts for reasons for racial choice and access to care factors are needed to further understand the relationship between racial choice, ethnic group and psychological distress.

Key words: Latinx mental health; racialization; psychological distress; Black-Latinx; racial choice.

Introduction

Psychological distress is a negative affective state that manifests with feelings of sadness, hopelessness, worthlessness, or nervousness (Drapeau et al., 2011; Ross, 2017). Accumulated stress weakens the immune system (Feeney et al., 2018), decreases cognitive functioning (McEwen et al., 2015), and has been associated with loss of independence, limited social and occupational functionality, and higher risk of developing anxiety and depressive disorders (Kessler et al., 2002; Ross, 2017).

It is well-established in the literature that non-Latinx Blacks experience higher rates of psychological distress than non-Latinx Whites (Banks et al., 2006). Evidence on the role that racial choice (e.g., Black vs. White) plays on the psychological distress of Latinxs and their ethnic groups, by contrast, is limited (Cuevas et al., 2016). To my knowledge, only one study has examined within-group differences of psychological distress among Latinxs by racial choice. This study estimated the relationship between race and psychological distress using the National Health Interview Survey (NHIS) and found that Black-Latinxs experienced higher psychological distress than their White counterparts, even after adjusting for demographic and socioeconomic factors (Mena et al., 2019). Although this finding suggests that racial choice plays a role in the psychological distress experiences of Latinxs, this study did not disaggregate by ethnic group.

The current study will examine the unexplored relationship between racial choice and psychological distress of Latinxs from different ethnic group backgrounds. In a racialized society like the United States (U.S.), one's racial choice may be a reflection of their skin color (Denton and Massey, 1989; Frank, Akresh, & Lu., 2018; Golash-Boza &

Darity 2008). Therefore, Latinxs who select Black as their race may have darker skin than those who select White. Colorism, a hierarchical social system based on skin color, would place darker skinned Latinxs at the bottom of the social hierarchy (Hunter, 2013). As Borrell theorizes in her Framework for the Effect of Race on Latinos/as' Health and Well-Being (Borrell, 2005; Borrell & Crawford, 2006), this racial categorization determines access to opportunities. While Black-Latinxs share cultural traits with their lighter-skinned peers, they may not have the same access to education, health care or the job market (Cuevas et al., 2016; Perreira & Telles, 2014; Santana, 2018). It is welldocumented in the research literature that interpersonal and institutional discrimination increase anxiety and depression, leads to negative health outcomes, and increases healthrelated risk behaviors such as smoking (Adames & Chavez-Dueñas, 2017; Cuevas et al., 2016). Black-Latinxs are also more likely than their White counterparts to experience increased policing and be racialized into the criminal justice system (Alcalá & Montoya, 2018). As a result, relative to their White peers, Black-Latinxs may carry a disproportionate burden of psychological distress in the U.S.

The panethnic term Latinx, however, denotes ethnicity, not race. The impact of colorism on health outcomes, therefore, may not fully account for disparities on psychological distress among Latinxs. Besides skin tone, there is a wide diversity of immigration-related characteristics concerning Latinxs' ethnic group background, generations and length of time living in the U.S., nativity, citizenship status and English proficiency. These characteristics have been used to racialize Latinxs, and thus may be linked to negative well-being outcomes within the panethnic Latinx community (Araújo, 2015; Araújo & Borrell, 2006). For instance, researchers using nationally representative

samples of data observed that U.S.-born Latinxs reported higher levels of anxiety and depression compared to immigrants (Alegría et al., 2008), whereas Latinx recentimmigrant who have been living in the U.S. for less than a decade reported fewer psychiatric disorders, including depression, than longer-term immigrants (Cook et al., 2009). Besides nativity and time in the U.S., disparities in mental health-related outcomes among Latinxs have been associated to language preference and documentation status. Evidence suggests that English proficiency protects immigrants against acculturative stress, whereas speaking only Spanish has the opposite effect (Lueck & Wilson, 2011). Undocumented immigrants and mixed-status families have also been shown to carry a disproportioned burden of mental health disparities such as stress, anxiety, and depression (Cobb et al., 2017).

According to Borrell's *Framework for the Effect of Race on Latinos/as' Health and Well-Being*, these immigration-related factors may play a role in the relationship between racial choice and psychological distress, especially ethnic group background. A recent brief from the National Center for Health Statistics (NCHS) that observed that while Latinxs experienced serious psychological distress at higher rates than non-Latinxs, levels of distress differed by ethnic group. Puerto Ricans experienced the highest rates of distress followed by Mexicans, Cubans, and Central or South Americans (Lucas et al., 2016). Borrell theorizes that "Hispanic subgroup" (i.e., ethnic group) may moderate the relationship between racial choice and psychological distress.

The Present Study

The present study will focus on the specified model for Study 1 (see figure 3.) to address the following research questions and hypotheses.

Research Question 1: Is racial choice significantly associated with psychological distress?

Hypothesis 1 (H1): Racial choice will be significantly associated with moderate and serious psychological distress compared to low distress, whereby Black-Latinx respondents will have higher odds of reporting distress at moderate and serious levels than White-Latinxs.

Research Question 2: Will the relationship between racial choice and psychological distress differ by ethnic group?

Hypothesis 2 (H2): The relationship between racial choice and psychological distress will differ by ethnic group, whereby Puerto Rican and Dominican respondents will report higher odds of moderate and serious psychological distress than Mexican and Cubans respondents.

Figure 3: Specified Model for Study 1



Method

Measures

Dependent Variable: Psychological Distress

Psychological distress is assessed in the National Health Interview Survey (NHIS) with the six-item version of the Kessler Psychological Distress Scale or K6 (Kessler et

al., 2002). The K6 asks participants to respond with a Likert scale that ranges between 0 'none of the time' to 4 'all of the time' to the question: 'During the past 30 days, how often did you feel 1) sad, 2) nervous, 3) restless or fidgety, 4) hopeless, 5) everything was an effort, 6) worthless. I followed prior research and added the scores across the 6 items for a scale score that ranged from 0 - 24. Higher scores indicated higher distress (Kessler et al., 2002).

While the summed scores produced a high internal consistency for the overall Latinx sample (α =.88), as well as for each ethnic group sample Mexican (α =.87), Cuban (α =.90), Puerto Rican, (α =.89) and Dominican (α =.89) samples, it also created a non-correctable positively skewed distribution of the sample. To avoid outlier bias estimation risks, I recoded the summed scores of psychological distress into a three-level ordinal variable as follows: (0-4) 'low psychological distress', (5-12) 'moderate psychological distress', and (13-24) 'serious psychological distress' (Dedania & Gonzales, 2019; Prochaska et al., 2012)

Independent Variables: Racial Choice and Ethnic Group

Respondents' racial choice was the primary independent variable of this study. The NHIS follows the Office of Management and Budget's (OMB) definitions of race and ethnicity. For race, an unscientific social category based on national origin, phenotype, or sociocultural group, respondents could choose among the following categories: 1) White, 2) Black/African-American, 3) American Indian & Alaskan Native, 4) Chinese, 5) Filipino, 6) Asian Indian, 7) Other race, or 8) Multiple race. I recoded the race variable to capture the three major categories Latinx respondents selected (0= White, 1= Black, 2= Other). Ethnic group was the secondary independent variable used to address the second research question and assess for within-group differences. The NHIS categorized respondents as Latinx if they were from Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race. I selected for this study only the Latinxs subgroups of interest: Mexican, Cuban, Puerto Rican, and Dominican).

Control Variables: Individual and Contextual Factors

Control variables included immigration status, poverty status³, educational attainment, employment status, age, sex, marital status, and U.S. region. To create the variable immigration status, I combined nativity with length of time in the U.S. (0= recent immigrant or less than ten years in the U.S., 1=long-term immigrant or more than ten years in the U.S., 2= U.S. born; Murillo et al., 2019). Though citizenship is linked to Latinx mental health outcomes, it was removed from this group of control variables due to multicollinearity concerns with immigrant status. I also included a dummy variable with the survey year waves of the NHIS.

Analytic Plan

To describe the sample by level of psychological distress, I computed weighted percentages. The percentages indicate the rates of moderate and serious distress, versus low distress -the reference category- by respondents' characteristics. To estimate the association between each variable and psychological distress, I computed Chi-square tests. In the same vein, to estimate the bivariate association within categories (e.g., Black vs. White, Other vs. White), I ran Wald tests. To investigate the adjusted association between racial choice and psychological distress, I conducted multinomial logistic regressions and estimated the adjusted odds ratios (aOR) of Black-Latinxs and OtherLatinxs to experience moderate and serious psychological distress, relative to White-Latinxs. I also estimated the aOR of experiencing psychological distress for each ethnic group separately to assess the within-group effects of racial choice on distress by ethnic group.

Missing Data

There were 788 (2.31%) missing observations for the dependent variable, psychological distress. Before conducting the main multivariate analyses of this study, I used multiple imputation (chained equation algorithm; MICE) and generated 10 imputed datasets to minimize bias in the multivariate analyses of the three conducted studies. The imputation process included the 16 variables in the multinomial regression models. Multiple imputation is regarded as an appropriate and conservative approach to handling missing data and helps to minimize bias that may occur in the analysis models because of them (Allison, 2002; Rubin, 1987; Perkins et al., 2018). Guidance on Stata multiple imputation commands and procedures used in this study can be found in its <u>2016 manual</u> (Stata, 2016).

Results

Preliminary Analyses

Sample Characteristics by Level of Distress

Table 1 displays the sociodemographic characteristics of respondents, the prevalence rates of moderate and serious psychological distress, and the associations between the independent and control variables with the dependent variable. The majority of respondents tended to select Mexican (78%) as their ethnic group, and tended to selected White (61%) as their racial choice. The bulk of the sample was working-age,

evenly distributed by sex. Most respondents lived with a partner (61%), either in the Western (43%) or Southern (36%) regions of the U.S. While over half of the sample (53%) was not born in the U.S., most immigrants (45%) had lived in the country for over a decade. In fact, a substantial proportion of respondents had U.S. citizenship (69%). Over a third of the sample had not attain high school education (34%). As a result, although the vast majority of the sample was employed (68%), many respondents lived under poverty level (41%).

Concerning distress, the group who experienced higher levels of moderate psychological distress (MPD) tended to select Black (23.6%) as their racial choice and be from Puerto Rico (20.5%), and in the prime of their working-age - between 35 and 64 years of age -. These respondents were also more likely to be U.S.-born (17.7%), women (18.7%), from the Northeast region (18.3%), and lived with a partner (15.1%). Unemployed participants (20%), with at least high school education (15.9%), and who fell under 100% of the FPL (20.2%) were also more likely to report moderate levels of psychological distress.

Respondents who reported serious psychological distress (SPD), on the other hand, tended to identify as either Puerto Rican (6.1%) or Dominican (4.9), were more likely to be over the age of 35, and U.S.- born (3.7%) or long-term immigrants (4.1%). Like their MPD peers, women (4.6%) from the Northeast region (5.3%) who lived with a partner (3.1%) were more likely to report SPD. Similarly, unemployed participants (6.7%), with at least high school education (3.7%), and with relatively higher incomes were more likely to report SPD.

Main Analyses

The Relationship Between Racial choice, Ethnic Group and Psychological Distress

Table 2 displays the adjusted odds ratios (aOR) on the effects of racial choice and ethnic group on moderate psychological distress (MPD) while adjusting for control variables. The model displaying the effects of racial choice and ethnic group on serious psychological distress (SPD) was omitted from display but can be available upon request. Racial choice was significantly related to experiencing MPD, but not SPD. Black-Latinxs had a 38% higher odds of reporting MPD than White counterparts (aOR= 1.38, 95% CI [1.07-1.78]). Concerning ethnic group, Puerto Ricans had 34% higher odds of experiencing MPD (aOR= 1.34, 95% CI [1.15-1.57]) and 111% higher odds of experiencing SPD (aOR= 2.11, 95% CI [1.58-2.82]) compared to Mexicans. Dominicans also had an 72% higher odds of reporting SPD than Mexicans (aOR= 1.72, 95% CI [1.12-2.64]).

The Role of Racial choice on The Psychological Distress of Latinx Groups

Table 2 also displays the aOR of reporting MPD respectively by ethnic group. Interestingly, racial choice was positively associated with experiencing higher levels of moderated psychological distress for Mexicans and Cubans, but not for Puerto Ricans and Dominicans. Compared to their White counterparts, Black-Mexicans had a 72% higher risk of reporting MPD (aOR= 1.72, 95% CI [1.06-2.79]). In the same vein, Black-Cubans had a 111% higher risk of reporting MPD than White peers (aOR= 2.11, 95% CI [1.12-3.98]). Racial choice, however, was not significantly associated with experiencing SPD across ethnic groups (SPD models are available upon request.
	Total N (% ^{rd.})	MPD (%)	SPD (%)		Total N (% ^{rd.})	MPD (%)	SPD (%)
Race				Marital status			
White ^{ref}	20444 (61)	16.3	3.5	Single ^{ref}	15373 (39)	19	4.8
Black	703 (2)	23.6*	4.5	Cohabitating/married	17909 (61)	15.1*	3.1*
Other	12191 (37)	16.7	4.2	U.S. Region			
Immigrant status				West ^{re}	14325 (43)	16.8	3.6
Recent immigrantref	2856 (8)	14.7	2.2	South	11895 (36)	15.4	3.6
Long-term immigrant	15434 (45)	16	4.1*	Midwest	3136 (10)	18.2	3.4
U.Sborn	14745 (47)	17.7*	2.2	Northeast	3982 (12)	18.3*	5.3*
Poverty				Ethnic Group			
400% or $>$ of FPL ^{ref}	5099 (18)	12.9	1.6	Mexican ^{ref}	25368 (78)	16.3	3.3
< 100% of FPL	9428 (23)	20.2*	6.6*	Cuban	2200 (6)	14.2	3.9
100%-199% of FPL	9825 (30)	17.5*	4.1*	Puerto Rican	4323 (12)	20.5*	6.1*
200%-399% of FPL	8774 (29)	15.4*	2.6*	Dominican	1447 (4)	15.3	4.9*
Education				NHIS year			
<high school<sup="">ref</high>	12257 (34)	17.7	4.9	2010 ^{ref}	3918 (10)	17.6	3.4
High school	8739 (28)	15.8*	3.7*	2011	4458 (10)	15.1*	3.8
Some college	5271 (17)	18.2	3.3*	2012	4487 (11)	14.2*	2.9
Employment				2013	4446 (11)	18	4.3
Employed ^{ref}	21593 (68)	15	2.4	2014	4444 (11)	16.6	4.4
Unemployed	11745 (32)	20*	6.7*	2015	4029 (11)	17.1	4.2
Age				2016	2820 (12)	17.4	3.3
18-25 ^{ref}	5166 (20)	17	2.4	2017	2394 (12)	15.8	3.1
26-34	7039 (22)	16.9	2.6	2018	2342 (12)	17.6	4.4
35-49	10457 (31)	14.7*	4*	Source: National Health Interv	view Surveys, 2010-20	18.	
50-64	6224 (18)	18.6*	5.6*	LPD= Low psychological dist	ress; MPD= Moderate	psychological dis	tress; SPD=
65>	4452 (10)	17.4	4.9*	^{rd.} =percentage is rounded up			
Sex				^{ref} =reference group.			
Male ^{ref}	14728 (50)	14.6	3	Note: All independent and cor	trol variables were sign	ng to wald tests.	ted with
Female	18610 (50)	18.7*	4.6*	psychological distress p<.001	6	2	

Table 1. Panethnic Latinx Sample Characteristics by Psychological Level of Psychological Distress in Frequency (N) and Percentages (%)

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	Panethnic Latinx	Mexican	Cuban	Puerto Rican	Dominican
	(n=32,580)	(n=24,750)	(n=2,165)	(n=4,254)	(n=1,411)
	aOR (CI)				
Racial choice					
White	Ref	Ref	Ref	Ref	Ref
Black	1.38* (1.07 - 1.78)	1.72* (1.06 - 2.79)	2.11* (1.12 - 3.98)	1.27 (0.87 - 1.85)	1.11 (0.56 - 2.20)
Other	1.00 (0.91 - 1.10)	1.00 (0.90 - 1.10)	1.33 (0.69 - 2.55)	0.98 (0.79 - 1.23)	1.16 (0.80 - 1.70)
Immigrant status					
Recent immigrant	Ref	Ref	Ref	Ref	Ref
Long-term immigrant	1.10 (0.93 - 1.29)	0.98 (0.81 - 1.18)	1.54 (0.95 - 2.52)	1.54* (1.02 - 2.32)	1.02 (0.56 - 1.86)
U.Sborn	1.36*** (1.07 - 1.54)	1.23* (1.03 - 1.48)	1.87* (1.06 - 3.30)	1.33 (0.88 – 2.01)	2.55** (1.32 - 4.94)
Poverty status					
400% or > of FPL	Ref	Ref	Ref	Ref	Ref
< 100% of FPL	1.80*** (1.53 - 2.11)	1.79*** (1.49 - 2.14)	1.32 (0.78 - 2.24)	2.03*** (1.35 - 3.07)	1.58 (0.84 - 2.97)
100%-199% of FPL	1.52*** (1.31 - 1.76)	1.55*** (1.31 - 1.84)	0.98 (0.57 - 1.70)	1.54* (1.07 - 2.21)	1.35 (0.68 - 2.68)
200%-399% of FPL	1.25*** (1.09 - 1.44)	1.25** (1.06 - 1.47)	0.84 (0.53 - 1.32)	1.35 (0.97 - 1.89)	1.57 (0.86 - 2.85)
Education					
< High school	Ref	Ref	Ref	Ref	Ref
High school	0.89* (0.80 - 0.99)	0.91 (0.81 - 1.03)	0.63* (0.41 - 0.97)	0.84 (0.64 - 1.10)	0.80 (0.50 - 1.27)
Some college	1.04 (0.91 - 1.20)	1.13 (0.96 - 1.32)	0.89 (0.55 - 1.44)	0.80 (0.58 - 1.10)	0.49 (0.24 - 1.02)
College degree or >	0.88 (0.78 - 1.01)	0.91 (0.79 - 1.06)	0.62* (0.41 - 0.93)	0.81 (0.58 - 1.13)	0.72 (0.38 - 1.38)
Employment					
Employed	Ref	Ref	Ref	Ref	Ref
Unemployed	1.30*** (1.17 - 1.44)	1.26*** (1.11 - 1.42)	1.97*** (1.35 - 2.86)	1.48*** (1.20 - 1.82)	1.06 (0.71 - 1.57)
Age					
18-25	Ref	Ref	Ref	Ref	Ref
26-34	1.27*** (1.11 - 1.45)	1.20* (1.04 - 1.40)	0.98 (0.45 - 2.13)	1.64** (1.16 - 2.33)	1.87 (0.88 - 4.01)
35-49	1.14 (0.99 - 1.31)	1.11 (0.95 - 1.30)	1.54 (0.82 - 2.90)	1.16 (0.82 - 1.63)	2.16* (1.11 - 4.23)
50-64	1.53*** (1.32 - 1.77)	1.49*** (1.26 - 1.76)	2.38** (1.34 - 4.24)	1.23 (0.87 - 1.75)	3.74*** (1.73 - 8.06)
65>	1.08 (0.90 - 1.29)	1.13 (0.91 - 1.39)	1.16 (0.58 - 2.33)	0.72 (0.49 - 1.04)	1.53 (0.67 - 3.54)

Table 2. Multinomial Logistic Regression: Moderate Psychological Distress (vs. Low Psychological Distress) among Panethnic Latinx Sample and by Ethnic Group

Sex

Male	Ref	Ref	Ref	Ref	Ref
Female	1.25*** (1.15 - 1.36)	1.25*** (1.13 - 1.38)	1.06 (0.79 - 1.42)	1.26* (1.03 - 1.54)	1.76* (1.10 - 2.81)
Marital status					
Single	Ref	Ref	Ref	Ref	Ref
Cohabitating or married	0.80*** (0.73 - 0.87)	0.81*** (0.73 - 0.90)	0.90 (0.64 - 1.26)	0.72** (0.58 - 0.90)	0.98 (0.63 - 1.53)
U.S. region					
West	Ref	Ref	Ref	Ref	Ref
South	0.89* (0.80 - 0.99)	0.91 (0.82 - 1.01)	0.63 (0.33 - 1.21)	0.75 (0.50 - 1.14)	0.53 (0.20 - 1.42)
Midwest	1.08 (0.94 - 1.24)	1.03 (0.89 - 1.19)	1.78 (0.64 - 5.00)	1.22 (0.77 - 1.94)	0.44 (0.08 - 2.35)
Northeast	0.93 (0.77 - 1.13)	0.96 (0.61 - 1.49)	0.65 (0.28 - 1.51)	0.83 (0.57 - 1.21)	0.55 (0.22 - 1.42)
Ethnic group					
Mexican	Ref				
Cuban	0.99 (0.80 - 1.22)				
Puerto Rican	1.34*** (1.15 - 1.57)				
Dominican	0.94 (0.74 - 1.19)				

Source: National Health Interview Surveys, 2010-2018. This dataset was weighted and imputed. The control variable NHIS year is included in the model, but omitted from display and can be available upon request. aOR= Adjusted odds ratio; CI= Confidence interval; Ref = reference group

* p<0.05; ** p<0.01; *** p<0.001

Discussion

The results of this study indicate that racial choice plays a role on the psychological distress of Latinxs, but not across all ethnic groups. For the first research question of this study, I examined the relationship between racial choice and psychological distress across a panethnic sample of Latinxs while adjusting for individual and contextual factors. Partially in line with my first hypotheses (H1) and consistent with prior research, I found that racial choice was significantly related to moderate psychological distress (MPD), whereby Latinxs who selected Black as their race (i.e., Black-Latinxs) more likely to report moderate psychological distress than White-Latinxs (Mena et al., 2019). However, racial choice was not significantly associated with serious levels of distress (SPD), which may be due to the small sample size of Black-Latinxs who reported SPD.

The descriptive statistics of psychological distress by ethnic group at first appear to help explain the relationship between racial choice and MPD. Puerto Rican and Dominican respondents reported higher levels of distress than Mexicans in the sample. These two ethnic groups are more likely to identify as Black than Mexicans. (Borrell, 2005; Ennis, Rio-Vargas, & Albert, 2011). Additionally, the Puerto Rican ethnic group, regardless of racial choice, was significantly associated with MPD (Lucas et al., 2016). Thus, it may be that Black-Latinxs' higher odds of moderate distress reflect the racialized lived experiences of Puerto Ricans and Dominicans, which may include discrimination by skin color and phenotype (Araújo Dawson, 2009; Araújo-Dawson, 2015 & Gomez, 2000). This helps to support what Borrell's framework (2005) posited, in that psychosocial factors, such as discrimination, may mediate the pathway between racial choice and well-being. However, the findings to the second research question draws contradicting conclusions.

For the second research question of this study, I assessed whether there were ethnic group differences in the relationship between racial choice and psychological distress. This within-group analysis showed partial support for my second hypothesis (H2). As expected, racial choice was still significantly associated with MPD among the Mexican and Cuban ethnic groups. Selecting the Black racial choice significantly increased the odds of MPD compared to selecting a White racial choice in the Mexican and Cuban samples. Surprisingly, this was not the case for Puerto Ricans and Dominicans. Racial choice was not significantly associated with MPD among the Puerto Rican and Dominican ethnic groups. In other words, the odds of reporting distress did not significantly differ between Black-Puerto Ricans/Dominicans and their White counterparts, even though descriptive statistics revealed that these two ethnic groups tend to select a Black racial choice and report higher distress than Mexicans. What can help explain this finding?

One potential explanation is the rejection of a White-Black binary, skin colorbased construction of race. Studies on the racial reporting of Latinxs show that racial choice may not always correspond with skin color. One study found that Puerto Ricans and Dominicans chose Black as their race despite having lighter skin color than those chose White as their race (Roth, 2010). Although a significant proportion of Puerto Ricans and Dominicans are often perceived as Black in the U.S., most Puerto Ricans chose White and most Dominicans chose Other on the 2010 Census (Roth, 2012; Vargas-Ramos, 2012). Prior research shows that Dominicans reject Black as their racial identification to distance themselves from blackness and being perceived as African-American (Golash-Boza & Darity, 2008). Similarly, Puerto Ricans, have been shown have a preference for identifying as White to participate in the structural and symbolic privileges associated with whiteness in the U.S. (Vargas-Ramos, 2012). This mismatch between racial self-identification and socially ascribed race may explain why race does not seem to play a role in the distress of the Puerto Rican and Dominican samples. For these groups, whiteness may not carry the protective anti-discriminatory effect that bestows upon lighter-skin individuals of European descent. Dominicans and Puerto Ricans in our sample who chose White as their race may still be perceived as Black by others, perhaps enduring similar rates of discrimination than their Black peers and therefore experiencing similar levels of psychological distress.

Another potential explanation is the geographic regional locations of the ethnic groups. Group differences by U.S. region (see Table A. in the Appendix) show that what distinguishes Black-Mexicans/Cubans from Black-Puerto Ricans/Dominicans is their

geographic locations. Consistent with traditional ethnic group enclaves, the majority of Black-Mexicans and Cubans reported living in the U.S. South (43%, 72.7%) while the majority of Black-Puerto Ricans and Dominicans reported living in U.S. Northeast (46.7%, 57.1%). Greater access to healthcare, which has been linked to reduced mental health disparities (Bridges et al., 2014), has been documented in Northeastern states who have expanded Medicaid (e.g., Massachusetts) compared to Southern states who have not (e.g., Florida; Hayes, Riley, Radley, & McCarthy, 2017). It has also been documented that Puerto Ricans have seen an increase in their access since the passing of the Affordable Care Act (Alcalá, Chen, Langellier, Roby, & Ortega, 2017). Therefore, racial choice may not matter for Puerto Ricans and Dominicans when reporting moderate levels of distress because Black-Puerto Ricans and Dominicans may experience similar rates of healthcare access as their White counterparts, which may increase their affordability and use of health and mental services.

Limitations

Due to the cross-sectional design of this study, I am unable to evidence a causal relationship between race and psychological distress. Self-identifying as Black or Other does not cause distress. Rather, Latinxs, such as Mexicans and Cubans who choose either as their race may be more likely to report distress for reasons beyond the scope of this study. Due to the self-identification format of the racial choice measurement in this study, it is uncertain whether Latinx racial choices are reflective of respondents' phenotypic features, how they perceive themselves, how others perceive them (ascribed race), or a

combination of the three. Researchers studying the topic of race measurement among Latinxs find that it is insufficient to rely on one dimension of racial self-reporting (Garcia, Sanchez, Sanchez-Youngman, Vargas, & Ybarra, 2015; Vargas, Winston, Garcia, & Sanchez, 2016) and that there are differences in self-reported health and mental health depending on self-perceived race, ascribed race, or street race (López et al., 2018). Also, the absence of access to care factors (e.g., health insurance, Medicaid coverage) limits the understanding of the relationship between racial choice, ethnic group, and psychological distress and raises important questions. For instance, does Medicaid coverage protect Black-Puerto Ricans and Dominicans from experiencing moderate levels of psychological distress?

Conclusion

This is the first study to link racial choice with psychological distress among a large ethnically diverse national sample of Latinxs. It is a building block to understanding structural factors, such as racialization, that may contribute to the risk of mental health disparities among diverse U.S. Latinx communities. To further understand the connections between racial choice and distress, future studies should consider and account for access to care factors and examine the relationship between racial choice, healthcare access, and psychological distress among Latinxs. Borrell also theorized that factors used to racialize Latinxs, such as immigrant status, may influence racial choice. Future studies should also examine what factors are related to the racial choices of Latinx individuals.

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CHAPTER III: MEDICAID COVERAGE, RACIAL CHOICE AND PSYCHOLOGICAL DISTRESS: THE MODERATING ROLE OF ETHNIC GROUP

Abstract

Objective: Medicaid expansions and coverage have been linked to improvements in mental health outcomes, including psychological distress. Though studies have included Latinxs, there has been no disaggregation by ethnic group or racial choice. This study's purpose was to examine how ethnic group moderates the relationship between Medicaid coverage, racial choice and psychological distress. **Design:** Using data from the National Health Interview Survey (NHIS) 2010-2018, I conducted multinomial logistic regressions unadjusted and adjusted odds ratio (OR, aOR) estimates of psychological distress (moderate and serious vs. low) among racial choice (White, Black, Other) and ethnic groups (Mexican/Cuban, Dominican,/Puerto Rican). Results: Although racial choice did not moderate the relationship between Medicaid coverage and psychological distress, the relationship between Medicaid coverage, racial choice, and psychological distress was moderated by ethnic group. Black-Puerto Ricans/Dominicans with Medicaid coverage were less likely to report moderate psychological distress (aOR= 0.23, 95% CI= [0.07 -0.77]) compared to their Black-Mexican/Cuban counterparts. Conclusions: The findings reveal that Medicaid coverage may be a protective factor for Black-Puerto Ricans/Dominicans. I further discuss how U.S. regional differences between Mexican/Cubans and Puerto Ricans/Dominicans to help make sense of the findings.

Key words: Medicaid, Racial choice, Latinx ethnic group

Introduction

Consistent with previous studies including the first study of this dissertation, Black-Latinxs are more likely to report higher levels of psychological distress compared to their White counterparts, even when accounting for individual and contextual factors, such as immigrant status, poverty status, educational attainment, employment status, age, sex, marital status, and U.S. region (Figuereo, n.d.; Mena, et al., 2019). Interestingly, the first study of this dissertation found ethnic group differences in the relationship between racial choice and moderate psychological distress (MPD). Unlike for Black-Mexicans and Cubans, Black-Puerto Rican and Dominican respondents reported similar rates of MPD compared to their White counterparts. Though it is possible that using a self-report measure of race could be masking the effect racial choice has on Puerto Ricans and Dominicans' psychological distress, I also suggested that greater access to health care may be protecting Black-Puerto Ricans and Dominicans from experiencing higher levels of distress given the regional differences between Puerto Ricans and Dominicans (U.S. Northeast) Mexicans and Cubans (U.S. South). Researchers who have examined the effects of Medicaid expansions, another regional difference, among low-income adults find that Medicaid can help reduce psychological distress (Baicker et al., 2013; 2018; Simon, Soni & Cawley, 2017; Winkelman & Chang, 2017; Winkelman, Segal & Davis, 2019). This study builds on findings from the first study of this dissertation to assess whether Medicaid coverage has differential impacts on the psychological distress levels of Latinx individuals by racial choice and ethnic group.

Impacts of Medicaid Expansion

The purpose of the 2010 Patient Protection and Affordable Care Act (ACA) was to significantly increase the accessibility and affordability of health insurance via Medicaid eligibility expansion to low-income adults (Wachino, Artiga, & Rudowitz 2014). As a result, millions of uninsured adults gained coverage, including those in racial minority groups (Carman, Eibner, & Paddock, 2015; Chen et al., 2016). Sommers, Baicker, and Epstein (2012) found that state Medicaid expansions were linked to increased Medicaid coverage, decreased uninsured rates and delayed care due to cost, especially for nonwhite respondents. Medicaid expansion appeared to narrow the gap of coverage between communities of color and whites. For instance, Latinx non-elderly adults had the largest decline among all racial minority groups by 11% (Artiga, Orgera, & Damico, 2020). The decline in uninsured rates among Latinxs are in fact larger since the passing of the ACA in 2010, from 32% to 19% (Artiga, Orgera, & Damico, 2020). Though Latinxs have seen a 13% decline in their uninsured rate, coverage disparities remain for U.S. Latinxs with millions still without coverage. Additionally, the expansion of Medicaid eligibility has not resulted in steady increases in access to mental health care for Latinxs. Recently researchers found that 2016 behavioral health admission rates among Latinxs decreased to rates lower than that of 2010 (before the ACA implementation), even though admission rates in 2014 increased (Rosales, Takeuchi, & Calvo, 2020).

Latinx Ethnic Group Coverage Gaps

Latinx ethnic groups have not experienced the same rates of coverage gain from Medicaid expansions. One study that used a nationally representative pooled sample of Latinxs (NHIS 2011 – 2015; N = 65,703) found that even though Latinxs were more

likely to be insured during the year the ACA expansion was implemented (2014) compared to 2011, Mexicans and Cubans were less likely to be insured compared to non-Latinx Whites (Alcalá et al., 2017). In this same study, Puerto Ricans held the highest rate of coverage (88.57%) than their ethnic counterparts ("other Latinxs", 81.48%; "Cuban", 79.59%; "Central American", 72.26%; and "Mexican", 68.47%) one year after the ACA expansion (2015). The authors suggested Cubans in their sample may be reporting lower rates of coverage because of being from a state that has yet to implement Medicaid expansions (i.e., Florida). The authors also found that noncitizens were less likely to be insured than their U.S. born counterparts, which likely helps explain Puerto Ricans' higher rates of coverage. A similar study with a more diverse and larger population sample (eight Latinx ethnic groups and non-Latinx racial groups, N=9,284,631) using the American Community Survey (ACS) from 2010-2014 found that the coverage gap in percentages between Latinx ethnic groups was 30% larger than the gap between Latinxs and non-Latinx Whites before the ACA expansion (i.e., 2010-2013; Gonzales & Sommers, 2018). According to the researchers, citizenship, English proficiency, and socioeconomic status partially explained the pre-ACA coverage gap for the Latinx ethnic groups. After the expansion (i.e., 2014), Mexican, Cuban, Central American, and South American groups reported the largest coverage gains, meanwhile Puerto Ricans reported similar coverage rates as non-Latinx Whites.

Effects of Medicaid Coverage on Psychological Distress

Medicaid expansions have also been associated with reductions in self-reported poor mental health days, depression diagnoses, and undiagnosed depression rates (Baicker et al., 2013; 2018; Simon, Soni & Cawley, 2017; Winkelman & Chang, 2017). However, few studies have examined the effects of Medicaid coverage on psychological distress (McMorrow, et al., 2017; Winkelman, Segal & Davis, 2019). The first of these studies found that expansions were associated with significant reductions in severe psychological distress among low-income parents, regardless of race which was excluded from their table display and discussion of findings (McMorrow, et al., 2017). The second more recent study (Winkelman, Segal & Davis, 2019) used data from the 2008-2014 Medical Expenditure Panel Survey (MEPS) with a more racially diverse sample that included a panethnic Latinx group to compare the health care costs, health care utilization, healthcare access, self-reported health and mental health (severe psychological distress) of individuals who remained uninsured (N=9784) with individuals who gained Medicaid coverage (N=963). They found a significant decrease in severe psychological distress (by 4.3 percentage points) among those who gained Medicaid coverage, whereas those that remained uninsured reported a small decrease that was not significant. The researchers also found a significant reduction among panethnic Latinxs who gained coverage (by 5.9 percentage points; N=362). One understanding of this reduction of psychological distress is that Medicaid coverage may provide financial security that buffers stress and improves mental health status (McMorrow et al., 2017).

However, there are findings that suggest an opposite relationship between Medicaid coverage and psychological distress. Studies have shown that having higher levels of distress may increase the likelihood of being covered by Medicaid (Novak et al., 2018; Pratt et al., 2007). Individuals experiencing higher levels of distress may be more likely to opt in public health insurance options, such as Medicaid because of their need to address their distress. One of the major gaps in these studies is the undersized panethnic Latinx samples. In other words, these samples are likely unrepresentative of the ethnic and racial diversity of Latinxs in the US. Without stratification of racial choice and ethnic groups among Latinxs, we are left with little understanding of how racially and ethnically diverse Latinxs experience Medicaid coverage and if coverage is enough to positively impact their access to care and health outcomes.

The Present Study

The Framework for the Effect of Race on Latinos/as' Health and Well-Being (Borrell & Crawford, 2016; see figure 1) posits that racial choice determines Latinxs' access to resources, including health care insurance. This study builds on previous findings on racial choice and psychological distress of Latinxs (Figuereo, n.d., Mena et al., 2019) and Medicaid effects on distress (McMorrow, 2017 & Winkelman, Segal & Davis, 2019) by assessing the effects of Medicaid coverage on psychological distress among Latinxs of different racial choice and ethnic groups. This study's specified model (see figure 4) guides the following research questions and hypotheses.

Research Question 1: Is Medicaid coverage significantly associated with higher levels of psychological distress?

Hypothesis 1 (H1): Medicaid coverage will be significantly associated with moderate and serious psychological distress compared to low distress, whereby respondents with Medicaid, compared to those without insurance coverage, will have lowers odds of reporting distress at moderate and serious levels.

Research Question 2: Is ethnic group is a significant moderator for the relationship between Medicaid coverage, racial choice, and psychological distress?

Hypothesis 2 (H2): Ethnic group will significantly moderate the relationship between Medicaid coverage, racial choice, and psychological distress, whereby Black-Puerto Ricans/Dominicans will have lower odds of reporting MPD than Black-Mexicans/Cubans.

Figure 4. Specified model for Study 2



Methods

Measures

Dependent Variable

The dependent variable for this study is psychological distress. Psychological distress was measured using the six-item version of the Kessler Psychological Distress Scale (K6 Scale; Kessler et al., 2002). The K6 is composed of the following NHIS survey items, "During the past 30 days, how often did you feel... 1) sad, 2) nervous, 3) restless or fidgety, 4) hopeless, 5) everything was an effort, 6) worthless". Responses to all items were rated on a 5-point Likert scale that ranged between 0 = "none of the time" and 1 = "all of the time". Researchers often sum the K6 items into a continuous scale of 0-24,

with higher scores indicating higher distress (Kessler et al., 2002). The summed scores produced a high internal consistency for this study's sample (α =.88). This coding of the K6 produced a non-correctable positively skewed distribution of this study's sample, putting data estimation at risk for outlier bias. To avoid estimation bias, I opted for a three-level ordinal variable with 0-4 indicating "none or low" distress, 5-12 indicating "moderate" distress and 13-24 indicating "serious" distress (Dedania, & Gonzales, 2019; Gonzales, Przedworski, & Henning-Smith, 2016; McAninch, Greene, Sorkin, Lavoie, & Smith, 2014; Prochaska, Sung, Max, Shi, & Ong, 2012).

Independent Variable (IV): Medicaid Coverage

The primary independent variable of this study is Medicaid coverage. Medicaid coverage was measured using a three-level categorical variable I recoded from several insurance-related questions in the NHIS questionnaire that asked respondents whether they were without coverage, covered by Medicaid, Medicare, and/or private insurance. The recoded variable included the following responses; 0 = "uninsured", 1 = "Medicaid only", and 2 = "Private and/or other public coverage"⁴.

Independent Variable (IV): Racial Choice

Racial choice refers to the three major race groups Latinxs selected when prompted in the National Health Interview Survey (NHIS) (0= White, 1= Black, 2= Other². In this study, respondents who selected "White" are referred to as White-Latinxs, those who selected "Black" are referred to as Black-Latinxs, and those who selected "Other" are referred to as Other-Latinxs.

Moderating Variable: Ethnic Group

The moderating variable of this study is ethnic group. Because the purpose of this study is to better understand why Black-Puerto Ricans and -Dominicans did not differ in their risk of MPD like Black-Mexicans and –Cubans did in the first study of this dissertation, I combined Mexicans and Cubans into one ethnic group and Puerto Ricans and Dominicans into another. Therefore, I recoded the ethnic group variable from the first study as follows (0 = Mexican/Cuban, 1 = Puerto Rican/ Dominican).

Control Variables

Control variables include the individual and contextual variables from Borrell's model (Framework for the Effect of Race on Latinos/as' Health and Well-Being; Borrell & Crawford, 2006) with the addition of variables related to healthcare access. Individual control variables included age (0 = 18-25, 1 = 26-34, 2 = 35-49, 3 = 50-64, 4 = 65), sex (0 = male, 1 = female), U.S. region (0 = West, 1 = Midwest, 2 = South, 3 = Northeast),employment status (0 = employed, 1 = unemployed), and educational attainment (0 = less than high school, 1 = high school, 2 = some college, 3 = college degree or more). Similar to other studies (e.g., Murillo, Ayalew, & Hernandez, 2019), I combined length of U.S. residence and nativity to create immigrant status with the following categories: 0= foreign-born respondents living less than ten years in the U.S., recent immigrant; 1=foreign-born living more than ten years in the U.S., long-term immigrant; 2= U.S.born. Psychosocial and contextual covariates include social support operationalized as marital status (0 = single, 1 = cohabitating or married), and poverty status (0 = <100% of FPL, 1 = 100% -199% of FPL, 2 = 200%-399% of FPL, 3 = 400% or more of FPL), respectively. To control survey year, I included NHIS year (0 = 2010, 1 = 2011, 2 =2012, 3 = 2013, 4 = 2014, 5 = 2015, 6 = 2016, 7 = 2017, 8 = 2018). To account for access

to care factors, I add the following two variables; usual place of care (0= usual place, 1= no usual place) and delay of care due to cost (0= no delay, 1= delayed care).

Analytic Plan

I used Stata Statistical Software (Version 15.0 SE; StataCorp, 2016) to perform the preliminary and main analyses of this study. I first performed preliminary analyses to produce univariate statistics of the key dependent, independent, and control variable stratified by ethnic group. The summary statistics of these variables are reported in the form of frequencies and percentages. I also performed bivariate associations using Chisquare tests between each variable and Medicaid coverage for the preliminary analyses. For the main analyses, I used model building with multinomial logistic regression models to obtain the unadjusted odds ratios (OR) of 1) the main effects of Medicaid coverage, racial choice, and ethnic group (H1), 2) the two-way interaction effect combinations between each of these variables and 3) and the three-way interaction effect of coverage, racial choice, and ethnic group. I then obtained the adjusted odds ratios (aOR) of the three-way interaction. Finally, to test whether Black-Puerto Ricans and Dominicans will have lower odds of reporting psychological distress than their Black-Mexican/Cuban counterparts (H2), I repeated the three-way interaction model with the Black-Mexican/Cuban with Medicaid only coverage group as the reference.

Missing Data

There were 788 (2.31%) missing observations for the dependent variable, psychological distress. Before conducting the main multivariate analyses of this study, I used multiple imputation (chained equation algorithm; MICE) and generated 10 imputed datasets to minimize bias in the multivariate analyses of the three conducted studies. The imputation process included the 16 variables in the multinomial regression models. Multiple imputation is regarded as an appropriate and conservative approach to handling missing data and helps to minimize bias that may occur in the analysis models because of them (Allison, 2002; Rubin, 1987; Perkins et al., 2018). Guidance on Stata multiple imputation commands and procedures used in this study can be found in its <u>2016 manual</u> (Stata, 2016).

Results

Preliminary Analyses

Descriptive Statistics

Table 3 displays the frequencies and percentages of each variable of interest for the total sample (N=34,126) and for each coverage group: Uninsured (n=10,516), Medicaid only (n= 3,848), and Private and/or other public coverage (n=18,715). Over half of the respondents selected White as their race (63%) and are Mexican/Cuban (81%), who are either immigrants having lived in the US for more than a decade (45%) or were born in the US (47%). Over half of the respondents also reported being female (53%), having US citizenship (71%), and reported cohabitating with a partner or being married (54%). Though most respondents are of working age (18-49; 68%) and employed (66.3%), over half reported earning a family income of either less than 100% or between 100 and 199% of the federal poverty level (54%). This low SES status may be a reflection of educational attainment, whereby most respondents reported either having less than a high school education or a high school diploma (60%). Though the overall sample appears to be on the lower side of the SES spectrum, most respondents reported having access to health care, specifically having a usual place of care (77%) and not delaying care due to cost (88%). Additionally, the majority of respondents are either from the Western (39%) or Southern (38%) U.S. regions, which may reflect the ethnic enclaves of Mexicans and Cubans in these regions. Regarding prevalence rates of psychological distress among the total sample, the vast majority of Latinxs reported low psychological distress (79%), followed by moderate psychological distress (17%) and serious psychological distress (4%). Moreover, respondent sample size increased with each year of the NHIS with the exception of 2014-2015.

				Ethnic group			
	Total (<i>N</i> = 34,126)		Mexican (n = 2	n/Cuban 8,173)	Puo Rican/D (n = 3)	erto ominican 5,953)	
	n	(%) ^w	n	(%) ^w	n	(%) ^w	p value
Psychological distress							<.001
Low	26037	78.6	21877	79.8	4160	73.5	
Moderate	5781	17.2	4580	16.4	1201	20.3	
Serious	1520	4.3	1111	3.8	409	6.3	
Coverage type							<.001
Uninsured	10516	29.2	9574	32.5	942	15.2	
Medicaid only	3848	11.5	2746	9.9	1102	18.3	
Private and/or other public	18715	59.3	15057	57.7	3658	66.5	
Racial choice							<.001
White	20919	62.7	17679	64.1	3240	56.8	
Black	725	2.3	231	0.8	494	8.6	
Other	12482	35	10263	35.1	2219	34.6	
Immigrant status							<.001
Recent immigrant	2923	8.1	2354	7.8	569	9.7	
Long-term immigrant	15788	45	12971	44.9	2817	45.4	
US-born	15093	46.9	12559	47.3	2534	44.9	
Poverty status							<.001
< 100% of FPL	9674	26.2	7770	25.4	1904	29.3	
100%-199% of FPL	10058	28.7	8565	29.6	1493	24.8	
200%-399% of FPL	8961	27.3	7485	27.7	1476	25.5	
400% or > of FPL	5219	17.8	4168	17.2	1051	20.4	
Educational attainment							<.001
< High school	12568	34.3	10876	36.2	1692	26.4	
High school	8955	26.4	7396	26.4	1559	26.4	
Some college	5377	16.6	4312	16.2	1065	18.1	
College degree or >	6945	22.7	5355	21.2	1590	29	
Employment							<.001
Employed	22055	66.1	18563	67.4	3492	60.5	
Unemployed	12071	33.9	9610	32.6	2461	39.5	

Table 3. Panethnic Latinx Sample Characteristics by Ethnic Group in Frequency (n) and Percentages (%) with Bivariate Associations

Age							<.001
18-25	5252	15.8	4448	16.4	804	13.5	
26-34	7209	21.6	6067	22.1	1142	19.5	
35-49	10665	30.1	9016	30.8	1649	26.9	
50-64	6400	18.6	5046	17.7	1354	22.5	
65>	4600	13.9	3596	13.1	1004	17.5	
Sex							<.001
Male	15062	46.7	12704	47.6	2358	42.9	
Female	19064	53.3	15469	52.4	3595	57.1	
Marital status							<.001
Single	15797	46.4	12262	43.6	3535	58	
Cohabitating/married	18269	53.6	15866	56.4	2403	42	
U.S. Region							<.001
West	14611	39.5	14138	47.2	473	7.2	
South	12147	37.2	10542	39.3	1605	28.6	
Midwest	3229	10.2	2767	10.5	462	8.6	
Northeast	4139	13.1	726	3.1	3413	55.7	
Usual place of care							<.001
Usual place	25635	76.7	20568	74.5	5067	85.7	
No usual place	8261	23.3	7433	25.5	828	14.3	
Care delay due to cost							0.672
Did not delay	29949	88.3	24719	88.2	5230	88.5	
Delayed care	4169	11.7	3449	11.8	720	11.5	
NHIS year							0.446
2010	3945	9.4	3249	9.4	696	9.3	
2011	4487	10.1	3717	10.1	770	10	
2012	4515	10.8	3769	10.9	746	10.4	
2013	4597	11.5	3799	11.6	798	11.2	
2014	4597	11.1	3840	11.2	757	10.7	
2015	4197	11.1	3452	11	745	11.4	
2016	2912	11.5	2352	11.2	560	13	
2017	2478	11.8	2044	11.8	434	11.6	
2018	2398	12.6	1951	12.7	447	12.4	

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Source: National Health Interview Surveys, 2010-2018. ^W= weighted percentages * p<.05; ** p<.01; *** p<.001

Bivariate Statistics

The bivariate associations between each variable of interest and ethnic group was statistically significant with the exception of care delay due to cost and NHIS year. Respondents with moderate and serious levels of psychological distress were more likely to be Puerto Rican or Dominican than Mexican or Cuban [X^2 (1.98, 1794.25) = 45.20, p < .001]. Respondents with Medicaid coverage only as well as those with Private and/or other public coverage⁵ were more likely to be Puerto Rican or Dominican than Mexican or Cuban $[X^2 (1.82, 1645.17) = 171.06, p < .001]$. Respondents who selected Black as their race were more likely to be Puerto Rican or Dominican than Mexican or Cuban X^2 (1.62, 1465.93) = 262.10, p < .001]. Immigrant respondents who have been living in the US for less than a decade have were more likely to be Puerto Rican or Dominican than Mexican or Cuban $[X^2 (1.93, 1744.99) = 6.70, p < .001]$. Respondents who earn a family income less than 100% of the FPL and between 400% or greater than that of the FPL were more likely to be Puerto Rican or Dominican than Mexican or Cuban $[X^2 (2.76,$ 2497.98 = 17.69, p < .001]. Respondents who attended some college or has a college degree were more likely to be Puerto Rican or Dominican than Mexican or Cuban X^2 (2.83, 2563.20) = 494.36, p < .001]. Respondents who reported unemployment were more likely to be Puerto Rican or Dominican than Mexican or Cuban $[X^2 (1.00, 906)]$ = 50.70, p < .001]. Immigrant respondents between the ages of 50 and 64 and those 65 or older were more likely to be Puerto Rican or Dominican than Mexican or Cuban X^2 (3.70, 3348.99) = 28.70, p < .001]. Female respondents were more likely to be Puerto Rican or Dominican compared than Mexican or Cuban $[X^2 (1.00, 906) = 24.14, p < .001]$. Respondents who are cohabitating or are married were less likely to be Puerto Rican or

Dominican than Mexican or Cuban [X^2 (1.00, 906) = 214.13, p < .001]. Respondents from the Northeast were more likely to be Puerto Rican or Dominican than Mexican or Cuban [X^2 (2.75, 2495.55) = 1045.68, p < .001].Respondents with a usual place of care were more likely to be Puerto Rican or Dominican than Mexican or Cuban [X^2 (1.00, 906) = 196.02, p < .001].

Main Analyses

Main Effects

Table 4 displays the main effect odds ratios (OR) of Medicaid coverage, racial choice and ethnic group on moderate psychological distress (MPD) compared to low psychological distress (LPD) and serious distress (SPD) vs. LPD. A significant main effect emerged for Medicaid coverage, racial choice, and ethnic group when reporting MPD vs. LPD after adjusting for control variables (OR= 1.35, 95% CI [1.17-1.56]; OR= 1.41, 95% CI [1.10-1.82,]; OR= 1.23, 95% CI [1.10-1.37]). Respondents with Medicaid coverage only compared to their uninsured counterparts had a 35% higher odds of reporting MPD. Respondents who selected Black as their race compared to White racial choice had a 41% higher odds of reporting MPD. Puerto Rican/Dominican respondents compared to Mexican/Cuban respondents had a 23% higher odds of reporting MPD. Medicaid coverage and ethnic group were also significantly associated with SPD. Respondents with Medicaid coverage only compared to their uninsured counterparts had a 87% higher odds of reporting SPD (OR= 1.87, 95% CI [1.51-2.31]). Puerto Rican/Dominican respondents had a 77% higher odds of reporting SPD (OR= 1.77, 95%) CI [1.48-2.12]). Racial choice was not significantly associated with SPD.

	Moderate Psychological Distr	ess (MPD vs. LPD)	Serious Psychological Dis	tress (SPD vs. LPD)
Model	OR	aOR	OR	aOR
<u>Main effects (N =32,404)</u>				
Medicaid coverage				
Uninsured	Ref		Ref	
Medicaid only	1.35*** (1.17 - 1.56)		1.87*** (1.51 – 2.31)	
Private and/or other public coverage	.93 (0.85 - 1.01)		.89 (0.76 - 1.05)	
Racial choice				
White	Ref		Ref	
Black	1.41** (1.10 - 1.82)		1.01 (0.70 - 1.48)	
Other	.99 (0.91 - 1.08)		1.14 (0.97 - 1.36)	
Ethnic group				
Mexican or Cuban	Ref		Ref	
Puerto Rican or Dominican	1.23*** (1.10 - 1.37)		1.77*** (1.48 – 2.12)	
Two-way interaction effects (N = 32,404)				
Racial choice x Medicaid coverage				
White X Uninsured	Ref		Ref	
Black X Medicaid only	1.10 (0.55 – 2.22)		1.21 (0.44 – 3.35)	
Black X Private and/or other public coverage	1.11 (0.65 - 1.91)		.72 (0.25 – 2.11)	
Other X Medicaid only	1.02 (0.78 - 1.32)		1.05 (0.69 - 1.61)	
Other X Private and/or other public coverage	1.09 (0.90 - 1.31)		1.12 (0.82 - 1.55)	
Ethnic group x Medicaid coverage				
Mexican or Cuban X Uninsured	Ref		Ref	
Puerto Rican or Dominican X Medicaid only	0.99 (0.71 - 1.38)		1.00 (0.59 - 1.71)	
Puerto Rican or Dominican X Private and/or other public coverage	.88 (0.68 - 1.16)		.89 (0.57 - 1.40)	
Racial choice x Ethnic group				
White X Mexican or Cuban	Ref		Ref	
Black X Puerto Rican or Dominican	.67 (0.41 - 1.11)		1.74 (0.64 – 4.72)	
Other X Puerto Rican or Dominican	1.01 (0.82 - 1.25)		1.01 (0.69 - 1.47)	
Three-way interaction effects (OR N = $32,404$: aOR N = $31,604$)				

Table 4. Multiple Logistic Regression: Main Effect and Interaction Effect Models of Medicaid coverage, Racial Choice and Ethnic Group on MPD and SPD (vs LPD)

Racial choice x Ethnic group x Medicaid coverage

White X Mexican or Cuban X Uninsured	Ref	Ref	Ref	Ref
Black X Puerto Rican or Dominican X Medicaid only	.19*(0.04-0.91)	.18*(0.03-0.91)	.65 (0.03 - 14.33)	.87 (0.04 – 19.93)
Black X Puerto Rican or Dominican X Private and/or other public coverage	1.15 (0.36 - 3.75)	1.18 (0.34 - 4.06)	.29 (0.02 - 4.02)	$.37\ (0.02 - 5.73)$
Other X Puerto Rican or Dominican X Medicaid only	.57 (0.28 - 1.15)	.57 (0.27 - 1.18)	1.21 (0.44 - 3.35)	1.29 (0.45 – 3.73)
Other X Puerto Rican or Dominican X Private and/or other public coverage	.87 (0.48 - 1.56)	.82 (0.44 - 1.53)	1.56 (0.63 - 3.83)	1.54 (0.59 – 4.04)

Source: National Health Interview Surveys, 2010-2018. Note. All adjusted models controlled for immigrant status, poverty, educational attainment, employment status, age, sex, marital status, US region, usual place of care and care delay due to cost, and NHIS year

LPD= Low psychological distress; MPD= Moderate psychological distress; SPD= Serious psychological distress * p<.05; ** p<.01; *** p<.01

Two-Way Interaction Effects

Table 4 also displays the series of two-way interaction effects coefficients and ORs of coverage, racial choice and ethnic group on MPD and SPD vs. LPD.). None of the two-way interactions between racial choice, ethnic group, and Medicaid coverage emerged significant in their relationship with psychological distress (MDP and SPD).

Three-Way Interaction Effects

Additionally, table 4 displays the three-way interaction effect ORs and aORs of Medicaid coverage, racial choice and ethnic group on MPD and SPD vs. LPD. Both the unadjusted and adjusted model revealed a statistically significant interaction between racial choice, ethnic group, and coverage type. Black-Puerto Ricans/Dominicans with Medicaid only had an 82% lower odds of reporting MPD compared to White-Mexican/Cuban respondents without coverage (aOR= 0.18, 95% CI [0.03 - 0.91]). The three-way interaction was not significant for SPD.

Table 5 displays the specified interaction term model that changes the reference group to Black-Mexican/Cubans with Medicaid only in order to test the second hypothesis (H2). This model revealed that Black-Puerto Rican/Dominican respondents with Medicaid only had a 77% lower odds of reporting MPD compared to Black-Mexican/Cubans with Medicaid only (aOR= 0.23, 95% CI [0.07 - 0.77]). In addition, each interaction group with the exception of White-Puerto Rican/Dominicans with Medicaid only and Black-Puerto Rican/Dominicans with Private and/or other public coverage had statistically significant lower odds of reporting MPD compared to Black-Mexican/Cubans with Medicaid only.

		SPD (vs. LPD)
Reference group: Black X Mexican/Cuban X Medicaid only	aOR	aOR
Racial choice x Ethnic group x Medicaid coverage		
Black X Mexican or Cuban X Medicaid only	Ref	Ref
White X Mexican or Cuban X Uninsured	.16*** (0.06 - 0.41)	1.15(0.16 - 8.58)
White X Puerto Rican or Dominican X Uninsured	.18*** (0.07 - 0.49)	2.66(0.34 - 20.75)
White X Mexican or Cuban X Medicaid only	.19** (0.07 - 0.48)	1.68 (0.23 – 12.24)
White X Puerto Rican or Dominican X Medicaid only	.32* (0.12 - 0.86)	3.21 (0.41 – 24.68)
White X Mexican or Cuban X Private and/or other public coverage	.18*** (0.07 - 0.45)	1.42 (0.19 – 10.37)
White X Puerto Rican or Dominican X Private and/or other public coverage	.21** (0.08 - 0.56)	2.58 (0.34 - 19.31)
Black X Mexican or Cuban X Uninsured	.21** (0.06 - 0.68)	.43 (0.02 - 7.32)
Black X Puerto Rican or Dominican X Uninsured	.18** (0.06 - 0.57)	2.71 (0.29 – 25.29)
Black X Puerto Rican or Dominican X Medicaid only	.23* (0.07 - 0.77)	4.57 (0.54 - 38.51)
Black X Mexican or Cuban X Private and/or other public coverage	.27* (0.09 - 0.81)	1.24 (0.13 – 12.06)
Black X Puerto Rican or Dominican X Private and/or other public coverage	.30 (0.11 - 0.81)	2.31 (0.29 – 18.55)
Other X Mexican or Cuban X Uninsured	.15*** (0.06 - 0.39)	1.29 (0.17 – 9.47)
Other X Puerto Rican or Dominican X Uninsured	.21** (0.07 - 0.62)	1.89(0.24 - 15.07)
Other X Mexican or Cuban X Medicaid only	.20*** (0.08 - 0.53)	2.21(0.30 - 16.33)
Other X Puerto Rican or Dominican X Medicaid only	.24** (0.09 - 0.66)	3.49(0.45 - 26.85)
Other X Mexican or Cuban X Private and/or other public coverage	.18*** (0.07 - 0.46)	1.60(0.22 - 11.87)
Other X Puerto Rican or Dominican X Private and/or other public coverage	.22** (0.08 - 0.57)	2.87(0.38 - 21.42)

Table 5. Multiple Logistic Regression of aORs for the Specified Interaction Terms Effect Combinations of Medicaid coverage, Racial choice and Ethnic group

Note. All adjusted models controlled for immigrant status, poverty, educational attainment, employment status, age, sex, marital status, US region, usual place of care and care delay due to cost, and NHIS year

LPD= Low psychological distress; MPD= Moderate psychological distress; SPD= Serious psychological distress

* p<.05; ** p<.01; *** p<.001

Discussion

This study aimed to better understand findings from the first study of this dissertation (Figuereo, n.d.), whether Medicaid coverage serves as a protective factor from moderate psychological distress (MPD) for Black-Puerto Ricans/Dominicans compared to their Mexican/Cuban counterparts. Therefore, I assessed the moderating effect of ethnic group on the relationship between Medicaid coverage, racial choice and psychological distress. As expected, the main effect results showed that racial choice and ethnic group were significantly related to higher levels of psychological distress compared to low levels, whereby Black-Latinxs (compared to White-Latinxs) and the Puerto Rican/Dominican ethnic group (compared to Mexican/Cuban subgroup) were more likely to report MPD. Though Medicaid coverage was significantly related to higher levels of distress as well and as expected, it was not in the expected direction. Surprisingly, Medicaid coverage had negatively effects on psychological distress, whereby respondents with Medicaid coverage only were more likely to report MPD and SPD compared to uninsured respondents. This may be due to the impact higher levels of distress may have of gaining access to public health insurance (Novak et al., 2018; Pratt et al., 2007). The relationship between Medicaid coverage and distress may be less about coverage reducing distress, but perhaps more about higher distress being related to Medicaid enrollment (Gonzales et al., 2016; Phalen, 2017). Individuals diagnosed with mental health conditions (e.g., depression, anxiety disorders) may be likely to have Supplemental Security Income (SSI), which is the federal cash assistance program for individuals with low-income and/or with disabilities (Zir, Musumeci, & Garfield, 2017). Having SSI automatically qualifies an individual for Medicaid (Watts, Cornachione, &

Musumeci, 2016). Given that the majority of Mexican and Cuban respondents earn a family income at less than 200% of the FPL, Black-Mexicans and Cubans in my sample with higher levels of distress may have a mental health condition and/or lower income that makes them automatically eligible for SSI that then increases their odds of having Medicaid coverage. Supplemental analyses (see Table B. in the Appendix) showing that low SES (higher poverty status, lower educational attainment, and unemployment status) is significantly associated with having Medicaid coverage further supports this potential explanation.

Though the two-way interaction did not emerge significant, the three-way interaction did as expected. Having Medicaid coverage was significantly associated with a lower odds of reporting moderate psychological distress among Black-Latinxs if they were Puerto Rican or Dominican. In other words, Black-Puerto Ricans/Dominicans with Medicaid coverage were significantly less likely to report moderate levels of psychological distress than Black-Mexicans/Cubans with Medicaid coverage. Similar to studies that have found reductions in psychological distress and related behavioral health outcomes (Baicker et al., 2013; Simon, Soni & Cawley, 2017; Winkelman et al., 2019), this suggests that Medicaid coverage may have a buffering effect on experiencing psychological distress for Black-Puerto Ricans/Dominicans over Black-Mexican/Cubans. Ethnic group differences from the descriptive and bivariate statistics show significant differences in access to care and contextual characteristics usual place of care and US region, which may help us understand this finding. Though Puerto Ricans and Dominicans are more likely to be unemployed and be less than 100% of the FPL than Mexicans and Cubans in the sample, they are more likely to have a usual place of care,
which may bolster access to health and mental healthcare for Puerto Ricans and Dominicans and in turn relieve stress (McMorrow et al., 2017). Though Puerto Ricans and Dominicans were more likely to report psychological distress at higher levels than Mexicans and Cubans, as found in previous studies (Alegria et al., 2007, Lucas et al., 2016), being more likely to live in the U.S. Northeast and having citizenship may protect them from the fear of using healthcare services that restrictive anti-immigrant policies place on Latinxs without citizenship (Philbin et al., 2018).

Previous research on anti-immigrant laws have found these policies to have detrimental effects on the access to care and psychological well-being of Latinxs, especially for those without U.S. citizenship and their families (Philbin et al., 2018). Philbin, Flake, Hatzenbuehler and Hirsch (2018) reviewed forty studies that examined the relationship between state-level immigration policies and Latinx health and found these two factors were related through pathways of structural racism and access to social institutions and access to health-related services. State-level anti-immigrant policies have been prevalent in the U.S. since the enactment of Arizona's omnibus policy SB 1070 in 2010, especially in southern states, such as Georgia's HB 87, Alabama's HB 56, (Karoly & Perez-Arce, 2016). These policies and laws have significantly increased fear among Latinxs that increased delays and decreased use in healthcare services (Salas, Ayón, & Gurrola, 2013; Toomey et al., 2014), a decrease in availability and affordability in care (White et al., 2014), and underreporting crime (Hardy et al., 2012). Research has also found that respondents who worry about deportation of friends or family and respondents who perceive their environment to be both anti-Latinx and anti-immigrant were more likely to report needing to seek help for emotional or mental health problems (e.g.,

feeling anxious, sad, or nervous; Vargas, Sanchez, & Juarez, 2017). Given that the majority of Mexicans and Cubans in this study live in the U.S. South, anti-immigrant laws and policies in their states may be canceling out the benefit of Medicaid coverage and increasing their exposure to discrimination, heightening their deportation, and deterring them from applying to and seeking help from social and healthcare services, which may lead to increased risk of experiencing psychological distress.

Limitations

The cross-sectional design of this study does not allow for inference between the relationships between Medicaid coverage, racial choice, ethnic group, and psychological distress. Secondly, the sample size of the groups in this study does not allow for greater complexity in the estimated models, such as the addition of policy-level interaction terms. Thus, I was unable to assess whether the relationships between racial choice and ethnic group, Medicaid coverage, and psychological distress depended on state and federal antiimmigrant policies. Including a variable that measures anti-immigrant policies in future studies can contribute to a greater understanding of the mental health effects of xenophobia and racism among Black-Latinxs. Also, it is difficult to understand Black-Latinxs' experiences with psychological distress when the meaning behind respondent racial choices is not measured in the estimation models. A recent study on Latinx racial reporting in the census (Miyawaki, 2017) summarized several ways researchers have interpreted Latinxs' self-reported race, including skin color, assimilation, and racial ideology (Dowling, 2014, Frank, Akresh, & Lu, 2010, Yancey, 2003). Another important limitation is the absence of additional Latinx ethnic groups that are increasing in population, such as Salvadorans, Guatemalans given that Central Americans have been

found to have similar Medicaid coverage rates and access to care as Mexicans (Alcalá et al., 2017).

Conclusion

This study is significant in that it is the first study to compare the effect of Medicaid coverage and racial choice on reporting psychological distress between Latinx ethnic groups. It builds on my previous findings (Figuereo, n.d.) on the identified disparity in psychological distress by racial choice (i.e., Black-Latinxs) and ethnic group (i.e., Mexicans and Cubans) and begins to uncover a better understanding of the potential underlying mechanisms that might explain this relationship (i.e., Medicaid coverage). This study's findings suggest that Medicaid coverage has differential impacts on Black-Latinx ethnic groups, whereby psychological distress is positive for Black-Puerto Ricans/Dominicans and negative for Black-Mexicans/Cubans.

These findings encourage healthcare policy makers and researchers to look beyond increasing insurance coverage as a strategy to reduce access to care and health and mental health disparities. Accounting for the racial choices of Latinxs may help untangle the interconnected impacts of immigration, healthcare, and policing polies and laws on the lived experiences of Black-Latinxs living under strict anti-immigrant policies in the U.S. Researchers focusing on Latinx mental health disparities should continue examining the pathways from insurance coverage to mental health-related outcomes among Latinxs of different ethnic and racial groups with the inclusion of unexamined moderators and mediators, such as structural and interpersonal forms of racism through policing and anti-immigrant federal and state policies. Perhaps further investigation into these mechanisms can help policymakers develop novel policy that not only reduces uninsured rates among Latinxs, but reduces the risk of psychological distress to those who are invisible and left with barriers to access even when they have coverage, such as Black-Mexicans and -Cubans.

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Chapter IV: FACTORS OF RACIAL CHOICE AMONG AN ETHNICALLY DIVERSE US LATINX SAMPLE

Abstract

Objective: Though immigrant status and socioeconomic status (SES) has been linked to Latinx racial choice, these studies have been limited to choosing 'White' or 'Other'. This study's purpose was to examine what factors, specifically immigrant status and SES factors, are associated with racial choice among an ethnically diverse U.S. Latinx sample. Design: Using data from the National Health Interview Survey (NHIS) 2010-2018, I estimated the adjusted odds ratios (aOR) of racial choice (White, Black, or Other) among Latinxs from Mexico, Cuba, Dominican Republic, and Puerto Rico. Results: Immigrant status and was significantly associated with racial choice (aOR=0.74, 95% CI [0.59 -0.94]), even after adjusting for SES factors (poverty status, educational attainment, employment status), individual factors (age, sex, citizenship, marital status), and contextual factors (U.S. region). With the exception of Dominicans, high poverty status increased Cuban and Puerto Rican respondents' odds of choosing Black as their race over White relative to earning a family income of 400% or above the Federal Poverty Line (FPL; Cubans, aOR= 5.71, 95% CI [1.85 – 17.66]; Puerto Ricans, aOR= 2.04, 95% CI [1.22 - 3.43]). Conclusions: The potential role of racial ideology is discussed in understanding the relationships between immigrant status, SES, ethnic group, and racial choice.

Key words: Racial choice; Latinx ethnic group; racialization

Introduction

When asked about race on the United States (U.S.) census, the majority of Latinxs select "White" or opt out of these traditional options and select "Some other race" (Ennis, Rio-Vargas, & Albert, 2011; Hitlin, Brown & Elder Jr., 2007; Humes et al., 2011; Rodriguez, Miyawaki, & Argeros 2013). According to a census brief based on the 2010 Census (Ennis, Rio-Vargas, & Albert, 2011), 53% of Latinxs selected White as their racial choice, 37% selected "Some other race". Though not as many Latinxs selected Black as their race (3%), the population of this group has doubled since the 2000 Census (Therrien & Ramirez 2001). However, little is known about this growing ethnoracial group. Luisa Borrell (2005) theorized that Black self-identification among Latinxs may lead to disadvantageous individual circumstances (e.g., low SES: lower education, higher unemployment) and psychosocial experiences (e.g., discrimination) that then may interact with social structures (e.g., racial segregation) and ultimately negatively influence their health and well-being.

Does Race Matter for Latinxs?

Thus far, studies have shown that race matters in the lives and well-being of Latinxs. Black-Latinxs are found to have lower socioeconomic status (lower income, higher poverty), perceive greater discrimination and experience worse health outcomes (psychological distress, hypertension, and low-birth weight) compared to their White counterparts (Borrell, 2009; Borrell & Crawford, 2006; Borrell & Dallo, 2008; Cuevas et al., 2016; Mena et al., 2019; LaVeist-Ramos et al., 2012; Logan, 2003). Less is known about what, in the first place, may influence Latinxs to select Black as their race over the more popular White option. Borrell and Crawford (2006) further developed Borrell's *Framework for the Effect of Race on Latinos/as' Health and Well-Being* (Borrell, 2005) and theorized that immigration, socioeconomic status position, individual, and contextual factors have an impact on the racial choices of Latinxs (see figure 1). Though studies have found evidence of these correlates, findings reveal mixed results.

What are Identified Correlates of Latinx Racial Choice?

Immigration measures (e.g., language, nativity, time in the U.S.) and SES have been shown to impact how Latinx individuals report their race. Studies find that English proficiency, higher income, greater durations of time in the U.S., and being born in the U.S. are associated with selecting White over Other (Tafoya, 2003; Tafoya, 2004). However, one study found Black-Latinxs were less likely to be born outside the U.S. and to speak Spanish than the overall Latinx population (Logan, 2003). Further, interviews with Puerto Ricans, Dominicans, and Ecuadorians indicated that those born in the U.S. and with high incomes reported Other as their race (Rodriguez, 2000). Additional contradicting findings show that greater length of residence in the U.S. is related to Latinxs choosing Other over White (Frank et al., 2010; Vargas-Ramos, 2012). However, immigration-related factors have been examined among Latinx individuals who may choose Black as their race.

Studies have suggested Latinxs choose Black as their race because of darker skin color (Denton and Massey 1989; Golash-Boza & Darity 2008). Other scholars have added that racial choice may also correspond to how others ascribe race because of skin color (Borrell, 2005; Borrell & Crawford, 2006). However, racial choice may also be beyond skin color (Dowling, 2014; Rodriguez, 2000; Roth, 2010; Telles & Ortiz, 2008). Dowling (2014) conducted in-depth interviews with 86 Mexican American adults (18-81

years old) residing in Texas and found that racial attitudes was a factor related to racial choice, in that colorblind ideology motivated Mexican American participants to identify as White as a way to combat discrimination. Though skin color may be a potential factor in Latinx racial choice, the dataset this study uses did not include a measurement for skin color and thus is included in any of the analysis models. This limitation is discussed further in the discussion section of this study.

Present Study

Given the literature on Latinx racial reporting, the purpose of this study is to examine what factors are associated with Latinx racial choice (i.e., White, Black or Other) from four of the largest U.S. Latinx ethnic groups: Mexicans, Puerto Ricans, Cubans, and Dominicans. The specified model for this study (see Figure 5.) guided the following research questions:

Research Question 1: Is immigrant status associated with racial choice?

Hypothesis 1 (H1): Immigrant status will be significantly associated with racial choice; whereby recent and long-term immigrants will be less likely to choose Black and more likely to choose Other as their race than White compared to their U.S.-born counterparts.

Research Question 2: Is socioeconomic status (i.e., poverty status, educational attainment, employment status) associated with racial choice?

Hypothesis 2 (H2): SES factors, including poverty status, educational attainment, and employment status will be significantly associated with racial choice, whereby respondents with lower SES statuses (i.e., <100% of FPL, < high school education, and unemployment) will be more likely to choose Black and Other as their race over White compared to their counterparts with the highest SES statuses (400% or > of FPL, college degree or higher, and employed).

Research Question 3: Based on Borrell's Framework for the Effect of Race on

Latinos/as' Health and Well-Being (see figure 4 for adapted model; Borrell &Crawford,

2006)), I ask the following exploratory question; Do the relationships between immigrant

status and racial choice and SES and racial choice differ by ethnic group?

Researchers have established the health and mental health implications of racial identity, specifically among Latinxs (Borrell, 2005: Borrell & Crawford, 2006). Identifying factors of Latinx racial choice will further help understand the pathways from racial choice to psychological distress. Though some researchers have tried interpreting the meanings behind Latinx racial choices (Bonilla-Silva, 2004; Denton & Massey 1989; Dowling, 2014; Golash-Boza & Darity, 2008; Frank, Akresh, & Lu, 2010; Stokes-Brown, 2012; Tafoya, 2004; Yancey, 2003), it is not known how Latinx racial choices may vary by ethnic group.

Figure 5. Specified Model for Study 3



Method

Measures

Dependent Variable: Racial Choice

Racial choice represents respondents' race, the dependent variable of this study. The NHIS follows the Office of Management and Budget's (OMB) definitions of race and ethnicity. For race, an unscientific social category based on national origin, phenotype, or sociocultural group (U.S. Census Bureau 2018), respondents could choose among the following categories: 1) White, 2) Black/African American, 3) American Indian & Alaskan Native, 4) Asian, 5) Other. I recoded the race variable to capture the three major categories Latinx participants selected (0= White, 1= Black, 2= Other).

Independent Variable (IV): Immigrant Status

In Borrell's conceptual framework (Borrell & Crawford, 2006) immigration is represented by three separate variables: nativity, length of U.S. residence, and language. Similar to previous studies (e.g., Murillo, Ayalew, and Hernandez 2019), I combined nativity with length of U.S. residence to create the variable: immigration status (0= recent immigrant or less than ten years of U.S. residence, 1=long-term immigrant or more than ten years of U.S. residence, 2= U.S. born)

IV: Socioeconomic Status

Socioeconomic status indicators included poverty status (0 = <100% of FPL, 1 = 100% -199% of FPL, 2 = 200%-399% of FPL, 3 = 400% or more of FPL), employment status (0 = employed, 1 = unemployed), and education (0 = less than high school, 1 = high school, 2 = some college, 3 = college degree or more).

Control Variables: Individual and Contextual factors

Individual covariates included sex (0= male, 1= female), age (0= 18-25, 1= 26-34, 2= 35-49, 3= 50-64, 4= 65>), and marital status (0= single, 1= cohabitating or married). In Borrell's conceptual framework (Borrell & Crawford, 2006), U.S. state/territory is identified as a contextual factor that represents a macro-level influence on Latinx racial identity in that states/territories with large Latinx enclaves may reinforce racial identification. Due to the NHIS limitation of region-level geography variable for their public data, I used the US region variable for this study to be represented as a contextual factor (0= West, 1= Midwest, 2= South, 3= Northeast).

Analytic Plan

For the univariate statistics of the sample, I computed unweighted totals and weighted percentages among the panethnic sample and by racial choice. To estimate the bivariate associations between each independent, control variable and racial choice, I computed Chi-square tests. To investigate the adjusted association between immigrant status (H1), socioeconomic status and racial choice (H2), I conducted multinomial logistic regressions to estimate the odds ratios (aOR) of these correlates. Finally, to examine within-group differences by ethnic group (H3), I analyzed the association between these factors and racial choice for each ethnic group sample.

Results

Preliminary Analyses

Sample Characteristics by Racial Choice

Table 6 displays the sociodemographic profiles of all respondents by racial choice and the associations between the correlates of interest and control variables with the dependent variable. The majority of respondents identified racially as White (61%) and ethnically as Mexican (78%). Most respondents were of working-age (35-49yo), evenly distributed by sex. The majority of respondents lived with a partner (61%), either in the Western (43%) or Southern (36%) regions of the United States. Although over half of the sample (53%) was foreign-born, most immigrants (45%) had lived in the US for more than 10 years. In fact, a substantial proportion of respondents had U.S. citizenship (69%). The majority of respondents were employed (68%) and over a third of respondents had not attained a high school education (34%). Also, many lived under poverty level at the time of their survey participation (41%).

Racial choice profiles revealed that respondents in all racial choice groups are likely to be between the working age of 35 and 49, employed, and have US citizenship. Respondents who chose White as their race were likely to be ethnically Mexican (76%), born in the U.S. (51%), and fall between 200%-399% of the federal poverty line (FPL). The White Latinx respondents tended to have less than a High School education (31%), live with a partner or be married (62%), and reside in the Southern US region (44%). Just as much female and male respondents identify racially as White.

Unlike White Latinxs, respondents who selected Black as their race tended to be ethnically Puerto Rican (45%), with a college degree (29%), and single without a partner or spouse (56%). Though Black-Latinxs, like their White counterparts, are likely to be the U.S. South (37%), they are also just as likely to be from the US Northeast (37%). Similar to White-Latinxs, Black-Latinxs are more likely to be born in the US (55%), between 200%-399% of the FPL (28%). Slightly more female respondents (52%) selected Black as their race.

Unlike their White and Black counterparts, respondents that selected Other as their race were likely be born outside the US and having lived more than 10 years in the country (53%), between 100%-199% of the FPL (32%), and from the Western region of the US (43%). Like White Latinxs, Other respondents were more likely to be ethnically Mexican (78%), have attained less than High School education (40%), and be living with a partner or married (60%). Just as much female and male respondents identify racially as Other.

Main Analyses

Factors of Racial Choice among Panethnic Latinxs

Table 7. displays the odds ratios (aOR) of Black and Other racial choice compared to the base outcome, White racial choice. These models were controlled for individual and contextual variables as well as survey year.

Immigrant Status. Immigrant status was significantly related to Black and Other racial choice, but in different directions. Compared to US-born respondents, long-term immigrant respondents had a 25% lower odds of reporting Black as their race over White (aOR= 0.75, 95% CI [0.59 - 0.94]). Recent immigrant respondents also had a 33% lower odds of reporting Black racial choice, (aOR= 0.67, 95% CI [0.48 - 1.01]). Regarding choosing Other over White, recent immigrant and long-term immigrant respondents had higher odds (35%, 62%, respectively) compared to US-born respondents (aOR= 1.35, 95% CI [1.15-1.58]); aOR= 1.62, 95% CI [1.48-1.77]).

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	Total $(N - 24.126)$	White $(n-20,010)$	Black	Other $(r=12,482)$	
	(N - 34, 120)	(n-20,919)	$\frac{(n-723)}{n(23)^{W}}$	(n-12,482)	n value
Immigrant status	II (70)	II (70)	II (70)	II (70)	
Immgrant status		1721 (0.2)	74 (0.0)	1110 (0.5)	<.001
Recent immigrant	2923 (8.4)	1/31 (8.3)	/4 (9.2)	1118 (8.5)	
Long-term immigrant	15788 (45.1)	8888 (40.9)	242 (35)	6658 (52.6)	
US-born	15093 (46.5)	10114 (50.8)	407 (55.8)	4572 (38.9)	
Poverty status					<.001
< 100% of FPL	9674 (22.9)	5609 (21.6)	214 (22.9)	3851 (25.1)	
100%-199% of FPL	10058 (29.7)	5959 (28.2)	210 (27.3)	3889 (32.2)	
200%-399% of FPL	8961 (29.2)	5656 (29.6)	173 (28.4)	3132 (28.7)	
400% or > of FPL	5219 (18.2)	3553 (20.7)	123 (21.4)	1543 (14)	
Educational attainment					<.001
< High school	12568 (34.3)	7062 (31.1)	172 (21.7)	5334 (40.2)	
High school	8955 (27.6)	5522 (27.7)	180 (26.9)	3253 (27.5)	
Some college	5377 (17)	3430 (17.8)	161 (22.8)	1786 (15.5)	
College degree or >	6945 (21.1)	4764 (23.5)	208 (28.6)	1973 (16.8)	
Employment					0.510
Employed	22055 (67.6)	13457 (67.7)	483 (70)	8115 (67.3)	
Unemployed	12071 (32.4)	7462 (32.3)	242 (30)	4367 (32.7)	
Ethnic group					<.001
Mexican	25912 (77.5)	15671 (75.9)	147 (20.7)	10094 (83)	
Cuban	2261 (5.7)	2008 (8.3)	84 (9.2)	169 (1.2)	
Puerto Rican	4453 (12.5)	2702 (13.1)	326 (45.1)	1425 (9.7)	
Dominican	1500 (4.4)	538 (2.7)	168 (25)	794 (6)	
Age					<.001
18-25	5252 (19.8)	3152 (19.3)	140 (23.2)	1960 (20.4)	
26-34	7209 (21.5)	4307 (21.3)	181 (24.4)	2721 (21.6)	

Table 6. Panethnic Latinx Sample Characteristics by Racial Choice in Frequency (n) and Percentages (%) with Bivariate Associations

35-49	10665 (30.4)	6282 (29.5)	205 (26.7)	4178 (32.1)	
50-64	6400 (18.5)	4015 (18.9)	117 (17)	2268 (18)	
65>	4600 (9.8)	3163 (10.9)	82 (8.7)	1355 (8)	
Sex					0.547
Male	15062 (50.1)	9140 (50)	305 (47.9	5617 (50.5)	
Female	19064 (49.9)	11779 (50)	420 (52.1	6865 (49.5)	
Marital status					<.001
Single	15797 (39.5)	9577 (38.4)	485 (56)	5735 (40.5)	
Cohabitating/married	18269 (60.5)	11307 (61.6)	239 (44)	6723 (59.5)	
U.S. Region					<.001
West	14611 (42.6)	7785 (36.1)	100 (13.3)	6726 (54.7)	
South	12147 (35.6)	9169 (44.2)	266 (36.7)	2712 (21.4)	
Midwest	3229 (9.9)	1937 (9.6)	86 (13.4)	1206 (10.2)	
Northeast	4139 (11.9)	2028 (10.1)	273 (36.6)	1838 (13.7)	
NHIS year					0.320
2010	3945 (9.8)	2252 (9.3)	69 (8)	1624 (10.8)	
2011	4487 (10)	2643 (9.8)	77 (8.9)	1767 (10.4)	
2012	4515 (10.8)	2804 (11.1)	83 (8.6)	1628 (10.4)	
2013	4597 (11.2)	2815 (11.2)	88 (10.6)	1694 (11.3)	
2014	4597 (11)	2759 (10.8)	101 (10.4)	1737 (11.4)	
2015	4197 (11.3)	2574 (11.5)	100 (12.5)	1523 (11)	
2016	2912 (11.8)	1855 (11.7)	82 (14.4)	975 (11.8)	
2017	2478 (11.8)	1673 (12.2)	59 (12.4)	746 (11.3)	
2018	2398 (12.3)	1544 (12.5)	66 (14.2)	788 (11.8)	

Source: National Health Interview Surveys, 2010-2018. ^W= weighted percentages * p<0.05; ** p<0.01; *** p<0.001

Socioeconomic Status. Poverty status, educational attainment, and employment status were not related to Black racial choice. However, poverty status and educational attainment were significantly related Other racial choice. Compared to respondents at 400% or above the FPL, those below 100% of the FPL, between 100%-199% and 200%-399%, all have similar higher odds (23%, 26%, 23%, respectively) of reporting Other (aOR= 1.23, 95% CI [1.08 - 1.40]); aOR= 1.26, 95% CI [1.13 - 1.41]; aOR= 1.23, 95% CI [1.09 - 1.37]). Compared to respondents with a college degree education or higher, respondents with less than a High School education and respondents with a High School diploma had higher odds (24%, 14%, respectively) of reporting Other over White (aOR= 1.24, 95% CI [1.01 - 1.40]); aOR= 1.14, 95% CI [1.02 - 1.27]).

	Black (vs. White)	Other (vs. White)
(<i>N</i> = 33,334)	aOR (CI)	aOR (CI)
Immigrant status		
US-born	Ref	Ref
Recent immigrant	0.67* (0.47 - 0.97)	1.35***(1.15 - 1.58)
Long-term immigrant	0.75* (0.59 - 0.94)	1.62***(1.48 - 1.77)
Poverty status		
400% or > of FPL	Ref	Ref
< 100% of FPL	1.14 (0.82 - 1.60)	1.23**(1.08 - 1.40)
100%-199% of FPL	1.20 (0.85 - 1.68)	1.26***(1.13 - 1.41)
200%-399% of FPL	1.00 (0.73 - 1.38)	1.23***(1.09 - 1.37)
Educational attainment		
College degree or higher	Ref	Ref
Less than high school	0.99 (0.75 - 1.32)	1.24***(1.10 - 1.39)
High school	0.99 (0.74 - 1.32)	1.14*(1.02 - 1.27)
Some college	1.12 (0.84 - 1.49)	1.01(0.90 - 1.14)
Employment status		
Employed	Ref	Ref
Unemployed	0.88 (0.69 - 1.13)	1.05(0.97 - 1.13)
Ethnic group		
Mexican	Ref	Ref
Cuban	5.17***(3.49 - 7.66)	0.21***(0.15 - 0.29)

Table 7. Multinomial Logistic Regression: Black and Other Racial choice (vs. White) among Panethnic Latinx Sample

Puerto Rican	12.87***(9.54 - 17.37)	0.81*(0.69 - 0.96)
Dominican	39.55***(26.29 - 59.50)	1.81***(1.45 - 2.26)
Age		
65 or older	Ref	Ref
18-25	1.45 (0.95 - 2.20)	1.55***(1.35 - 1.78)
26-34	1.52*(1.00 - 2.31)	1.43***(1.25 - 1.64)
35-49	1.37 (0.92 - 2.05)	1.46***(1.29 - 1.64)
50-64	1.15 (0.75 - 1.75)	1.30***(1.15 - 1.48)
Sex		
Male	Ref	Ref
Female	0.98 (0.80 - 1.21)	0.97(0.90 - 1.04)
Marital status		
Single	Ref	Ref
Cohabitating or married	0.63***(0.50 - 0.80)	0.85***(0.79 - 0.91)
US region		
South	Ref	Ref
West	1.04 (0.73 - 1.47)	2.82***(2.34 - 3.38)
Midwest	1.85*** (1.30 - 2.64)	2.02***(1.65 - 2.49)
Northeast	0.96 (0.70 - 1.32)	2.38***(1.92 - 2.95)

Source: National Health Interview Surveys, 2010-2018.

Note. The control variable NHIS year is included in the model, but omitted from display and can be available upon request. aOR= Adjusted odds ratio; CI= Confidence interval; Ref = reference group

* p<0.05; ** p<0.01; *** p<0.001

Ethnic Group. For Black racial choice, Cuban, Puerto Rican, and Dominican respondents had higher odds (417%, 1187%, 2955%, respectively) compared to Mexican respondents (aOR= 5.17, 95% CI [3.49 - 7.66]; aOR= 12.87, 95% CI [9.54 - 17.37]; aOR= 39.55, 95% CI [26.29 - 59.50]). For Other racial choice, Cuban and Puerto Rican respondents had lower odds (79%, 19%, respectively) compared to Mexican respondents (aOR= 0.21, 95% CI [0.15 - 0.29]; aOR= 0.81, 95% CI [0.69 - 0.96]). However, Dominican respondents had an 81% higher odds of reporting Other as their race over

White compared to Mexican respondents (aOR= 1.81, 95% CI [1.45 – 2.26]).

Correlates of Racial Choice by Latinx Ethnic Group

Table 8. displays the odds ratios (aOR) of Black and Other racial choice compared to the base outcome (White) among each of Latinx ethnic groups included in

this study (i.e., Mexicans, Cubans, Puerto Ricans, and Dominicans). These models were controlled for individual and contextual variables as well as survey year.

Immigrant Status. Immigrant status was significantly associated with racial choice only among Mexican and Puerto Rican respondents, but not among Cuban and Dominican respondents. Among Mexicans, long-term immigrant respondents had a 51% lower odds of reporting Black as their race over White compared to US-born immigrant respondents (aOR=0.49, 95% CI [0.28 - 0.86]). Regarding the odds of reporting Other racial choice over White, immigrant respondents had higher odds (recent immigrant 53%, long-term immigrant 82%, respectively) compared to US-born immigrant respondents (aOR=1.53, 95% CI [1.27 - 1.84]; aOR=1.82, 95% CI [1.65 – 2.00]).

Among Puerto Rican respondents, recent immigrant respondents had a 62% lower odds of reporting Black as their race over White compared to US-born respondents (aOR= 0.38,95% CI [0.19 - 0.78]). Regarding the odds of reporting Other racial choice over White, long-term immigrant respondents had 27% higher odds compared to US-born immigrant respondents (aOR= 1.27,95% CI [1.01 - 1.60]).

	Mexican sample $(N = 25,271)$		Cuban sampl	e(N=2,223)	N = 2,223) Puerto Rican sample ($N = 4,378$		Dominican sample (N = 1,462)	
	Black (vs. White)	Other (vs. White)	Black (vs. White)	Other (vs. White)	Black (vs. White)	Other (vs. White)	Black (vs. White)	Other (vs. White)
	aOR (CI)	aOR (CI)	aOR (CI)	aOR (CI)	aOR (CI)	aOR (CI)	aOR (CI)	aOR (CI)
Immigrant status								
US-born	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Recent immigrant	0.76 (0.27 - 2.15)	1.53*** (1.27 - 1.84)	0.93 (0.37 - 2.33)	1.35 (0.63 - 2.93)	0.38** (0.19 - 0.78)	1.16 (0.81 - 1.68)	1.22 (0.56 - 2.66)	1.35 (0.82 - 2.23)
Long-term immigrant	0.49* (0.28 - 0.86)	1.82*** (1.65 – 2.00)	0.63 (0.28 - 1.42)	1.42 (0.72 - 2.79)	0.67 (0.44 - 1.01)	1.27*(1.01 - 1.60)	1.37 (0.76 - 2.47)	1.39 (0.88 - 2.19)
Poverty status								
400% or $>$ of FPL	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
< 100% of FPL	0.66 (0.32 - 1.37)	1.12 (0.96 - 1.30)	6.82***(2.26 - 20.54)	3.63** (1.50 - 8.75)	2.12** (1.26 - 3.56)	1.75*** (1.27 - 2.42)	0.41* (0.20 - 0.85)	1.63 (0.91 - 2.91)
100%-199% of FPL	0.79 (0.42 - 1.47)	1.17* (1.03 - 1.33)	5.49**(1.61 - 18.71)	2.77*(1.23 - 6.23)	2.03* (1.18 - 3.49)	1.77*** (1.32 - 2.37)	0.56 (0.28 - 1.10)	1.60 (0.92 - 2.78)
200%-399% of FPL	0.78 (0.43 - 1.42)	1.16* (1.02 - 1.32)	3.25*(1.08 - 9.78)	2.05 (0.99 - 4.23)	1.31 (0.75 - 2.28)	1.31 (1.00 - 1.73)	0.65 (0.34 - 1.23)	1.50 (0.82 - 2.74)
Educational attainment								
College degree or higher	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Less than high school	0.65 (0.34 - 1.25)	1.22**(1.07 - 1.39)	0.99 (0.46 - 2.13)	1.44 (0.81 - 2.58)	1.10 (0.72 - 1.68)	1.27 (0.95 - 1.70)	1.23 (0.56 - 2.70)	0.98 (0.58 - 1.65)
High school	0.71 (0.42 - 1.21)	1.15*(1.02 - 1.31)	1.03 (0.53 - 1.99)	1.15 (0.64 - 2.06)	0.97 (0.61 - 1.55)	1.17 (0.91 - 1.51)	0.96 (0.50 - 1.88)	0.67 (0.40 - 1.12)
Some college	0.71 (0.43 - 1.42)	0.97 (0.85 - 1.11)	1.29 (0.49 - 3.37)	0.50 (0.20 - 1.28)	1.31 (0.85 - 2.03)	1.19 (0.90 - 1.59)	1.23 (0.65 - 2.30)	1.00 (0.58 - 1.73)
Employment status								
Employed	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Unemployed	0.96 (0.53 - 1.75)	1.04 (0.96 - 1.13)	1.29 (0.64 - 2.60)	0.90 (0.52 - 1.54)	0.73 (0.51 - 1.05)	0.95 (0.77 - 1.17)	1.18 (0.63 - 2.19)	1.45 (0.99 - 2.12)
Age								
65 and older	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
18-25	2.21 (0.72 - 6.82)	1.67*** (1.43 - 1.96)	0.84 (0.28 - 2.55)	1.80 (0.63 - 5.19)	2.07* (1.05 - 4.08)	1.07 (0.75 - 1.53)	0.83 (0.30 - 2.32)	1.13 (0.60 - 2.13)
26-34	2.56 (0.86 - 7.66)	1.48*** (1.27 - 1.73)	0.93 (0.36 - 2.43)	2.02 (0.98 - 4.14)	1.82 (0.94 - 3.50)	1.22 (0.86 - 1.72)	1.04 (0.35 - 3.06)	1.47 (0.74 - 2.90)
35-49	1.39 (0.45 - 4.28)	1.52*** (1.31 - 1.75)	1.86 (0.85 - 4.06)	1.94 (0.97 - 3.89)	1.65 (0.87 - 3.16)	1.22 (0.90 - 1.65)	1.13 (0.42 - 3.02)	1.02 (0.58 - 1.82)
50-64	1.63 (0.53 - 4.99)	1.33*** (1.15 - 1.54)	0.85 (0.38 - 1.86)	0.46*(0.23 - 0.90)	1.59 (0.80 - 3.15)	1.23 (0.91 - 1.65)	0.63 (0.23 - 1.76)	1.35 (0.76 - 2.38)
Sex								
Male	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Female	1.12 (0.73 - 1.72)	0.96 (0.89 - 1.04)	0.92 (0.53 - 1.60)	0.67 (0.43 - 1.04)	0.97 (0.71 - 1.31)	0.95 (0.79 - 1.13)	0.85 (0.52 - 1.38)	1.08 (0.75 - 1.55)
Marital status								
Single	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Cohabitating or married	0.51** (0.34 - 0.79)	0.86*** (0.80 - 0.93)	0.50*(0.28 - 0.88)	0.79 (0.52 - 1.18)	0.83 (0.57 - 1.20)	0.94 (0.78 - 1.12)	0.45** (0.25 - 0.83)	0.60** (0.42 - 0.86)
US region								
South	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref

Table 8. Multinomial Logistic Regression: Black and Other Racial Choice (vs. White) by Ethnic Group

West	0.85 (0.53 - 1.35)	2.69*** (2.22 - 3.26)	3.87*** (1.75 - 8.54)	9.57***(4.93 - 18.56)	0.86 (0.44 - 1.70)	2.64***(1.88 - 3.69)	0.95 (0.37 - 2.43)	1.42 (0.46 - 4.37)
Midwest	1.19 (0.68 - 2.10)	1.85*** (1.48 - 2.30)	3.39* (1.02 - 11.29)	6.66***(2.37 - 18.76)	2.52***(1.48 - 4.29)	2.39***(1.71 - 3.34)	2.00 (0.62 - 6.47)	1.07 (0.39 - 2.95)
Northeast	1.00 (0.35 - 2.83)	1.70* (1.11 - 2.59)	2.07 (0.84 - 5.12)	6.20***(2.92 - 13.19)	1.29 (0.85 - 1.95)	2.43***(1.89 - 3.13)	0.75 (0.45 - 1.25)	5.02*** (3.29 - 7.68)

Source: National Health Interview Surveys, 2010-2018. Note. The control variable NHIS year is included in the model, but omitted from display and can be available upon request. aOR=Adjusted odds ratio; CI= Confidence interval; Ref = Reference Group * p<0.05; ** p<0.01; *** p<0.001

Socioeconomic Status. The relationship between poverty status and racial choice was statistically significant among each ethnic group (Mexican, Cuban, Puerto Rican and Dominican respondents), but for different racial choices and in different directions.

Among Mexicans, poverty status was only significantly related to Other racial choice, whereby respondents between 100%-199% and between 200%-399% both had a higher odds (17%, 16%) of reporting Other over White compared to respondents at 400% or above the FPL (aOR= 1.17, 95% CI [1.03 - 1.33]; aOR= 1.16, 95% CI [1.02 - 1.32]).

Among Cubans, respondents below 100% of the FPL, between 100%-199% and between 200%-399% all had higher odds (582%, 449%. 225%, respectively) of reporting Black as their race over White compared to respondents at 400% or above the FPL (aOR= 6.82, 95% CI [2.26 – 20.54] ; aOR= 5.49, 95% CI [1.61 - 18.71]; aOR= 3.25, 95% CI [1.08 - 9.78]). Regarding the odds of choosing Other, respondents below 100% of the FPL and those between 100%-199% had higher odds (263%, 177%, respectively) compared to respondents at 400% or above the FPL (aOR= 3.63, 95% CI [1.50 - 8.75]; aOR= 2.77, 95% CI [1.23 – 6.23]).

Among Puerto Ricans, respondents below 100% of the FPL and between 100%-199% had higher odds (112%, 103%, respectively) of reporting Black as their race over White compared to respondents at 400% or above the FPL (aOR=2.12, 95% CI [1.26 – 3.57]; aOR=2.03, 95% CI [1.17 – 3.49]). Regarding the odds of choosing Other, respondents below 100% of the FPL and between 100%-199% had higher odds (75%, 77%, respectively) compared to respondents at 400% or above the FPL (aOR=1.75, 95%CI [1.27 – 2.42]; aOR=1.77, 95% CI [1.32–2.37]). Among Dominicans, poverty status was only significantly related to Black racial choice, whereby respondents below 100% of the FPL had 59% lower odds of selecting Black as their race over White compared to respondents at 400% or above the FPL (aOR=0.41, 95% CI [0.20 - 0.85]).

Educational attainment was significantly related to racial choice only among Mexican respondents and only for Other racial choice. Compared to respondents with a college degree or higher, Mexican respondents with less than a high school education and those with a high school diploma both had higher odds (22%, 15%, respectively) of reporting Other as their race over White (aOR= 1.22, 95% CI [1.07 - 1.39]; aOR= 1.15, 95% CI [1.02 - 1.30]).

Discussion

The aims of this study were to assess whether immigrant status and socioeconomic factors were significantly associated with racial choice among a panethnic Latinx sample and ethnic group samples, while controlling for individual and contextual factors.

Immigrant Status

In line with my first hypothesis 1 (H1), immigrant status mattered in selecting Black and Other as a racial choice over White. Latinx immigrants, regardless of length of US residence, were likely to avoid identifying as Black and more likely to choose Other over White. This was also the case for island-born Puerto Rican respondents as found in previous studies (Vargas-Ramos, 2012). Vargas-Ramos (2012) found that island-born Puerto Ricans were likely to prefer identifying as White than their counterparts with less ties to the island. The stigma of blackness in Latin America may also produce a strong aversion to choosing the Black racial option, which therein may produce a preference for whiteness (Darity Jr, Dietrich, & Hamilton, 2005; Haywood, 2017; Vargas-Ramos, 2012).

However, when faced with the option of Other versus White, Latinx immigrants, including long-term Mexican immigrants, prefer to identify as Other. This may result because of the length of time living in the US. Studies have found that Latinxs, specifically Mexicans and Puerto Ricans who have attempted to assert whiteness over time realized it was not accepted by non-Latinx Whites (Dowling, 2014; Vargas-Ramos, 2012). Mexican Americans from Texas who were interviewed reported that their choice to identify as Other was partially because that they are not treated as White evidenced by discriminatory experiences (Dowling, 2014). Immigrants' preference for the Other race option may also be due to being accustomed to racial schemas used in immigrants' country/territory of origin (Roth, 2012). With less exposure to the US census-informed racial schema, Latinx immigrants may choose Other so they can write in racial terms from their home country/territory's racial schema (e.g., *Moreno, Trigueno, Indio*).

Socioeconomic Status

In line with the second hypothesis (H2), socioeconomic status indicators significantly influenced how panethnic Latinxs and their ethnic groups reported their race. Low SES Latinxs (higher poverty, less education) were more likely to choose either Black or Other over White as their race. Adhering to racial ideologies that value whiteness in Latin America, such as *blanquemiento* (whiteness) may play a role in this. *Blanquemiento* encourages the practice of "mejorando la raza" (better the race) for Latinxs whether it may be through beauty standards or marrying a non-Latinx White to gain upward mobility in society (Haywood, 2017). Therefore, a low SES position may indicate to Latinxs that they have not reached the higher end of the social mobility ladder and are at the bottom with non-Latinxs Blacks. This finding may also be a reflection of the relationship between SES and racialization. Studies have shown that individuals who have experienced poverty and unemployment are less likely to be identified as White and more likely to be identified as Black (Sanchez & Garcia, 2012). Latinxs may make a racial choice based on how others perceive them (ascribed race) and may believe others see them as non-white because of their low SES position (e.g., Borrell, 2005).

Within-group Differences by Ethnic Group

Regarding the role of ethnic group on SES and racial choice, respondents in poverty (<100% of the FPL) had higher odds of choosing Black over White if they were Cuban and Puerto Rican. Surprisingly, Dominicans in the same poverty group were less likely to choose Black as their race over White. This may be because Dominicans have a different racialization experience as a recently arrived immigrant group compared to their more established Latinx immigrant counterparts (Cubans, and Puerto Ricans). Though they may be ascribed as Black more often than most ethnic groups, Dominicans may be more likely to have a stronger aversion to identifying as Black because of internalized anti-Black attitudes that stem from *antihaitianismo* (anti-Haitian attitudes) in the Dominican Republic (Lamb & Dundes, 2017). Dowling's 2014 study found that colorblind racial attitudes motivated Mexican Americans to choose White as their race. Therefore, racial attitudes may be crucial for Dominicans' racial choices as well. Interestingly, it has been documented by a recent qualitative study that higher education is where Dominicans may replace anti-Black attitudes they have been exposed to from family members with higher awareness of blackness in their heritage and a greater embrace of a Black/Afro-Latinx identity (Hordge-Freeman & Veras, 2020). Though education was not related to Black racial choice for Dominicans, it may be possible that poor Dominicans may face barriers of access to higher education and therefore are limited to social spaces that perpetuate anti-Black attitudes, decreasing their chances of choosing Black over White as their race.

Limitations

This study is a pooled cross-sectional design, causation cannot be inferred between immigrant status, SES, and racial choice. Another limitation was being unable to control for location by state-level. Geography variables on the state-level and further in are not included in NHIS' publicly available data. Therefore, I was limited to using US region in the examined models to control for contextual factors, which consequently may be masking the impact state-level ethnic group enclaves on racial choice. Also, the respondents were asked about their race only using a self-report format and therefore I was limited to operationalizing respondents' race as a choice and nothing more (e.g., selfperceived identity, ascribed identity, skin color). Given recent qualitative findings on racial attitudes (Dowling, 2014), it is possible that self-reported race could be tapping into other constructs related to identity (e.g., racial attitudes). Future studies would benefit from comparing immigration and SES factors to different dimensions of racial identity.

Conclusion

Immigrant status and socioeconomic status are influential in Latinxs' racial decision-making. Just as race is defined as a fluid sociological construct (Omi & Winant,

2015), the decision to choose one to identify also appears to be not static. Racial choice may change depending on the referenced race in opposition, immigration and economic circumstances, and ethnic group. Though Latinx immigrants may be likely to distance themselves from black identity when white is the referenced race, they are likely to be pulled more towards choosing Other as their race compared to White. However, economic barriers are likely to push Latinxs more towards Black and Other and away from White, except for Dominicans. This study contributes to the knowledge of racialization processes among Latinxs and between different ethnic groups. It provides ground for the exploration of unexamined factors that may also be pertinent to racial choice, such as racial attitudes and ideology.

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CHAPTER V. DISCUSSION

The purpose of this dissertation was to examine the pathways of racial choice and psychological distress among panethnic and ethnically diverse Latinx groups. Through the three conducted studies, I found that racial choice matters in the lives of Latinxs, particularly in the context of reporting higher levels of psychological distress. I also found that factors that are expected to bridge racial choice and psychological distress may also influence racial choice.

The studies conducted in this dissertation partially supported some of the relationships outlined in Borrell's Framework for the Effect of Race on Latinos/as' Health and Well-Being (Borrell, 2005; Borrell & Crawford, 2006). Immigrant status and ethnic group does play a role in racial choice. However, the pathways from racial choice and psychological distress may differ depending on ethnic group. Access to care factors, such as Medicaid coverage and usual place of care appear to explain why Black-Puerto Ricans and Dominicans may not experience higher distress than their White counterparts. Borrell's model posited that contextual factors such as US state location may be an indication of racial segregation that may lead Black-Latinxs closer to negative wellbeing. Though U.S. state location was not able to be tested, I found that US region may be an important contextual factor pointing to anti-immigrant policies that may disproportionately expose Black-Mexicans and Cubans to distress. The pathways from racial choice one makes on a survey (like the NHIS or the census) to health and wellbeing maybe one piece of a larger dynamic of racialization processes that include racial identity factors such as racial ideology and attitudes. Adding such factors to Borrell's
framework may enhance the ability to further untangle the textured realities of race in the lives of Latinx individuals and communities.

Implications

As mentioned, one of the limitations to Hispanic Health Paradox (HHP) studies is the reliance on culture explaining immigrant and U.S.-born health disparities. The findings of this study suggest racial choice matters and that racialization may be a structural force in the lives of Latinxs that HHP studies have not yet accounted for. Future studies testing the HHP should account for racial choice and related racialization processes to understand how the immigrant health advantage applies to Latinxs of different race groups (i.e., Black, White, other).

Policy implications that emerge from this project is the opportunity to address the intersection of race and immigration with current healthcare and immigration policies. The Affordable Care Act (ACA) has helped increase insurance coverage for many low-income adults, including non-Latinx Blacks and many members of the panethnic Latinx community. However, the ACA excluded undocumented immigrants from accessing such coverage gains, which disproportionately affect many Mexican and Cubans living in the US who are more likely to be without citizenship than Puerto Ricans and Dominicans. Such exclusion is part of an anti-immigrant environment that induce fear of using healthcare services (Salas, Ayón, & Gurrola, 2013; Toomey et al., 2014), which may leave Black-Mexicans and Cubans with unaddressed psychological distress.

Culturally adapted clinical interventions for Latinxs may focus on traditional cultural values (*personalismo*, *dichos*, *familismo*), immigration experiences (acculturation), language and ethnic provider-client concordance (Adames & Chavez-

Dueñas, 2017; Gallardo, 2012). However, these interventions may overlook Latinx group differences by racial identity, skin color and colorism experiences (Adames & Chavez-Dueñas, 2017). Given the findings of this dissertation, it is recommended clinicians integrate racialization experiences during clinical assessments to gain a more comprehensive picture of how clients and service users experience racial choice and identity within their social networks, educational institutions, workplace, and in the healthcare system. Navigating racial choice and identity in these spaces may involve interactions with discrimination and colorism which may produce anxiety and stress that would go unnoticed, unaddressed, and untreated otherwise.

Conclusion

Racial choice matters in the lives of Latinxs, whereby the selected race may position Latinxs towards pathways to psychological distress. Racial choice may also be a reflection of Latinx immigration status and socioeconomic position. Additionally, there are ethnic group differences that shed light to the potential role racial ideology and internalized anti-Black racism in the racialization processes of Latinxs.

Giving the growing number of Black-Latinxs and Latinxs that identify as Afro-Latinx (Haywood, 2017), further developing and enhancing theories and models of understanding the racialization processes Latinxs that may push or pull Latinxs towards and away racial choices and potential psychological consequences will be essential. This will help reduce the invisibility of Black and Afro-Latinx representation in Latinx mental health research. *Blanquemiento*, a racial ideology and culture that values whiteness in Latin America and in Latinx communities in the US renders Black and Afro-Latinxs invisible (Haywood, 2017). Understanding the psychological consequences of racial ideologies in Latinx racialization processes may be a missing factor to explore in reducing and eliminating Latinx health and mental health disparities.

Human Subjects Review

The data used in this dissertation is publicly available and de-identified and therefore did not require exemption review from the Boston College Institutional Review Board.

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Appendix

	Latinxs (n=34,126)			Mexican (n=25,912)			Cuban (n=2,261)			Puerto	Rican (n	=4,323)	Dominican (n=1,630)		
	White	Black	Other	White	Black	Other	White	Black	Other	White	Black	Other	White	Black	Other
Psychological Distress															
Low	80.2	71.9	79.1	80.7	73.2	80.1	82.9	69.1	76	75.1	68	71.2	81	78.7	79.1
Moderate	16.3	23.6	16.7	16.2	25.5	16.2	13.5	27.9	16.6	19.5	26.2	21.1	14	15.9	16.2
Serious	3.5	4.5	4.2	3.1	1.2	3.7	3.6	3	7.4	5.3	5.8	7.7	5	5.4	4.7
Age															
18-25	19.3	23.2	20.4	20.8	33.8	21	10.7	14	15.2	17	25.1	16.1	15.4	14.5	19
26-34	21.3	24.4	21.6	22.4	29.7	22	15.4	12.6	21	18.7	23.3	18.9	22.6	26.2	20.7
35-49	29.5	26.7	32.1	30.1	18.5	33.2	27	34.6	34.3	27.6	26.3	27.6	29.3	31.2	25
50-64	18.9	17	18	17.5	13.5	17	25.3	16.3	9.5	22.2	18.9	23.3	23.2	16.6	24.2
65>	10.9	8.7	8	9.2	4.5	6.8	21.7	22.5	20	14.6	6.3	14.1	9.6	11.6	11.2
Sex															
Male	50	47.9	50.5	50.1	47	51.2	52.3	50.5	62.9	48.4	49.1	48.7	47	45.3	42
Female	50	52.1	49.5	49.9	53	48.8	47.7	49.5	37.1	51.6	50.9	51.3	53	54.7	58
U.S. Region															
West	36.1	13.3	54.7	45.6	40.8	64.2	4.3	12.3	20.5	8.4	5.8	10.3	4	4.6	1.3
South	44.2	36.7	21.4	41.2	43	22.1	86.2	72.7	53.7	37.8	27.8	19.5	30.8	34.2	8.5
Midwest	9.6	13.4	10.2	10.6	13.6	10.7	3	7.5	8.3	9.5	19.7	12	2.1	4.1	0.9
Northeast	10.1	36.6	13.7	2.7	2.6	2.9	6.6	7.6	17.5	44.4	46.7	58.2	63.1	57.1	89.4
Immigrant status															
Recent immigrant	8.3	9.2	8.5	6.9	6.3	7.5	17.7	24	25.6	8.5	4.6	7.7	17.3	14.3	19.2
Long-term immigrant	40.9	35	52.6	39.4	18.1	53.4	56.7	45.9	49.9	35.9	25.2	41.6	58.2	62.7	60.2
U.Sborn	50.8	55.8	38.9	53.7	75.6	39.1	25.6	30.1	24.5	55.6	70.2	50.7	24.5	23	20.6
Citizenship															

Table A. Characteristics of Panethnic Latinx Sample by Racial Choice and Ethnic Groups in Percentages (%)

Non-U.S. citizen	27.4	13.2	37.9	32	19.9	42.6	26.4	28.1	41.2	1.1	0.8	1.7	28.1	24.3	32.4
U.S. citizen	72.6	86.8	62.1	68	80.1	57.4	73.6	71.9	58.8	98.9	99.2	98.3	71.9	75.7	67.6
Employment															
Employed	67.7	70	67.3	69	72.4	68.7	61.6	50.9	63.2	62.9	70.3	58.9	75.3	74.6	62.2
Unemployed	32.3	30	32.7	31	27.6	31.3	38.4	49.1	36.8	37.1	29.7	41.1	24.7	25.4	37.8
Education															
< High school	31.1	21.7	40.2	34.8	21.9	42.3	17.1	21.3	23.1	20.3	20.9	28.2	23.2	23.1	34.2
High school	27.7	26.9	27.5	27.2	26.4	27.4	29.9	30.5	34.6	28.4	27	29.7	29.1	25.9	23.8
Some college	17.8	22.8	15.5	18.1	21.5	14.9	12.8	18.2	9.5	19.2	26.1	18.8	17.8	19.8	18.3
College degree or >	23.5	28.6	16.8	19.9	30.2	15.3	40.2	30	32.8	32.1	26	23.3	29.9	31.2	23.7
Marital status															
Single	38.4	56	40.5	37.3	58.3	38	37.4	55.9	43.9	44.6	54.7	50.6	41	56.6	57.8
Cohabitating/married	61.6	44	59.5	62.7	41.7	62	62.6	44.1	56.1	55.4	45.3	49.4	59	43.4	42.2
Poverty status															
< 100% of FPL	21.6	22.9	25.1	22.2	17.3	24.2	18	31.3	24.7	20	25.9	27.4	23	19	33.4
100%-199% of FPL	28.2	27.3	32.2	29.5	26.2	33.1	25.7	33.9	27.5	22.2	27	27.4	27.9	26.4	28.6
200%-399% of FPL	29.6	28.4	28.7	29.4	30.6	29.1	32	27.1	34.3	29.3	27.5	26.1	28.3	28.6	26.7
400% or > of FPL	20.7	21.4	14	18.9	25.9	13.6	24.3	7.7	13.5	28.5	19.6	19.2	20.8	26	11.4
NHIS year															
2010	9.3	8	10.8	9.4	7.8	10.5	8.4	9.8	15.8	9.2	9.1	11.8	7.3	5.7	11.9
2011	9.8	8.9	10.4	10	11	10.2	9	12.9	7.5	9.3	9	10.5	7.9	5.3	13.5
2012	11.1	8.6	10.4	11.4	10.7	10.2	10.5	10.3	10.5	10.2	10.2	11.8	8.6	3.3	10.6
2013	11.2	10.6	11.3	11	12.3	11.6	12.7	10.2	4.2	10.8	6.6	11.4	11.9	16.6	8.7
2014	10.8	10.4	11.4	10.8	16.5	11.4	11.7	9.8	8.6	10.6	7.7	11.8	9.2	10.3	11.8
2015	11.5	12.5	11	11.4	9.3	11.2	11.8	8.9	8.2	11.9	14.9	11.2	11.4	12.2	7.7
2016	11.7	14.4	11.8	11.2	16	12.1	10.5	9	11.6	13.6	13.9	10.4	20	16.1	9.8
2017	12.2	12.4	11.3	12.1	7.1	11.3	12.6	12.3	19	12.4	16.2	8.7	11.5	9.9	13.8
2018	12.5	14.2	11.8	12.6	9.4	11.6	12.8	16.8	14.6	12.1	12.4	12.6	12.1	20.6	12.1

			Medicaid coverage								
	To (N = 3)	tal 4,126)	Unin (n = 1	sured 0,516)	Medica (n = 3	aid only 3,848)	Private other p (n = 1)	and/or public 8,715)	-		
	n	(%) ^w	n	(%) ^w	n	(%) ^w	n	(%) ^w	v		
Dependent variable											
Psychological distress									<		
Low	25310	78.8	8138	79.2	2635	71.2	14537	80			
Moderate	5560	17	1762	16.7	804	21.4	2994	16.3			
Serious	1452	4.2	408	4	295	7.4	749	3.7			
Independent and Moderating variables											
Racial choice									<		
White	20380	63.1	6182	60.9	2011	52.4	12187	66.2			
Black	691	2.3	146	1.5	140	4.2	405	2.3			
Other	12008	34.7	4188	37.6	1697	43.4	6123	31.5			
Ethnic group									<		
Mexican/Cuban	27377	80.9	9574	90.1	2746	69.6	15057	78.6			
Puerto Rican/Dominican	5702	19.1	942	9.9	1102	30.4	3658	21.4			
Immigration control variable											
Immigrant status									<		
Recent immigrant	2858	82	1769	16.5	326	82	763	42			
Long-term immigrant	15336	45.1	5700	54.3	1677	44	7959	40.8			
U.Sborn	14588	46.7	2903	29.2	1817	47.8	9868	55			
SES control variables											
Poverty status									<		
< 100% of FPI	0182	25.6	4072	36.9	2140	53.4	2970	14 7			
< 100% 01 FTL 100%-199% of FPI	9684	23.0	3796	36.5	1220	32.4	4668	23.7			
200%-399% of FPL	8820	27.7	2121	21.4	405	12.5	6294	33.7			
400% or > of FPL	5186	18.3	451	5.2	62	1.9	4673	27.9			
Educational attainment									<		
< High school	12139	34.1	5165	48	1773	44.2	5201	25.4			
High school	8652	26.3	2876	28	1091	29	4685	25			
Some college	5201	16.5	1260	12.6	563	15.6	3378	18.6			
College degree or >	6837	23.1	1124	11.4	388	11.2	5325	31			
Employment									<		
Employed	21455	66.3	7401	72.2	1868	50.7	12186	66.3			
Unemployed	11624	55.7	3115	27.8	1980	49.3	6529	55.7			
Individual control variables											
Age									<		
18-25	4992	15.5	1914	18.6	873	23	2205	12.5			
26-34	6970	21.6	2891	28.4	921	24.1	3158	17.8			
50-49 50-64	10337	30.1 18 7	3972 1545	50.5 14 6	1134	28.5	5231 2052	27.2			
50-0 4 65>	0254 4546	10./	1343	14.0 2	730 184	19.2 5 2	3933 4168	20.0			
Sev	1010	17.2	174	2	104	5.2	-1100	21.7	~		
Mala	14722	17	5177	52.2	1114	21 5	0422	175			
Female	14/23	47 53	5339	52.2 47.8	2734	51.5 68.5	8432 10283	47.5 52.5			
Citizenship									<		
Non-U.S. citizen	10412	29.1	6089	56.9	1106	27.7	3217	15.8			
U.S. citizen	22501	70.9	4330	43.1	2732	72.3	15439	84.2			
Marital status									<		
Single	15186	45.9	4427	42.6	2233	57.8	8526	45.3			
Cohabitating/married	17837	54.1	6076	57.4	1608	42.2	10153	54.7			

Contextual control variable									
U.S. Region									<.001
West	13999	38.9	4285	35.7	1935	48	7779	38.7	
South	12009	38	4408	45.6	704	18.3	6897	38	
Midwest	3160	10.2	1057	10.5	303	9	1800	10.3	
Northeast	3911	12.9	766	8.1	906	24.7	2239	13	
Access to care control variables									
Usual place of care									<.001
Single	24770	76.5	4768	46.1	3377	88.6	16625	89.1	
Cohabitating/married	8088	23.5	5671	53.9	445	11.4	1972	10.9	
Care delay due to cost									<.001
Single	28973	88.1	8094	77	3603	93.9	17276	92.4	
Cohabitating/married	4100	11.9	2419	23	243	6.1	1438	7.6	
Survey year control variable									
NHIS year									<.001
2010	3858	9.5	1478	11.9	373	7.1	2007	8.8	
2011	4372	10.2	1667	12.7	411	7.4	2294	9.5	
2012	4404	10.9	1686	13.8	455	9.2	2263	9.9	
2013	4485	11.6	1657	14.1	419	9	2409	11	
2014	4451	11.2	1323	11.1	596	12	2532	11	
2015	4025	11	1050	9.5	596	13.2	2379	11.3	
2016	2781	11.3	566	7.6	400	14.9	1815	12.5	
2017	2393	11.7	569	9.4	308	13.5	1516	12.5	
2018	2310	12.5	520	9.9	290	13.6	1500	13.6	

^W= weighted percentages * p<.05; ** p<.01; *** p<.001

Notes

- 1. Latinx is a gender-inclusive term to refer to Latina/os.
- 2. The "Other" race option was included in the NHIS for respondents who felt their race was not represented with the defined set of races provided (e.g., Black/African American, White, etc.).
- 3. Poverty status refers to family income according to percentage of the federal poverty line.
- 4. "Private and/or other public coverage" included respondents who have private, Medicare coverage or any combination with Medicaid.