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Understanding Contributors to the Black Immigrant Health Paradox:
Leveraging a Social-Cognitive Approach

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Philosophy in Psychology

by

Praise Onaopemipo Owoyemi

2026

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ABSTRACT OF THE DISSERTATION

Understanding Contributors to the Black Immigrant Health Paradox:

Leveraging a Social-Cognitive Approach

by

Praise Onaopemipo Owoyemi

Doctor of Philosophy in Psychology

University of California, Los Angeles, 2026

Professor Annette Louise Stanton, Chair

Extant research has provided support for the immigrant health paradox within the Black community. Specifically, Black immigrants in the United States largely demonstrate better physical and mental health outcomes than U.S-born Black individuals. Investigations of current explanatory hypotheses of the immigrant health paradox have yielded mixed findings and notable limitations. Accordingly, the present research aimed to test a new framework for understanding potential key contributors to the Black immigrant health paradox. This framework employed a social-cognitive approach by integrating a race-conscious lens with system justification beliefs (via the meritocratic worldview or MW), in charting how ideologies may shape perceptions of discrimination, and subsequently, how differences in perceived discrimination might mediate the differential health outcomes between Black immigrants and their American-born counterparts. Two interrelated studies examined and tested the constructs underlying the social-cognitive model (i.e., nativity status, the meritocratic worldview, perceived

discrimination) as factors hypothesized as potential mechanisms of the Black immigrant health paradox.

Study 1 examined secondary analyses of data from a large nationally representative sample that included Black Americans and Black Caribbean immigrants. Structural equation modeling was conducted to test the proposed social-cognitive framework. Findings provided partial support for my hypotheses. MW was significantly related to psychological distress through discrimination, but nativity status did not moderate the relationship. Contrary to my hypothesis, MW did not buffer against psychological distress; instead MW was associated with greater psychological distress. Notably, nativity status moderated the structural relations among MW and physical health. Specifically, MW was significantly associated with poorer physical health (as measured by number of medical conditions) in U.S. Born Black Americans, but there was not a significant association for Black immigrants.

Study 2 complemented Study 1 by exploring current Black immigrants' perspectives on the immigrant health paradox and constructs embedded in the social-cognitive model. Black immigrants reported significant health-related changes after immigrating to the United States. Participants attributed these changes to a confluence of cultural, social, and lifestyle factors alongside anti-Black racism. Collectively, findings from study 1 and study 2 advance understanding of how MW and discrimination influence health among Black communities and help facilitate targeted interventions to support health outcomes in U.S. Born Black Americans and Black immigrants.

The dissertation of Praise Onaopemipo Owoyemi is approved.

Denise Chavira

Yi Feng

Patrick Wilson

Courtney Thomas

Annette L. Stanton, Committee Chair

University of California, Los Angeles

2026

DEDICATION

I dedicate this dissertation first and foremost to my wonderful parents. Thank you both for your endless love, support, and guidance. Your decision to move to the United States, and the life you both built, motivated this research.

This project is also dedicated to the Black immigrants who so graciously shared their lived experiences with me. It was a privilege to speak with you all and hear your stories, and I hope I have represented your experiences with the care and accuracy they deserve.

To my coding team, Ibukun and Leezet, thank you for your thoughtfulness and commitment. This dissertation simply would not have been possible without both of you. To Leezet, thank you for also being my anchor in this dissertation process. Our weekly co-working routines made what was an intense process feel less daunting.

To my partner, thank you for being my person throughout this graduate school journey. Your tireless support, encouragement, and willingness to shoulder more than your share allowed me to devote my time to this work.

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LIST OF ACRONYMS

BI – Black Immigrants

CES-D – Center for Epidemiologic Studies Depression Scale

CFA – Confirmatory Factor Analysis

CFI – Comparative fit index

CI – Confidence Intervals

EDS – Everyday Discrimination Scale

FIML – Full-information maximum likelihood

HIPAA – Health Insurance Portability and Accountability Act

IRB – Institutional Review Board

IRR – Incidence rate ratios

JH – John Henryism

MED – Major Experiences of Discrimination

MI – Modification indices

MLR – Maximum likelihood estimation with robust standard error

MW – Meritocratic Worldview

N – Number of participants

NSAL – National Survey of American Life

RMSEA – Root-mean-square error of approximation

SEM – Structural Equation Modeling

SES – Social economic status

SRMR – Standardized Root Mean Square Residual

TLI – Tucker-Lewis Index

UBA – U.S. Born Black Americans

UCLA – University of California, Los Angeles

U.S. – United States

VITA

Education

2025 – 2026 **West Los Angeles Veterans Affairs (VA)** – Los Angeles, CA
Clinical Psychology Internship

December 2021 **University of California, Los Angeles** – Los Angeles, CA
Master of Arts in Clinical Psychology

2014 – 2018 **Wesleyan University** – Middletown, CT
Bachelor of Arts: Psychology; Russian, Eastern European, & Eurasian Studies

Grants & Fellowships

2025 UCLA Political Psychology Fellowship

2023 – 2024 Society for Biopsychosocial Science and Medicine I2EyE Scholar

2023 UCLA Graduate Summer Research Mentorship Fellowship

2022 – 2023 NIMH T32 Predoctoral Fellowship – Biobehavioral Issues in Mental and Physical Health Training Grant

2021 APA Division 36 Diversity Scholars Grant

2021 UCLA Psychology Graduate Student Research Mentorship Fellowship

2016 U.S. Department of State – Russian Critical Language Scholarship

Peer-Reviewed Publications

Owoyemi, P., Denyse, T., Pageot, Y. K., Martin, K. J., deLuz, D., Kim, J. H. J., Stanton, A. L. (2025). “You gotta go through it with me”: Black women navigating spirituality during the breast cancer journey. *Psycho-Oncology*, 34(1). <http://dx.doi.org/10.1002/pon.70085>

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- Hobbs, K., Monette, P., **Owoyemi, P.**, Beard, C., Rauch, S., Ressler, K., Vahia, IV. (2019). Incorporating electronic and social media into patient care: a clinician survey. *Journal of Medical Internet Research*, 21(7), doi:10.2196/13218.

Selected Presentations

- Stanton, A.L., Denyse, T., Martin, K., **Owoyemi, P.** (2026). The Strong Black Woman Schema, Coping Processes, and Depression in Breast Cancer Survivors. In A. Stanton (Chair), Project Soar (Speaking Our African American Realities): Understanding Survivorship in Black American Women Diagnosed with Breast Cancer. Symposium at the American Psychosocial Oncology Society (APOS) 23rd Annual Conference, New Orleans, LA.
- Owoyemi, P.**, Denyse, T., Pageot, Y. K., Martin, K. J., deLuz, K.D., Kim, J. H. J., & Stanton, A. L. (2024, March 20 – 23). Project Soar (Speaking Our African American Realities): Spirituality as a Predictor of Posttraumatic Growth and Physical Symptoms among Black Breast Cancer Survivors. Poster presentation at the American Psychosomatic Society, 81st Annual Scientific Meeting, Brighton, UK.
- Ramirez, E., **Owoyemi, P.**, Weihs, K.L., Stanton, A.L. (2024, March 13–16). Cumulative adversity indices as predictors of depressive symptoms over time in Latina breast cancer survivors. Poster presentation at the Society of Behavioral Medicine's 45th Annual Meeting & Scientific Sessions, Philadelphia, PA.
- Owoyemi, P.**, Denyse, T., Pageot, Y. K., Martin, K. J., deLuz, D., Kim, J. H. J., & Stanton, A. L. (2023). Project Soar (Speaking Our African American Realities): Examining the role of spirituality among Black women in the breast cancer context. Citation poster presentation at the 2023 American Psychosomatic Conference, San Juan, Puerto Rico.
- Hoch, M.M., **Owoyemi, P.**, Jorge, A., Weihs, K.L., & Stanton, A.L. (2023). “Goodness of Fit” models of psychological adjustment in breast cancer survivorship: Examining illness perceptions of current and anticipated illness. Poster presentation at the 2023 American Psychosomatic Conference, San Juan, Puerto Rico.
- Owoyemi, P.**, Weihs, K.L., Wiley, J., Stanton, A.L. (2022). Predictors of Depressive and Physical Symptoms After a Breast Cancer Diagnosis. Data blitz presentation at the 2022 American Psychological Association Annual Conference, Minneapolis, MN, United States.
- Owoyemi, P** & May, R. (2019). Impact of clinical trials on patients and their families. Oral presentation at McLean Hospital Geriatric Psychiatry Division Meeting.
- Owoyemi, P.**, Hobbs, K., Beard, C., Silverman, B., Ressler, K., Vahia, I. (2019). Electronic media and its applications in psychotherapy: methods and a geriatric case study. Poster presentation at the annual meeting of the American Association for Geriatric Psychiatry (AAGP).

Introduction

Black Immigrant Population in the United States

Over the last two decades, the Black immigrant population in the United States has grown exponentially; as of 2024, 5.6 million Black immigrants lived in America, a substantial increase from the 2.4 million Black immigrants in the United States (U.S.) in 2000 (Piña, Cahn, & Im, 2026). Currently, more than one in ten Black individuals are immigrants, with estimates projecting that by 2060, approximately 17% of the Black community in America will be immigrants (Anderson, 2015; Tamir, 2022). Although Black immigrants come from a range of regions/backgrounds (e.g., Africa, Caribbean, Central America, South America), Caribbean and African immigrants comprise 88% of all foreign-born Black individuals as of 2019 (Tamir, 2022). Several factors account for the changing composition of the Black population in America. In addition to migration push factors (e.g., economic challenges, political violence) and pull factors (e.g., educational opportunities, healthcare advancements), U.S. policies such as the Immigration and Nationality Act of 1965, which eliminated the prior quota system and allowed for equal numbers of openings per country of origin, and the Immigration Act of 1990, which aimed to increase immigration from underrepresented countries, helped to facilitate this growth (Anderson, 2015; Kamya, 2023).

With the changing ethnic and racial composition of the U.S. and specifically, the increasing numerical representation of foreign-born Black individuals, recognition of the importance of examining intragroup dynamics alongside intergroup relations has grown. Indeed, this changing landscape can help shift the tendency to treat the Black community in America as a monolith and recognize other identities (e.g., nativity status, country of origin, immigrant

generational status) as being equally or even more salient to an individual. Yet critical research examining the ethnic diversity within the Black community, intra-racial differences in interpersonal processes and beliefs, and subsequent differential outcomes is woefully limited. Accordingly, this dissertation project aims to help address that gap. Specifically, given that a key intra-racial difference, demonstrated both within the Black community as well as among other marginalized communities, has been variability in health outcomes between Black immigrants and U.S.-born Black individuals, the aim of the present research is to propose and test a new framework for understanding nativity-based variability in physical and mental health outcomes (e.g., mortality rates, hypertension, self-rated health, depression) in the Black community.

The following review will first define and expand on the immigrant health paradox broadly as well as its relevance to the Black community. Next, the review will address prior theories put forth to explain the paradox, before I discuss critiques of those prior explanatory models. Following the review of the literature, I will propose an alternative model, incorporating a race-conscious lens in a social-cognitive framework to better understand mechanisms that may help explain the Black immigrant health paradox.

Immigrant Health Paradox

Migration and adjustment to the U.S. is associated with a number of stressors including navigating economic challenges, social norms, potential language barriers, and lifestyle and cultural changes (Akinsulure-Smith, 2016). Although recent immigrants to the U.S. may be expected to have poorer outcomes on several dimensions such as health and educational outcomes, given the various obstacles they may have to overcome in moving to a host country, minoritized immigrants (i.e., Latino, Asian, Black) have been found to outperform or have better

metrics (e.g., neonatal mortality advantage, academic achievement and school engagement, depression and anxiety disorders) than their native-born counterparts or more established (e.g., 2nd and 3rd generation) immigrant peers (Coll & Marks, 2012; Hao & Woo, 2012; Lau et al., 2013; Markides & Coreil, 1986). This is known as the immigrant paradox. Studies examining this paradox have yielded evidence for the immigrant paradox in domains such as education (Coll & Marks, 2012), crime (Desmond & Kubrin, 2009), and health outcomes (Cunningham, Ruben, & Narayan, 2008). The present studies will focus specifically on the physical and mental health domains, given that the immigrant paradox (also called the healthy immigrant effect or the immigrant health advantage) has been shown across a number of different health metrics (Venters & Gany, 2011). While much of the work into this paradox has focused on Latinos in the U.S. (Markides & Coreil, 1986), the immigrant health paradox has similarly been observed within the Black community (Earl et al., 2011).

Black Immigrant Health Paradox

Within the Black community, Black immigrants tend to demonstrate largely better health outcomes relative to their U.S.-born counterparts (Venters & Gany, 2011). For example, Black immigrants in the U.S. have a much lower mortality risk than their native-born counterparts (Hummer et al., 1999; Singh & Siahpush, 2002), as well as a longer life expectancy (7-9 additional years) (Venters & Gany, 2011). Additionally, Black immigrants have lower levels of hypertension and cardiovascular mortality (Singh & Siahpush, 2002). Likewise, other studies have found that U.S.-born Black adults were more likely to report sleep difficulties and have hypertension and diabetes compared with foreign-born Black adults (Johnson et al., 2022). Similarly, Black immigrants are at a lower risk for pre-term birth and low birth weight than U.S.-born Black individuals (Larimore et al., 2021). In terms of mental health differences, Black

immigrants are less likely to report experiencing depression (Constance-Huggins, 2021) and less likely to experience moderate or severe psychological distress than U.S.-born Black Americans (Marquez-Velarde, 2022).

Research has also sought to determine whether the Black immigrant health paradox presents across varying countries of origin, with conflicting results. Specifically, although some studies support the idea that country of origin, particularly the racial context of the country of origin, impacts the presence of this paradox, other studies have found the opposite. For example, Marquez-Verlarde and colleagues (2022) found that although Black immigrants from majority or mixed-Black contexts (e.g., Caribbean, South America) were less likely to experience psychological distress relative to U.S.-born Black Americans, Black Europeans (i.e., Black immigrants from a majority-white context) had comparable levels of psychological distress with U.S.-born Black Americans. Similarly, Read and Emerson (2005) found that while Black immigrants from racially mixed (e.g., West Indies) regions and minority white areas (e.g., South America, Africa) had better health (i.e., self-rated health, fewer limitations due to hypertension) relative to U.S.-born Black Americans, Black immigrants from majority white regions (e.g., Europe) did not differ significantly compared with American-born Black individuals. However, another study provides contradicting evidence. Hamilton and Hummer (2011) found no significant difference in likelihood of reporting fair or worse health among Black immigrants from Nigeria compared with Black immigrants from Europe. That is, there were not differences in self-reported health outcomes between Black immigrants from majority-white countries compared with this majority-Black country (i.e., Nigeria), thus challenging the importance of an immigrant's prior racial context. Further research needs to be conducted to assess the role of the racial context of an immigrant's country of origin in impacting the immigrant paradox.

Notably, within the minoritized immigrant paradox literature, research has also established that the longer an immigrant resides in the U.S., the worse their health becomes. Emerging research has begun to demonstrate this change within the Black immigrant community as well. For example, prior work has found higher odds of worse cardiovascular health for Haitian and Guyanese immigrants who lived in the U.S. for longer than 10 years relative to those residing in the U.S. for fewer than 10 years (Thomas et al., 2018). Similarly, Caribbean immigrants' health advantages (compared with native-born Black Americans) deteriorated after being in the U.S. for more than 20 years (Hamilton & Hummer, 2011). However, more research is needed to understand why this health advantage erodes over time.

Explanations for the Immigrant Health Paradox

Despite the waning of health differences with minoritized immigrants' longer residence in America, much of the research on the immigrant health paradox has focused more on explaining why this paradox occurs, with mixed success. Prior explanations for this phenomenon include the healthy immigrant selection account (i.e., selectivity theory), culturally protective factors, and general psychological hardiness. The healthy migrant selection explanation posits that the paradox occurs because it is the immigrants who are the healthiest (relative to others remaining in the home country) that are able to immigrate successfully (Palloni & Morenoff, 2001). Some evidence supports this explanatory account (Kennedy et al., 2006; Palloni & Morenoff, 2001).

A separate explanation proposes that this paradoxical phenomenon occurs due to sociocultural protective factors. Situated within this explanation is the idea that factors such as social support, cultural values, and strong family networks help to protect against the stress that comes with settling into a host country. For example, many immigrant groups, particularly from

Black and Latino communities, emphasize the importance of strong family networks (Landale, Oropesa, & Gorman, 2000). These family networks may provide both emotional support in dealing with adversity that can arise from living in a new country as well as physical resources (e.g., shelter, childcare, information and advice on navigating a new environment). This explanation is not without merit. Research has demonstrated the positive effect of social support in mitigating psychological distress within the healthy immigrant paradox (Yang, 2021). Similarly, foreign-born individuals living in communities with other immigrants of the same ethnicity has been associated with positive health outcomes such as lower mortality (Eschbach et al., 2004) and lower depressive symptoms (Ostir et al., 2003). Additionally, a general psychological hardiness hypothesis has been put forth (Funk, 1992). Psychological hardiness can be thought of as a dispositional variable, in which high-hardy individuals are more likely to appraise potential stressors as growth opportunities and more likely to see events as meaningful and controllable (Funk, 1992). This dispositional tendency is thought to lend itself to buffering against negative stress-induced outcomes (e.g., adjustment difficulties, stressful life events; Kuo & Tsai, 1986).

A separate explanation for this paradox is relative deprivation theory. Relative deprivation theory posits that there is a social dimension to how people evaluate their sense of wellbeing; that is, individuals judge their sense of wellbeing not in absolute terms, but also as it relates to others with whom they may identify (Davis, 1959; Lamb & Banerjee, 2024). Accordingly, in the immigrant health paradox context, recent immigrants to the United States may be evaluating their overall wellbeing in comparison to people back in their birth country (i.e., their reference point) rather than a United States-based reference point; this may then lead to more positive ratings in well-being (if material conditions like job opportunities, income,

access to care in their birth country was lower). However, as the immigrant resides in the U.S. for a longer period of time (including subsequent generations), this reference point would then shift from individuals in the original birth country to individuals in the U.S., which may explain why a health advantage seems to decline over time. In essence, the relative deprivation theory in this context would reconceptualize the immigrant health paradox as not a paradox but rather a consequence of the shift in the immigrant's internal reference group (over time) when rating their health.

Challenges to the Prior Paradox Explanations

Although each of these explanatory hypotheses has merit, each comes with its own set of concerns. Regarding the immigrant selection account, notable limitations and contradicting evidence are apparent. For example, although Salas-Wright and colleagues (2018) found that immigrants were less likely than native-born U.S individuals to report having parents with a history of psychiatric conditions (supporting a selectivity explanation), the authors cautioned that differential mental health literacy between foreign-born and native-born individuals could serve as a confound; similarly, they note that there may have been more stigma or less tendency to diagnose psychiatric conditions in immigrants' home countries, especially considering that reports on mental health conditions regarded an earlier generation (Salas-Wright et al., 2018). Furthermore, other work has provided evidence against the healthy migrant selection account (Abraído-Lanza et al., 1999; Martinez et al., 2015; Ro et al., 2016) or demonstrated how this account does not fully explain the paradox (Miller et al, 2023).

In terms of culturally protective factors, while there is evidence that sociocultural protective factors may contribute to the immigrant health paradox, little research is available regarding Black immigrants born outside of the U.S. (i.e., first-generation Black immigrants).

Additionally, one would expect that the more recently immigrated individuals would have poorer health outcomes than immigrants who had lived in the U.S. for at least a few years and had become fully integrated in their host country support networks, if this hypothesis is to bear out. Indeed, prior research has found that Latino immigrants actually had fewer social ties than U.S. born Latinos, contradicting this culturally protective factors explanation (Viruell-Fuentes et al., 2013). Further, the evidence indicates that immigrant health worsens with time, the longer an individual is in the U.S. (Riosmena, Wong, & Palloni, 2013). Additionally, this explanation does recognize the role of globalization, whereby immigrants may have already begun adopting or practicing American behaviors, norms, and lifestyles, even prior to immigration (Bacong & Menjivar, 2021; Ferguson et al., 2017). Regarding the third hypothesis explaining this paradox, psychological hardiness remains less clearly defined relative to the other two explanatory accounts. Furthermore, prior research did not yield strong evidence for this hypothesis in a sample of foreign-born and U.S.-born Asian women (Lau et al., 2013). However, further work is needed to test this explanatory account across different immigrant groups that show the immigrant paradox.

Finally, the relative deprivation theory as an explanation of the immigrant health paradox holds contradicting findings and has significant limitations. For example, a prior study examining subjective well-being and social status in Latino and Asian immigrants found that higher subjective social standing in immigrants' birth country was associated with lower depression in the past month and that subjective social standing was not significantly associated with a separate measure of self-reported mental health status (Gelatt, 2013); findings from this study further suggested that immigrants held simultaneous reference points both to individuals in their birth country as well as individuals in the United States (Gelatt, 2013). An additional

limitation for relative deprivation theory is that the immigrant health paradox has been observed in objective physical health outcomes including lower rates of hypertension and diabetes, and better birth outcomes (e.g., lower rates of their baby being at a low birth weight) (Johnson et al., 2022; Larimore et al., 2021; Villalonga-Olives, 2017). Taken together, not only have these explanatory accounts come with substantial limitations or yielded evidence directly contradicting the respective hypotheses, they also have not been rigorously tested in first generation Black immigrants (i.e., Black immigrants born outside the U.S.).

What other factors may be contributing to the immigrant health paradox and the ensuing erosion of the health advantage over time? The prior explanations have neglected to account for how structural factors (e.g., laws and institutional policies; systemic racism) and individual processes (e.g., racial socialization and centrality, perceived discrimination) may dynamically interact to create this paradox (Bacong & Menjivar, 2021). Given that this phenomenon occurs within minoritized immigrant populations, including the Black community, it is critical to incorporate the U.S.'s distinctly racialized social system as well as the impact of discrimination to better understand the causes and erosion of the paradox. The present investigation aims to do exactly that. In recognizing the significance of the social context, especially regarding race, it is important first to examine the role of discrimination in the health of Black Americans more broadly.

Discrimination and Health

Discrimination is a well-documented predictor of poor health (Busse et al., 2017; Cardenas et al, 2025; Carter et al., 2019), whereby members of a marginalized group (e.g., Black Americans) may experience substantial decline in their health via discrimination. Discrimination can be defined as the unfair, differential treatment of a group based on characteristics related to

their identity (e.g., ethnicity/race, religion, gender, sexual orientation) (American Psychological Association, 2019). Discrimination is often characterized as interpersonal racism, and discriminatory acts can be exhibited through subtle (e.g., microaggressions) or blatant behaviors (Goosby et al., 2018). Goosby et al. (2018) proposed a discrimination-health biosocial pathway in which discriminatory events are stressors recognized by the brain as needing an instantaneous physiological reaction (e.g., activation of the hypothalamic-pituitary-adrenocortical axis, sympathetic nervous system, and immune system) and potentially resulting in learned vigilance and anticipation towards future discriminatory events; eventually, this sustained or chronic stress exposure results in a weathering of the body and thus greater susceptibility to negative health outcomes (Goosby et al., 2018).

Substantial evidence supports this discrimination-adverse health link. For example, empirical work has shown prospective relationships between discrimination and hypertension, asthma, breast cancer, increased inflammation, and higher blood pressure (Lewis et al., 2015; Luthra et al., 2018). The prospective nature of these studies helps to reduce the counterargument that those who have these negative health conditions may also remember or report more discriminatory events. Other studies demonstrate an association between self-reports of discrimination and poorer mental health (Gee et al., 2006), more depression (Britt-Spells et al., 2016), greater odds of being diagnosed with at least one chronic disease (Earnshaw et al., 2016), and higher odds of a substance use disorder (Hunte & Barry, 2012). Finally, epidemiological work has found that these accumulative stressors (i.e., experiencing more racist and discriminatory events) over the lifespan could have an aggregate effect on psychological health (Vines et al., 2017).

It is important to note that many of these studies have used self-reports to measure the health effects of perceived discrimination. Emphasizing the perceptual aspect of discrimination is important because differences in how individuals appraise or view the world around them have been associated with differences in whether discrimination is perceived (see the following section for a closer examination). Put differently, changes in internal social-cognitive processes can impact perceptions of discrimination. To be clear, this is not to say that racism does not exist if one does not perceive it. Indeed, robust research across disciplines has established how, regardless of perception, structural racism and discrimination persist. Examples of systemic racism and discriminatory acts include disparate access to economic, educational, and health resources, disproportionate exposure to environmental risks, and even flagrantly demeaning remarks from politicians as they reject protective immigration bills (e.g., President Trump’s infamous “shithole countries” remark in reference to majority-Black countries) (Brown, 2018; Fram & Lemire, 2018; Viruell-Fuentes et al., 2012). These actions lead to and maintain inequalities, which in turn are associated with negative health outcomes (Selvarajah et al., 2022; Simons et al., 2021; Wynn, 2019). Concurrently, the interpersonal discriminatory experiences an individual perceives are also significantly associated with deleterious health consequences (Carter et al., 2019). As such, it remains critical to examine the role and impact of perceived discrimination. Accordingly, the following sections will expand on how a specific social-cognitive belief system (i.e., meritocratic worldview) may shape perceptions of discrimination, and how that belief system may help to explain the differential health outcomes between recent Black immigrants and their American-born counterparts.

Meritocratic Worldview

The meritocratic worldview (MW) is a cultural belief system that encompasses the idea that through hard work and grit, individuals, regardless of background or circumstances, have control over their own fate and can achieve success (Kaiser & Major, 2006). Specifically, this belief system is the collective endorsement of similar ideologies such as the 1) Individual Mobility Belief (the notion that upward mobility is possible for anyone); 2) Belief in a Just World (people get what they deserve); 3) Protestant Work Ethic belief (the championing of hard work and industriousness); and 4) American Dream (everyone has equal opportunity to succeed through hard work and perseverance, regardless of circumstances) (Kaiser & Major, 2006; Major et al., 2002). This worldview helps facilitate justification of people's outcomes and life circumstances: that everything in life (e.g., opportunities, situations) is equal and controllable. Thus, people who take this worldview are more likely to partake in system justification (i.e., justifying or legitimizing the existing social order and societal systems in place).

Importantly, MW has been described as a social-contextual variable that impacts perceptions of discrimination (Kaiser & Major, 2006). Research demonstrates how reports of greater perceived discrimination by members of lower-status (e.g., marginalized) groups is accurately explained by those members more frequently experiencing discriminatory events, rather than a hypersensitivity or overreporting of discrimination (Major et al., 2002). However, greater endorsement of MW is associated with reduced perceptions of discrimination for members of low-status groups. For example, Shorey and colleagues (2002) found that Latino American undergraduates were less likely to identify themselves as targets of racism the more they viewed themselves as having control over their lives. An experimental study found that women who endorsed MW had a lower likelihood of believing they were passed over for a job

position in favor of a male candidate (by a male manager) due to sexism (Major et al., 2002). In a separate study, Black American and Latino American college students were less likely to see themselves as personally having been victims of racial discrimination the more they believed in individual mobility ideologies (Major et al., 2002). Notably, endorsing MW is associated with a lower sense of entitlement among members of lower-status groups and a greater sense of entitlement among members of high-status groups (O'Brien, Major, & Gilbert, 2012). Proposed explanations for this differential entitlement response are that high-status members may be motivated to justify the system to maintain their high-status position (e.g., that they are entitled to their position solely because they earned it rather than external/structural factor conferring an advantage), whereas lower-status members may either 1) experience cognitive dissonance (e.g., experiencing conflicting interpretations regarding why they experienced a negative outcome) that in turn depresses levels of entitlement (O'Brien, Major & Gilbert, 2012) or 2) internalize negative outcomes as personal failures (for lower-status members that endorse MW) rather than evidence of systemic disadvantages, thus contributing to a lower sense of entitlement to resources or positive outcomes (Major & Kaiser, 2017).

Palliative Effects of the Meritocratic Worldview

An emerging area of research has begun to examine the link among these types of system justifying ideologies (e.g., MW), perceived discrimination, and health. Specifically, some scholars have found a palliative effect of MW. McCoy and colleagues (2013) found a positive association between endorsement of MW and wellbeing in women of color and women with a lower socioeconomic status. Additionally, in one study examining denial of gender inequality, researchers found that women who denied the presence of gender discrimination reported better subjective well-being, and this was partially accounted for by perceptions of system fairness

(Napier, Suppes, & Bettinsoli, 2020). Interestingly, this association between denial of discrimination and higher reported well-being was found using data from individuals across 23 countries (including the U.S.), and this relationship was particularly strong in countries that had more sexist norms (Napier, Suppes, & Bettinsoli, 2020). Another study found that endorsement of meritocratic ideology was positively associated with subjective well-being and that this ideology positively mediated the relation between right-wing political orientation and subjective well-being (Napier & Jost, 2008). Finally, a longitudinal study using data from 18 countries (including the U.S.) found that system justification was negatively associated with depression and anxiety and positively associated with life satisfaction, providing further evidence of a potential protective or palliative role of these types of ideologies (Vargas-Salfate et al., 2018).

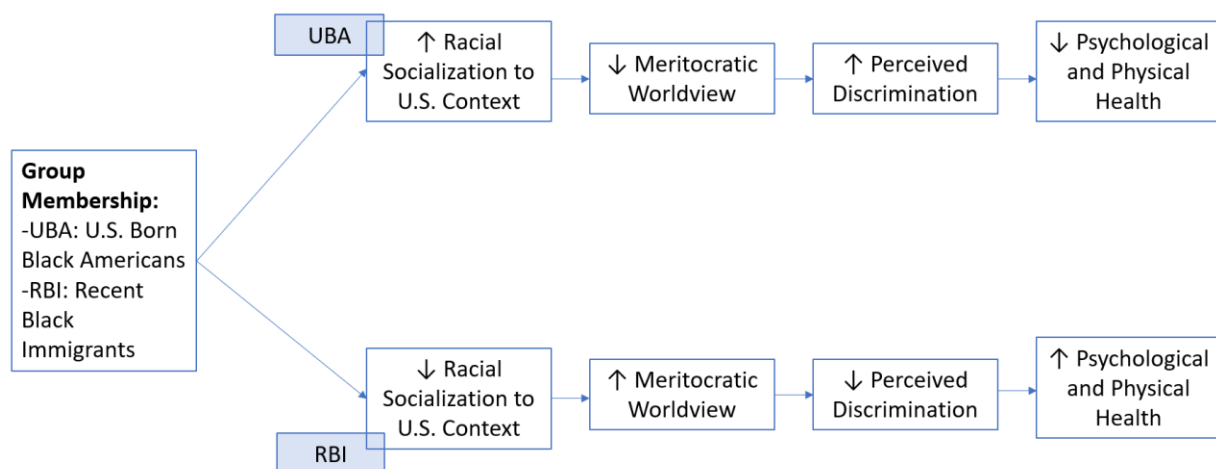
However, within the Black American community, Hagiwara et al. (2015) found that Black individuals who endorsed the just world belief *and* reported facing high levels of discrimination were more likely than other Black individuals to have higher blood pressure and a higher number of chronic illnesses. This finding indicates that for Black individuals, holding these types of ideologies while also actively perceiving many discriminatory events is associated with adverse effects; that is, continuous exposure to discrimination while trying to maintain a belief in the meritocratic worldview (and associated ideologies) may result in negative health outcomes. Therefore, this worldview may serve a protective role only insofar as perceptions of discrimination are reduced/minimized or denied. Returning to the broader discussion of the immigrant health paradox, these associations may provide a new way of understanding nativity-based differences between U.S.-born Black Americans and Black immigrants.

Proposed Social-Cognitive Framework for the Immigrant Health Paradox

This relatively new area of research linking social worldviews, racialized systems and behaviors, and health alongside recognition of the limitations of current explanations of the immigrant paradox contributes to a new framework for examining social-cognitive mechanisms that may explain the immigrant paradox (see Figure 1). The following proposed model necessitates a social-cognitive approach, as social cognition examines the cognitive processes (e.g., how people perceive, interpret, and react to situations) that arise from people's goals and are driven by individual level factors, situational contexts, and social systems. Social cognition can therefore serve as a useful vehicle for understanding how minoritized individuals perceive and respond to others' behaviors, how they create and adjust their interpretations of the social context, and how they then adapt to and cope with any challenges that arise (Padilla & Perez, 2003).

Figure 1

The Conceptual Model of the Proposed Social-Cognitive Model of the Immigrant Health Paradox



Note. The figure depicts the proposed social-cognitive model, whereby recent Black immigrants, hypothesized to have less racial socialization to the United States racial context, relative to their

U.S.-born counterparts, will endorse higher MW, which in turn may be associated with less perceived discrimination and subsequently better health. On the other hand, U.S.-born Black individuals, hypothesized to have greater racial socialization of Blackness in the U.S. context, will endorse less MW, which in turn may be associated with stronger perceptions of discrimination and poorer health. This model indicates that recency of immigration is important, because more time in the U.S.-based racial context may be associated with greater racial socialization over time, potentially resulting in the depicted U.S.-born pathway (as is seen with Black immigrants of later generations as well as Black immigrants residing in the U.S. for longer periods of time).

The underlying hypothesis of this model is that first-generation Black immigrants will more strongly endorse the Meritocratic Worldview relative to their U.S.-born counterparts. The rationale for this hypothesis stems from two ideas: The first is that, because crucial motivators of voluntary migration are social and economic advancement (Alcantra et al., 2014), individuals that immigrate may already be endorsing this worldview by virtue of deciding to immigrate, that is, MW may be associated with the decision to immigrate – through hard work and determination, they can achieve the goal of immigrating; furthermore, overcoming challenges in order to immigrate may reinforce their belief in this worldview. Thus, the relationship between MW and deciding to immigrate may be bidirectional. The second idea is that Black immigrants may initially be less attuned to race-related issues compared with Black Americans, as discussions around and inequities based on race may be less relevant in their countries of origin, particularly when they come from majority Black contexts. In contrast, many Black Americans experience racial socialization specific to the United States context (Lesane-Brown, 2006; Perry et al., 2025). Racial socialization (as it relates to Black identity in the U.S. context) is the process through which individuals receive implicit and explicit communication around race, including information about the traditions and history of Black Americans as well as messaging that helps cultivates awareness and preparation for potential discriminatory experiences (Hughes et al., 2006; Neblett et al., 2016; Simon, 2021). Given that much of the evidence suggests that

individuals who endorse MW have lower perceptions of discrimination (Major, Gramzow, et al. 2002; Shorey et al., 2002), this model proposes that when faced with a single discriminatory event, first-generation Black immigrants, endorsing high levels of MW (and not having had prior racial socialization to the U.S. racial context), will not perceive the event as discriminatory. Likewise, if that discriminatory event is ambiguous, recent Black immigrants, as compared to U.S.-born Black individuals, will not have to contend with an increased cognitive load in trying to decipher whether the event was an instance of discrimination, and there will not be increased anticipatory vigilance towards discrimination. Perhaps even initially, blatant discrimination may be interpreted as one-off situations rather than evidence for systemic injustice, serving as an initial buffer against the discrimination-poor health link.

Notably, what makes this social-cognitive model flexible is that the process it charts is not just specific to Black immigrants. Specifically, this model suggests a dose-response relationship, rather than different mechanisms occurring between U.S.-Born Black Americans and recent Black immigrants. This model posits a process by which variability in racial socialization and subsequent associated differences in MW can impact perceiving discrimination and health. However, an underlying assumption (which was examined in study 1) is that Black immigrants endorse MW at higher levels than Black Americans, thus initiating this social-cognitive process and providing a potential mechanism that explains the differential health outcomes between Black immigrants and Black Americans. Rationale for this assumption is 1) the reinforcing factors of immigration and 2) the difference in the racial context (e.g., majority-vs. minority-Black) of one's country of origin. The flexibility of this model also allows for future investigations of the model within Black Americans, and examining the associations among varying levels of MW, perceived discrimination, and health. Indeed, much of the work that has

examined MW and perceived discrimination or MW and health has been with U.S.-born American samples, but integrating and examining the relationships between these constructs, to my knowledge, has not been done.

Furthermore, as discussed earlier, research shows that the longer Black immigrants reside in the U.S., either in terms of length of stay or subsequent generations (e.g., offspring of first- or second-generation immigrants), the worse their health becomes (Constance-Huggins, 2021). The proposed framework also serves as a useful model for understanding this aspect of the phenomenon. Specifically, the more exposure Black immigrants or their offspring have to blatant, subtle, or ambiguous discrimination in the U.S., the more their belief in MW may be eroded, which in turn may result in the discrimination-health connection seen with native-born Black Americans. Alternatively, greater endorsement of MW in the face of experiencing and now perceiving repeated discriminatory events may also be associated with negative health outcomes, as demonstrated by Hagiwara and colleagues (2015). The Hagiwara et al. (2015) finding indicates that for Black individuals, holding these types of ideologies while also actively perceiving many discriminatory events is associated with adverse effects; that is, repeated exposure to discrimination while trying to maintain a belief in the meritocratic worldview (and associated ideologies) may result in negative health outcomes. Therefore, this worldview may only serve a protective role insofar as perceptions of discrimination are minimized or denied. One line of work that is compatible with this idea (the erosion of the health advantage) is research on John Henryism (JH). Briefly, JH is conceptualized as a dispositional coping strategy; Black Americans who engage in high-effort, continuous coping to manage and even overcome the stressors associated with racism have been found to have worse health outcomes (e.g., greater odds of depression) (Hudson et al., 2016). It could similarly be argued that for Black immigrants,

the longer they remain in the U.S. and continuously have to cope with or overcome discrimination-related stressors (whether attempting to maintain MW or labeling/perceiving race-related discrimination as such), the more their health may deteriorate (in line with evidence showing increased length of U.S. residence is associated with poorer health outcomes).

Overview of Dissertation Project

For this dissertation, I employed a mixed-methods approach to elucidate potential mechanisms of the Black immigrant health paradox. In Study 1, I conducted secondary analyses of data from the National Survey of American Life (NSAL) (Jackson et al., 2004), using structural equation modeling (SEM) to test the proposed social-cognitive model of the Black immigrant health paradox. The proposed study methodology is detailed in the next section. Broadly, I examined the relationships between nativity status, length of time in the U.S., MW, and perceived racial discrimination on mental and physical health outcomes. My primary outcomes for this first study were psychological distress, depression, and number of chronic medical conditions. These specific markers of health were selected for examination based on prior research demonstrating the presence of the health paradox in these domains (Constance-Huggins, 2021; Johnson et al., 2022; Marquez-Velarde, 2022). Accordingly, using these outcomes allowed me to examine whether prior findings on the Black immigrant health paradox are replicated in a different sample (i.e., NSAL). Study 2 complimented and extended study 1 by providing a more in-depth and nuanced examination into current Black immigrants' perspectives on the immigrant health paradox. Additionally, study 2 explored Black immigrants' perceptions of and responses to racial discrimination and meritocracy beliefs (e.g., upward mobility, American dream, just world), and the relevance of these factors for their health).

Study 1: Examining the Immigrant Health Paradox among Black Americans and Black Immigrants: A Social-Cognitive Approach

Study Aims and Hypotheses

Aim 1:

The primary aim of the first study was to test my proposed social-cognitive model for understanding the Black immigrant health paradox. Accordingly, I examined (1) the relationship between MW and perceived racial discrimination in a sample of U.S. born Black Americans and Black immigrants; (2) whether varying perceptions of racial discrimination as a function of MW in turn significantly impact health outcomes; and (3) whether nativity status (Black individuals born in the United States vs. outside of the United States) moderates the aforementioned relations between MW, discrimination, and health outcomes. The racial context of participants' country of origin served as a proxy measure for prior racial socialization, where the U.S. born context suggests greater racial socialization (to Black identity and anti-Black racism specific to the United States context) while Majority-Black country of origin suggests less racial socialization.

Hypothesis 1:

I hypothesized that 1) Black immigrants would endorse the MW system more strongly than their native counterparts and 2) endorsement of the MW would be associated with lower perceptions of discrimination and in turn more positive health outcomes, in line with prior research on an initial health advantage.

Aim 2:

I tested whether the relationships among MW, perceived discrimination, and health outcomes among Black immigrants were moderated by duration of residence in the United States, to assess whether a health advantage, as a function of the proposed MW-perceived discrimination pathway, was observed for Black immigrants who have been in the U.S.'s racial context for an extended time.

Hypothesis 2:

Given research showing the erosion of the health advantage the longer Black immigrants stay in the U.S., I hypothesized that more recent Black immigrants would have better health outcomes than Black immigrants residing in the U.S. for a longer time. Importantly, in centering the relationship between MW and health, I hypothesized that Black immigrants who had been in the U.S. for longer *and* still strongly endorsed MW would report poorer health outcomes, compared to recent Black immigrants and Black immigrants in the U.S. for longer who did not strongly endorse MW. I suspected this to be the case based on Hagiwara and colleagues' (2015) finding that for Black Americans, high endorsement of the just world belief (a component of MW) along with high perceived discrimination, was associated with greater chronic illness and higher blood pressure than Black Americans who did not strongly endorse MW. I posited that the longer a Black immigrant resides in the U.S., the more exposure they may have to discrimination, and the more MW may no longer serve to reduce perceived discrimination. Therefore, continuing to strongly endorse MW despite perceiving discrimination, may be associated with negative health outcomes, akin to prior findings with Black Americans (Hagiwara et al., 2015).

Aim 3:

I examined whether Black immigrants' country of origin differentially impacts my proposed model. Specifically, I tested whether Black immigrants from majority-Black contexts (e.g., Jamaica, Haiti) more strongly endorsed MW compared with Black immigrants from mixed-Black contexts (e.g., Spanish Caribbean countries, Trinidad and Tobago), and assessed how country of origin is associated with MW, perceived discrimination, and health outcomes.

Hypothesis 3:

I hypothesized that Black immigrants from majority-Black contexts, now residing in the U.S. would more strongly endorse MW and report lower perceived racial discrimination, relative to Black immigrants from mixed-Black contexts.

Method

Participants

The current investigation involved secondary analyses of data from the National Survey of American Life (NSAL) (Jackson et al., 2004). NSAL was a cross-sectional study designed to 1) examine the prevalence, severity, and impairment related to psychological disorders among a nationally representative sample of the U.S. population, with particular focus on nativity status (i.e., U.S. born vs. foreign-born) within the Black community and 2) assess potential risk and resilience factors (e.g., discrimination, immigration and nativity status, relationship support, religion) (Jackson et al., 2004; Pennell et al., 2004); information regarding physical health-related metrics was also collected. Black Americans ($n=3,570$), Afro-Caribbean immigrants ($n=1,621$), including second and subsequent generations, and non-Latine White Americans

($n=1,006$) completed surveys collected from 2001 to 2003 through primarily in-person interviews (86%) and some telephone interviews (14%); telephone interviews were conducted when in-person interview were not feasible (Jackson et al., 2004). Institutionalized individuals, unhoused populations, people in the military, people younger than 18, and adults who did not speak English were excluded from the study (Jackson et al., 2004). Response rates for data collection were 70.7% for Black Americans, 77.7% for Afro-Caribbeans, and 69.7% for non-Latine White Americans (Jackson et al., 2004). Analyses for the present investigation focused on the Black American and Afro-Caribbean samples.

Publications that have used the NSAL data can be found at the following website: <https://www.icpsr.umich.edu/web/ICPSR/studies/20240/versions/V8/publications?q=National+Survey+of+American+Life#>. Notably, the NSAL is a subset of the Collaborative Psychiatric Epidemiology Surveys (CPES), which are comprised of the National Comorbidity Survey Replication (NCS-R) and the National Latino and Asian American Study (NLAAS) in addition to NSAL (total $N = 20,013$). Additionally, the National Comorbidity Survey Re-Interview (NCS-2) and an NSAL-adolescent supplement were later added to the CPES data. 846 journal articles have been published using CPES data; searching the term “National Survey of American Life” among the CPES publications yields 50 journal articles, 3 dissertations, and 2 conference presentations. However, based on a brief review of published articles, to my knowledge, the present study was the first to investigate the relationships among all the constructs included in the proposed social-cognitive model (e.g., nativity status, MW, perceived discrimination, and physical and mental health outcomes). Other studies using NSAL examined some of these constructs (e.g., perceived discrimination, health), but not others (e.g., MW, racial context of

country of origin, and/or length of residence in U.S.), and not in a manner that addressed the research aims of the current investigation.

Procedure

As described in the Jackson and colleagues (2004) and Pennell et al. (2004) papers, NSAL participants were recruited through flyers circulated at Black American and Caribbean churches, community centers, college campuses, employment offices, libraries, and via newspaper advertisements. The University of Michigan Institutional Review Board (IRB) approved the NSAL data collection. The researchers aimed to race-match the interviewers to the respondents, so interviewers were recruited from primarily Black neighborhoods, including hair salons, churches, and community centers; more than 300 interviewers were recruited and trained (see Pennell et al., 2004, for a more detailed overview of respondent recruitment and interviewer recruitment and training).

Following a standard script, interviewers identified themselves, introduced the study and obtained informed verbal consent; written consent was required only if interviews were audio recorded. Some interviews were recorded for interviewer evaluation purposes. Specifically, 5% of an interviewer's conducted interviews were recorded and assessed for quality assurance. Average interview length varied by race/ethnicity, such that interviews with Black Americans averaged 2 hours, 20 minutes, interviews with Afro-Caribbean participants averaged 2 hours, 43 minutes, and interviews with non-Latine White Americans averaged 1 hour, 43 minutes. The longer interviews with Black Americans and Afro-Caribbean individuals compared with the White respondents were due to omission of irrelevant questions for White respondents. Participants received \$50 for their participation.

Measures

Copies of the selected NSAL measures can be found in Appendix A.

Demographic Variables

Ethnicity and nativity status, country of origin, and duration of time living in the U.S. was assessed in NSAL. Race/ethnicity was assessed via a race/ancestry categorical question, with response options being African American, Afro-Caribbean, non-Latino white, Other Hispanic. Nativity status was a binary variable assessing whether participants were born in the U.S. or not. Within the Black immigrant sample, country of origin was assessed along with ethnic origin, with the following response options: 1 (*Spanish Caribbean*), 2 (*Haiti*), 3 (*Jamaica*), 4 (*Trinidad and Tobago*), 5 (*Other*). Participants were asked how long they had lived in the U.S., with response options as follows: 0 (*U.S. born*), 1 (*Less than 5 years*), 2 (*5-10 years*), 3 (*11-20 years*), 4 (*20+ years*). Additional sociodemographic factors (i.e., age, gender, education, marital status, employment status, and socioeconomic status, as measured by household income) were also assessed.

Measures of MW

Given typical measures of MW (e.g., Belief in a Just World scale, Upward Mobility measure, Capitalist Values Scale, Belief in Status Permeability) were not included in NSAL, separate variables were selected as indicators of MW. In that the MW entails meritocracy and personal responsibility-related beliefs, the MW was a latent construct that encompassed the following variables: attributions regarding an individual's subjective social status, and sense of personal control.

Attributions regarding one's subjective social status: To measure subjective social status and the attributions participants make to explain their perceived social status, I used the NSAL modified MacArthur Scale of Subjective Social Status. Similar to the MacArthur Scale of Subjective Social Status (Adler et al., 2000), participants were shown a picture of a ladder on a page with a scale from 1 to 10. However, with the NSAL version, participants were told "The steps on the ladder stand for 10 possible steps in your life. The tenth step stands for the best possible way of life for you and the first step stands for the worst possible way of life for you. What step number best describes where you are now?" Participants were also asked to identify the ladder step number that described where they would like to be in a few years, before being asked to self-rate likelihood of them reaching their goal step. The likelihood ratings ranged from 1 (*highly likely*) to 4 (*highly unlikely*). Additionally, participants were asked what was preventing them from being able to reach the next step and were given a list of reasons, to which the participants either endorsed *yes* (a score of 1) or *no* (a score of 0). The list of reasons provided were: lack of ability, lack of opportunity, lack of effort, bad luck, the participant's race, or the participant's gender as preventing them from reaching the next step. Accordingly, one of the measures included in the MW construct was these attributional responses. Specifically, using a subset of the attributions of why a participant believes they are prevented from reaching the next ladder step, I created a composite score (with the total ranging from 0 to 3). The subset from the provided list of reasons were the (1) lack of ability, (2) lack of opportunity, and (3) lack of effort attributions in line with the beliefs embedded in MW. Endorsing *yes* to lack of ability and/or lack of effort was assumed to be in line with MW, given that the embedded belief in MW is that everyone has the ability to succeed through hard work. However, endorsing *yes* to lack of opportunity was assumed to be in opposition with MW, because of the MW belief that everyone

has equal access to opportunities. Accordingly, lack of opportunity was reverse scored, so that responses of *no* corresponded with a score of 1. Higher scores on the attributional composite/index indicated greater endorsement of MW in participants' explanations of what prevents them from reaching the next step on the ladder.

Sense of personal control: The 7-item Pearlin Mastery scale (Pearlin & Schooler, 1978) was used to measure an individual's sense of personal control over their life. Items rated from 1 (*strongly disagree*) to 4 (*strongly agree*); a sample item (that is reverse-scored) is "I have little control over the things that happen to me." High scores on this scale were assumed to reflect high MW. Internal consistency in the present sample was McDonald's omega [ω] = 0.72.

Measures of Perceived Discrimination

Three measures were used to assess the perceived discrimination construct. The first measure is the Everyday Discrimination Scale (EDS; Williams et al., 1977), in which ten items assessed interpersonal, routine discriminatory experiences. A sample item is: "In your day-to-day life, how often do any of the following things happen to you – you are treated with less respect than other people are." Response options range from 1 (*almost every day*) to 6 (*never*). Scoring was calculated by reverse coding all items and summing the scores together. Greater scores on the scale reflected higher levels of perceived discrimination. Internal consistency in this sample was high at $\omega = 0.89$.

The Major Experiences of Discrimination Scale (MED) was adapted from the study: Midlife in the United States: A National Longitudinal Study of Health & Well-Being (MIDUS) (Kessler et al., 1999; Williams et al., 2008). MED included 9 items regarding lifetime acute instances of discrimination such as negative interactions with the police, unfair employment and housing

practices. Participants indicated *yes* (1) or *no* (0) for each item. The sum of *yes* responses thus represented a count of major discriminatory experiences. Internal consistency was $\omega = 0.65$.

NSAL also included a question that measured colorism - discrimination based on skin tone (Monk, 2015; Monk, 2021). Specifically, Black American and Afro-Caribbean participants were asked “How often would you say that Whites treat you badly because of the shade of your skin color?” Response options ranged from 1 (*Very often*) to 5 (*Never*). Scores were calculated by reverse coding the response, such that a higher number reflected greater negative out-group appraisal.

Outcome Variables

Psychological distress was assessed via the Kessler 6 (K6) scale (Kessler et al., 2002). The K6 measured non-specific psychological distress, including anxiety and depression-related symptoms, over the past 30 days. Participants reported their frequency of feeling hopeless, restless, worthless, nervous, sad, and that everything was an effort. Responses were measured on a 5-point Likert scale from 0 (none of the time) to 4 (all of the time), with higher summed scores reflecting higher psychological distress. Internal consistency for the scale in this sample was $\omega = 0.83$.

Physical health was assessed via self-report of medical conditions (Hootman et al., 2009). Participants endorsed either *yes* or *no* for whether a doctor had ever diagnosed them with any of the following 22 medical conditions: arthritis, allergies, anemia, asthma, back problems, blood circulation problem, cancer, diabetes, fertility problem, fibroid tumor, glaucoma, headaches, hearing problems, heart troubles, high blood pressure, kidney problem, liver problem, lung

disease, osteoporosis, sickle cell disease, ulcer, vision problems. “Yes” responses were summed to yield a total count of physical health problems.

Selection of Covariates

Five covariates were included in the structural models: sex, education, employment status, income, and marital status. The selected covariates were reliably demonstrated in the literature to relate to one or more of the focal variables in this study: psychological distress (which captures depression and anxiety-related symptoms; Kessler et al., 2002; Umucu et al., 2021), medical conditions, MW, or discrimination. For example, extant research has documented sex differences in prevalence of depression and psychological distress, with studies showing that Black women are more likely than Black men to have depression and report higher levels of psychological distress compared to their Black male counterparts (Cénat et al., 2025; Smith and Read, 2023, respectively). Other studies have similarly demonstrated that Caribbean immigrant women in the United States report statistically significantly higher levels of depressive symptoms and physical health conditions than Caribbean immigrant men (Livingston et al., 2007). However, education has shown to be protective against psychological distress and physical disability for Black individuals (Elhabashy et al., 2025; Thorp et al., 2013). Notably, these demographic variables do not exist in a vacuum. Research has shown interactive effects between gender and education on health outcomes. Assari (2017) found that for Black men (and not Black women), having at least a high school diploma buffered against increased chronic physical conditions 25 years later. Johnson-Lawrence and colleagues (2019) found that education mitigated the deleterious association between discrimination and depression for Black men, but not Black women. The combined effects of education and income on health have also been examined, where higher

education and greater incomes were associated with fewer depressive symptoms among Black women (Scarinci et al., 2002).

Similarly, the relationship between income (and socioeconomic status more broadly) and health have been widely studied, with higher socioeconomic status associated with lower rates of depression for Black women (Gazmararian et al., 1995), greater income related to fewer depressive symptoms in African immigrant women (Escamilla and Saasa, 2020), income and unemployment predicting higher odds of a major depressive episode for Black men (Hudson et al., 2012), unemployment inversely associated with greater psychological distress among Black individuals (Adejogbe & Mobolaji, 2025), and unemployment related to higher odds of moderate-severe psychological distress for Black individuals, irrespective of nativity status (Elhabashy et al., 2025). Of note, socioeconomic status (SES) has also been demonstrated to impact MW, including individuals with lower SES initially endorsing MW beliefs more (relative to their high SES counterparts), but over time and with higher education, their emphasis on MW beliefs are similar to that of their high SES peers (Tang & Wu, 2025). Finally, marital status has been shown to impact health. For example, being married was associated with fewer depressive symptoms among Black American women, and African immigrant women in the United States (Scarinci et al., 2002; Escamilla & Saasa, 2020, respectively). Given the strong literature on sex, education, income, unemployment, and marital status, these covariates were included in the present investigation to reduce potential confounds between my predictor and outcome relationships.

Analytic Approach

Primary Analyses

Mplus (Version 8.10; Muthén & Muthén, 1998-2023) and R Studio (Version 4.2; R Core Team, 2022) were used to analyze the data. Tables and figures were created in jamovi (Version 2.6.26; The jamovi project, 2025). Preliminary analyses included descriptive statistics to characterize the sample and focal variables, as well as computed bivariate correlations among study variables. Tables 1-3 provide descriptive statistics and correlations for study variables. Statistical analyses incorporated sampling weights that were adjusted for unequal probabilities of selection, post-stratification, and non-response to account for the NSAL's complex stratified, clustered sample design, which was intended to produce population-representative estimates (Heeringa et al., 2006; Jackson et al., 2004).

In order to test the proposed social-cognitive framework depicted in Figure 2, I conducted structural equation modeling (SEM), using a two-step approach (Anderson & Gerbing, 1988). I examined the measurement model via confirmatory factor analysis (CFA) to test the relationships between the observed/measured variables with their hypothesized latent construct (i.e., the unobserved factor variables). Following confirmation of good model fit for the CFAs of each latent factor, I then tested the a priori structural model. See Figure 2 for the structural model. Theoretically justified modification indices (MIs) were used as needed to improve model fit.

In both the measurement models and the structural models, full-information maximum likelihood (FIML), which assumes the data are missing-at-random, was used to handle missing data. Maximum likelihood estimation with robust standard errors (MLR) was used to estimate the parameters and their standard errors. Five goodness-of-fit indices were examined to test for

model fit: root-mean-square error of approximation (RMSEA), comparative fit index (CFI), Tucker-Lewis Index (TLI), standardized root mean square residual (SRMR), and the chi-square test statistic. Adequate fit for the models was based on the following metrics: RMSEA less than .06, SRMR less than or equal to .08, and CFI and TLI greater than .9; notably, given the large sample size, a nonsignificant chi-square statistic was not a key index used to determine goodness-of-fit (Hu & Benter, 1999; Marsh, Hau, & Wen, 2004). Through SEM, I also tested my mediation path, assessing whether MW related to appraisals of discrimination, which in turn acted as a mediator of health outcomes. Finally, I conducted multigroup analyses within the SEM framework to test whether the relations between MW, discrimination, and health outcomes were moderated by nativity status (i.e., being born in the United States or outside of the United States). Multigroup analysis is a useful statistical procedure for assessing the interaction between the hypothesized relationships in a structural model and group membership (Plegue & Kolenic, 2014).

Exploratory Analyses

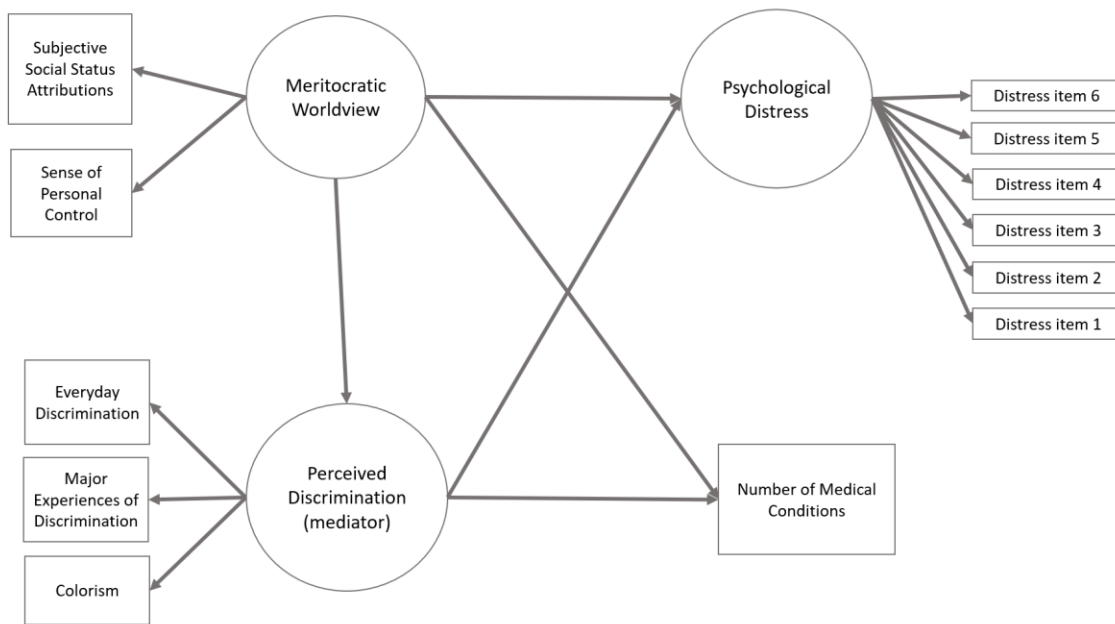
Examination of additional moderators, in line with aims 2 and 3 of the study, were conducted as exploratory analyses. Multigroup analyses were again conducted to test the duration of residence in the U.S., and Black immigrants' country of origin as moderators of the relationships between MW, perceived discrimination, and health. Specifically, I tested whether the proposed social-cognitive model would vary as a function of 1) Black immigrants from different countries of origin and 2) duration of residence in the U.S. as assessed in NSAL (E.g., <5 years, 5-10 years, 11-20 years, 20+ years).

Power Analysis.

In order to assess the power for my proposed SEM model, I employed a simulation-based approach, in line with established suggested practices (Muthen & Muthen, 2002). The power analyses allowed me to determine the probability of detecting statistically significant parameters with varying sample sizes. Monte Carlo simulations were computed via the R Studio “Simsem” package (Pornprasertmanit et al., 2021). A sample of 350 participants was determined sufficient to detect a medium effect size with power of .80 at $p < .05$. Accordingly, the current sample of 5,191 participants was well powered to detect an effect.

Figure 2

Structural model of the relationships between the meritocratic worldview, perceived discrimination, and psychological and physical health.



Note. The rectangles represent the observed variables and the ovals represent the latent variables.

Covariances among latent constructs or observed variables were selected based on theoretical justification. These covariances are omitted from the figure for clarity but are reported and shown in Appendix B (Mplus syntax and diagrams). The covariates (i.e., marital status, sex,

education, employment status, and income) predicting all latent factors and the observed medical conditions outcome are likewise not depicted in the figure for parsimony but were included in analyses.

*The original structural model included depression as a latent outcome factor alongside the psychological distress factor. However, analyses revealed substantial factor collinearity, with the depression and psychological distress factor significantly correlated ($r = 0.97$), despite their indicators capturing different time-frames (e.g., Kessler 6 measure assessed the past 30 days; CES-D 12-item assessed the past week). As such, I elected to retain the psychological distress factor as my mental health outcome (with factor indicators stemming from the Kessler 6 questionnaire) because the Kessler 6 measure has effectively been used to measure distress among Black Immigrants (Marquez-Velarde et al., 2022). In contrast, when the psychometric properties of the 12 item CES-D (as the depression measure) were tested in the NSAL study, there was compromised construct validity for male Black immigrants and U.S. born Black men (Torres, 2012). Similarly, in a separate NSAL confirmatory factor analyses comparison study of the 12-item CES-D between Black Americans and White Americans, there were worse item loadings among Black individuals than White individuals (Assari & Moazen-Zadeh, 2016). Accordingly, the figure above depicts the revised structural model without the depression factor.

Results

Participant Characteristics

The sample for the present investigation was 5,191 Black individuals (Black immigrants = 1598; U.S. Born Black American = 3,593). Participants' age ranged from 18 to 94 years old ($M=42.47$). A substantial majority of the sample (78%) had a household income lower than

\$50,000, approximately three-quarters of the sample had a high school diploma or greater, and about two-thirds of the sample (68%) were employed. One-third of the participants (33%) were never married, a little over one-third (37%) of the sample were married, and the remaining were either divorced, separated, or widowed (30%). See Table 1 for the full participant characteristics.

Descriptive Statistics

Means and correlations between the study variables are displayed in Tables 2 and 3, respectively. Table 2 included the skewness and kurtosis of each focal variable, with common guidelines indicating that skew ≥ 3 and kurtosis ≥ 10 suggest significant nonnormality (Kline, 2023). Figure 3 depicted the distribution of the total medical conditions variable; because that outcome variable is a count variable, its distribution was visually examined in addition to using standard skewness and kurtosis guidelines. Figure 3 indicated the total medical conditions variable was heavily right-skewed, where 26% of the sample reported no medical conditions and 78% of the sample had fewer than 4 medical conditions (see Appendix c for the frequency table). Accordingly, a negative binomial model was estimated for the total medical conditions outcome variable. A negative binomial model was selected over zero-inflated poisson model due to overdispersion (variance greater than the mean) for this outcome variable (Gardner et al., 1995; Schober & Vetter, 2021). The dispersion parameter for the total medical conditions outcome was later tested, with results indicating significant overdispersion ($\alpha = 0.30$, $p < .000$), supporting the use of negative binomial modeling for this variable.

Missing data rates were 0% for all study variables except for the colorism variable (which had a 1% missing data rate). In terms of outcome variables, the average number of medical conditions among Black immigrants was 1.71 ($SD = 1.93$) and among Black Americans was 2.27

($SD = 2.33$). Finally, the average level of psychological distress among Black immigrants was 8.96 ($SD = 3.89$), while the average level for Black Americans were 9.44 ($SD = 4.44$).

Table 1
Demographic Descriptive Statistics

	N	Missing	Mean (n)	SD (%)	Minimum	Maximum
Age	5191	0	42.47	16.11	18	94
Household Income	5191	0	--	00	0	3
Less than \$50,000	--	--	4045	78%	--	--
\$50,000 - \$74,999	--	--	669	13%	--	--
\$75,000 – 99,999	--	--	259	5%	--	--
> \$100,000	--	--	218	4%	--	--
Education	5191	0	--	--	1	4
< High school	--	--	1226	24%	--	--
High school graduate	--	--	1843	36%	--	--
Some college	--	--	1252	24%	--	--
College graduate or higher	--	--	870	17%	--	--
Employment Status	5181	10	--	--	0	2
Employed	--	--	3517	68%	--	--
Unemployed	--	--	524	10%	--	--
Not in Labor Force	--	--	1140	22%	--	--
Nativity Status	5134	57	--	0.43	0	1
Outside United States	--	--	1230	24%	--	--
United States	--	--	3904	76%	--	--
Years in U.S.	5092	99	--	--	0	4
U.S. Born	--	--	3904	77%	--	--
Less than 5 Years	--	--	138	3%	--	--
5 – 10 Years	--	--	174	3%	--	--
11 – 20 Years	--	--	364	7%	--	--
20+ Years	--	--	512	10%	--	--
Country of Origin of Black Immigrant	1598	3593	--	--	1	5
Spanish Caribbean	--	--	180	11%	--	--
Haiti	--	--	298	19%	--	--
Jamaica	--	--	510	32%	--	--
Trinidad & Tobago	--	--	170	11%	--	--

		N	Missing	Mean (n)	SD (%)	Minimum	Maximum
Marital Status	Other	--	--	440	28%	--	--
		5183	8	--	--	0	2
	Married	--	--	1915	37%	--	--
	Divorced/Separated/ Widowed	--	--	1549	30%	--	--
	Never Married	--	--	1719	33%	--	--
Sex		5191	0	--	--	0	1
	Male	--	--	1914	37%	--	--
	Female	--	--	3277	63%	--	--
Current U.S. Region		5191	0	--	--	1	4
	Northeast	--	--	1546	30%	--	--
	Midwest	--	--	607	12%	--	--
	South	--	--	2786	54%	--	--
	West	--	--	252	5%	--	--
Age at Immigration		5096	95	--	--	0	4
	U.S. Born	--	--	3904	77%	--	--
	<12 years	--	--	240	5%	--	--
	13 – 17 Years	--	--	164	3%	--	--
	18 – 34 Years	--	--	591	12%	--	--
	35+ Years	--	--	197	4%	--	--

Note. For the marital status variable, the married group reflects individuals who are married or cohabiting, per the NSAL codebook.

* There was a notable sex difference ratio in this sample, where 63% of participants identified as female and 37% identified as male; Jackson and colleagues' (2006) methodological paper noted that disproportionate institutionalization (e.g., military service, incarceration) of younger Black men impacted sample representations (Jackson, Neighbors et al., 2006). Further, in the NSAL follow-up studies, female participants had higher response rates than male participants (Jackson et al., 2010) and this may have also been the case in the original NSAL survey.

Table 2

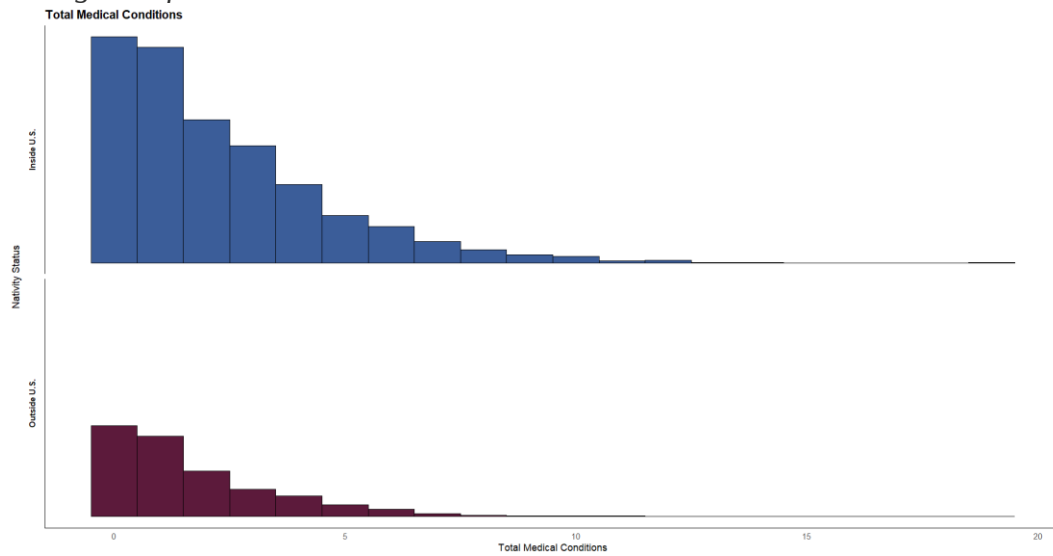
Descriptive Statistics on Focal Variables by Nativity Status

	Nativity Status	N	Missing	Mean	SD	Minimum	Maximum	Skewness		Kurtosis	
								Skewness	SE	Kurtosis	SE
Total Medical Conditions	Outside U.S.	1230	0	1.71	1.93	0	17	1.91	0.07	6.25	0.14

Descriptive Statistics on Focal Variables by Nativity Status

	Nativity Status	N	Missing	Mean	SD	Minimum	Maximum	Skewness		Kurtosis	
								Skewness	SE	Kurtosis	SE
Psychological Distress	United States	390 4	0	2.27	2.33	0	19	1.51	0.04	3.15	0.08
	Outside U.S.	123 0	0	8.96	3.89	0	28	1.04	0.07	1.59	0.14
Colorism	United States	390 4	0	9.44	4.44	0	30	0.91	0.04	1.51	0.08
	Outside U.S.	121 5	15	2.45	1.23	1	5	0.47	0.07	-0.69	0.14
Major Discrimination	United States	387 2	32	2.64	1.22	1	5	0.25	0.04	-0.83	0.08
	Outside U.S.	123 0	0	1.06	1.43	0	9	1.61	0.07	2.68	0.14
Everyday Discrimination	United States	390 4	0	1.39	1.64	0	9	1.40	0.04	1.75	0.08
	Outside U.S.	123 0	0	20.22	8.44	0	60	1.11	0.07	2.17	0.14
Sense of Control	United States	390 4	0	22.37	9.01	0	60	0.76	0.04	0.62	0.08
	Outside U.S.	123 0	0	12.38	4.50	0	26	0.05	0.07	-0.03	0.14
Subjective Social Status Attribution	United States	390 4	0	11.30	4.56	0	28	0.17	0.04	0.19	0.08
	Outside U.S.	123 0	0	0.78	0.82	0	3	0.65	0.07	-0.60	0.14
	United States	390 4	0	0.84	0.85	0	3	0.60	0.04	-0.62	0.08

Figure 3
Histogram of Total Medical Conditions variable.



Note. The associated blue plot represents Black individuals born inside of the United States; the associated maroon plot represents Black individuals born outside of the United States.

Table 3
Correlations (with confidence intervals) of Outcome Variables and Focal Predictors

	Total Medical Conditions	Psychological Distress Factor	MW Factor	Discrimination Factor
Total Medical Conditions	—	—	—	—
Psychological Distress Factor	0.00	—	—	—
MW Factor	0.01	-0.27***	—	—
Discrimination Factor	-0.01	0.37***	0.25***	—

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

Relationships of MW and Discrimination on Health Outcomes Across the Full Black

Sample

As demonstrated in Table 4, both the full measurement model and structural model with

covariates and psychological distress as an outcome variable had good model fit (full measurement model: RMSEA = 0.03, CFI = 0.98, SRMR = 0.03; structural model with psychological distress latent factor: RMSEA = 0.03, CFI = 0.95, SRMR = 0.04). Because total medical conditions required negative binomial modeling, typical model fit indices (i.e., RMSEA, CFI, SRMR) were not possible because chi-square tests of model fit and these typical fit indices assume continuous outcomes. As such, I employed an incremental model-testing approach, where I first tested the fit indices for my measurement models to establish the validity of my measures, then I evaluated the fit indices of my full structural model with the covariates and just the continuous latent outcome (psychological distress) to ensure there was still good model fit, and then I incorporated the count outcome into the final structural model, retaining the same structure as my model with continuous predictor and outcome variables. Finally, I compared the parameters (e.g., loadings and residual variance) of my structural model that had my continuous outcome with the parameters of my final structural model (that included the count outcome) to help evaluate model fit. There were no substantial changes in the structural model parameters between the structural model that included only the latent continuous factor (psychological distress) and the final structural model that included the count variable (total medical conditions). See Appendix D for the loadings and residual variance of the structural model with only psychological distress as the outcome variable. The results below are the model parameters for the final model that included both psychological distress and total medical conditions.

Reported results are standardized path coefficients for ease of interpretation across variables measured on different scales (See Table 5 and Figure 4). Structural model results (controlling for covariates) indicated that both MW and discrimination were significantly related to psychological distress (MW: $\beta = 0.57$, $p < .000$, [0.49, 0.64]; discrimination: $\beta = 0.27$, $p <$

.001, [0.19, 0.35]), such that greater MW and greater perceived discrimination were both directly associated with greater psychological distress. The overall structural model explained 51% of the variance in psychological distress.

Because a negative binomial model is estimated for the total medical conditions variable, model results related to the total medical conditions were interpreted on an exponential scale; as such, unstandardized path coefficients are not interpretable on the original count scale but are exponentiated to yield incidence rate ratios (IRR) (Hilbe, 2014; UCLA Office of Advanced Research Computing [OARC], n.d.-a; UCLA OARC, n.d.-b). IRRs reflect how much the expected count of medical conditions (or the expected rate) is multiplied for every one-unit increase in a continuous predictor, holding all other variables constant (Hilbe, 2014; Schober & Vetter, 2021). The following IRR results for the medical conditions outcome were interpreted as the percentage change for clarity (Piza, 2012; Schober & Vetter, 2021; UCLA OARC, n.d.-b). Results demonstrated that MW was directly associated with total medical conditions ($\beta = .37$, $IRR = 1.10$, $p < .001$, [0.31, 0.43]), such that each one standard deviation increase in MW was associated with a 10% higher expected number of medical conditions. Similarly, discrimination was also significantly related with total medical conditions ($\beta = 0.07$, $IRR = 1.12$, $p = .001$, [0.01, 0.12]), where one standard deviation increase in discrimination was associated with a 12% higher expected number of medical conditions.

Additionally, as my social-cognitive framework hypothesizes that discrimination would mediate the relationship between MW and health outcomes, I also examined the indirect effects. See table 6 for the mediation results. My hypothesis was partially supported in that discrimination was an intervening variable between MW and the mental health outcomes, but in an unanticipated way. Specifically, MW demonstrated a significant indirect effect on

psychological distress through discrimination ($\beta = 0.08, p < .001, [0.05, 0.10]$) as well as total medical conditions through discrimination ($\beta = 0.03, p = .02, [0.004, 0.05]$). However, where I had hypothesized that greater MW would be associated with lower perceived discrimination and subsequently better health outcomes, these results actually demonstrated that greater MW was associated with higher perceived discrimination and greater psychological distress and total medical conditions.

Table 4

Model Fit Statistics for Social-Cognitive Framework with Mental Health Outcome Across Full Sample

	Measurement Model: Predictor Factors (MW & Discrimination)	Measurement Model: Latent Outcome Factor (Psychological Distress)	Full Measurement Model: Predictor Factors & Latent Outcome Factor (Psychological Distress)	Full Structural Model of Proposed Social Cognitive Framework & Latent Outcome Factor (with covariates included)
N	5191	4991	5191	5181
χ^2	6.75	26.90	177.26	491.41
DF	2	7	37	77
P Value	0.03	<0.001	<0.001	<0.001
CFI	0.995	0.995	0.98	0.95
TLI	0.97	0.99	0.97	0.92
SRMR	0.01	0.02	0.03	0.04
RMSEA	0.02	0.02	0.03	0.03

* All models were estimated using robust estimator with full information maximum likelihood. CFI = comparative fit index. TLI = Tucker-Lewis index. SRMR = standardized root mean square residual. RMSEA = root mean standard error of approximation. General guidelines for good model fit include a non-significant chi square p value, CFI and TLI equal or above .9, SRMR value less than or equal to .08, and RMSEA value less than or equal to .06 (Hu & Bentler, 1999). **TLI may be lower due to having few indicators for each of my predictor factors; it may also be lower due to the weights needed to be included to account for the complex survey data. ***See Appendix B for Mplus scripts and diagrams.

Table 5

Path Model Summary: Standardized Direct Effects of Predictors on Outcome Variables Across the Full Sample (N = 5181)

Paths	β	SE	IRR	P-value	95% CI
Psychological Distress Outcome					
Meritocratic Worldview	0.57	0.04	--	<0.001	[0.49, 0.64]
Discrimination	0.27	0.04	--	<0.001	[0.19, 0.35]
Marital Status	0.01	0.02	--	0.642	[-0.03, 0.05]
Sex	0.131	0.02	--	<0.001	[0.09, 0.18]
Education Status	-0.06	0.03	--	0.03	[-0.12, -0.01]
Employment Status	0.01	0.02	--	0.62	[-0.03, 0.05]
Income	-0.04	0.02	--	0.05	[-0.08, 0.001]
Medical Conditions Outcome					
Meritocratic Worldview	0.37	0.04	1.10	<0.001	[0.31, 0.43]
Discrimination	0.07	0.03	1.12	0.02	[0.01, 0.12]
Marital Status	-0.13	0.02	--	<0.001	[-0.16, -0.09]
Sex	0.27	0.02	--	<0.001	[0.23, 0.31]
Education Status	-0.01	0.02	--	0.77	[-0.04, 0.03]
Employment Status	0.21	0.02	--	<0.001	[0.17, 0.25]
Income	0.02	0.02	--	0.30	[-0.02, 0.06]

Note. Covariates were coded as follows: marital status (0 = married, 1 = divorced/separated/widowed, 2 = never married); sex (0 = male, 1 = female); education status (1

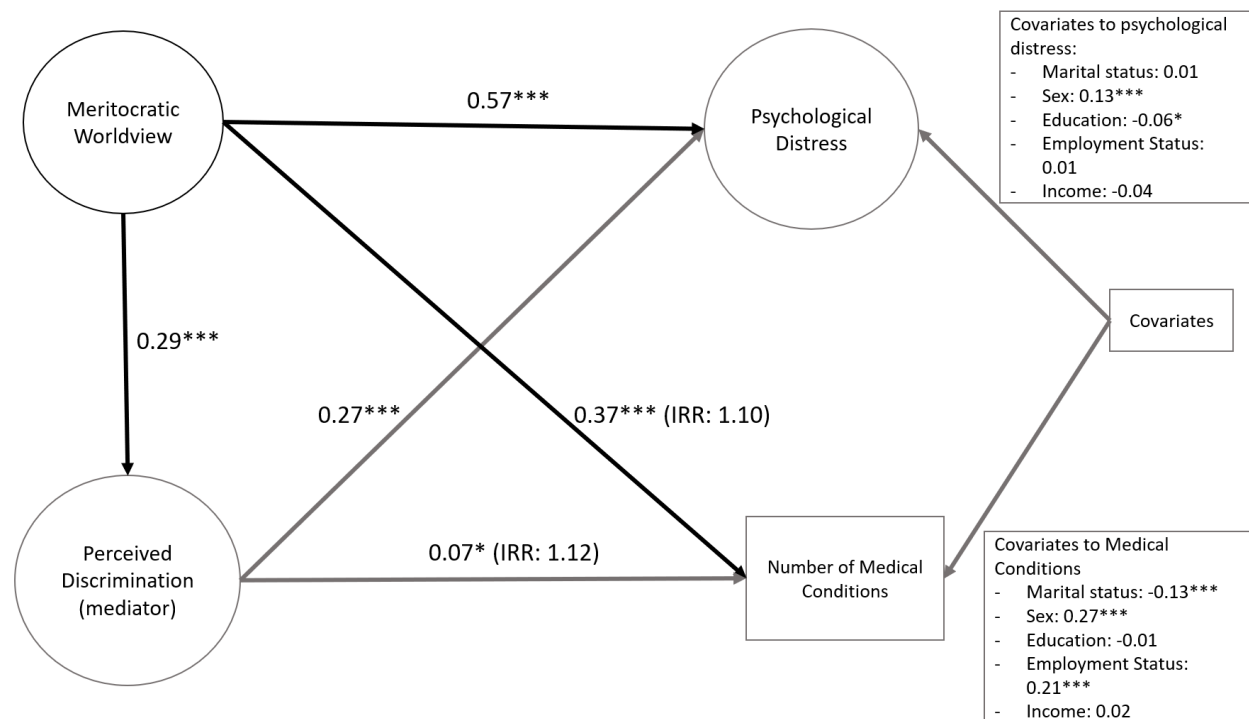
= less than 12 years, 2 = 12 years, 3 = 13-15 years, 4 = ≥ 16 years); Employment status (0 = employed, 1 = unemployed, 2 = not in labor force); and income (0 = $\leq \$50,000$, 1 = \$50,000-\$74,999, 2 = \$75,000-\$99,000, 3 = $\geq \$100,000$).

*Incidence Rate Ratios (IRRs) are reported for the focal predictors for the medical conditions outcome, calculated as e^b where b is the unstandardized coefficient (Hilbe, 2014).

** CI = confidence intervals; brackets present the lower limit followed by the upper limit.

Figure 4

Final Structural Model with Standardized Parameter Estimates Across the Full Sample (N = 5181)



Note. * $p < .05$. ** $p < .01$. *** $p < .001$; IRR = Incidence Rate Ratio for the medical conditions outcome.

Table 6

*Path Model Summary of Direct, Indirect, and Total Effects of Meritocratic Worldview (MW)
Across the Full Sample (N = 5181)*

Paths		Distress			Medical Conditions		
		β	p	95% CI	β	p	95% CI
MW → Outcome							
Total effect		0.64	<0.001	[0.58, 0.71]	0.50	<0.001	[0.44, 0.56]
Direct effect		0.56	<0.001	[0.49, 0.64]	0.48	<0.001	[0.41, 0.55]
Total indirect effect		0.08	<0.001	[0.05, 0.10]	.03	0.02	[0.004, 0.05]
Specific indirect pathway							
MW → Outcome	Discrimination →	0.08	<0.001	[0.05, 0.10]	.03	0.02	[0.004, 0.05]

Note. β = standardized coefficient. Indirect effects indicate the pathway through Discrimination.

*CI = confidence intervals; brackets present the lower limit followed by the upper limit.

Relationships of MW and Discrimination on Health Outcomes Moderated by Nativity Status

Multigroup analyses were computed to examine the hypothesized moderating effects of nativity status on the social-cognitive framework. Stepwise procedures were implemented to compute the multigroup analyses (Feng, 2025a; Feng, 2025b). The first step of this type of analyses was to allow model parameters to freely vary across groups (i.e., least constrained model) to confirm that the measurement model was tenable (e.g., the measurement factor structure held) simultaneously for Black immigrants and U.S born Black Americans. Next, I constrained the parameters of focal predictors to be equal between the two groups and tested the difference. Results supported metric invariance as the constrained model did not fit significantly worse than the least constrained model ($\Delta\chi^2(8) = 3.27, p = 0.92$), indicating there was not a significant difference in measurement factor loadings between Black immigrants and U.S. born

Black Americans (Feng, 2025a). See Table 7 for the multigroup analyses fit indices for nativity status (final measurement model: RMSEA = 0.02, CFI = 0.94, SRMR = 0.04). Following confirmation of measurement invariance (i.e., that the latent constructs functioned the same way for Black immigrants and U.S. born Black Americans), I assessed whether the structural model was simultaneously viable for both groups before testing whether nativity status moderated the structural relations among MW, discrimination, and health outcomes (Feng, 2025b).

Results from the multigroup structural analyses showed only one statistically significant structural parameter between Black immigrants and U.S. born Black Americans. Specifically, nativity status moderated the relationship between MW and total medical conditions (Diff = -0.08, $p < .001$, [-0.12, -0.04]), where MW was statistically significantly related to total medical conditions among U.S. born Black Americans ($\beta = 0.34$, IRR = 1.10, $p < .001$, [0.29, 0.40]), but not among Black immigrants ($\beta = 0.04$, IRR = 1.01, $p = 0.57$, [-0.1, 0.18]). This moderation effect indicates that the full sample finding demonstrating a significant association between MW and total medical conditions was driven by the U.S. born Black American group. All other focal structural paths were equivalent across the two groups ($p > .05$); Full sample coefficients that were previously reported above are retained for those paths. Refer to Table 8 for the structural difference tests.

Table 7

Fit Statistics for Psychological Distress Models: Multigroup Analysis by Nativity Status

Least Constrained Measurement Model	Constrained Measurement Model	Psychological Distress (Structural Paths Freely Estimated)	Psychological Distress Structural Paths (Constrained Structural Paths)
--	-------------------------------------	--	--

N	6018 (Black Immigrant Group: 1259; U.S. Born Group: 4759)	6018 (Black Immigrant Group: 1259; U.S. Born Group: 4759)	6018 (Black Immigrant Group: 1259; U.S. Born Group: 4759)	6018 (Black Immigrant Group: 1259; U.S. Born Group: 4759)
χ^2	190.27 (Black Immigrant Group: 108.08; U.S. Born Group: 82.19)	169.50 (Black Immigrant Group: 97.62; U.S. Born Group: 71.89)	395.99 (Black Immigrant Group: 197.35; U.S. Born Group: 198.64)	389.17 (Black Immigrant Group: 194.68; U.S. Born Group: 194.50)
DF	74	82	166	169
P Value	<0.001	<0.001	<0.001	<0.001
CFI	0.97	0.98	0.94	0.94
TLI	0.95	0.97	0.92	0.92
SRMR	0.03	0.04	0.04	0.04
RMSEA	0.02	0.02	0.02	0.02

* All models were estimated using robust estimator with full information maximum likelihood. CFI = comparative fit index. TLI = Tucker-Lewis index. SRMR = standardized root mean square residual. RMSEA = root mean standard error of approximation. General guidelines for good model fit include a non-significant chi square p value, CFI and TLI equal or above .9, SRMR value less than or equal to .08, and RMSEA value less than or equal to .06 (Hu & Bentler, 1999). **TLI may be lower due to having few indicators for each of my predictor factors; it may also be lower due to the weights needed to be included to account for the complex survey data. ***See Appendix B for Mplus scripts and diagrams. ****Multigroup Analyses controlled for the same covariates as the full sample structural model (i.e., marital status, sex, education status, employment status, income).

Table 8

Multigroup Analyses: Structural Path Difference Tests by Nativity Status

Path	β (BI)	P-Value (BI)	95% CI	β (UBA)	P-Value (UBA)	95% CI	Difference Test	SE	Difference Test P- value	95% CI	IRR (BI)	IRR (UBA)
Psychological Distress Outcome												
MW	0.52	<0.001	[0.42, 0.62]	0.54	<0.001	[0.43, 0.64]	-0.01	0.02	0.67	[-0.04, 0.03]	--	--
Discrimination	0.30	<0.001	[0.13, 0.46]	0.28	<0.001	[0.19, 0.37]	0.02	0.13	0.85	[-0.22, 0.27]	--	--
Medical Conditions Outcome (NB)												
MW	0.04	0.57	[-0.1, 0.18]	0.34	<0.001	[0.29, 0.40]	-0.08	0.02	<0.001	[-0.12, -0.04]	1.01	1.10

Discrimination	0.19	0.03	[0.02, 0.35]	0.04	0.03	[0.02, 0.09]	0.29	0.16	0.07	[-0.02, 0.59]	1.42	1.07
Mediation Path A												
MW to Discrimination	0.25	<0.001		0.25		-0.002		0.02	0.89	[-0.03, 0.03]	--	--

Note. BI = Black Immigrants, UBA = U.S. Born Black Americans.

*Multigroup Analyses controlled for the same covariates as the full sample structural model (i.e., marital status, sex, education status, employment status, income). See Appendix B for Mplus scripts and diagrams.

**The difference column captures the unstandardized difference between group-specific path coefficient, with the p-value indicating whether that difference is significant or not.

***IRR = Incidence Rate Ratio for the medical conditions outcome.

****CI = confidence intervals; brackets present the lower limit followed by the upper limit.

Exploratory Analysis One: Years in the United States as Moderator of Relationships of MW and Discrimination on Health Outcomes

Multigroup analyses were also computed within the Black immigrant subsample to explore whether Black immigrants' duration of time living in the United States further moderated proposed social cognitive model. Notably, however, during the initial measurement phase of the multigroup analyses stepwise procedure, there was factor structure invariance, where the measurement model of the latent constructs was not equivalent across the different duration subgroups. Measurement model fit indices were examined separately for each subgroup. Table 9 displays the fit indices for the subgroup with the worst model fit (i.e., the duration group of Black immigrants who had lived in the United States for less than five years). Further assessment of the latent constructs for the group of Black immigrants <5 years in the U.S., revealed good fit indices for the measurement model of the latent outcome factor (psychological distress:). However, the measurement model for the latent predictors in this group (Black immigrants <5 years in the U.S.) had abysmal fit indices, RMSEA = 0.1, CFI = 0.44, SRMR = 0.04. The poor measurement model fit for this group subsequently precluded any further invariance testing or structural path comparisons across the duration groups.

Table 9

Fit Statistics for Measurement Models: Black Immigrants with Less than Five Years in the United States

	Full Measurement Model (with Latent Predictors and Outcome)	Measurement Model of Latent Outcome (Psychological Distress)	Measurement Model of Latent Predictors (MW and Discrimination)
N	143	137	143
χ^2	54.12	6.19	4.88
DF	37	9	2
P Value	0.03	0.72	0.09
CFI	0.92	1.00	0.44
TLI	0.88	1.00	0.0
SRMR	0.08	0.04	0.04
RMSEA	0.06	0.00	0.1

* All models were estimated using robust estimator with full information maximum likelihood. CFI = comparative fit index. TLI = Tucker-Lewis index. SRMR = standardized root mean square residual. RMSEA = root mean standard error of approximation. General guidelines for good model fit include a non-significant chi square p value, CFI and TLI equal or above .9, SRMR value less than or equal to .08, and RMSEA value less than or equal to .06 (Hu & Bentler, 1999).
 **See Appendix B for Mplus scripts.

Exploratory Analysis Two: Country of Origin as Moderator of Relationships of MW and Discrimination on Health Outcomes

A second set of multigroup analyses within the Black immigrant subsample was conducted. Specifically, I aimed to test whether Black immigrants' country of origin moderated the structural relations of MW and discrimination on my psychological and physical health outcomes. Similar to the first set of exploratory analyses (duration of time in the U.S. as a moderator), this set of exploratory analyses also did not support factor structure invariance. In particular, there was poor measurement model fit for Black immigrants from the Spanish Caribbean, RMSEA = 0.31, CFI = 0.09, SRMR = 0.08. As a result, further group comparison testing regarding Black immigrants' country of origin were not possible. See Table 10 for the model fit indices of this group.

Table 10

Fit Statistics for Measurement Models: Black Immigrants from the Spanish Caribbean

	SC Full Measurement Model	SC Measurement Model of Latent Outcome	SC Measurement Model of Latent Predictors
N	180	175	180
χ^2	145.56	24.74	37.19
DF	37	7	2
P Value	<0.001	0.001	<0.001
CFI	0.53	0.84	0.09
TLI	0.31	0.66	0.00
SRMR	0.11	0.05	0.08
RMSEA	0.13	0.12	0.31

*Groups coded as follows: SC = Spanish Caribbean; HA = Haiti; JA = Jamaica; TT = Trinidad and Tobago; O = Other country of origin

** All models were estimated using robust estimator with full information maximum likelihood. CFI = comparative fit index. TLI = Tucker-Lewis index. SRMR = standardized root mean square residual. RMSEA = root mean standard error of approximation. General guidelines for good model fit include a non-significant chi square p value, CFI and TLI equal or above .9, SRMR value less than or equal to .08, and RMSEA value less than or equal to .06 (Hu & Bentler, 1999).

***See Appendix B for Mplus scripts and diagrams.

Discussion

The goal of this quantitative study was to assess my proposed social-cognitive framework for understanding intra-racial differences in health outcomes. Specifically, I posited that the Meritocratic Worldview (MW) was associated with greater perceptions of discrimination, which in turn impacted mental and physical health outcomes within the Black community. The present investigation yielded important findings for understanding health outcomes across and between U.S. born Black Americans and Black immigrants.

Consistent with the broader literature on discrimination and health (Cardenas et al, 2025; Earnshaw et al., 2016; Gee et al., 2006), discrimination was significantly associated with worse

health outcomes (i.e., psychological distress and total medical conditions) for Black individuals, irrespective of nativity status. MW or meritocracy beliefs were also significantly related to psychological distress and total medical conditions across the full sample, albeit in the opposite direction than expected. Specifically, MW was directly associated with worse health outcomes, that is, greater psychological distress (irrespective of nativity status) and a higher expected number of medical conditions (in the full sample); this is in direct contrast to the palliative association that had been anticipated based on the MW literature (McCoy et al., 2013; Napier, Suppes, & Bettinsoli, 2020; Vargas-Salfate et al., 2018).

Relatedly, the mediation results showed that MW was associated with greater perceived discrimination (instead of less perceived discrimination as had been hypothesized) and subsequently worse psychological distress, regardless of nativity status. One potential explanation for this unexpected finding may be that, with higher endorsement of MW, there may be greater attunement or sensitivity to when interpersonal and structural interactions violate the principles of MW – good things happen to good people, and hard work results in success – as discrimination inherently does. That is, discrimination violates MW principles because it means that external factors outside one’s control (i.e., racial prejudice) can impact an individual’s outcomes, overriding their own hard work and merit. Although this MW finding was inconsistent with my prediction, it was more in line with Hagiwara and colleagues’ (2015) study with Black Americans where greater endorsement of MW while perceiving discrimination was associated with poorer health outcomes; as well as a separate study finding where MW beliefs (i.e., Just World Belief) did not have a palliative effect for Black individuals with chronic pain (Crouch et al., 2023).

Moderation results in the current study revealed that this MW through discrimination to psychological distress pathway functioned the same between U.S. born Black Americans and Black immigrants, suggesting that my social-cognitive framework may not be explaining the Black immigrant health paradox as it relates to psychological distress. Importantly, however, regarding physical health outcomes, nativity status moderated the association between MW and total medical conditions, where MW was statistically significantly associated with a higher expected count of medical conditions among U.S. born Black Americans, but was no longer a significant association among Black immigrants. One explanation for this moderation finding may be that because Black immigrants had statistically significantly fewer medical conditions ($M = 1.71$; U.S. Born Black Americans, $M = 2.27$, $p < .001$), there may have been a restricted range, where there was less variance in medical conditions in the Black immigrant subsample for MW to have a detectable association.

Through exploratory analyses, I attempted to examine further differences within the Black immigrant group. However, there was configural non-invariance in my measurement models when further stratifying Black immigrants by the number of years lived in the United States. Specifically, there was substantially poor fit for the measurement model with only my focal predictors (MW and discrimination) for Black immigrants who had lived in the United States for less than five years. There are both theoretical and statistical explanations for the exploratory analyses. It is notable that the poor measurement model fit occurred for the most recent Black immigrants to the United States, given that acculturation is often measured by length of stay where more years in the U.S. serves as a proxy for greater acculturation (Abraído-Lanza et al., 2006; Luo & Wu, 2016). Indeed, in the broader literature on racially minoritized immigrants, one study found different acculturation trajectories, where fewer years in the United

States is associated with lower orientation towards U.S. culture (Cobb et al., 2021). Taken together, it may be the case that the most recent Black immigrants in the United States may be interpreting MW in a substantively different way than Black immigrants who are in the U.S. for five years or more.

Similar to the results for Black immigrants who have lived in the U.S. for less than five years, Black immigrants from Spanish Caribbean countries also showed measurement non-invariance (particularly in the focal predictor measurement model). This measurement non-invariance may indicate that country of origin also influences how MW is interpreted. Further, what matters may not just be the country of origin, but also the racial context of that country (Read & Emerson). Likewise, the racial context is not only about whether a country's context is majority Black or White, or racially mixed, but *how* it is mixed what factors impact racial identification. In this study, compared to the Spanish Caribbean countries, most of the remaining country of origin groups (i.e., Jamaica, Haiti, Trinidad & Tobago) have a significant concentration of individuals of African descent (Nations Encyclopedia, n.d.-a; Nations Encyclopedia, n.d.-b; Nations Encyclopedia, n.d.-c). The last country of origin group was categorized as "other," so unable to determine the racial demographics in the remaining category. The configural non-invariance for the country of origin exploratory analyses may be highlighting the importance of accounting for the racial context of a Black immigrant's country of origin.

Notably, a non-theoretical explanation for the measurement non-invariance for the most recent Black immigrants (<5 years in the U.S.) *and* for Black immigrants from the Spanish Caribbean may be that the measurement structure simply does not hold for this group. Critically, although the MW latent factor was theoretically derived, the indicators for the factor did not come from a psychometrically established MW-specific measure, but was instead a composite

that came from other existing measures in the NSAL dataset. It may therefore be the case that this MW composite was operationalized sufficiently enough at the full sample level and in detecting broader group differences by nativity status, but was not sensitive enough (or lacked the structural stability) required to detect further stratified group variation within the Black immigrant subsample. Exacerbating this challenge may have been the small sample sizes in these further stratified subgroups (143 Black immigrants with < 5 years in the U.S.: 180 Black immigrants from Spanish Caribbean group) relative to the full sample (5,191). These methodological constraints (i.e., MW as a created composite, relatively small sample size) limit the ability to determine whether the measurement non-invariance is capturing meaningful differences in how the acculturation stage and racial context of the country of origin impacts interpretations of MW vs. whether it simply is a measurement limitation. Nevertheless, these findings present exciting avenues for future research, whether that is future investigations using established MW measures or larger Black immigrant samples that allow for closer examination of whether duration of residence in the U.S. and racial context of birth country influence the structural relations among MW, discrimination, and health outcomes.

Beyond the MW composite limitation, other study limitations include the cross-sectional design, the composition of the Black immigrant sample, the lack of age as a covariate, and shifts in the sociopolitical context since the early 2000s data collection period. Specifically, because the NSAL data was a cross-sectional design, causal inferences are unable to be made. Additionally, the Black immigrant sample being a predominantly Black Caribbean sample limits the generalizability of the nativity status findings to other Black immigrant subgroups (e.g., Black African immigrants). Further, the current study did not include age as a covariate, a notable limitation as increasing age has been associated with a higher number of medical

conditions – one of the focal outcome measures of the study (Baker et al., 2017). Future research should control for age to account for any potential confounding effects. Finally, the sociopolitical climate at the time of data collection (2001 to 2003) substantially differs from the current sociopolitical context, which may limit the generalizability of results to Black immigrant experiences and perceptions in the present day. Qualitative findings from study 2 of this dissertation provides additional support for this limitation.

Despite the aforementioned limitations, this study had several strengths. First, by using the NSAL dataset, I was able to examine my social-cognitive framework in a large, nationally-representative sample, offering more generalizable population-level estimates. Additionally, SEM allowed for the direct modeling and removal of measurement error, so that my examined structural relationships had less biased estimates than would otherwise be obtained with linear regression approaches. Similarly, the negative binomial modeling approach for the medical conditions outcome addressed overdispersion, producing more accurate results for the medical condition results. In addition, testing whether the structural relations among MW, discrimination, and health outcomes differed by nativity status, and further, by duration of residence and racial context of birth country, allowed for a more nuanced understanding of how MW, discrimination, and health are related between and within Black immigrant and U.S. Born Black Americans. Given these strengths, the findings from the present investigation highlight the health consequences of MW and discrimination for U.S. Born Black Americans and Black immigrants, demonstrating a need for tailored clinical interventions that address the negative consequences of MW and race-related discrimination across Black individuals in the U.S.

Study 2: Adjusting to America: A Qualitative Exploration of Black Immigrants' Perspectives on the Immigrant Health Paradox

Abstract

The Black immigrant health paradox reflects the phenomenon of recent Black immigrants in the United States (U.S.) exhibiting better health outcomes (e.g., lower mortality risk, lower levels of hypertension, fewer chronic illnesses, fewer depressive symptoms, lower psychological distress) than U.S.-born Black Americans and more established (e.g., longer residence in the U.S., later generations) Black immigrants. Limited research has focused on how structural factors (e.g., racism, discrimination) interact with and influence individual-level factors to shape this paradox. Given the importance of the racial context in the U.S., the present study explored 1) Black immigrants' perspectives on how the U.S.'s racialized system affects their health and well-being; 2) whether the immigrant health paradox resonated with current Black immigrants' health experiences; 3) Black immigrants' beliefs regarding contributors to the paradox and its erosion over time. Seventeen individual semi-structured interviews were conducted. Through reflexive thematic analyses, seven themes were generated: 1) post-migration influence on health approaches: what was changed vs. maintained; 2) difficulties navigating the U.S. healthcare system; 3) health changes due to environmental challenges in the United States; 4) navigating the American Dream: asymmetry between expectation vs. reality; 5) experiencing anti-Black racism and discrimination in the United States context; 6) developing my Black identity: exposure, identity conflict, and racial socialization; 7) recommendations to support Black immigrants' health. Participants' experiences reflected complex health-related shifts after immigrating to the U.S., including a change towards valuing mental health and increased preventive health care; however, participants reported multiple barriers to healthcare access. Black immigrants identified

environmental, lifestyle, and social changes as contributors to worsening health, as well as stress stemming from the disconnect between the American Dream ideal and the demanding work culture in the U.S. Interwoven between these acculturative stressors was anti-Black racism, with deleterious health consequences. Relatedly, Black immigrants reflected on a shift in which their racial identity became more central, citing greater exposure, education, and community with Black Americans. Participants offered strategies to help maintain health while in the U.S. Findings from this qualitative investigation hold critical implications for identifying factors that can support the well-being and health of Black individuals in America.

Introduction

Across several physical and mental health-related domains, first generation Black immigrants tend to display better health outcomes (e.g., longer life expectancy, lower obesity risk, better self-rated health, fewer sleep difficulties, lower levels of hypertension, fewer depressive symptoms, and less psychological distress) than U.S.-born Black Americans, Black immigrants who have resided in the U.S. for longer, and later generations of Black immigrants (i.e., 2nd and 3rd generation) (Bennett et al., 2012; Constance-Huggins, 2021; Hamilton & Hummer, 2011; Johnson et al., 2022; Marquez-Velarde, 2022; Venters & Gany, 2011). This phenomenon has been labeled the (Black) immigrant health paradox or the immigrant health advantage. Research similarly demonstrates that over time, as Black immigrants stay in the U.S., (whether by duration of residence or progeny/subsequent generations), this health advantage erodes (Bennett et al., 2012; Hamilton & Hummer, 2011; Kaplan et al., 2015; Thomas et al., 2018). Although this paradox has been seen across multiple minoritized immigrant groups (e.g., Latine immigrants, Asian immigrants), given the exponential increase in the Black immigrant population in the U.S. (Piña, Cahn, & Im, 2026), alongside enduring racial disparities in health for Black individuals in the U.S., (Orsi et al., 2010; McClendon et al., 2021), this study will focus specifically on the Black immigrant health paradox.

Despite research on the immigrant health paradox more broadly (e.g., Latine, Asian immigrants), a paucity of qualitative research examines the Black immigrant paradox. To my knowledge, only one qualitative study exploring Black immigrants' perspectives on this health paradox has been published (i.e., a study with a sample of Ghanaian immigrants; Kaplan et al., 2015). Kaplan and colleagues' (2015) qualitative study yielded four themes to help account for the erosion of the health advantage over time: barriers to health care, increased stress,

environmental exposures, and negative changes in health behaviors. Notably, participants in that study referenced a reduced social status (i.e., working lower-status jobs than they previously held, xenophobic microaggressions) in transitioning to the U.S.; however, changes in social status were not explored in-depth, as much of the study focused on other factors contributing to the later decline of the health advantage. Nevertheless, insights from this study reinforce the need to further explore contributors to this paradox and its decline in Black immigrants across multiple countries of origin, given the heterogeneity in the racial context of a Black immigrant's country of origin and variability in Black immigrants' perspectives. This substantial gap in the literature therefore necessitates taking a bottom-up community approach where the community members' (i.e., Black immigrants) views and perspectives are told, and help to generate and examine explanatory hypotheses for the immigrant health paradox.

The present study complements and builds on study 1 of this dissertation by taking a closer look at Black immigrants' perceptions of the immigrant health paradox. Given that study 1 uses data from NSAL, a dataset from the early 2000s, this follow-up qualitative study will investigate 1) Black immigrants' perspectives on the paradox and 2) the relevance and applicability of the constructs involved in my proposed social-cognitive model (e.g., MW, perceived discrimination) on Black immigrants' health in more recent times. An updated exploration of these specific constructs and the broader immigrant health advantage is critical, particularly in light of recent sociopolitical events. Specifically, the 2020 Black Lives Matter protests concurrent with the global pandemic of COVID-19 may make themes related to racial discrimination, equity, and health consequences all the more salient across intra-Black communities, and may simultaneously have prompted a re-evaluation of notions related to the

American dream for Black immigrants, given the widespread reporting of race-based discrimination in the U.S.

Indeed, the 2020 protests against police brutality and racialized violence galvanized many Black immigrants to speak out against racial injustice in the U.S. (Layne, 2021). Additionally, the catalyst for the 2020 protest, the murder of George Floyd, resonated with Black immigrants, in both the shared racial identity, as well as the salient reminder of police violence and legal disparities (e.g., racial profiling, disproportionate detention) Black immigrants experience in the U.S. (Aranda & Vaquera, 2015; Layne, 2021; Oliver et al., 2022). Similarly, one study found that for Nigerian immigrants in the U.S., the 2020 protests sparked calls for dialogue and action, as well as self-reflections on Black immigrants' vulnerability to racialized violence (Acheme & Cionea, 2021). In parallel, the COVID-19 pandemic had disproportional impacts (e.g., higher COVID-related mortality rates; heightened exposure due to greater likelihood of being an essential worker) on minorities, including Black immigrants; immigrants were also prohibited from accessing health-related assistance programs (e.g., Medicaid, Supplemental Nutrition Assistance Program), further complicating the issue (Clark et al., 2020; Obinna, 2021). These dual and intersecting crises (i.e., racialized violence, COVID-19 pandemic), highlight the importance of updating and strengthening our current understanding of the Black immigrant health paradox.

Aims

Aim 1:

The first aim of the study was to understand how Black immigrants make sense of and respond to the immigrant health paradox more broadly. Specifically, this study explored 1)

whether the immigrant health paradox resonated with Black immigrants' health experiences; 2) and if so, what Black immigrants perceived as contributors to this paradox and any erosion in health over time; 3) and finally, what factors inform Black immigrants' own health in the U.S.

Aim 2:

The second aim of this study investigated the relevance and applicability of the constructs underlying my proposed social-cognitive model on Black immigrants' health. Specifically, this study explored 1) whether and how Black immigrants feel the U.S.'s culture and systems impact their psychological and physical health; and 2) whether and how Black immigrants perceive race and/or race-related stress to be impacting their health.

Method

Participants

Participants ($N = 17$) were Black immigrants. Eligibility criteria for this study were self-identification as: 1) a Black first generation (i.e., born outside of the U.S.) immigrant; 2) able to communicate in English; 3) at least 18 years of age.

Recruitment Procedures

Research team

In light of the qualitative nature of this study, a research coding team was formed in order to support coding reliability, group consultation as part of reflexivity practices, and consensus

reconciliation of codes and themes. See the analytic plan below for a more detailed review of the qualitative analyses for this study. The coding team was comprised of three Black psychology doctoral students (including the principal investigator) from the University of California, Los Angeles (UCLA). Two of the coders were first-generation Black immigrants from Nigeria and one of the coders was a second-generation Afro-Latina immigrant with ancestry from the Dominican Republic and Puerto Rico.

Participant recruitment

The UCLA IRB approved this research study prior to any participant recruitment and data collection. Notably, due to political administration shifts in the United States with associated racist messaging towards immigrants, including Black immigrants at the time of the 2024-2025 study recruitment (Catalina et al., 2024), previously proposed recruitment pathways were no longer viable options (i.e., local and national Black immigrant organizations) in response to the political climate. As such, recruitment proceeded more slowly than anticipated. Still, recruitment employed multiple targeted efforts, including active, passive, and snowball recruitment methods (Davis et al., 2018).

In terms of active recruitment, Black immigrant organizations were contacted in an effort to set up an initial meeting to introduce the team, describe the project and what led to the research being conducted, provide flyers, and assess for potential candidates. Black immigrant organizations either never responded or declined, citing increased concerns regarding privacy in light of sociopolitical events. Recruitment also involved physical distribution of flyers and informal community-based recruitment in places such as Los Angeles-based African hair salons (e.g., Image of Africa Hair Braiding) and barbershops. Additionally, recruitment materials were

posted on social media (e.g., Facebook) as well as emailed to relevant student and professional listservs (e.g., 21 student associations/groups across five universities, UCLA student registrar, Black professionals group chats) and posted in ethnic grocery stores within Black immigrant communities. Similarly, interested individuals were also encouraged to circulate the flyer to those they thought may be interested and eligible (e.g., the snowball recruitment method).

Procedure

Of the 21 Black immigrants who were contacted after expressing initial interest, 17 (81%) took part. Two of the initial 21 respondents reported they were 2nd generation immigrants and therefore ineligible, one declined after the screening call (citing discomfort around discussing their health), and one never responded. Seventeen individual semi-structured interviews were thus conducted, with the principal investigator conducting 13 of the 17 (76%) interviews and a member of the coding team conducting 4 (24%). Prior to the research team member conducting any of the interviews, the principle investigator trained the research member by practicing the questions with her, having the member conduct mock interviews and having the member listen to an audio recording of one of the interviews. The semi-structured interviews took place via HIPAA-compliant Zoom technology with the intention of maximizing accessibility. Interviews typically lasted approximately one hour in an effort to be mindful of participants' potential time constraints. Honoraria of \$30 were offered and all accepted. Prior to the start of the semi-structured interviews, the researcher obtained verbal consent (and a written first name). Participants were instructed to *not* write their full name, to optimize confidentiality in light of heightened negative attention and scrutiny towards immigrants in the United States. Participants also completed a demographic form assessing age, gender, country of birth, duration in the U.S., age at immigration to the U.S., income, education, and a single-item overall health

rating question (i.e., “In general, would you say your health is poor, fair, good, very good, or excellent?”). Following completion of the demographic measure, Black immigrants participated in the individual, semi-structured interview. See Appendix E for the semi-structured interview questions. The semi-structured interview questions were developed in part to examine the social-cognitive model being tested. The investigator offered to provide any published work from this study to participants, to help support their voices being centered and heard.

Analytic Plan

The semi-structured interviews were audio-recorded. Eleven of the 17 (65%) interviews had automatic raw transcriptions enabled via the HIPAA-compliant Zoom platform. Automatic Zoom transcriptions were not enabled for the first six interviews, as this feature within Zoom was not identified until later in the data collection process. As such, the first six audio recordings of the interviews (35%) were imported into a transcription service (i.e., WhisperScript). In terms of security, the WhisperScript stays on the local computer environment, such that the information does not get transmitted to any cloud or internet-based platforms. Following raw transcriptions for all of the interviews, the principal investigator carefully reviewed the transcripts and audio, rectifying any errors or discrepancies in the transcripts based on the audio. The transcripts were then uploaded into NVivo (Version 15) qualitative analysis software (Lumivero, 2025) for subsequent analysis.

A contextualist framework was used to conduct reflexive thematic analysis (Braun & Clark, 2006, Braun & Clark, 2021). The contextualist framework notes the ways in which people try to make sense of their experiences and how also the social context shapes and influences people’s knowledge and meaning-making (Braun & Clark, 2006). Likewise, practicing

reflexivity, that is, ongoing self-reflection of the assumptions and biases a researcher has that could potentially impact the data analysis, is critical (Morrow, 2005). Accordingly, each member of the research team kept a record of their reactions, thoughts, and feelings about the qualitative data and engaged in biweekly regular team discussions and consultations regarding the reactions each member had (Morrow, 2005). Coding was initially inductive, with research team members individually generating initial codes by examining the latent and semantic meanings within the data. Next, team members collaboratively reconciled the codes and jointly developed a coding scheme. Then, coding was deductive, with an eye towards specific content relevant to the research aims. Similarly, the team collectively reconciled the codes, recognizing the iterative nature of the processes, such that reconciliation repeated until codes were finalized. Following finalization of the codes, research team members collectively identified candidate themes that captured the central ideas and patterns from the codes. Through ongoing discussion and revision, the candidate themes were finalized.

Results

Participants were 17 Black immigrants who ranged in age from 20 years to 60 years ($M = 30.44$). The sample was highly educated relative to the broader Black immigrant population in the U.S. (Tamir & Anderson, 2022) – of the 14 who reported their education level, 78% had a bachelor's degree or higher. Approximately 50% reported an annual household income of less than \$50,000. Participants' years spent in the United States ranged from 1 year to 29 years ($M = 8.15$). More than half of the participants identified as female. See Table 1 for the demographic characteristics of the participants.

Table 1

Sample Descriptive Statistics

	N	Missing	Mean (n)	SD (%)	Minimum	Maximum
Age	16	1	30.44	11.04	20	60
Birth Country	16	1	--	--	--	--
Nigeria	--	--	6	38%	--	--
Tanzania	--	--	1	6%	--	--
Jamaica	--	--	3	19%	--	--
Kenya	--	--	2	13%	--	--
Uganda	--	--	1	6%	--	--
Haiti	--	--	1	6%	--	--
Italy	--	--	1	6%	--	--
France	--	--	1	6%	--	--
Sex	16	1	--	--	0	1
Male	--	--	7	44%	--	--
Female	--	--	9	56%	--	--
Years in the United States	16	1	13.13	8.15	1	29
Age at immigration	16	1	17.38	11.93	4	42
Education	14	3	--	--	3	5
Some college	--	--	3	21%	--	--
College graduate	--	--	2	14%	--	--
Post-college graduate	--	--	9	64%	--	--
Income	14	3	1.79	1.67	0	4
< \$25,000	--	--	5	36%	--	--
\$25,000 to \$49,999	--	--	2	14%	--	--
\$50,000 to \$74,999	--	--	1	7%	--	--

Sample Descriptive Statistics

	N	Missing	Mean (n)	SD (%)	Minimum	Maximum
\$75,000 to \$99,000	--	--	3	21%	--	--
≥ \$100,000	--	--	3	21%	--	--
Self-Rated Overall Health	15	2	2.53	0.83	0	4

Note. Self-rated overall health was on a 5-point Likert scale from 0 indicating “poor” health to 4 indicating “excellent” health, such that higher scores reflected better overall health.

*One participant did not complete the demographic questionnaire but reported her age, birth country (Ethiopia), gender, and education-level during the semi-structured interview.

Through reflective thematic analyses, seven themes were generated to capture participants’ reflections on their health over time as well as the factors that influenced their health pre and post-immigration. The following sections describe the themes in depth and include representative quotes. The representative quotes have been lightly edited (e.g., removing repeated words that participants used as fillers while thinking out loud; removing extra “ums” and “likes”) for clarity. Refer to table 2 for a brief description of each theme.

Table 2

Themes generated from reflective thematic analysis on how Black immigrants make sense of and respond to their health over time (N =17)

Theme	Brief Description
Post-Migration Influence on Health Approaches: What Was Changed Vs. Maintained	Participants discussed how living in the United States led to a redefining of how health was understood and practiced in three key ways: 1) a recognition of the importance of mental health, 2) a shift from crisis-driven medical care to preventive care, and 3) greater utilization of biomedical approaches, without necessarily foregoing holistic approaches.
Difficulties Navigating the U.S. Healthcare System	Participants reflected on external barriers (i.e., structural and interpersonal) that made it harder to access and engage with the United States Healthcare system, despite their reconceptualization of health. Participants

	discussed developing strategies to be able to address these barriers.
Health Changes Due to Environmental Challenges in the United States	Participants discussed how the social and environmental conditions associated with immigrating and adapting to a new life in the United States contributed to worsening health. These conditions included diet changes, changes in the physical environment, general lack of access to resources, and the loss of community in a new country.
Navigating the American Dream: Asymmetry between Expectation vs. Reality	Participants often described a jarring contrast between their (and loved ones') expectations of what life in the U.S. would be like against the actual experience of living in the United States. Participants largely critiqued the American Dream as incomplete or unrealistic, instead viewing a culture and normalization of overwork in the United States.
Experiencing Anti-Black Racism & Discrimination in the United States Context	Participants discussed how anti-Black racism was a distinct and profound stressor layered on top of broader immigration challenges, a stressor that significantly impacted how they navigated and were received in the United States.
Developing my Black Identity: Exposure, Identity Conflict, and Racial Socialization	Participants reflected on the process by which they developed and deepened their sense of Black identity following immigrating to the United States. Living in the U.S. led to: 1) exposure to Blackness as a central and collective identity; 2) struggles navigating and reconciling their previously central ethnic identity with this newly encountered racial identity; and 3) learning the history, culture, and realities of being Black in the U.S. context.
Recommendations to Support Black Immigrants' Health	Participants offered ideas and suggestions (to both Black immigrants and healthcare providers) on things that can help Black Immigrants maintain or improve their health while living in the United States.

Theme 1: Post-Migration Influence on Health Approaches: What Was Changed Vs. Maintained

Participants reflected on what health meant to them. For some, the focus was on physical functioning and ability to carry out daily activities:

Participant 4: "Health to me, I think, means being able to physically function well in the environment or work I might have to do. So, um, I think for me, one of my measures of health is at least being able to go up like two or three flights of stairs without being out of breath."

Participant 3: "health is more functional. The ability to do your day-to-day activities without any hindrance."

Others described it more broadly, encompassing an overall wellbeing that captured physical and mental health.

Participant 5: "Health, to me, means all our own well-being, feeling happy within oneself, within one's body. And I guess without illness or injury, technically. "

Participant 2: "[Health is] how well my body is functioning to keep me alive. And making sure that like the different processes and the different regulations are like up to par and performing in a way that is sufficient to maintain my overall health and energy and both mentally, physically, emotionally. "

Participant 15: "when I think of health, my brain immediately goes to physical health. I think up until recently, I wouldn't have concluded mental health into that aspect, but I've learned a lot."

Sub-theme: Recognition of the Importance of Mental Health

Importantly, many participants described a growing recognition and valuing of mental wellness as a key part of health. This recognition represented a shift for many participants. Specifically, participants noted that prior to immigrating to the United States, mental health was often either not discussed, stigmatized, or filtered through a spiritual lens.

Participant 17: "But that mental element, I don't think, was even really addressed. Like, I don't remember hearing a lot about mental health when I was growing up."

Participant 14: "Even something like mental health, like mental health problems do not exist, um, in Jamaica."

Participant 13: "It's very little awareness of other areas of health, other than physical health, back in Nigeria. And a lot of people discount or do not emphasize mental health or emotional well-being. And they just be like, oh, you're okay, it is okay, you know? You have to be strong, you know, even when people are being torn apart, yeah."

Participant 8: "In my country as well, people, when they don't really, like, have kind of mental health dealings, so going to see a counselor, that's not cultural in our country. "

Participant 4: "But it was like, um, most mental health is not like a thing in Tanzania. Um, it's either you're crazy or you're not crazy. "

Participants reflected on spiritual-based explanatory models that were prevalent in how mental health was understood in their home country. Some participants shared how mental health symptoms were attributed to supernatural forces or manifestations of evil, with others noting the dismissal of mental health struggles subsequently exacerbated the mental health challenges.

Participant 2: "And, you know, like [mental illness] was like the devil's actions and not something that, you know, could possibly be wrong biologically or genetically or anything like that. Nothing that needed treatment, basically. "

Participant 16: "I think Ethiopians tend to think that, like, if you're sick, especially mentally ill, it's a curse, or, like, it's some sort of like, bad spirit, or someone put some sort of something on you, and that's why you're sick. There's a lot of heavy dependence on religion."

Participant 10: "Mental health, that was not really talked about at all, ... It's not something that they had the access to speak about in their culture, because I think, um, Jamaicans, but a lot of Caribbeans in general, like, there's this overarching reliance, like, over-reliance on Christianity, or just your religion, even if you aren't necessarily a very religious person, like, it's forced on you to believe these things, to talk about certain things, to not talk about certain things, and that can be counterproductive to your health."

Following migration to the United States, participants shared a greater attunement to their mental health, attributing it to more exposure, discussion, and education of the importance of mental health.

Participant 13: "It's like a gradual thing. You know, the more exposure I get and the more, um, the more resources I find, the more I appreciate and understand, and even thinking back, I understand certain things that I saw as a child and didn't really get. ...Example, like, um, we went to church, we had a family, their mom was extremely depressed. And nobody, like, saw it as something that needed to pay attention to because, you know, she would just come to church, she didn't talk to anybody, she would just sit down, walk

slowly. I used to just wonder what it was, you know, like, why is she like that? She wasn't just, like, a quiet person or an introvert. Now I understand that she was extremely depressed, and, you know nobody could, like put a name to it, and she – up till the time I lost contact with her family – she never got any help. You know? And thinking back now, it kind of hurt me."

Participant 1: "I'm a lot more sensitive to my mental, like, state of being than I was when I was back there [in birth country]."

Sub-theme: A Different Way of Approaching Health: Embracing Preventive Care

Participants described shifts in how they approached their physical health pre-migration to now living in the United States. Participants shared that in their birth country, there was a greater emphasis on using cultural and homegrown remedies, including spiritual practices, to treat physical illnesses rather than hospital-based care.

Participant 12: " When I was younger, I used to see people, like, instead of going to hospitals, um, they'd go to, like, herbalist. Traditional medicine men."

Participant 5: "We have, like, things that we do at home like drinking tea. They think that tea can like fix every issue. [laughter] Um but – and then there are like certain remedies that they do. Like I remember, like, if I had like gas pain, um, my grandma would like rub like kerosene oil um, on my stomach. And it actually did help. I don't know if it's like a smell or something or, like, placebo but it did help."

Participant 17: "The idea was more of, like, this must be some sort of, um like, an inherited family issue, or, like, a family curse, and ...you didn't find a solution using your

traditional doctor, um, and so it was kind of like, well, there is another route that's more, um, spiritual, and that whether, again, whether it's religious, that's traditional."

Participant 2: "Growing up, like I was just like, whenever I was like sad or depressed or anything like that, my mother would just like kind of like pray it away or splash holy water on me and like pray that I would get better."

Participant 9: "They believed that the traditional medicine, you just pluck one tree. One leave, one dart, and put it together. Then you are – it works, it works! ...So, that's the reason why, you know, we say that health back in, back home is kind of like, trial and error."

Likewise, participants discussed how normalized it was in their birth country to not go to the doctor unless there was a dire need/medical emergency.

Participant 5: "Um, it's just [Jamaicans] not wanting to go to the doctor because they just don't think it's like a serious enough thing."; "Jamaicans think about health ... in terms of like if they're not dead, then they're fine. "

Participant 3: "Um, so that is one when I say cultural belief – another thing is we also believe you don't always have to go into the hospital for many things, like, um if you have to, you have to, but like if I got malaria, I'll just mostly thug it out, you know? "

However, many participants reported that through living in the United States, they increasingly engaged in more preventive medical care and routine checkups, which they found beneficial.

Participant 13: "But when I got here, I realized that there are certain things, you know, routine things that you need to do, and if you don't do it, you may have to face some

dental problems in the future, you know? ... The exposure to, um, you know, dental health has been helpful to me because, you know, that has created an awareness that you have to maintain a certain part of your body. And don't wait until you have problems with them before you do anything about it.."

Participant 17: "And then because I do more checkups, I'm more aware of the areas that I need support in, so then I do more of that. So, like, vitamins, and things like that, which, before I, like, I don't remember taking vitamins."

Participant 14: "Um, so, like, here, like, I go to my PCP for my yearly checkups every January, like clockwork, I will not be missing that appointment."

Some participants also reported approaching their health by integrating alternative practices (e.g., natural remedies, spirituality) with biomedical approaches health. For example, one participant discussed seeking out a psychic/spiritualist after engaging in traditional trauma-therapy.

Participant 16: "And [the psychic] actually, um, told me that yes, mental health, um, can contribute to people's, um, like, mental ailments. But there's also the spiritual side of it, um, which is kind of like, you know, a little bit of Christianity, like, you know, with demons and spirits and things like that. So, you know, she was kind of explaining to me that, um, my problem maybe isn't so much like a diagnosis, like a book diagnosis, but something spiritual inside of me that's blocked. And so, since then, um, I've kind of worked with her to sort of release, um, a lot of the trauma from my bod-, from my spirit, from my body."

Theme 2: Difficulties Navigating the U.S. Healthcare System

Participants described better clinical care in the United States, in terms of the physical conditions of the hospital and the clinical expertise. However, many participants emphasized significant difficulty in being able to actually access the U.S. Healthcare, citing reasons such as lack of insurance, financial costs, or long-wait times.

Participant 13: "Because even though the systems are there, it's not everybody that can, like, access it. You know, if you don't have a job that's provides insurance, or if you have a job and you can't even afford the insurance, because I know some people that whatever they're paid at their job, they can't pay insurance deduction from it, because if they pay insurance, then they'll be left with almost nothing."

Participant 1: " Not being born here and not having something like the documentation to just easily access the healthcare system sometimes made it difficult for me."

Participant 14: "I just think insurance is a scam and it's often connected to your job or your school. And, God forbid you're in, like, a transition period. Yeah, I feel that's definitely a stressful thing because I've had to transition jobs before ... and there's been a gap, um, and as you know, like, I have these chronic migraines, like, it's something that if I need my prescription, and I'm not covered, I've had to pay, like, hundreds of dollars for it. Um, and that's stressful, and being stressed leads to migraines and other things."

Participant 8: "It's more expensive here. When I went to the emergency room, even though I had insurance, I spent a lot of money, over thousands of dollars, so I didn't expect that. And so, compared to my country also, I can say, health services are really expensive here."

Participant 4: " I'm still very hesitant to engage in healthcare because we associated it with a huge amount of cost here. And so, we oftentimes, I think before Obamacare, we didn't have insurance... I always had the thought that I couldn't break my arm, or do any sports, or anything that would injure me to a point that would cost my mom a lot of money."

In addition to structural barriers, participants described negative interactions with healthcare providers. For some, this was feeling dismissed by their providers. For others, this was feeling misunderstood by providers and they recounted situations where their healthcare provider was not culturally responsive. Likewise, some participants shared their fears that the provider would not care for them, citing statistics they knew about anti-Blackness in the healthcare system.

Participant 15: "I have experienced this myself, where I'm not listened to as a Black person, you know, explaining pain levels and all of those things. So, I think that just sort of... tied together to become an incredible burden to actually access healthcare that is good for me and actually can help me. "

Participant 10: "So, I would love to have had better experiences with the healthcare system, but I do think I am jaded by it, and if I don't need to, I'm not going to."

Participant 4: "one of my first therapists was white. But, and I appreciate her because like I mean I think she was correct that I have ADHD, but there came to be a question when I was mentioning like the stoicism, like the certain behaviors I have where she thought I might be on the spectrum. And I think I was trying to be open to it but like it's kind of like am I on the spectrum or am I Tanzanian? ...In therapy, I found it was very hard to

distinguish whether the therapist was actually able to discern my behaviors from like my own cultural identity, because that was so new to them too. "

Participant 15 (referencing the black maternal mortality rate): "I mean, to the point where, like, I'm scared to have a child in America. I don't want to have a child in America, because I don't want to die. And I don't want my child to die. And these statistics are, like, real. They do happen. So, it's hard, like, I think it makes it really difficult to trust medical professionals."

Participant 16: " I think at some point, um, people were saying that doctors didn't think Black people felt, the same amount of pain as white people, and it was just, like, all these things that I was reading about. Um, didn't make me feel safe, you know, in this country...Um, and definitely, I think have had me hesitant to, once again, like, go see doctors or go see professionals, because I felt like they weren't hearing me, they were seeing that I was Black and then having their own notions about it."

One participant also shared a negative interaction they had with their healthcare provider that put them in danger.

Participant 14: "That doctor was really dismissive and weird. And this was in relation to when I had done the appointment for the blood clot, so I had to follow up within 24 hours with a physician. My [regular] doctor wasn't available, but they were in the similar office network, so I went to see him. And he prescribed me – I think it's a painkiller. Um, and I went to pick it up at the pharmacy, and the pharmacist was like, what the hell? Like, you can't take this. If you take this with that, you will have a heart – He [the pharmacist] was

very confused... So, like not only were you [the prescriber] dismissive with no type of bedside manner, but like, you tried to kill me. Um, yeah, so that was that."

To cope with these negative healthcare interactions, participants discussed learning how to advocate for themselves, looking at the research, and trying out multiple providers to feel heard.

Participant 5: "I'm very aware of what's happening and I'm educated about health. So, you know if I tell my doctor, like, oh I looked up something, they laugh, but I'm like, no, I'm reading research articles. I'm not looking up random stuff on Google."

Participant 17: "I'm always skeptical, like, I'm always questioning and then I get there, and I'm, like, over-prepared, if that makes sense. Because I don't trust them. So, it's like, I feel like I have to do my kind of full-on work to be able to make sure that I'm, like, safe in their care...So, like, even for me giving birth, I was like, I'm gonna be demanding, I'm gonna, be over-prepared. Because I feel like they're not gonna do their best, or they're not gonna try, their best. They're gonna think, I probably could take the pain threshold."

Theme 3: Health Changes due to Environmental Challenges in the United States

Subtheme: Changes in the Physical and Material Environment Impact Me

Participants shared how differences in the physical environment (e.g., weather, air quality, and climate) negatively impacted their health. Likewise, some participants also contrasted the processed food in the United States with the food in their birth country, noting how lack of access to natural/organic food in the U.S. contributed to worsened health.

Participant 12: " I'd probably say the environment [impacts health]. It's definitely more polluted here than it is back home... Also, there's a lot of processed food here. Um, it's

harder to get organic food. It's also more expensive to buy organic food. As opposed to back home, you could just have your own garden, in your backyard, and you can be getting things from there. So, I think that shift in diet, as well as the environment might be contributing to [the health paradox] over time. "

Participant 3: "I felt like I was healthier in Nigeria in general on a functional perspective. Like maybe I don't know if it's because I'm older and maybe double like the size I was, but I just felt like I could do a lot more. I don't know if it's the weather, even just in general, like even just my lips, they get like a lot more chapped here.. "

Participant 6: "My main concern concerning my health, is concerning my sugar level and also the blood pressure and also the cholesterol level. So, it has spiked higher than compared to when I was in Kenya. And also, when I took the medical diagnosis while applying for my visa, and after a year, I went for a checkup and measured my sugar level, the blood pressure. So, it's a bit higher when I'm here in the U.S. So, I think maybe it's concerning the food that I take here, because mostly it's something about the food."

Participant 2: "I think here in the United States, there's a lot more processed foods with added sugars and added sodium. ...I guess in Nigerian cultures, in our food it's more natural and everything's a lot more homemade or like passed down family recipes with like fruits and veggies and you know stuff like that, that's kind of hearty rather than like, I don't know. United States food is just – I don't know it could be a little bit better."

In addition to differences in food, several participants reflected on the having fewer opportunities to physically move in the United States, attributing an increased sedentary lifestyle in the U.S. to worsening health.

Participant 7: "When I came over here, it was always, like, staying in one place, so I never used to exercise and all that. There's a time I went to the doctor, and in that time, um, it was after I'd given birth. And they told me, um. I have type 2 diabetes, like, I'm pre-diabetic."

Participant 6: " Maybe the main reason for body weight and also the sugar level is inactivity. Because you find that most of the time, I'm in my laptop because the work that I do is mostly like a remote work. So, maybe there's slow movement and also like finding time to exercise is a bit hard. And also, like compared to Kenya, I used to do a manual job. And also like if I have to go to an office, you have to go from one place to another. So, I can say the contributing factor that also leads to [the paradox] is inactivity."

Consistent with the Black immigrant health paradox, many participants reported a decline in their health after living in the United States. Notably, a few participants (participants 7 and 12) were actually able to situate their decline in health within specific time points by using objective reference points (e.g., health assessments they completed prior to the United States and medical check-up while in the United States). Anchoring their subjective experiences with their formal health assessments allowed participants to further evaluate their health change both objectively and subjectively.

Subtheme: Health Consequences of Limited Access to Resources

In addition to the material and physical environment, participants described how the shifting political climate (e.g., punitive immigration policies) and subsequent lack of access to resources or opportunities heightened stress and contributed to worse mental health.

Participant 8: "So for the mental health changing, I always think about immigration policies...because immigration policies is tougher than before. But not only now, I always think about, like, immigration policy, what I'm gonna do after my programs. Uh, yeah, I always think about that."

Participant 16: "Definitely my immigration status. Um, it was hard for a long time. I couldn't get a driver's license. Um, jobs were hard to get because of my immigration status, and then college... So that's something that, like, has always been on the back of my mind, and that weighs on me."

Subtheme: Loss of Community in New Country

Finally, many participants reported the increased sense of loneliness and isolation in the United States, naming how the lack of a sense of community had adverse health outcomes. Participants contrasted the sense of connectedness experienced in their birth country with the loneliness encountered following immigration.

Participant 7: "When I moved over here, um, it was okay, but, I started getting lonely, because you don't have any people to talk to, and, like, you're in the house alone all the time, so I think it started getting to my head. And it must have affected me."

Participant 3: "In Nigeria its more, from my experience, more of a community, you know your neighbors. But like here, I had two suite mates. I can barely tell you anything about them and we lived together for two years."

Theme 4: Navigating the American Dream: Asymmetry between Expectation vs. Reality

Subtheme: Reality is Different from My Expectations

Participants shared beliefs they and their loved ones held about life in America and how it compared to their experiences living in the U.S. They reflected on the disconnection between the economic hopes/aspirations that motivated their decision to immigrate and the employment challenges they experienced while in the U.S. For example, some participants noted poor job opportunities and having to start over, financially or professionally, despite being accomplished or more resourced in their birth country.

Participant 8: "They also have mental issues. Because uh, we are selling kind of big America, so the kind of American dream, and when they come here, they see it's different. And they have kind of depression. They have kind of issues. Sometimes, I know some people, they sell what they have, so to achieve some kind of stuff, and when they come in, they see that they are doing something that they didn't expect to do"

Participant 7: "When I came over here, everyone used to ask for money even when I was not working, right? ... it was hard for people to believe, you know, these people have a belief that when someone goes to America, they are rich. Yeah, but when you come over here, personally, I won't say that I thought that when you come to America, you're rich and all that, but I had a different perspective of things over here. So, until I came here and I saw that people's life is all about work, work, work, work."

Participant 9: "Looking for a job, a job that you will be provided with that they don't have to look at your accent. So, that was that was something that really impacted me, that was very stressful when I got to the United States, that affected at least some of my mental health... When you come to this land, it's just like, begin again. ...No matter your intellect, no matter everything you got. It's, you're starting from the scratch."

Many participants reported an overemphasis on labor as life in the United States, where the prevalence of hustle culture negatively impacted their health.

Participant 3: "The amount of stress on the work...it actually led me to being a car accident at some point... remember I was studying from like 7 a.m. to like 5 p.m. And I was on my drive home and the accident happened. So it just, it doesn't let you be present.."

Participant 8: "U.S. System is an economic system. So, you, as a tool. Human as an instrument, you have to give the outcomes. And life-work balance is kind of tough here in the United States. But, yeah, it's the system, it's culturally, that's the system. To be good, you need to give the outcome, so you press your body, you press your body, and that impacts your health."

Participant 9: "they're like, oh, America! Land of opportunity. Oh, we're gonna do 3, 4 jobs. Let's do it. I can do it. I can cope. Then, boom, boom, boom, boom. ... I've heard several people in our community. They would just say they just collapsed at work. Because they never had time to sleep, to rest. "

Participant 5: "I do think that, like, for some immigrant groups, when it comes to the U.S., they have to hustle a lot more. It's like work more, especially to support their family back home, so they're like more stressed and they're in a new environment, so they're like not used to the culture."

Relatedly, participants expressed feeling like they had to push through and overwork themselves because of pressure or expectations from loved ones or community members back in their birth country.

Participant 1: "So, everyone just expects, oh you're in America, you have to succeed you know, so that's the negative aspect. Just like the stress of like everyone, like, the stress of responsibility, like the stress of like everyone believing you have to at this point you know?"

Participant 11: "Fulfill the obligation as being an offspring, you know, in a – someone that is an immigrant, you have an obligation to produce, uh, to make money and, to provide in general, not just for yourself, but for the lineage of the family that you don't know of."

Participant 10: "But I also do think capitalism is a major issue. Like, every day I wake up and I'm just like, damn, how am I gonna get some money? Like, how am I gonna help my family progress? And my family tells me that, too. They're like, we know you're gonna get rich and help us do this and that, and I really want to, but it's like, thinking about that every single day, it will drive you insane, because you understand the really big sacrifices that your family made to come to America, which used to be, like, the beacon of hope, the place with the white picket fences, and the land of opportunity, and being able to do anything. Then you get here, and you're like, damn, like, it can be really shitty out here. Like, you can move to America and be living worse than your family who's in Jamaica, asking you for money every two weeks."

Subtheme: American Dream as a Flawed Ideal

Participants also reflected on the American Dream, connecting the culture of overwork to their critiques of the American Dream. Many participants described the American Dream as a façade or at least, an ideal that inaccurately assuming a level playing field.

Participant 8: "Different dreams for different immigrants if you come here from a Caribbean country, as a Black, or from a Latino country. So, [for example] the American dream is having a car. I mean, a nice car, maybe the 2025 car. Having a house, you will pay for 30 years? Right? You have it, but you have to work 15 hours a day. And you don't have time for your children. Then we continue today, same system. Then I work as dishwasher. Then I work to collect garbage in the street, work for the cities as immigrant, and you achieve the American dream, because in your country, you cannot have a car. And here you have a car, that's an American dream."

Participant 7: "They work two jobs and all that to get, um, some money and stuff. And I'm like, what kind of life is this? Like, there's no really such thing like America Dream, but people just work a lot. A lot."

Participant 11: "I think this belief is really fanciful. I think it's only fantastical now, just because I'm in it. But if you were to ask my 16-year-old self, I'd be insanely excited to learn a skill to provide some kind of value so I can earn some money, but me now, I think it's really fantastical, just because there's so many barriers in place where it's not as clear-cut as it sounds... There's the luck of birth, there's the luck of wealth, there's um, social circles... and then you're almost guaranteed a safe haven to a comfortable life. And, uh. This American dream aspect isn't – I haven't given up on it yet, but there's a lot of things that disprove that it's really possible."

Participant 10: "I don't think [the American Dream] really exists anymore. It's hard because America really is the land of opportunity, but it's first and foremost, the land of exploitation. And my understanding was of the American Dream is that you can work

hard and earn your way to achieving the dream. That is not the case. If you are a certain type of person, in terms of class, or um, things like that in America, like, you're always gonna be running on this hamster wheel. ”

Participant 15: " I think the American Dream fails many, many Americans and many, many immigrants. ... Because it does not take into account, like, socioeconomic challenges, it does not take into account racial issues, it doesn't take into account, like, a lot of things. Like, a Black immigrant isn't necessarily going to have the same exact experience as a white immigrant that came from Germany, or something like that. Or me as a Black immigrant, American isn't going to have the same like, opportunity or the same level of access as African American people that are here, and African American kids that grow up here. So, no, I think it's an extremely flawed theory that has been sort of sold to us for many, many years."

Notably, even for participants that saw the American Dream in a more positive light, they still had caveats.

Participant 12: "[American Dream has] made it easier and harder at the same time. Because I can set a certain goal that I'm working towards. But again, it comes with another pressure to do the same as those who have come before you. Even though maybe the job market might be harder to break into right now."

Taken together, many participants actively critiqued, rather than endorsed, the American Dream (a prototypical expression of the Meritocratic Worldview). This critical stance against this salient example of the meritocratic worldview contrasted with assumptions of my proposed social-cognitive model, which posited that the process of immigration would reinforce meritocracy

beliefs, as motivation for voluntary immigration often rests on the belief that the hard work required to immigrate will yield success (e.g., better economic advancement). These discrepant results may be explained by the disconnection participants reported between their (and others') expectations before moving to the United States with their lived realities in the United States.

Theme 5: Experiencing Anti-Black Racism & Discrimination in the United States Context

Subtheme: Colorism or Tribalism, Not Racism in Birth Country

Participants noted that while there were biases based on colorism (skin tone) or tribalism (ethnic tribe or subgroup within the birth country) in their birth country, racism was not a salient issue.

Participant 8: "Back in the history, so we had different classes in the colony in Haiti. And even all the people, all the population is black, but we have different, uh, uh different type of skin. We have dark skin, light skin, and so on. And based on that, people can experience, uh, discrimination."

Participant 3: " I guess in Nigeria, it was more somewhat of colorism, but that one too is still like, okay, it's more like a preference type thing than it dictates what the person can do or what their ability is."

Participant 7: " In Uganda, there's, uh, we have more, like, tribalism, because the... I think we have something like 50-something tribes in Uganda. ... There's some tribes that are more privileged than the other."

Participant 12: "But then, uh, until I came here, I never considered myself black. I was just Kenyan. Like, we only identified with our nations, not our skin colors. Of course, we'd had, like, colorism, like he's light skin, or dark skin. "

Subtheme: The Salience of Anti-Black Racism in the United States

Some participants noted that prior to coming to the U.S., they had been warned about racism and subsequently tried to prepare.

Participant 9: "like my younger brother. He happened to be a professor, like, he was a doctor, and then he went into being a professor. So, when he was a doctor – oh my goodness, he went through a lot. There were, you know, like, racism was there. ...They were kind of victimizing him. And so that impacted him. So, him coming back home to tell us those stories. That already prepared our mind that, no, you are going to the United States, be prepared. This is what is going to happen."

Participant 7: "There will be a lot of racism, I hear people talk about it, like, a lot. So yeah, it's something I expected. I've not gone through yet like before, I've not yet gone through it. But I know, uh, you can't run away from it, you know? Just have to be mentally prepared. It can happen anywhere."

Participants discussed how living in the United States meant that anti-Black racism was unavoidable. Specifically, some Black immigrants recounted blatant interpersonal racism experiences they had faced. Others detailed microaggressions or vicarious discriminatory experiences.

Participant 17: "I lived in [American state] and I remember a truck drove past and, like, screamed the N-word with a hard R in it."

Participant 4: "In at least the east African community in [American city], where we had one lady – her son was like killed by police officers. And I think that there was just a complete tonal shift for everybody, you know?"

Participant 6: "So, most of the time you find that maybe you're trying to fit – in a group discussion – find that maybe the person is good at something maybe, like, maybe doing some mathematical solution, but like you find that maybe they say like this is a group of whites and maybe blacks are not allowed here, so that one it actually affected my self-esteem. ... And also, the situation that I underwent, sometimes maybe people calling you some funny names, maybe you are just an immigrant and maybe you are here to maybe deplete their resources. So, that's the kind of stress that I underwent concerning the social interaction."

Participant 2: "it's shocking, it's really sad to see or to go on social media and have like just certain people just automatically just view you as lesser simply because of your skin tone or race and ...it doesn't make anyone feel good to see someone who looks like them be hated on or shunned or bullied or anything like that."

Participant 13: "it's more bitter than sweet, really because a lot of times race is seen as a criteria to assume who you are? Or what you can do. "

Participant 10: "The UK is different because, yes, it's very racist over there. But they had a different experience with slavery. So, all of their stuff, they try to keep it more under wraps, whereas in America, it's different, because you know the racism is going on, and there's the language and the history behind it, but they will deadass just tell you, oh, that didn't happen, or they're hiding, or they're gonna minimize it. So, and coming from

London, where it's like you see these things going on, but overall, the culture of that society is to be more polite... whereas in America, there's all the space in the world to talk about it, but they're still gonna do what they wanna do. So, it was very jarring to come here and realize, like. Dang, they don't mention this in the American Dream. They don't say all this is going on, you know? "

Participant 5: " I think people thought we were like post, we were living in a post-racial society, so like any sort of like racist thing that somebody would do, it would just be a joke. Like you think about like Vine [social media app] and so on. Like there's so many like racial caricatures of like black people on there.

Black immigrants also described intersecting identity discrimination including colorism and misogynoir (i.e., gendered racism specifically directed at Black women; Bailey, 2021).

Participant 3: "I think the United States has a combination of both [racism and colorism], and it definitely does play a factor too because at the end of the day, I've seen it happen with one of my close friends... Um, so I feel like it is in the United States only when it's within the same race. So, I think that's when it's mainly discussed. So, once the race barrier is broken, then colorism typically enters the mix."

Participant 11: " You'd see colorism pop up very, very fast, and I was confused on, like, okay, I'm dark, what's the problem? And colorism in elementary school is, like a huge, flashbang of we don't like you, kind of dynamic."

Participant 10: "Because I've had friends, you'll bond on being Black, or just being cool, and then it gets into a situation where you are experiencing some level of misogynoir, and they act like they don't see it going on, or they don't understand, and that adds another

level of disappointment ... I'm seeing this attractiveness piece really be super important, and me understanding the nuances of attractiveness and just seeing how people treat you based on how you're perceived, like with your skin color, your gender, how you perform gender, but also how attractive you are...I know I've taken a long time to get to this point, but it's just like now I'm just hyper-aware of race, of gender, of financial status, of attractiveness, and I can objectively assess where I stand in that system."

Unsurprisingly, participants reflected on how their experiences of racism negatively impacted their mental health and sense of self.

Participant 8: "And also, when you go to some social event as Black, minority, sometimes I notice white people's behavior, they are different... sometimes that affect me in terms of, like not really believing in myself or self-confidence kind of stuff, feel like you are a failure. I don't think I'm a failure, you see what I mean? But this kind of stuff, they impact your mental health as a black."

Participant 9: " You know, if somebody's telling you something and making you feel down. Like, making you want to think that you are nobody. Then, of course, it affects, it will affect you and bring down your self-esteem. ...I'll be truthful to you, yeah, sometimes you go back home and think about it. What kind of country did I even come?"

Participants also reported that because of the racism and sense of othering, they felt particularly compelled to overperform as a compensatory strategy.

Participant 17: "It's sort of just a hit on your self-esteem, like, am I good enough for this? Do I look good enough? Not just, like, academics, but it's like, having to outperform, at

least where I went to school in [American state], I had to be overperforming to be taken seriously. And even then, you're still treated badly.”

Participant 3: "When I first came here, I had to, I felt like I had to somewhat like prove myself. Especially in the sense that I was like the only black person in like the whole six years."

Participant 2: "And you just kind of like grow up to kind of like teach yourself like not to be those like stereotypes or anything like that. Not that they're necessarily bad, just you know, just being like a black woman, we're automatically gonna get judged for everything we do and we're gonna have to work you know twice as hard to get like half of what a white person would get so it's just trying to not conform to those like stereotypes that they like try to push on us and deal. "

In line with the proposed social-cognitive model, participants described how racial discrimination had deleterious health consequences (e.g., impacted self-esteem, worsened mood and mental health). Additionally, most participants described perceiving and experiencing race-based discrimination in overt, subtle, or vicarious ways. Notably, the proposed social-cognitive model did not account for the idea that some Black immigrants may have received information about anti-Black discrimination prior to immigrating (whether from loved ones who had already moved to the United States or via news articles or social media). Although this information is different from direct exposure to the racial discrimination, this pre-immigration awareness may have helped participants prepare for and better identify race-based discrimination.

Theme 6: Developing My Black Identity: Exposure, Identity Conflict, and Racial Socialization

Participants largely reported that they did not think about race in their birth country and that moving to the United States prompted reflections on race.

Participant 11: "Prior to immigrating, I did not think about race, because I just thought everyone was Black."

Participant 2: "Being constantly surrounded around the same people, I never thought about race too often."

Subtheme: Navigating Intra-Racial Identity Dynamics

Some Black immigrants noted intra-racial tensions and feeling disconnected from both the dominant White American society and the Black American society. Similarly, some participants discussed how this separation or distinction between Black Americans and Black immigrations was associated with negative interpersonal experiences.

Participant 8: "As black, you are not really connected to the white community that sometime are majority. And as black, sometimes you are not connected to the Black American, as Black immigrant, not connected to the Black American... So, that really impacts you. You feel, like, isolated in a country, isolated in a city, in a school."

Participant 11: "In most, like, circles and conversations of where it's, hey, you're the only black guy here, what do you think about it? I don't care. ... Um, so I get into circles where I'm not necessarily wanted. And I then also, don't want to be in circles where I don't feel like I belong as well, so It's kind of like a midway."

Participant 12: "It's harder for African people to associate themselves with the Black American crowd as much. It's very, um, in the shadows, but you don't see them being, like close friends, and I don't know why. Um, but with race, I don't know, it's kind of a sensitive, it's quite a sensitive topic around that. And something people tend to not talk about."

Subtheme: Greater Racial Centrality Through Education and Exposure

Participants described how, over time they experienced a greater awareness of the racial landscape of the United States, including recognizing how and why the United States history continued to be impactful. Many participants subsequently identified a shift from their ethnic and immigrant identity to Blackness as their racial identity. The shift participants highlighted specifically reflects the racial socialization component embedded in my social-cognitive model, where over time, through greater explicit and implicit communication (education and exposure), many individuals gain more critical awareness and appreciation of Black identity in the U.S. context.

Participant 5: "I think before moving to the U.S., I don't know if I would say my racial identity, like, was like a central – like if you asked me when I first moved to the U.S., like what is my central identity? I would say Jamaican. And I think no, it's like I am a black woman who is an immigrant from Jamaica. I think my Jamaicanness is still central to me, but like my black womanness is definitely a little bit stronger right, as, as of now, because I've been in the U.S. for so long. "

Participant 4: "Um, I think, I mean, I think race tends to become part of it. I think, yeah, I would say, I mean, I don't know if I emphasized it before, but I think like as generally,

most 99.999% of Africans being black, there will be, so like at some point, something will happen to make that reality [their Blackness] be undeniable, I think. And I think it starts to accumulate even if they don't consciously ascribe it to racism, they start to recognize that they're being treated differently. And I think I noticed that with some of our family friends, where like they would mention things and I'm like well, yeah, I think you know what's going on, but I guess you don't want to mention it [he laughs]."

Participant 1: "I feel like I've developed an identity for being black like not only do I identify as Nigerian, like I also now identify as being black because at the same time I am a black individual. So, the history I do feel like has affected me."

Participants attributed the racial awakening and identity-related shift to greater exposure, education, being in community and feeling a sense of solidarity with other Black Americans.

Participant 5: "And I think that definitely had me started thinking about things more critically, engaging in a lot more literature on racism and health and like understanding. ... I think I definitely took advantage of like opportunities in college to like learn about like more about race. "

Participant 1: "I'd say college, like the start of my college years, for sure, where I became the minority group. Because I live in or like I lived in [American city] and my school was majority black and Hispanic, you know, it's like me being a minority - it never really came to mind so I identified more as like, uh Nigerian, but now I am the minority. Like the black is a minority, it is what sticks out to me first before like oh I'm Nigerian now."

Participant 4: "I grew up with, black African-American, women babysitting me, taking care of me and my brother. I think that there's this one social worker that we always went

to before that watched us before we went to the bus stop. And I think that allowed us to get more acculturated than I think like, I've seen some Africans come, some like they engage with black Americans. But I think sometimes, their distance and staying only in community can kind of not transfer that cultural legacy. So, my awareness, my mental and physical health of like stress due to, I think, racism or discrimination is, I think a lot more prescient or conscious to me than I think I've seen with like other friends of mine that are also African."

Participant 17: "I think after going to college, after growing up, after doing my own research, my perception of racial discourse in America is very different than what it was when I was in high school, and when I was with my family, obviously, and I think I'm very quick to identify myself as a Black American, rather than, like Ethiopian American, because I think there is a form of solidarity and a form of, like, gratitude that has to be given to, to Black Americans who worked here and who fought for those rights and for our ability to be here and to exist and to thrive."

Theme 7: Recommendations to Support Black Immigrants' Health

Participants shared strategies and suggestions to help support Black immigrants' health.

Regarding recommendations to fellow Black immigrants, many emphasized the importance of finding community:

Participant 10: "I would say community is really important. That's one thing that I've just – it's a resounding lesson that I continue to learn, so even though you may not be as healthy as you need to be, like I think community will help you get a lot closer"

Participant 8: "Be open as immigrant, be open, stay attached to your community, but also attached to other communities, because you can learn from them. "

Participant 12: "We all talk, we all have a group, a huge group, we talk, we tell each other what to do, trying to further that connection, someone's got you, so we've been trying to share that load, make it as easy as it is back at home."

Participant 6: "And also the second suggestion is that you should be free to talk to people, mostly Black immigrants that have been there before. So, they will kind of help you to transition smoothly."

Participant 3: "Community, community, community. I wasn't really a fan of all of that, but community."

Others emphasized advocating for oneself in the health context.

Participant 15: "Go to the doctor and advocate for yourself. Um, don't settle for the answers that one doctor gives you. You have the right to adequate healthcare and correct healthcare, and you should keep trying, and unfortunately, despite the distrust, which is very valid in the healthcare system, it is the best option. Modern science is the best option in many ways. That doesn't mean you should abandon your holistic methods or anything like that, but you should absolutely not neglect medical."

Participants also reported the importance of balance in lifestyle-habits such as diet and exercise.

Participant 13: " If there is more awareness, that could be helpful. And I think, uh moderation, you know? moderation in everything, even if, when you like a particular thing, just cutting down on the portion."

Participant 12: "Back at home, you don't have any choice but to be healthy. Um, it's the food, so trying to limit processed foods. And maybe try, because one thing we don't do is work out, and I'm lucky that I play sports. Most people don't work out. If we don't work out here, you're doomed. Yeah, just, if not going to the gym, just try and stay active."

Some participants also encouraged engagement in spiritual tools like faith and prayer.

Participant 13: "faith can actually help a lot. So, a lot of times, you know, going to church, praying, singing, you know? Faith. Faith has been a great help for me emotionally as well."

Participant 7: " Always pray! ...I don't know your belief, but I believe in God. Yeah, and uh, God's always been there. And I always believed that, um, when you have a problem, pray. If you don't have anyone to talk about it with, talk to God about it. It kind of helps you feel a little relieved, you know?"

Regarding recommendations to the healthcare community, participants discussed the need for more culturally-responsive providers and greater efforts to disseminate health-related information and resources to immigrant communities.

Participant 14: "Make the medical space more approachable and demystifying it, ...trying to change some of that from, like, a medical standpoint, and making that space, a more comfortable space."

Participant 2: "Health classes [to learn]... to read an American nutritional label."

Participant 8: "Try to have information... federal stuff organizations, local resources, try to know what kind of local resources available in your city, or your town."

Discussion

This qualitative investigation generated seven critical themes that expand our understanding of what contributes to Black immigrants' health over time in the United States as well as what can be leveraged to better support their health. First, participants reflected on changes in how they perceived and then approached health, emphasizing a shift towards prioritizing mental health and engaging with preventive care within a biomedical model (though not necessarily foregoing traditional practices). Importantly, however, the data highlighted a contrast between participants' internal reorientation towards their health against the challenges and inaccessibility of engaging with the U.S.'s healthcare system. The barriers participants reported are in line with prior work noting barrier to care access among immigrants (e.g., insurance challenges, lack of culturally-responsive care; Payton et al., 2021).

In addition to challenges using the U.S.'s healthcare system and the consequences from the limited access, many participants shared how residing in the U.S. introduced distinct challenges (relating to both the physical and social environment) that were harmful to their health. These challenges included environmental exposure to pollution, dietary shifts, the loss of community/social ties, and restricted access to opportunities (e.g., jobs, educational opportunities) due to immigration status. Participants remarked that as a result of these changes, they had experienced heightened stress, loneliness, increased allergies and cold-like symptoms, weight-gain, and higher blood pressure, with one participant noting the shock she received when she was told she had become pre-diabetic. These reported health changes are consistent with the

broader patterns of acculturative stress that is common across immigrant communities. Specifically, acculturative stress has been conceptualized as the challenges of adapting to a new country and culture, accompanied by negative health effects such as greater anxiety, depression, blood pressure (Berry et al., 1987; Eggerth & Flynn, 2021; Perreira & Pedroza, 2019; Tineo et al., 2024). Given the deleterious effects of acculturative stress, attention has started to turn towards identifying effective interventions and coping strategies to mitigate the impact. Identified beneficial coping strategies include leveraging spiritual practices (e.g., prayer, faith) and finding community to increase social support (Ibe-Lamberts et al., 2025; Levitt et al., 2005; Yakusho, 2010). These strategies were similarly echoed in the present investigation study, with participants championing the importance of connecting with other communities and finding ways to “share that load” by reaching out to loved ones, as well as leaning on prayer and spiritual groups.

Beyond acculturative stress, participants commented on the broader cultural context of the United States. Notably, all of the participants had heard of the American Dream and a majority found the American Dream to be inaccurate. Specifically, many, though not all, participants discussed the American Dream as a façade that masked a culture of overwork and a lack of equitable opportunities. Accordingly, many participants reported a negative impact on their health as a result of this overemphasis on labor. Indeed, even those that held favorable views of the American Dream acknowledged the considerable stress and pressure associated with the work culture in the United States. This critique of overwork and American Dream as an illusion of equal opportunity has previously been noted (Mazellis, 2022), including by other Black immigrants (Knight et al., 2015). In short, participants articulated a growing disillusionment that the meritocratic ideals of the American Dream were not equally accessible to

them. This shift maps onto broader trends in the United States, where previously many Americans felt the American Dream was possible for them (Smith, 2017), but now, a greater percentage of Americans (i.e., 41%) find the American Dream to be out of reach (Borelli, 2024). This change may be attributable to increased worries about the economy (Green et al., 2026), but also specifically for immigrants, the increased systemic obstacles that have accompanied new immigration policies (Sanchez & Amaya, 2026).

In the present study, participants' critical stance of the American Dream appeared contrary to the proposed social-cognitive model where I had posited that recent Black immigrants would report greater endorsement of the Meritocratic Worldview (as embodied by the American Dream in this study). However, the model had not accounted for globalization and how increased interconnectedness among countries (whether via news, the internet, or ease of travel access) may lead to Black immigrants being more aware of anti-Black discrimination in the U.S. even prior to immigrating. Indeed, a few participants described learning about the racism in the United States prior to leaving their birth country. However, it may also be the case that because many Black immigrants in this study had lived in the United States for several years (average length of time: 13 years) and were therefore not *recent* Black immigrants, there was less endorsement of the American Dream. Specifically, the social-cognitive model captured a dose-response relationship, proposing that greater exposure and racial socialization to the U.S. context, including a longer duration of residence in the U.S., might be associated with lower endorsement of MW. Additionally, age and/or generational status may also intersect with duration of residence to differentially impact endorsement of MW among Black immigrants. For example, although the present study sample skewed relatively young ($M = 30$), the few participants that highly endorsed the American Dream tended to be older/of an older generation,

suggesting that age or generational status may be an important factor when considering MW endorsement, and warranting future examination.

In addition to the compounding effects of acculturative stress and disillusionment with the American dream, the present study documented how anti-Black racism added a unique and additional burden that exacerbated the challenges common in immigration. Specifically, several participants highlighted anti-Black racism as a salient and deliberate, recurring practice that was woven into their immigrant experience. Participants reflected on a range of experiences including overt interpersonal racism (e.g., being subjected to slurs, purposeful excluding due to race), subtle interpersonal discrimination (e.g., questions and veiled comments that emphasized their otherness), vicarious exposure (e.g., hearing about police brutality in one's local community, observing harmful stereotypes and racist caricatures via social media), and institutional sanitization/erasure of racist structures (e.g., intentionally downplaying the racist actions of past historical figures). Participant accounts also illuminated experiences of intersectional discrimination. Some women participants described misogynoir (Bailey, 2021), how sexism operated alongside and compounded racism. Other participants spoke about how colorism was layered on racial discrimination. Participants reflected on how these overlapping forms of discrimination impacted them across multiple domains: social, occupational, and educational, with negative health consequences. Specifically, as a result of anti-Black racism and intersectional discrimination, participants reported feeling devalued, disconnected, and unwelcome, accompanied by worsened self-esteem, increased anxiety, pressure about needing to “overperform” in order to be taken seriously rather than relegated to harmful stereotypes. This finding is consistent with prior research demonstrating the negative impact of racism on health for Black immigrants, such as greater levels of depression and anxiety, posttraumatic stress

disorder, higher risk of cardiovascular disease, (Motley et al., 2024; Nyanamba et al., 2024; Turkson-Ocran et al., 2020).

Equally important (and partially in response to the salience of racism) was the shift from ethnic to racial centrality, with many Black participants sharing how greater exposure to the U.S. context (including race-based discrimination, education about the U.S. history, and being in community with Black Americans) prompted an internal identity shift anchored in their Blackness. Importantly, this shift is consistent with the process of racial socialization – how individuals make sense of their racial identity and learn to respond to or cope with race-related stressors (Meyer et al., 2021). Racial socialization captures several dimensions including cultural socialization – increasing cultural knowledge, traditions, and history (including knowledge of accomplishments Black Americans have had in U.S. history) that helps promote racial pride in Blackness (in this case) – as well as preparation for bias by increasing awareness of race-related discrimination and providing coping strategies when one is confronted with such (Hughes & Chen, 1997; Perry et al., 2025; Simon, 2020). Crucially, racial socialization has been found to help mitigate the negative impact of racial discrimination (Dotterer & James, 2017; Neblett et al., 2008) and predict resiliency when faced with adversity (Brown, 2008). Accordingly, some scholars position racial-socialization as an important, cultural strengths-based intervention that promotes approach-oriented, rather than avoidance-based, coping with race-related discrimination (Anderson et al., 2018; Anderson & Stevenson, 2019). Racial socialization may therefore be particularly valuable for Black immigrants, many of whom are contending with racism as a profound stressor for the first time. Specifically, and as demonstrated in the present study, racial socialization can help facilitate a greater sense of belonging, reduce intra-racial tensions, and promote greater identification and solidarity with Black Americans.

Regarding limitations, the political climate at the time of study recruitment – specifically, the current federal administration, which was accompanied by hostile anti-immigration rhetoric and punitive immigration policies – posed challenges (Nagel, 2025; Zhang & Kaur, 2025). Subsequently, there were likely self-selection biases such that participants were Black immigrants who were both willing and felt comfortable/safe enough to share their experiences. The research team worked to maximize participant privacy and increase participant comfort by 1) not including questions related to legal status; 2) having Black immigrants only write their first name and give verbal consent, rather than full names and signed consent; 3) using a HIPAA-compliant version of Zoom videoconferencing; 4) ensuring that audio and video recordings of the interviews were not uploaded to any cloud-platforms; 5) promptly deleting video recordings and only keeping audio recordings for the sake of confirming transcription accuracy. Despite these precautions, the current sample likely reflects a specific cohort of Black immigrants and does not include the perspectives of those who may not have felt comfortable or safe to participate in the research. Additionally, regarding generalizability, the sample was generally highly educated – 78% of those who provided their education level had at least a bachelor’s degree compared to the broader 31% of Black immigrants in the U.S. (Tamir & Anderson, 2022). This limitation is in part, a result of one of the primary recruitment channels (i.e., university and professional associations). Further, the sample was not representative of all the different mixed or majority-Black countries and the modal country of origin for participants in this study was Nigeria – likely another consequence of another recruitment avenue (i.e., word of mouth referrals, with two members of the research team being first generation Black immigrants).

Importantly, however, these limitations should be contextualized alongside the significant gap in existing research on Black immigrants’ health in the United States. Accordingly, the

present investigation poses a meaningful contribution by providing a more in-depth understanding in the Black immigrant health paradox and sets important groundwork for future research. Furthermore, while the current political landscape posed recruitment challenges, it also allowed for Black immigrants' real-time reflections/responses to variables directly relevant to study aims including health, the American Dream, the United States' culture, and the role of racism. Finally, a number of countries were represented and yet, Black immigrants still shared overlapping perspectives, suggesting that the themes captured in this study reflect genuine patterns that resonate across the broader Black immigrant population.

General Discussion

The central aim of this dissertation was to evaluate empirically a novel framework of potential mechanisms underlying the Black immigrant health paradox by leveraging a mixed-methods approach. The hypothesized mechanisms were the meritocratic worldview (MW or meritocracy beliefs) and perceived discrimination, situated within the United States' racial context. Findings from both the quantitative and qualitative studies provide support for the relationships between the hypothesized mechanisms and health outcomes, albeit not always in the anticipated directions.

In line with prior research on discrimination and health, Study 1 findings revealed that regardless of nativity status, discrimination was associated with greater psychological distress and a higher expected count of medical conditions for Black individuals. Contrary to my hypotheses and prior literature, MW was directly related to worse mental health (i.e., higher rather than lower psychological distress), as well as indirectly related to higher psychological distress through greater perceived discrimination (McCoy et al., 2013; Napier & Jost, 2008; Vargas-Salfate et al., 2018). Similarly, MW was associated with greater (instead of less) perceived discrimination, inconsistent with prior MW research on racially minoritized individuals (Kaiser & Major, 2006; Major et al., 2002). Importantly, this MW – psychological distress pathway held regardless of nativity status among Black individuals. Notably, however, nativity status moderated the relational pathway among MW and *total medical conditions*, such that MW was significantly related to a higher expected count of medical conditions among U.S. born Black individuals, but not among Black immigrants. Taken together, study 1 findings suggest that higher endorsement of MW is associated with greater attunement to (or stronger perceptions of) discrimination, with negative mental health consequences (i.e., psychological

distress) among Black individuals, irrespective of nativity status. However, the relationship between MW and total medical conditions may be conditional on nativity status (present only for U.S. born Black Americans).

Where study 1 provided quantitative support for the structural relations among the social-cognitive framework, study 2 provided qualitative support by a) characterizing how Black immigrants relate to and make sense of the paradox in general and b) examining the contemporary relevance of the factors embedded in the social-cognitive framework. Evaluating the contemporary relevance and significance of each of the individual factors of the social-cognitive framework (i.e., meritocracy beliefs, perceived discrimination, health) was especially important given that recruitment for the original NSAL data occurred between 2001 – 2003, a notably different sociopolitical climate than the present day (see Catalina et al., 2024 and Fram & Lemire, 2018 for recent anti-immigrant political rhetoric). Findings from study 2 indicated that many Black immigrants experienced worsened physical and mental health (e.g., high cholesterol, high blood pressure, impaired sleep, anxiety, impacted self-esteem) following immigration and life in the U.S. However, participants also discussed how living in the U.S. led them to prioritize their mental health more and engage with preventive medical care. Still, this desire to utilize preventive care was limited (for some) by structural and interpersonal barriers that rendered the U.S. healthcare system inaccessible.

The qualitative study also yielded important results related to the factors embedded in the social-cognitive framework. Most Black immigrants in the study found the American Dream (a prototypical example of MW; Kaiser & Major, 2006) to be inaccurate, and for some, an illusion that obscured an emphasis on overwork and unequal opportunities. Consequentially, many participants reported negative health impacts as a result of this overwork culture. Compounding

the acculturative stress and waning belief in the American Dream was anti-Black racism and intersectional discrimination. Black immigrants reported perceiving direct and/or vicarious race-based discrimination, that was often layered on top of sexism and colorism, contributing to adverse health outcomes. As a parallel process, some Black immigrants described an internal identity shift towards greater racial centrality following greater exposure to the U.S. racial context (e.g., racial discrimination, education about U.S. history, increased sense of community with Black Americans). In addition to the protective elements this racial socialization conferred (e.g., community, belonging, self-advocacy, reduction in intra-racial tensions), Black immigrants explicitly provided recommendations to support the health of Black individuals in the United States. Those recommendations included: actively seek information and resources, find community, engage with and learn from diverse networks, use prayer, keep a balanced diet, and practice acceptance.

Findings from both studies illuminate mechanisms that may support the well-being and health of Black individuals in the United States. Strengths of this dissertation include a mixed-methods design that allowed for a more comprehensive understanding of the Black immigrant health paradox by: 1) rigorously testing the structural relations among MW, perceived discrimination, and health, and 2) thoroughly exploring the nuances of the paradox among present-day Black immigrants. Study 1 provided breadth by quantitatively testing a large, nationally-representative sample, allowing for intra-racial comparisons by nativity status as well duration of residence in the U.S. and country of origin (despite the configural non-invariance results of the latter two moderators). Study 2 provided depth through a closer examination of factors that may shape the Black immigrant health paradox; importantly, the qualitative study centered the perspectives and experiences of the individuals for whom this paradox may apply,

facilitating the refinement of explanatory hypotheses and the development of targeted recommendations. That said, this dissertation was not without limitations. A notable limitation of the quantitative study was the lack of an established MW measure in the NSAL dataset. Although an MW composite was created based on the theoretical components of MW, future studies would benefit from incorporating a validated MW measure to help ensure configural non-invariance of the exploratory moderators (e.g., duration of residence in the U.S. and county of origin) was not potentially due to measurement concerns, but rather evidence of a structural difference between groups. Additionally, NSAL used a cross-sectional design, limiting causal interpretations. Subsequent investigations may therefore benefit from longitudinal and/or prospective designs to 1) clarify temporal sequencing of events and 2) quantitatively examine how the relations among MW, perceived discrimination, and health for Black individuals may look in the present day and over time. Notably, the NSAL sample was composed of Black Caribbean immigrants, while the qualitative investigation was composed of primarily African immigrants (65%). Given Read and Emerson's (2005) work on the racial context of an individual's country of origin, further consideration of a Black immigrant's country of origin is warranted. Finally, study 1 did not control for age, which may have had an influence on the focal variables. Indeed, in study 2, some participants who were older or of an older generation, appeared to more strongly endorse MW relative to younger participants in the study (though this was not quantitatively tested), reinforcing the importance of examining age and generational status as potentially relevant factors for MW. Future qualitative explorations may focus on a larger and more ethnically diverse sample of black immigrants to capture a broader range of perspectives. Finally, additional studies can extend the current work by experimentally testing the constructs within the social-cognitive framework, perhaps by priming MW, modulating the overtness of a

discriminatory vignette, or obtaining continuous biometric health data. Nonetheless, the present research findings have significant real-world relevance and can help build a foundation for more culturally-responsive interventions and policies downstream.

Appendices

Appendix A: Copies of NSAL Measures

Kessler 6 Measure (Kessler et al., 2002)

The following questions ask about how you have been feeling during the **past 30 days**. For each question, please circle the number that best describes how often you had this feeling.

During the past 30 days, about how often did you feel:

1. So depressed that nothing could cheer you up?
2. Nervous?
3. Restless or fidgety?
4. Hopeless?
5. That everything was an effort?
6. Worthless?

Answer options for each: All the time (1) Most of the time (2) Some of the time (3)

A little of the time (4) None of the time (5)

Pearlin Mastery Scale (Pearlin & Schooler, 1978)

Item

1. There is really no way I can solve some of the problems I have.
2. Sometimes I feel that I'm being pushed around in life.
3. I have little control over the things that happen to me.
4. I can do just about anything I really set my mind to do.
5. I often feel helpless in dealing with the problems of life.
6. What happens to me in the future mostly depends on me.
7. There is little I can do to change many of the important things in my life.

Modified MacArthur Scale of Subjective Social Status (Adler et al., 2000)

“The steps on the ladder stand for 10 possible steps in your life. The tenth step stands for the best possible way of life for you and the first step stands for the worst possible way of life for you.

What step number best describes where you are now? Will you please tell me the step number that best describes where you would like to be a few years from now? How likely is it that you will actually reach step [selected step from the prior question]?



Everyday Discrimination Scale - anchored to race; (Williams et al., 1977)

In your day-to-day life, how often do any of the following things happen to you?

1. You are treated with less courtesy than other people are.
2. You are treated with less respect than other people are.
3. You receive poorer service than other people at restaurants or stores.
4. People act as if they think you are not smart.
5. People act as if they are afraid of you.
6. People act as if they think you are dishonest.
7. People act as if they're better than you are.
8. You are called names or insulted.
9. You are threatened or harassed.
10. You are followed around in stores

Recommended response categories for all items:

Almost everyday

At least once a week

A few times a month

A few times a year

Less than once a year

Never

The Major Experiences of Discrimination Scale (Kessler et al., 1999; Williams et al., 2008)

In the following questions, we are interested in the way other people have treated you or your beliefs about how other people have treated you. Can you tell me if any of the following has ever happened to you?

1. At any time in your life, have you ever been unfairly fired?
2. For unfair reasons, have you ever not been hired for a job?
3. Have you ever been unfairly denied a promotion?
4. Have you ever been unfairly stopped, searched, questioned, physically threatened or abused by the police?
5. Have you ever been unfairly discouraged by a teacher or advisor from continuing your education?
6. Have you ever been unfairly prevented from moving into a neighborhood because the landlord or a realtor refused to sell or rent you a house or apartment?
7. Have you ever moved into a neighborhood where neighbors made life difficult for you or your family?
8. Have you ever been unfairly denied a bank loan?
9. Have you ever received service from someone such as a plumber or car mechanic that was worse than what other people get?

Appendix B: Mplus Syntax and Diagrams

Note: in Mplus software, “!” indicates my notes/commentary that does not get run with the model

Mplus Syntax for CFA Measurement Model: Predictor Factors (Meritocracy Beliefs Factor & Discrimination Factor)

TITLE: CFA Measurement Model for MW & Discrim;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL
Cleaned_Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat
imm_age carrib marry sex age region income educate f_edu
m_edu job citizen pss_la pss_ste Ability oppor effort m1
m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10
med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2
k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9
dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10
w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro
ast copd blo sc hp glau fert osteo fib ane head hear visio allerg
back groll mental physical cesd distress colorism majorDis
dailydis control ssattrib;

USEVAR= colorism majorDis

dailydis control ssattrib;

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

SUBPOPULATION = race_sub EQ 1; ! Full sample retained to keep accurate sampling weights
and standard errors, but only looking at the Black sample (Black immigrants and U.S. born Black
Americans)

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

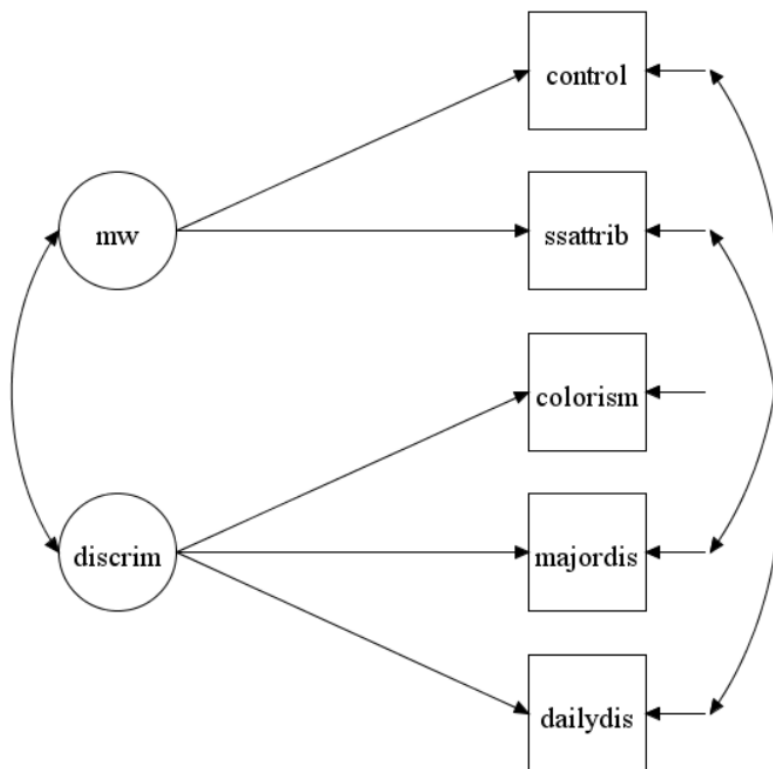
MODEL:

MW BY control ssattrib;

Discrim BY colorism majorDis dailydis;

control WITH majorDis; !inverse relations idea given that a lot of the major discrimination items are things out of one's personal control, so fine to covary!
ssattrib WITH dailydis; !less likely to attribute position in life to effort/ability if experience frequent discrimination

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS:



Mplus Syntax for CFA Measurement Model: Psychological Distress

TITLE: CFA Measurement model psych distress;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL
Cleaned _Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat
imm_age carrib marry sex age region income educate f_edu
m_edu job citizen pss_la pss_ste Ability oppor effort m1
m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10
med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2
k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9
dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10
w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro
ast copd blo sc hp glau fert osteo fib ane head hear visio allerg
back groll mental physical cesd distress colorism majorDis
dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6;

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

SUBPOPULATION = race_sub EQ 1;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

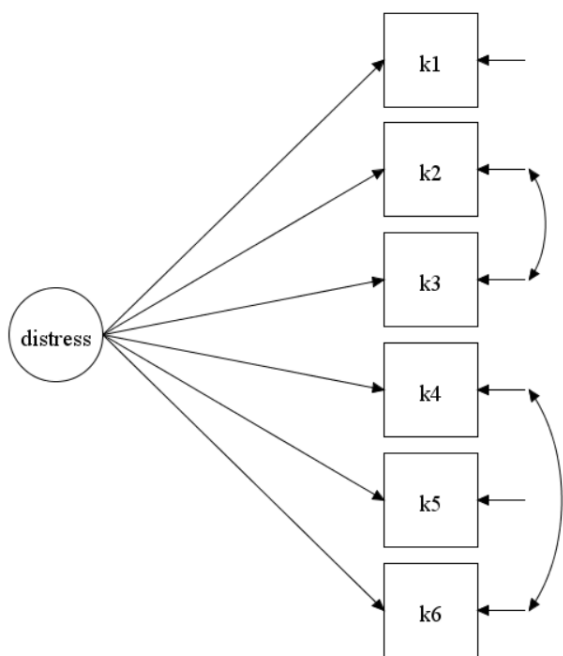
MODEL:

Distress BY k1 k2 k3 k4 k5 k6;

K3 WITH K2; !clinically and theoretically, nervousness and fidgeting present together, so have them covary!

K6 WITH K4; !clinically/theoretically, sense of worthlessness and sense of hopelessness present together (demoralization construct captures both) so have them covary!

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS tech1 tech4;



CFA Full Measurement Model

TITLE: CFA Full Measurement model mental health;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL
Cleaned _Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat
imm_age carrib marry sex age region income educate f_edu
m_edu job citizen pss_la pss_ste Ability oppor effort m1
m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10
med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2
k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9
dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10
w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro
ast copd blo sc hp glau fert osteo fib ane head hear visio allerg
back groll mental physical cesd distress colorism majorDis
dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control
ssattrib;

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

SUBPOPULATION = race_sub EQ 1;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

MODEL:

MW BY control ssattrib;

Discrim BY colorism majorDis dailydis;

Distress BY k1 k2 k3 k4 k5 k6;

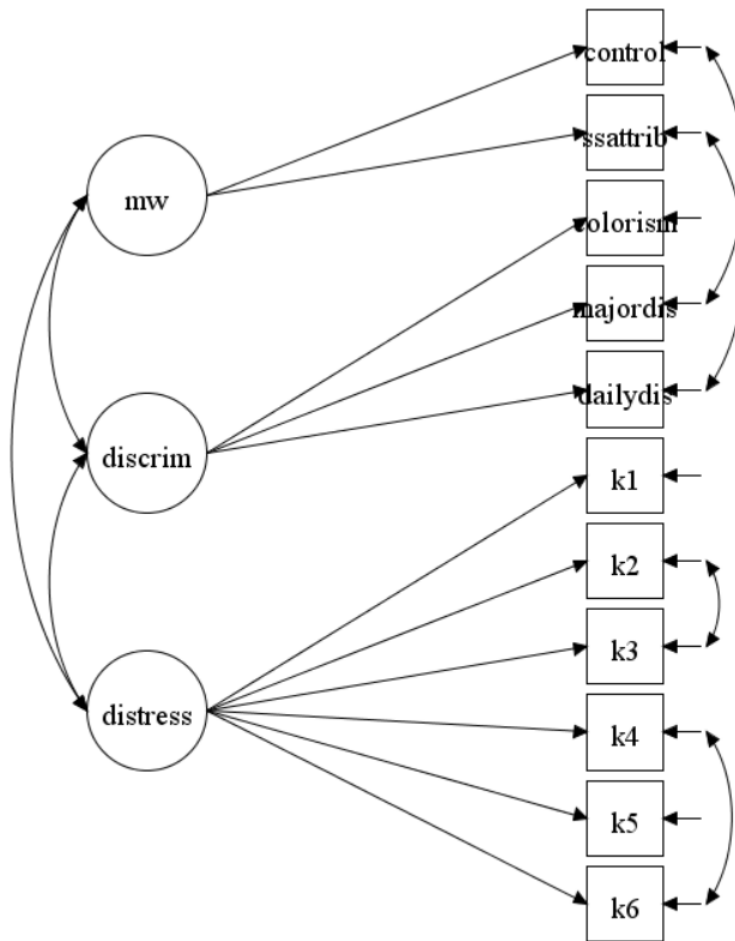
control WITH majorDis;

ssattrib WITH dailydis;

K3 WITH K2;

K6 WITH K4;

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS tech1 tech4;



SEM Full Structural Model with Psychological Distress

TITLE: SEM Full model Psych Distress;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL
Cleaned _Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat
imm_age carrib marry sex age region income educate f_edu
m_edu job citizen pss_la pss_ste Ability oppor effort m1
m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10
med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2
k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9
dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10
w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro
ast copd blo sc hp glau fert osteo fib ane head hear visio allerg
back groll mental physical cesd distress colorism majorDis
dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control
ssattrib marry sex income educate job;

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

SUBPOPULATION = race_sub EQ 1;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

MODEL:

MW BY control ssattrib;

Discrim BY colorism majorDis dailydis;

Distress BY k1 k2 k3 k4 k5 k6;

Distress ON MW;

Distress ON Discrim;

Discrim on MW (a);

Distress ON marry sex educate job income;

Discrim ON marry sex educate job income;

MW ON marry sex educate job income;

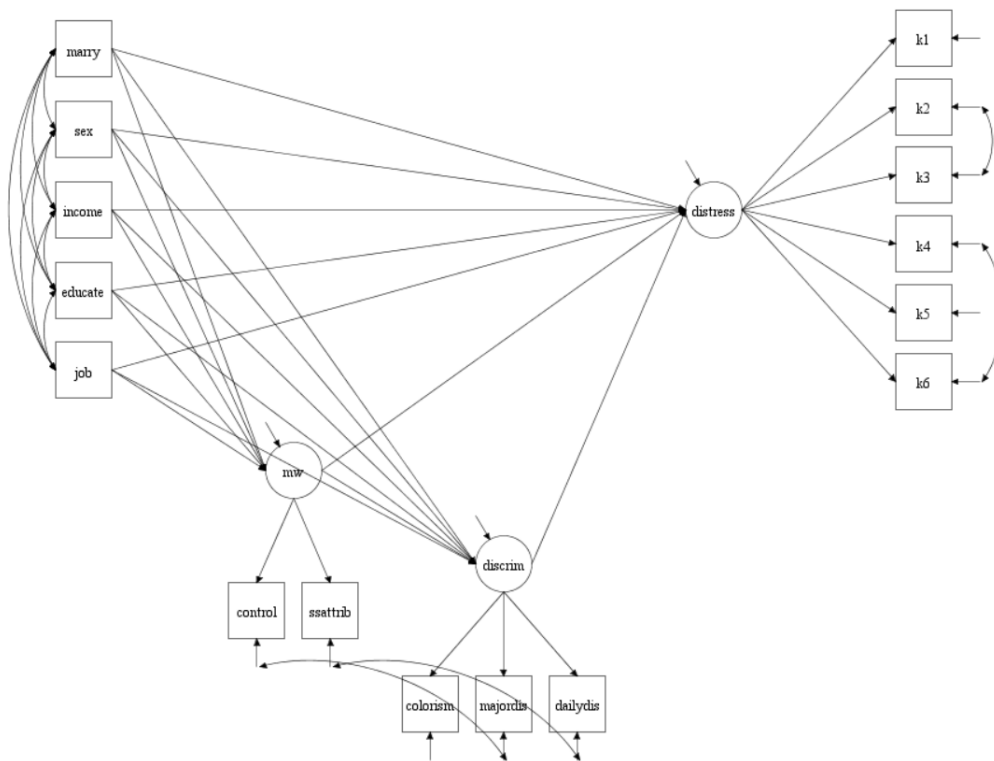
control WITH majorDis;

ssattrib WITH dailydis;

K3 WITH K2;
K6 WITH K4;

MODEL INDIRECT:
DISTRESS VIA DISCRIM MW;
Distress IND MW;

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS tech1 tech4;
STDYX;
INDIRECT;



Final Structural Model with Psychological Distress and Total Medical Conditions Across the Full Black Sample

TITLE: SEM Full model Psych Distress & Medical Condition;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL

Cleaned _Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat
imm_age carrib marry sex age region income educate f_edu
m_edu job citizen pss_la pss_ste Ability oppor effort m1
m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10
med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2
k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9
dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10
w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro
ast copd blo sc hp glau fert osteo fib ane head hear visio allerg
back groll mental physical cesd distress colorism majorDis
dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control
ssattrib marry sex income educate job groll;

COUNT IS groll (nb);

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

SUBPOPULATION = race_sub EQ 1;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

ALGORITHM = EM; !Mplus suggested adding this given the presence of latent variables in my full model.

MITERATIONS = 1000;

MCONVERGENCE = 0.01;

MODEL:

MW BY control ssattrib;

Discrim BY colorism majorDis dailydis;

Distress BY k1 k2 k3 k4 k5 k6;

Distress ON MW;

**CFA Model Comparison between Black Immigrants and U.S. born Black Americans
Simultaneously for Psychological Distress**

TITLE: SEM Full model psych distress multigroup;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL

Cleaned _Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat
imm_age carrib marry sex age region income educate f_edu
m_edu job citizen pss_la pss_ste Ability oppor effort m1
m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10
med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2
k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9
dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10
w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro
ast copd blo sc hp glau fert osteo fib ane head hear visio allerg
back groll mental physical cesd distress colorism majorDis
dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control
ssattrib marry sex income educate job;

GROUPING = native (0=BI 1=BA);

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

MODEL:

MW BY control ssattrib;

Discrim BY colorism majorDis dailydis;

Distress BY k1 k2 k3 k4 k5 k6;

Distress ON MW(dir);

Distress ON Discrim (b);

Discrim on MW (a);

Distress ON marry sex educate job income;

Discrim ON marry sex educate job income;
MW ON marry sex educate job income;
control WITH majorDis;
ssattrib WITH dailydis;
K3 WITH K2;
K6 WITH K4;
SSATTRIB WITH COLORISM; !less likely to attribute position in life to effort/ability if
experiencing frequent colorism-based discrimination
SSATTRIB WITH MAJORDIS;!same rationale as above, except with major experiences of
discrimination

MODEL INDIRECT:
DISTRESS VIA DISCRIM MW;
Distress IND MW;

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS tech1 tech4;
STDYX;
INDIRECT;

Multigroup Analyses by Nativity Status with Psychological Distress as Outcome: Measurement Model Least Constrained with Most Constrained

TITLE: SEM Full model psych distress multigroup;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL

Cleaned _Scored _Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat

imm_age carrib marry sex age region income educate f_edu

m_edu job citizen pss_la pss_ste Ability oppor effort m1

m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10

med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2

k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9

dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10

w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro

ast copd blo sc hp glau fert osteo fib ane head hear visio allerg

back groll mental physical cesd distress colorism majorDis

dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control

ssattrib;

GROUPING = native (0=BI 1=BA);

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

MODEL = CONFIGURAL METRIC;

MODEL:

MW BY control ssattrib;

Discrim BY colorism majorDis dailydis;

Distress BY k1 k2 k3 k4 k5 k6;

control WITH majorDis;

ssattrib WITH dailydis;

K3 WITH K2;

K6 WITH K4;

Structural Model Comparison between Black Immigrants and U.S. born Black Americans
Simultaneously for Psychological Distress Structural Paths Freely Estimated

TITLE: SEM Full model psych distress multigroup_freely estimated;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL

Cleaned _Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat

imm_age carrib marry sex age region income educate f_edu

m_edu job citizen pss_la pss_ste Ability oppor effort m1

m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10

med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2

k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9

dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10

w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro

ast copd blo sc hp glau fert osteo fib ane head hear visio allerg

back groll mental physical cesd distress colorism majorDis

dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control

ssattrib marry sex income educate job;

GROUPING = native (0=BI 1=BA);

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

SAVEDATA:

DIFFTTEST = constrained.dat;

MODEL:

MW BY control (a)

ssattrib (b);

Discrim BY colorism (c)

majorDis (d)

dailydis (e);

Distress BY k1 (f)

k2 (g)

k3 (h)

k4 (i)

k5 (j)

k6 (k);

Distress ON MW(dir);

Distress ON Discrim (b);

Discrim on MW (a);

Distress ON marry sex educate job income;

Discrim ON marry sex educate job income;

MW ON marry sex educate job income;

control WITH majorDis;

ssattrib WITH dailydis;

K3 WITH K2;

K6 WITH K4;

SSATTRIB WITH COLORISM; !less likely to attribute position in life to effort/ability if experiencing frequent colorism-based discrimination

SSATTRIB WITH MAJORDIS;!same rationale as above, except with major experiences of discrimination

MODEL INDIRECT:

DISTRESS VIA DISCRIM MW;

Distress IND MW;

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS tech1 tech4;

STDYX;

INDIRECT;

Structural Model Comparison between Black Immigrants and U.S. born Black Americans
Simultaneously for Psychological Distress Structural Paths Constrained

TITLE: SEM Full model psych distress multigroup_constrained;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL

Cleaned _Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat

imm_age carrib marry sex age region income educate f_edu

m_edu job citizen pss_la pss_ste Ability oppor effort m1

m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10

med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2

k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9

dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10

w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro

ast copd blo sc hp glau fert osteo fib ane head hear visio allerg

back groll mental physical cesd distress colorism majorDis

dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control

ssattrib marry sex income educate job;

GROUPING = native (0=BI 1=BA);

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

SAVEDATA:

DIFFTTEST = constrained.dat;

MODEL:

MW BY control (a)

ssattrib (b);

Discrim BY colorism (c)

majorDis (d)

dailydis (e);

Distress BY k1 (f)

k2 (g)

k3 (h)

k4 (i)

k5 (j)

k6 (k);

!structural paths constrained equal across groups

Distress ON MW(sa);

Distress ON Discrim (sb);

Discrim on MW (sc);

Distress ON marry sex educate job income;

Discrim ON marry sex educate job income;

MW ON marry sex educate job income;

control WITH majorDis;

ssattrib WITH dailydis;

K3 WITH K2;

K6 WITH K4;

SSATTRIB WITH COLORISM; !less likely to attribute position in life to effort/ability if experiencing frequent colorism-based discrimination

SSATTRIB WITH MAJORDIS;!same rationale as above, except with major experiences of discrimination

MODEL INDIRECT:

DISTRESS VIA DISCRIM MW;

Distress IND MW;

Structural Model Comparison between Black Immigrants and U.S. born Black Americans
Simultaneously for Psychological Distress Structural Paths Constrained & Testing Differences
of Corresponding Structural Parameters

TITLE: SEM Full model psych distress multigroup_constrained;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL

Cleaned_Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat

imm_age carrib marry sex age region income educate f_edu

m_edu job citizen pss_la pss_ste Ability oppor effort m1

m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10

med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2

k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9

dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10

w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro

ast copd blo sc hp glau fert osteo fib ane head hear visio allerg

back groll mental physical cesd distress colorism majorDis

dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control

ssattrib marry sex income educate job;

GROUPING = native (0=BI 1=BA);

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

```

estimator = MLR;
SAVEDATA:
DIFFTEST = constrained.dat;
MODEL:
MW BY control (a)
ssattrib (b);
Discrim BY colorism (c)
majorDis (d)
dailydis (e);
Distress BY k1 (f)
k2 (g)
k3 (h)
k4 (i)
k5 (j)
k6 (k);
!structural paths constrained equal across groups
Distress ON MW(sa);
Distress ON Discrim (sb);
Discrim on MW (sc);
Distress ON marry sex educate job income;
Discrim ON marry sex educate job income;
MW ON marry sex educate job income;
control WITH majorDis;
ssattrib WITH dailydis;
K3 WITH K2;
K6 WITH K4;
SSATTRIB WITH COLORISM; !less likely to attribute position in life to effort/ability if
experiencing frequent colorism-based discrimination

```

SSATTRIB WITH MAJORDIS;!same rationale as above, except with major experiences of discrimination

MODEL BA:

Distress ON MW(sa2);

Distress ON Discrim (sb2);

Discrim on MW (sc2);

Distress ON marry sex educate job income;

Discrim ON marry sex educate job income;

MW ON marry sex educate job income;

control WITH majorDis;

ssattrib WITH dailydis;

K3 WITH K2;

K6 WITH K4;

SSATTRIB WITH COLORISM; !less likely to attribute position in life to effort/ability if experiencing frequent colorism-based discrimination

SSATTRIB WITH MAJORDIS;!same rationale as above, except with major experiences of discrimination

MODEL CONSTRAINT:

NEW(adiff bdiff cdiff);

adiff = sa - sa2;

bdiff = sb - sb2;

cdiff = sc - sc2;

MODEL INDIRECT:

DISTRESS VIA DISCRIM MW;

Distress IND MW;

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS tech1 tech4;

STDYX;

INDIRECT;

Moderation Analyses: Structural Model with Count Outcome (medical conditions) included, nativity status as moderator; mixture model with classes specified

TITLE: SEM Full model with medical cond. multigroup_constrained;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL

Cleaned_Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat

imm_age carrib marry sex age region income educate f_edu

m_edu job citizen pss_la pss_ste Ability oppor effort m1

m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10

med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2

k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9

dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10

w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro

ast copd blo sc hp glau fert osteo fib ane head hear visio allerg

back groll mental physical cesd distress colorism majorDis

dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control

ssattrib marry sex income educate job groll;

COUNT IS groll (nb);

CLASSES = c(2);

KNOWNCLASS = c(native = 0 native = 1); !had to adjust code to allow for negative binomial

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

MISSING are all (-9999);

ANALYSIS:

TYPE = MIXTURE COMPLEX;

estimator = MLR;

ALGORITHM = INTEGRATION;!had to adjust code to allow for negative binomial per mplus
error notification

MITERATIONS = 1000;

MCONVERGENCE = 0.01;

MODEL:

%OVERALL%

!measurement paths constrained equal across groups

MW BY control (a)

ssattrib (b);

Discrim BY colorism (c)

majorDis (d)

dailydis (e);

Distress BY k1 (f)

k2 (g)

k3 (h)

k4 (i)

k5 (j)

k6 (k);

Distress ON MW;

groll ON MW;

Distress ON Discrim;

groll ON Discrim;

Discrim on MW;

Distress ON marry sex educate job income;

groll ON marry sex educate job income;
MW ON marry sex educate job income;
Discrim ON marry sex educate job income;
control WITH majorDis;
ssattrib WITH dailydis;
K3 WITH K2;
K6 WITH K4;
SSATTRIB WITH COLORISM;
SSATTRIB WITH MAJORDIS;

%c#1% ! Black Immigrants (native = 0), telling it this is class 1

!structural paths constrained equal across groups

Distress ON MW(sa);
groll ON MW (sb);
Distress ON Discrim (sc);
groll ON Discrim (sd);
Discrim on MW (se);
Distress ON marry sex educate job income;
groll ON marry sex educate job income;
MW ON marry sex educate job income;
Discrim ON marry sex educate job income;
control WITH majorDis;
ssattrib WITH dailydis;
K3 WITH K2;
K6 WITH K4;
SSATTRIB WITH COLORISM; !less likely to attribute position in life to effort/ability if
experiencing frequent colorism-based discrimination

SSATTRIB WITH MAJORDIS;!same rationale as above, except with major experiences of discrimination

%c#2% ! Black Americans (native = 1), telling it this is class 2

Distress ON MW(sa2);

groll ON MW (sb2);

Distress ON Discrim (sc2);

groll ON Discrim (sd2);

Discrim on MW (se2);

Distress ON marry sex educate job income;

groll ON marry sex educate job income;

Discrim ON marry sex educate job income;

MW ON marry sex educate job income;

control WITH majorDis;

ssattrib WITH dailydis;

K3 WITH K2;

K6 WITH K4;

SSATTRIB WITH COLORISM;

SSATTRIB WITH MAJORDIS;

MODEL CONSTRAINT:

NEW(adiff bdiff cdiff ddiff ediff);

adiff = sa - sa2;

bdiff = sb - sb2;

cdiff = sc - sc2;

ddiff = sd - sd2;

ediff = se - se2;

MODEL INDIRECT:

DISTRESS VIA DISCRIM MW;

GROLL VIA DISCRIM MW;

Distress IND MW;

GROLL IND MW;

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS tech1 tech4;

STDYX;

INDIRECT;

Multigroup Analyses with Time in the U.S. as Group Identification

CFA Full Measurement Model: Least Constrained

TITLE: CFA Full Measurement model Psych Distress Duration;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL

Cleaned _Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat

imm_age carrib marry sex age region income educate f_edu

m_edu job citizen pss_la pss_ste Ability oppor effort m1

m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10

med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2

k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9

dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10

w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro

ast copd blo sc hp glau fert osteo fib ane head hear visio allerg

back groll mental physical cesd distress colorism majorDis

dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control

ssattrib;

GROUPING = durat (0=US 1=LF 2=FT 3=ET 4=GT);

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

MODEL:

MW BY control ssattrib;

Discrim BY colorism majorDis dailydis;

Distress BY k1 k2 k3 k4 k5 k6;

control WITH majorDis;

ssattrib WITH dailydis;

K3 WITH K2;

K6 WITH K4;

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS tech1 tech4;

CFA Full Measurement Model: Black Immigrants Less than Five Years in United States

TITLE: CFA Full Measurement model Psych Distress_LF Group;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL

Cleaned _Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat

imm_age carrib marry sex age region income educate f_edu

m_edu job citizen pss_la pss_ste Ability oppor effort m1

m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10

med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2

k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9

dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10

w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro

ast copd blo sc hp glau fert osteo fib ane head hear visio allerg

back groll mental physical cesd distress colorism majorDis

dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control

ssattrib;

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

SUBPOPULATION = durat EQ 1;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

MODEL:

MW BY control ssattrib;

Discrim BY colorism majorDis dailydis;

Distress BY k1 k2 k3 k4 k5 k6;

control WITH majorDis;

ssattrib WITH dailydis;

K3 WITH K2;

K6 WITH K4;

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS tech1 tech4;

CFA Predictor Factors Measurement Model: Black Immigrants Less than Five Years in United States

TITLE: CFA MW Measurement model Psych Distress_LF Group;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL

Cleaned_Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat

imm_age carrib marry sex age region income educate f_edu

m_edu job citizen pss_la pss_ste Ability oppor effort m1

m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10

med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2

k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9

dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10

w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro

ast copd blo sc hp glau fert osteo fib ane head hear visio allerg

back groll mental physical cesd distress colorism majorDis

dailydis control ssattrib;

USEVAR= colorism majorDis dailydis control

ssattrib;

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

SUBPOPULATION = durat EQ 1;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

MODEL:

MW BY control ssattrib;

Discrim BY colorism majorDis dailydis;

control WITH majorDis;

ssattrib WITH dailydis;

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS tech1 tech4;

Multigroup Analyses with Country of Origin of Black Immigrants as Group Identification

CFA Full Measurement Model: Least Constrained

TITLE: CFA Full Measurement model Psych Distress country;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL

Cleaned _Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat

imm_age carrib marry sex age region income educate f_edu

m_edu job citizen pss_la pss_ste Ability oppor effort m1

m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10

med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2

k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9

dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10

w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro

ast copd blo sc hp glau fert osteo fib ane head hear visio allerg

back groll mental physical cesd distress colorism majorDis

dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control

ssattrib;

GROUPING = carrib (1=SC 2=HA 3=JA 4= TT 5=0);

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

MODEL:

MW BY control ssattrib;

Discrim BY colorism majorDis dailydis;

Distress BY k1 k2 k3 k4 k5 k6;

control WITH majorDis;

ssattrib WITH dailydis;

K3 WITH K2;

K6 WITH K4;

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS tech1 tech4;

CFA Measurement Model for Spanish Caribbean Country of Origin

TITLE: CFA Full Measurement model Psych Distress SC country;

DATA:FILE IS C:\Users\powoyemi1\Documents\Dissertation Related\NSAL

Cleaned _Scored_Mplus.csv;

VARIABLE:

NAMES= ID Strat clustr sweight pweight race race_sub native durat

imm_age carrib marry sex age region income educate f_edu

m_edu job citizen pss_la pss_ste Ability oppor effort m1

m2 m3 m4 m5 m6 m7 fate e1 e2 e3 e4 e5 e6 e7 e8 e9 e10

med1 med2 med3 med4 med5 med6 med7 med8 med9 col k1 k2

k3 k4 k5 k6 dep1 dep2 dep3 dep4 dep5 dep6 dep7 dep8 dep9

dep10 dep11 dep12 life_dep w1 w2 w3 w4 w5 w6 w7 w8 w9 w10

w11 w12 w13 w14 s15 op omh art ulc can hbp di liv kid stro

ast copd blo sc hp glau fert osteo fib ane head hear visio allerg

back groll mental physical cesd distress colorism majorDis

dailydis control ssattrib;

USEVAR= k1 k2 k3 k4 k5 k6 colorism majorDis dailydis control

ssattrib;

WEIGHT= sweight;

STRATIFICATION= Strat;

CLUSTER= clustr;

SUBPOPULATION = carrib EQ 1;

MISSING are all (-9999);

ANALYSIS:

TYPE=COMPLEX;

estimator = MLR;

MODEL:

MW BY control ssattrib;

Discrim BY colorism majorDis dailydis;

Distress BY k1 k2 k3 k4 k5 k6;

control WITH majorDis;

ssattrib WITH dailydis;

K3 WITH K2;

K6 WITH K4;

OUTPUT: SAMPSTAT MODINDICES (3.84) STAND RESIDUAL PATTERNS tech1 tech4;

Appendix C: Distributions, T-Tests

Table 1

Frequencies of Total Medical Conditions variable by Nativity Status

Total Medical Conditions	Nativity Status	Counts	% of Total	Cumulative %
19	Outside U.S.	0	0%	0%
	Inside U.S.	1	0%	0%
17	Outside U.S.	1	0%	0%
	Inside U.S.	2	0%	0%
14	Outside U.S.	0	0%	0%
	Inside U.S.	1	0%	0%
13	Outside U.S.	1	0%	0%
	Inside U.S.	2	0%	0%
12	Outside U.S.	1	0%	0%
	Inside U.S.	10	0%	0%
11	Outside U.S.	2	0%	0%
	Inside U.S.	8	0%	1%
10	Outside U.S.	3	0%	1%
	Inside U.S.	28	1%	1%
9	Outside U.S.	2	0%	1%
	Inside U.S.	34	1%	2%
8	Outside U.S.	5	0%	2%
	Inside U.S.	56	1%	3%
7	Outside U.S.	13	0%	3%
	Inside U.S.	91	2%	5%
6	Outside U.S.	31	1%	6%
	Inside U.S.	155	3%	9%
5	Outside U.S.	49	1%	10%
	Inside U.S.	202	4%	14%
4	Outside U.S.	88	2%	15%
	Inside U.S.	332	6%	22%

Table 1

Frequencies of Total Medical Conditions variable by Nativity Status

Total Medical Conditions	Nativity Status	Counts	% of Total	Cumulative %
3	Outside U.S.	116	2%	24%
	Inside U.S.	498	10%	34%
2	Outside U.S.	193	4%	37%
	Inside U.S.	608	12%	49%
1	Outside U.S.	340	7%	56%
	Inside U.S.	916	18%	74%
0	Outside U.S.	385	7%	81%
	Inside U.S.	960	19%	100%

Independent Samples T-Test

Independent Samples T-Test of Meritocratic Worldview by Nativity Status

		Statistic	df	p
MW Factor	Welch's t	-2.58	768.23	0.010

Note. $H_a: \mu_0 \neq \mu_1$

*Groups were coded as follows: 0=born outside of the U.S.; 1=born in the United States. As such, the negative t-test statistic suggests that Black immigrants endorsed the Meritocratic Worldview more.

Appendix D: Model Parameters for Structural Model with Psychological Distress and Covariates

Standardized Factor Loadings:

DISTRESS ON

MW	0.690	0.083	8.298	0.000
DISCRIM	0.226	0.051	4.411	0.000

DISCRIM ON

MW	0.314	0.044	7.172	0.000
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DISTRESS ON

MARRY	0.000	0.020	-0.019	0.985
SEX	0.110	0.026	4.176	0.000
EDUCATE	-0.020	0.041	-0.488	0.625
JOB	-0.018	0.031	-0.573	0.567
INCOME	-0.027	0.022	-1.207	0.227

DISCRIM ON

MARRY	0.068	0.025	2.762	0.006
SEX	-0.197	0.027	-7.174	0.000
EDUCATE	0.088	0.031	2.809	0.005
JOB	-0.132	0.023	-5.840	0.000
INCOME	0.048	0.026	1.804	0.071

MW ON

MARRY	0.031	0.027	1.160	0.246
SEX	0.035	0.024	1.435	0.151
EDUCATE	-0.191	0.034	-5.584	0.000
JOB	0.142	0.032	4.386	0.000
INCOME	-0.072	0.031	-2.308	0.021

Standardized Residual Variance:

MW	0.907	0.023	39.784	0.000
DISCRIM	0.859	0.020	43.769	0.000
DISTRESS	0.373	0.084	4.456	0.000

Appendix E: Semi-Structured Interview Question Guide

Semi-Structured Interview Question Guide

General Immigrant Health Paradox Questions

1. What does health mean to you?
 - a. Are there differences in how health is understood in the United States vs. your country of origin?
 - b. What are your personal beliefs around health (physical and mental)?
 - c. What is your country of origin's cultural messages around health? Are there certain cultural practices or beliefs that shape your health?
2. What factors do you feel contribute to/influence your health?
3. What was your health generally like in your country of origin?
4. What was your health like when you first moved to United States?
5. Have you noticed any changes in your health as you have lived in United States?
 - a. In what way(s)?
 - b. What do you think may be contributing or leading to this change?
 - c. How do you respond to this change?
6. *Investigator references the immigrant health paradox:* A pattern that we have noticed is that for some Black immigrants in the United States, their physical and mental health gets worse over time.
7. Do you feel that this pattern reflects your health experiences?
 - a. In what ways?
8. What do you think leads to this pattern?

9. Is there anything you feel this pattern is missing or not including?

Questions incorporating race-related stress

1. Did you have stressful experiences in your country of origin that impacted your health?
2. Have you had stressful experiences in the United States that have impacted your health?
3. Did you think about race prior to immigrating?
 - a. How was race talked about in [country of origin]?
 - b. How have you seen it discussed in the United States?
4. Did your views on race change since moving to the United States?
 - a. What influenced this change?
5. Has some aspect of your racial and ethnic identity played a role in your health?
 - a. In what ways does race play a role in your health?
 - i. Positive, negative, both, not at all?
6. How about stressful experiences related to your race – have they impacted your health?
 - a. If so, in what ways? Positive, negative?
 - b. How have you found yourself dealing with any stressful racial experiences?
7. Do you feel that the U.S.'s culture impacts your health?
 - a. In what ways? Positive, negative, both?
 - b. What have interactions with the U.S. health care system been like for you?
8. Do you feel that the U.S.'s history impacts your health?
 - a. In what ways? Positive, negative, both?

9. In the U.S., a common belief is the “American dream” – the idea that anyone, no matter their background, can achieve success and happiness through hard work, personal responsibility, and determination.
 - a. Have you heard this idea before?
 - b. How do you feel about this belief? Do you agree with the idea?
 - c. How has this idea shaped your experiences in the U.S.?
 - i. In general, and as it relates to your healthcare/health-related experiences?
10. What suggestions do you have for things that would help Black immigrants stay healthy?

Appendix F: Recruitment Flyer for Qualitative Study

Are you a Black Immigrant who is at least 18 years old? Interested in sharing your story?

Take part in a study to help increase understanding of the health experiences of Black immigrants.

About the study:

- Respond to questions regarding your health-related experiences and how they may have changed over time (should take no more than one hour)
- Receive \$30 in compensation.
- Note that you will not be asked any questions about your citizenship status.

You may be eligible to participate if:

- You identify as Black
- You are at least 18 years old
- You were born outside of the United States
- You are comfortable reading, writing, and speaking in English

If you have any questions about this study, or would like to learn more about participating, please contact:

Praise Owoyemi
UCLA Department of Psychology
424-209-7276 or at powoyemi1@g.ucla.edu



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