# Investigating Vigilance: A New Way to Account for the Effects of Racism on Health Inequities

## Abstract

Racism is widely regarded as a fundamental driver of health inequities. There is no standardized way of measuring racism in previous research and most previous measures of racism are limited to the interpersonal level, particularly perceptions of unfair treatment observed by individuals. Another major research gap is the deficit of investigations into structural and cultural racism, a deficit that stands in sharp contrast to the oversaturation of studies on individual experiences and attitudes about racism. Furthermore, discerning instances of racism is difficult because contemporary racism is often more subtle and ambiguous than in the past. The goal of this paper is to describe notable advancements in the measurement of racism as well as understanding the effects of racism on health. These advancements were presented during the inaugural Collaboration on Race, Inequality, & Social Mobility in America (CRISMA) conference at Washington University in St. Louis in March 2019. This paper focuses on the measurement of vigilance, described as anticipatory stress, efforts to mitigate racism, and rumination of past experiences of racism and accounting for the effects of vigilance on health.

## Introduction

Health equity is defined as obtaining the highest level of health for all people (Braveman, 2006). The concept of health equity implies that everyone should be able to obtain the highest level of health possible and should not be disadvantaged because of their social position or other socially determined circumstances. As such, Whitehead and colleagues argue that, "health equity involves creating opportunities and removing barriers to achieving the fullest health potential for all people" (Whitehead, Burström, & Diderichsen, 2000). While health equity is a lofty goal, there is an abundance of deeply entrenched, well-documented racial/ethnic health inequities, ranging from disparities in overall life expectancy to birth-related outcomes to overall levels of morbidity and chronic disease. Several fundamental factors have created and reinforced racial/ethnic health inequities. One such fundamental factor in the explanation of health inequities is racism.

# **Defining Racism**

Racism is a system that does not rely on specific actors with explicit intent or personal prejudice (Hicken, Kravitz-Wirtz, Durkee, & Jackson, 2018). Racism underlies fundamental structural and institutional factors that shape access to resources and fuel racial inequalities (Hicken, Kravitz-Wirtz et al., 2018; Phelan, Link, & Tehranifar, 2010). According to Jones, there are three levels of racism: institutionalized, personally mediated, and internalized (Jones, 2000). Each category mutually reinforces the other but have various impacts on affected racial groups. Jones (2000) describes institutionalized racism as differential access to resources and opportunities based on race. Institutionalized racism is structural and often legal; it can include quality of housing education, employment opportunities, and accumulated wealth (Jones, 2000). Personally-mediated racism is interpersonal discrimination perpetuated by privileged groups towards

marginalized groups. This includes both intentional and implicit bias, and can manifest as suspicion, fear, devaluation, or dehumanization of people of color (Jones, 2000). The third level described is internalized racism, or the belief in stereotypes and discrimination by the oppressed groups. It can manifest as adherence to standards of whiteness, such as skin shade and hair texture, self-devaluation, and absence of feelings of self-worth (Jones, 2000).

Racism is widely regarded as a fundamental driver of health inequities. For example, Gilbert Gee and Chandra Ford (2011) characterize structural racism as "the macro-level systems, social forces, institutions, ideologies, and processes that interact with one another to generate and reinforce inequities among racial and ethnic groups" (pp.17). Structural racism is manifest in persistent economic inequality, including enormous income and wealth disparities. Despite racism's fundamental role in in the United States, there are significant limitations to the existing scientific inquiry on this subject. There is no standardized way of measuring racism in previous research and most previous measures of racism are limited to the interpersonal level, particularly perceptions of unfair treatment observed by individuals. Another major research gap is the deficit of investigations into structural and cultural racism, a deficit that stands in sharp contrast to the oversaturation of studies on individual experiences and attitudes about racism. Furthermore, discerning instances of racism is difficult because contemporary racism is often more subtle and ambiguous than in the past. Bonilla-Silva (2014) argues that contemporary racism can be described as "now you see it, now you don't" and "smiling face" discrimination, including practices such as shutting people out of networks, racial gerrymandering, and other disenfranchisement practices (Bonilla-Silva, 2014). In the face of ambiguous differential treatment, people of color often privately question whether the differential treatment they have experienced is tantamount to racial discrimination.

## **Rationale**

The goal of this paper is to describe notable advancements in the measurement of racism as well as understanding the effects of racism on health. These advancements were shared during the inaugural Collaboration on Race, Inequality, & Social Mobility in America (CRISMA) conference at Washington University in St. Louis in March 2019. The panelists argued that the current public health and biomedical framework being used to study such disparities is not centering race, and is thereby unequipped to address these health impacts. When health providers are operating from a colorblind perspective, racism is not taken into account nor its role in health outcomes. Because the breadth of the impact of racism and discrimination on health is so wide, this paper will focus specifically on the research of Dr. Maggie Hicken, research assistant professor at the Survey Research Center at the University of Michigan. She discussed the effects of vigilance on health, particularly the role of anticipatory stress, efforts to mitigate racism, and rumination of past experiences of racism, here described as vigilance, and how vigilance impacts health. Hicken's work has included the development of an appropriate survey measure to capture these feelings and behaviors as well as understanding the association between vigilance upon physiological responses to racism, such as blood pressure, heart rate, and sleep.

## **Cultural Racism**

Hicken argues that because racism is a system. It does not require explicit intent or bias since it is incorporated into structural factors and embedded in institutions ranging from the individual to society levels. These systematic differences have created and fueled inequities in access to power and resources, leading to the marginalization of communities of color. Geronimus and colleagues (2016) describe cultural racism as hegemonic, incorporated into dominant cultural beliefs, including stereotypes, informal rules, procedures, and laws that reinforce a hierarchical

racialized society (Geronimus et al., 2016). Hicken argues that cultural racism, or the shared belief system of the dominant (white) group, helps to create policies based on said beliefs and punishes deviation from these values (Hicken, Lee, & Hing, 2018). Such policies that self-perpetuate white supremacy and domination create social, economic, and health consequences for groups outside of this system.

At the heart of cultural racism is the multi-level process of categorizing and classifying the world around us based on meanings assigned to categories and classification (Hicken et al., 2018). The creation and attachment of stigmatizing stereotypes undermines the humanity and obscures within-group variation of black Americans, while aiding in the propagation of cognitive shortcuts that are frequently made in day-to-day life. Hicken and colleagues (2018) theorize that these cognitive shortcuts (i.e. stereotypes), created and reinforced by cultural racism, result in the misrecognition of blackness by non-Black people. The application of crude stereotypes is often observed in interpersonal discrimination.

Increasingly, scholars recognize that it is not just perception of discrimination that can be deleterious to health. For example, exposure to one episode of discrimination during one's life can reverberate over the life course and even generationally, as parents socialize their children around race. For example, Nuru-Jeter and colleagues (2009) found that black women's childhood experiences of racism as well as the extending stress of protecting their own children from the harm they experienced creates additional stressors that may have long-term physical and mental health consequences. Through interviews and other qualitative data analysis, the authors found that these outside experiences with racism have a greater impact on birth outcomes beyond the prenatal and post-delivery period. Because of exposure to discrimination, several scholars have argued that black Americans develop adaptive strategies to navigate predominately white spaces.

## Vigilance

American society remains deeply segregated and public spaces including schools, restaurants, places of employment, healthcare settings remain predominantly white. Hicken and others have documented that black Americans feel they must remain vigilant in order to anticipate differential treatment in an effort to mitigate effects of differential treatment (Hicken, Kravitz-Wirtz, et al., 2018; Hicken, Lee, Ailshire, Burgard, & Williams, 2013; Kwate & Meyer, 2011; Lewis, Cogburn, & Williams, 2015). Hicken explained that vigilance consists of a variety of behaviors, including impression management, or not making oneself "too threatening" to white people and speaking in a way to not appear unintelligent, the social avoidance of culturally white spaces where one might encounter discrimination, and the mental preparation for potential future racism and prejudiced encounters (Lee & Hicken, 2016).

Researchers have observed the development of public identities and public performances that black Americans use to defy stereotypes and signal to whites that they belong in these spaces (Lee & Hicken, 2016; Sacks, 2018). For example, Lacy (2004) has found that middle-class black Americans, whom are very likely to navigate predominantly white spaces on a regular basis, exert considerable energy to fit well within predominantly white settings. Lacy found that they construct "public identities" to signal their class position to white people to better mitigate potential discriminatory experiences in educational, workplace, and retail settings (Lacy, 2004). Lacy (2007) defined public identities as "purposeful, instrumental strategies that either reduce the probability of discrimination or curtail the extent of discrimination they face in public interactions with whites" (p. 73). Lacy's respondents described broader efforts to signal social class and establish commonalities with white people in public spaces, labeling these strategies as

"script switching." Script switching included using certain diction, wearing certain clothing, and discussing certain topics when interacting with white people (Lacy, 2007).

Hicken characterized vigilance as a chronic stress response, as black Americans are often simultaneously anticipating racism, ruminating over past experience of racism, and are actively working to defy stereotypes and guard against new incidents of discrimination. Vigilance includes factors such as impression management and preparation for slights due to race. Hicken and Lee (2018) argue that this preparation is not limited to previous experiences of racism but can include vicarious experiences of racism shared within one's immediate social network. They also argue that with speed of information drastically accelerated via smartphones and social media, vicarious experiences of racism can include incidents that go beyond their immediate networks, such as the shooting death of unarmed, 18-year old Michael Brown by a white police officer and the subsequent Ferguson uprisings. Williams and Medlock have documented that there has been an increase in harassment and intimidation at the national level following the candidacy and election of Donald Trump as president and there is evidence that racist rhetoric has a negative effect on the health and well-being of black Americans (Williams & Medlock, 2017). Chae and colleagues developed an Internet-based measure of racism, an approximation of area racism based on use of derogatory language within different market areas (Chae et al., 2015). They found that this measure of racism was associated with greater all-cause mortality among black Americans, compared to whites. These findings lend further support for the need to develop measures of racism that go beyond interpersonal discrimination.

Hicken, Lee, and colleagues have developed a measurement of vigilance to more accurately capture the experience and effects of contemporary, racialized stereotypes. This Likert-like survey measure is composed of items such as, "In your day-to-day life, how often do you try to

prepare for possible insults from people before leaving home or are careful to watch what you say and how you say it?" Hicken argues that experiencing chronic stress, in this case vigilance, has physiological consequences that ultimately affect the long-term health for black Americans.

# **Effects of Vigilance on Health**

Although a detailed description of the physiological stress reaction system is beyond the scope of this paper, it is important to note that the human body has a remarkable stress response system that is designed to protect people from threats (McEwen & Gianaros, 2010). In the face of an acute stressor, stress hormones such as epinephrine are released into the bloodstream, and a cascade of physiological changes, ranging from increased lung capacity and pupil dilation, are set in motion (McEwen, 2004; McEwen & Gianaros, 2010; McEwen & Wingfield, 2003). While this response, often described as "fight or flight" is critical in helping escape threats to one's life, researchers have shown that chronic activation of this system is deleterious to health. Our bodies' stress response systems are not sensitive enough to differentiate between social stressors, such as vigilance, and immediate threats to one's life (Berger & Sarnyai, 2015; Turner, 2013). Chronic activation of the body's stress response system leads to dysregulation over time, which is associated with multiple physiological changes such as poorer memory and emotional regulation and the development of atherosclerosis—the buildup of plaque in the arteries—and the storage of visceral fat (Geronimus, Hicken, Keene, & Bound, 2006; McEwen, 2004). These physiological changes, which occur and accumulate over the life course, contribute to the development of chronic diseases such as cardiovascular disease and diabetes, which in turn affect overall rates of mortality and morbidity (Compas, 2006; Geronimus et al., 2006; Kemeny & Schedlowski, 2007).

Furthermore, researchers have documented that animals that are low in status are the most likely to experience this chronic stress activation (McEwen & Wingfield, 2003). Applied to the human experience, researchers posit that chronic stress exposure contributes to observed racial inequities in health. Geronimus developed the weathering hypothesis as a theoretical framework to understand accelerated aging and premature physiological deterioration of black women due to frequent exposure to racism and socioeconomic disadvantage (Geronimus, 2001). This is hypothesized to contribute to poorer reproductive health outcomes (Nuru-Jeter et al., 2009, Geronimus, 1992). Several scholars have found support for the weathering hypothesis, as there is evidence of elevated allostatic load scores among black adults, compared to whites, which likely contributes to black-white health inequities.

In relation to vigilance, Hicken has found that when people's stress response is repeatedly activated due to apprehension over facing racism and discrimination, dysfunction in the body's regular stress response system occurs (Hicken et al., 2013; Hicken, Lee et al., 2018). Even if an act of discrimination is not perceived, black people remain hyper-alert and prepared to confront any instance of intentional or unconscious racism. Rumination over racist events can promote prolonged cognitive processing which can develop into a chronic stressor that repeatedly activates the stress response system. This is a unique, frequent chronic stress directly related to cultural racism. Collectively, Hicken and colleagues (2013) demonstrated the corrosive effect of vigilance on the stress of study participants and argue that vigilance contributes to black-white health inequities.

#### Conclusion

The effects of racism on health are likely more profound than previous research. Current conceptual understandings and measurements of racism are insufficient in explaining racial

health disparities. Racism, both acute and chronic, have long-term negative health impacts. Hicken's work is helping to lead scholarship related to racism by reframing how racism operates, considering the cultural, systemic nature of racism in the United States. Cultural racism has not only influenced individual biases and prejudice, but has shaped the development of policies and practices. It is also important that the effects of racism are not limited to single incidents. Rather, the effects of racism are observed over the life course as people of color ruminate on racist experiences and subsequently, modify their behavior to prevent or anticipate unfair treatment. The same preparation to enter such spaces, accounting for one's appearance and speech does not exist for white Americans, consequently resulting in unequal acute and chronic stress levels that affect population health between white and black populations. Researchers are developing more sophisticated methods to understand how stress affects different health outcomes. It is clear the chronic activation of the stress response can lead to a cascade of physiological changes, which contribute to greater likelihood of chronic disease and shorter life expectancy among black Americans.

#### References

- Berger, M., & Sarnyai, Z. (2015). "More than skin deep": Stress neurobiology and mental health consequences of racial discrimination. *Stress*. https://doi.org/10.3109/10253890.2014.989204
- Bonilla-Silva, E. (2014). Racism without Racists: Color-Blind Racism and the Persistence of Racial Inequality in America. New York, Rowman and Littlefield.
- Braveman, P. (2006). Health disparities and health equity: concepts and measurement. *Annu. Rev. Public Health*, 27, 167–194.
- Chae, D. H., Clouston, S., Hatzenbuehler, M. L., Kramer, M. R., Cooper, H. L. F., Wilson, S. M., ... Link, B. G. (2015). Association between an Internet-Based Measure of Area Racism and Black Mortality. *PLOS ONE*, *10*(4), e0122963.
- Compas, B. E. (2006). Psychobiological processes of stress and coping: Implications for resilience in children and adolescents Comments on the papers of Romeo & McEwen and Fisher et al. In *Annals of the New York Academy of Sciences*. https://doi.org/10.1196/annals.1376.024
- Geronimus, A. T. (2001). Understanding and eliminating racial inequalities in women's health in the United States: the role of the weathering conceptual framework. *Journal of the American Medical Women's Association (1972)*, 56(4), 133-136,149-150.
- Geronimus, A. T., Hicken, M., Keene, D., & Bound, J. (2006). "Weathering" and age patterns of allostatic load scores among blacks and whites in the United States. *American Journal of Public Health*, 96(5), 826–833.
- Geronimus, A. T., James, S. A., Destin, M., Graham, L. A., Hatzenbuehler, M., Murphy, M., ... Thompson, J. P. (2016). Jedi public health: Co-creating an identity-safe culture to promote health equity. *SSM Population Health*, 2, 105–116. https://doi.org/10.1016/j.ssmph.2016.02.008
- Hicken, M. T., Kravitz-Wirtz, N., Durkee, M., & Jackson, J. S. (2018). Racial inequalities in health: Framing future research. *Social Science & Medicine*, *199*, 11–18. https://doi.org/https://doi.org/10.1016/j.socscimed.2017.12.027
- Hicken, M. T., Lee, H., Ailshire, J., Burgard, S. A., & Williams, D. R. (2013). "Every Shut Eye, Ain't Sleep": The Role of Racism-Related Vigilance in Racial/Ethnic Disparities in Sleep Difficulty. *Race and Social Problems*. https://doi.org/10.1007/s12552-013-9095-9
- Hicken, M. T., Lee, H., & Hing, A. K. (2018). The weight of racism: Vigilance and racial inequalities in weight-related measures. *Social Science & Medicine* (1982), 199, 157–166. https://doi.org/10.1016/j.socscimed.2017.03.058
- Jones, C. P. (2000). Levels of Racism: A Theoretic Framework and a Gardener's Tale. *American Journal of Public Health*, 90(8), 1212–1215.
- Kemeny, M. E., & Schedlowski, M. (2007). Understanding the interaction between psychosocial stress and immune-related diseases: A stepwise progression. *Brain, Behavior, and Immunity*, 21(8), 1009–1018.
- Kwate, N. O. A., & Meyer, I. H. (2011). ON STICKS AND STONES AND BROKEN BONES Stereotypes and African American Health, *1*, 191–198.
- Lacy R., K. (2004). Black spaces, Black places: Identity construction in middle-class suburbia. *Ethnic and Racial Studies*, 27(9), 908–930.
- Lacy R., K. (2007). *Blue-Chip Black: Race, Class, and Status in the New Black Middle Class*. Berkeley: University of California Press.

- Lee, H., & Hicken, M. T. (2016). Death by a thousand cuts: The health consequences of Black respectability politics. *Souls*, *18*, 421–445. https://doi.org/10.1080/10999949
- Lewis, T. T., Cogburn, C. D., & Williams, D. R. (2015). Self-Reported Experiences of Discrimination and Health: Scientific Advances, Ongoing Controversies, and Emerging Issues. *Annual Review of Clinical Psychology*, *11*(1), 407–440. https://doi.org/10.1146/annurev-clinpsy-032814-112728
- McEwen, B. S. (2004). Protection and damage from acute and chronic stress: allostasis and allostatic overload and relevance to the pathophysiology of psychiatric disorders. *Annals of the New York Academy of Sciences*, 1032, 1–7.
- Mcewen, B. S., & Gianaros, P. J. (2010). Central role of the brain in stress and adaptation: Links to socioeconomic status, health, and disease. *Annals of the New York Academy of Sciences*. https://doi.org/10.1111/j.1749-6632.2009.05331.x
- McEwen, B. S., & Wingfield, J. C. (2003). The concept of allostssis in biology and biomedicine. *Hormones and Behavior*, 43(1), 2–15.
- Nuru-Jeter, A., Dominguez, T. P., Hammond, W. P., Leu, J., Skaff, M., Egerter, S., ... Braveman, P. (2009). "It's the skin you're in": African-American women talk about their experiences of racism. an exploratory study to develop measures of racism for birth outcome studies. *Maternal and Child Health Journal*, *13*(1), 29–39. https://doi.org/10.1007/s10995-008-0357-x
- Phelan, J. C., Link, B. G., & Tehranifar, P. (2010). Social Conditions as Fundamental Causes of Health Inequalities. *Journal of Health and Social Behavior*, *51*(1 suppl), S28–S40. https://doi.org/10.1177/0022146510383498
- Sacks, T. K. (2018). Performing Black womanhood: a qualitative study of stereotypes and the healthcare encounter. *Critical Public Health*, 28(1), 59–69. https://doi.org/10.1080/09581596.2017.1307323
- Turner, R. J. (2013). Understanding Health Disparities: The Relevance of the Stress Process Model. *Society and Mental Health*. https://doi.org/10.1177/2156869313488121
- Whitehead, M., Burström, B., & Diderichsen, F. (2000). Social policies and the pathways to inequalities in health: a comparative analysis of lone mothers in Britain and Sweden. *Social Science & Medicine*, 50(2), 255–270.
- Williams, D. R., & Medlock, M. M. (2017). Health Effects of Dramatic Societal Events Ramifications of the Recent Presidential Election. *New England Journal of Medicine*, 376(23), 2295–2299. https://doi.org/10.1056/NEJMms1702111