Distribution Agreement

In presenting this thesis as a partial fulfillment of the requirements for a degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis in whole or in part in all forms of media, now or hereafter now, including display on the World Wide Web. I understand that I may select some access restrictions as part of the online submission of this thesis. I retain all ownership rights to the copyright of the thesis. I also retain the right to use in future works (such as articles or books) all or part of this thesis.

Aneesha Maini

April 10, 2020

Does Love Trump Hate?: An Analysis of Preterm Birth Rates in Virginia Across the 2016 Election and Unite the Right Rally

by

Aneesha Maini

Dr. Tracy Scott Adviser

Department of Sociology

Dr. Tracy Scott

Adviser

Dr. Jeffery Mullis

Committee Member

Dr. Arri Eisen

Committee Member

2020

Does Love Trump Hate?: An Analysis of Preterm Birth Rates in Virginia Across the 2016 Election and Unite the Right Rally

Ву

Aneesha Maini

Dr. Tracy Scott

Adviser

An abstract of a thesis submitted to the Faculty of Emory College of Arts and Sciences of Emory University in partial fulfillment of the requirements of the degree of Bachelor of Arts with Honors

Department of Sociology

Abstract

Does Love Trump Hate?: An Analysis of Preterm Birth Rates in Virginia Across the 2016 Election and Unite the Right Rally By Aneesha Maini

The 2016 United States Presidential election was what many would call one of the most controversial elections in recent years for a multitude of reasons, including the unconventional and inflammatory nature of Donald Trump's campaign, particularly around issues of race and gender. The Trump presidency has continued to be associated with policies and groups who target vulnerable racial/ethnic populations; one watershed moment occurred with the Unite the Right Rally in Charlottesville, VA. Previous research has established a strong connection between race and likelihood of mothers delivering their newborn preterm (<37 weeks gestation). Simultaneously, there is a large body of previous research regarding the association between racism related stress and adverse health outcomes. However, there is a lack in research in regard to the potential impact of macro-level racism on preterm birth outcomes. Therefore, it is worth exploring the relationship between the time period of the 2016 election and the Unite the Right Rally and the outcome of preterm births across racial/ethnic groups. In this study, I examine the correlation between time period and changes in preterm birth rate across four racial/ethnic groups: non-Hispanic Whites, non-Hispanic Blacks, Hispanics, and Other. I simultaneously examine the outcomes of each racial/ethnic group across four time periods: during the campaign to nomination, from the nomination to inauguration, postinauguration, and post-Unite the Right Rally. I first discuss the theoretical framework and present supporting empirical research about the potential relationship between macro-level racism and preterm birth outcomes. I utilized data from the CDC WONDER Natality Dataset to analyze preterm birth rates across the mentioned racial/ethnic groups and time periods within the state of Virginia between September 2015 and August 2017. Results showed that there was a statistically significant increase in preterm birth rate for Hispanic mothers between the first and final time period, while there was a statistically significant decrease in preterm birth rate for non-Hispanic Black mothers between the third and fourth time periods. This study adds to previous literature by examining the pregnancy outcomes of mothers within the state of Virginia during a time period with macro-level racist events.

Does Love Trump Hate?: An Analysis of Preterm Birth Rates in Virginia Across the 2016 Election and Unite the Right Rally

By

Aneesha Maini

Dr. Tracy Scott

Adviser

A thesis submitted to the Faculty of Emory College of Arts and Sciences of Emory University in partial fulfillment of the requirements of the degree of Bachelor of Arts with Honors

Department of Sociology

Acknowledgements

To my adviser, Dr. Tracy Scott, thank you for your incredible guidance and advice throughout this experience. I could not have accomplished this without your help.

To my committee member, Dr. Jeffery Mullis, thank you for your direction and counsel with the data analysis of this study. Your guidance allowed my project to grow from a thought to a group of concrete results.

To my committee member, Dr. Arri Eisen, thank you for opening my eyes to the importance of learning across disciplines. Had it not been for my Minor program under your guidance, I would not have had the courage to take on this thesis.

To all my committee members, thank you for your continued support throughout this entire process. It has been one of my most challenging experiences at Emory, but also one which I have been the most passionate about.

To my friends and family, thank you for being my biggest cheerleaders throughout this entire experience and inspiring me every other day as well.

I. Introduction1	
II. Research Questions	
III. Background4	
Theoretical Background	
Historical Background	;
Theoretical Models and Empirical Research Background	,
IV. Hypotheses	ļ
V. Methods15	j
Dataset16	j
Independent Variables17	,
Outcome19)
Data Analysis20	
VI. Results	
Preterm Birth Outcomes Across Time Periods21	
Comparing Preterm Birth Outcomes Between Race/Ethnicity Group	;
VII. Discussion	}
VIII. Tables and Figures29	
Table 1)
Table 2)
Table 3)
Table 4)
Figure 1	
Figure 2	
IX. References	;

Table of Contents

INTRODUCTION

The 2016 United States presidential election was what many would call one of the most controversial elections in recent years. Not only was Hillary Clinton the first woman to win the presidential nomination of a major party, but Donald Trump also became the United States' first president in over 60 years with no experience serving in Congress or as a governor (Onion et al. 2018). However, what truly made the 2016 election stand out to many voters was the unconventional nature of Donald Trump's campaign. It became immediately apparent that it was one which relied heavily on voters' racial preconceptions, which are prevalent in our nation. "Trump made it clear in his campaign that 'Make America Great Again' meant that America was greater when white people's power was more sweeping and more secure" (Berlatsky 2020).

While Clinton's campaign focused on health care, fair taxes, as well as rights for women, minorities, and the LGBTQ community, Trump repeatedly expressed his goals to end corruption in our nation's capital, oppose free trade deals, and, last but not least, build a wall at the Mexican border (Onion et al. 2018). Furthermore, with each candidate came controversy. In Clinton's case, her opponents referenced the FBI investigation into her potential incorrect use of her personal email during her time as secretary of state. On the other hand, Trump's opponents cited reports of his sexual misconduct and his controversial comments and tweets on immigrants and race. While many had expectations of a guaranteed win on Clinton's end, ultimately, Donald Trump won the Electoral College with 304 votes in comparison to Clinton's 227 (Onion et al. 2018). Following Trump's inauguration in January 2017, however, the racist rhetoric did not appear to dim, ultimately coming to a climax in August 2017 with the Unite the

Right Rally in Charlottesville, VA. The Unite the Right rally was a neo-Nazi and white supremacist rally that occurred between August 11-12, 2017. Charlottesville had been in a debate prior to the events of the rally regarding what to do with a statue of General Robert E. Lee, who led the Confederate army during the Civil War. However, white nationalists opposed the removal of the statue. They gathered for the rally, chanting statements such as "you will not replace us" and the Nazi-associated phrase "blood and soil" (Keneally 2018). On August 12th, the rally turned deadly when a man accelerated his vehicle into the crowd of counterprotesters, killing one woman and leaving 19 others injured (Keneally 2018). Ultimately, the controversy came to a head with the questionable response to the events by President Donald Trump, who released the following statement: "We condemn in the strongest possible terms this egregious display of hatred, bigotry, and violence on many sides—on many sides" (Keneally 2018). This statement sent shockwaves across the nation, as many questioned his reluctance to call out the white nationalist and neo-Nazi groups who gathered.

Research thus far has established a strong connection between race and likelihood of mothers delivering their newborn preterm (<37 weeks gestation). There is a consistent, significantly higher incidence of preterm delivery amongst African American women in comparison to their White counterparts. Simultaneously, there is a large body of previous research regarding the association between racism-related stress and adverse health outcomes (Brown 2003; Jones 2000; Williams 2012; Williams and Mohammed 2013; Williams, Yu, and Jackson 1997; Daniels 2019). However, there is a lack of research regarding the potential impact of macro-level racism on preterm delivery outcomes, specifically regarding the effect of the racist undertones of Donald Trump's presidential campaign, his subsequent unexpected win,

and the events of the Unite the Right rally. This study attempts to do so by investigating the potential changes in preterm birth rates in the state of Virginia between racial groups across four time periods: during the presidential campaign to the nomination, from the nomination to the inauguration, post-inauguration, and finally post-Unite the Right rally. Using data from the publicly available CDC Wide-ranging Online Data for Epidemiologic Research (CDC WONDER) dataset, this study compares the rate of preterm birth outcomes between time periods by race.

RESEARCH QUESTIONS

1. What is the relationship between the time period of the 2016 election/Unite the Right Rally and the pregnancy health outcomes, as measured by rates of preterm birth, of Non-Hispanic Black, Non-Hispanic White, and Hispanic mothers in the surrounding regions?

2. How do pregnancy health outcomes, as measured by rates of preterm birth, differ between minority racial groups (non-Hispanic Black, Hispanic, and other) and non-Hispanic Whites within these time periods?

This study is motivated by and is a partial replication of a previous article written at the Harvard TH Chan School of Public Health which looked into the preterm birth outcomes of immigrant, Hispanic, and Muslim populations in New York City during the 2016 presidential campaign, the nomination to the inauguration, and post-inauguration (Krieger et al. 2018). I aim to demonstrate how race and the particular time period of the 2016 election could potentially have an impact on the outcome of preterm births (PTB) amongst vulnerable populations while explicitly looking at the state of Virginia due to the heightened sociopolitical stressors in that state following the Unite the Right rally in Charlottesville, VA. To answer this

question, I will be examining preterm birth rates for non-Hispanic Black, non-Hispanic White, and Hispanic women across four time periods defined due to their relationship to phases of the 2016 election cycle and the Unite the Right rally. This research adds to a growing body of work that is examining the most recent election and its adverse health outcomes across the population. This study and its research question will provide insight into the importance of how macro-level racism could potentially have an impact on the health outcomes of vulnerable groups.

BACKGROUND

Theoretical Background

Critical Race Theory:

First and foremost, this study is informed by Critical Race Theory, which describes how racism has an impact on both the macro and micro levels of society (Jones 2000; Bonilla-Silva 2006; Feagin 2013; Gee and Ford 2011; Golash-Boza 2016; Omi and Winant 2016). According to Critical Race Theory, racism is "ordinary," meaning that racism is hard to confront because we often do not acknowledge it. A color-blind approach to creating equality, "expressed in rules that insist only on treatment that is the same across the board," does not address all forms of discrimination (Delgado et al. 2017). However, this color-blind approach does not address many macro and micro levels of society, where racism is still widespread. For example, on a macro level, institutional racism, despite policy-makers' best interests, persists through countless structural disparities. On a micro-level, micro-aggressions similarly continue.

In a previous study done by Daniels, Critical Race Theory was used to hypothesize that "highly publicized incidents of police violence are an indicator of macro-level racism because

they are the result of institutionalized practices in law enforcement, and because they function as contextual, regional-level stressors for the residents and community members located in the geographic regions in which they occur" (Daniels 8, 2019). Similarly, for this study, Critical Race Theory is used to contend that the widespread harmful rhetoric of Donald Trump throughout his campaign and inauguration in combination with the increase of hate crimes, in particular the Unite the Right rally in Charlottesville, VA in August 2017, are indicators of macro-level racism because they act as regional-level stressors for the residents located in the areas where they happen.

Critical Race theorists, while focusing on race and racism, do not ignore the intersection of race with "other forms of subordination" such as gender or class (Solorzano 1998). Furthermore, Critical Race theorists' ultimate goal is to, yes, abolish racism/racial subordination; however, this includes a wider aspiration of ending other types of inferiority (i.e., gender or sexual orientation) (Solorzano 1998). Lastly, Critical Race Theory uses interdisciplinary methods to analyze race in the context of history.

Intersectional Role of Minority Women:

In conjunction with race, the intersectional role that minority women play acts as an additional piece to the puzzle, aiding in an offering an explanation of how exposure to not only racism but also sexism could play a role in differing health outcomes.

Past research has shown much on the correlation between race, sociopolitical stressors, and health outcomes, continuously showing that the particular experience of Black females is not equivalent to that of the general population of blacks and females, respectively. To further elaborate on this point, the identities of a 'woman' and a 'black person' are both of lower status in the U.S. (Settles 2006; Reid and Comas-Diaz 1990). However, the condition which Black women are in is due to their status as both black and female, allowing them to be susceptible to both sexism and racism (Crenshaw 1993). This study is particularly interested in Black women as their exposure to both sexism and racism, and psychosocial stressors have been shown to contribute to adverse health outcomes (Vines et al. 2009; Rosenthal and Lobel 2011).

Historical Background

Throughout the time period being studied, not only has Donald Trump made many inflammatory remarks regarding the African American community but has also made many similarly controversial statements regarding women in general. For example, Trump often "casts heavily black American cities as dystopian war zones" (Leonhardt and Philbrick 2018). Furthermore, he often creates false crime statistics, exaggerating urban crime. Additionally, he has called out many African Americans for being "unpatriotic." Trump has also historically questioned former President Obama's nationality, suggesting that he was not born in the U.S. but rather in Kenya. Lastly, the Unite the Right rally in August 2017, which is of interest in this study, is also an example of an event that specifically targeted Black Americans. A study from 2019 identified that the primary enemies of the alt-Right groups involved in the Unite the Right rally included those that they considered to be "domestic threats" such as immigrants, refugees, the mainstream media, and groups such as Black Lives Matter and the LGBTQ community (Klein 2019).

In terms of his rhetoric regarding women as a whole, there are similarly countless examples of generally misogynistic statements he has made. For example, during his campaign, he made a statement regarding his opponent, Carly Fiorina, doubting her ability to garner votes due to

her appearance and her status as a woman: "Look at that face. Would anybody vote for that? Can you imagine that, the face of our next president? I mean, she's a woman, and I'm not supposed to say bad things, but really, folks, come on. Are we serious?" (Lange 2018). He made similar remarks regarding Hillary Clinton's gender such as "If Hillary Clinton can't satisfy her husband, what makes her think she can satisfy America?", "If she were a man, I don't think she'd get five percent of the vote," and referred to her as a "nasty woman" (Lange 2018).

Similarly, Hispanic women play a similar intersectional role, being both of a minority ethnic status as well as female. "What is unique is the continuing impact of structural racism and ethnic hostility towards Hispanic communities, and the interaction of immigration and acculturation with traditional Hispanic cultural values" (Hispanics in Philanthropy 2017). During the 2016 election period as well as in the year following the inauguration of Donald Trump, the topic of immigration was at an all-time high. Donald Trump began his 2016 campaign with a speech calling Mexican immigrants criminals and "rapists." However, such remarks did not end there. Throughout his campaign, he continued to argue for the U.S. to build a wall at the US-Mexico border.

Furthermore, he used the gang MS-13 to disparage all immigrants, suggesting that Obama's protection of the Dreamers contributed to the spread of the gang (Leonhardt and Philbrick 2018). In 2018, he called some undocumented immigrants "animals," claiming that migrants were bringing diseases into the United States. Similar to black Americans, the Unite Rally targeted Hispanic Americans as being "outsiders" who could be considered to be "domestic threats" (Klein 2019).

Theoretical Models and Empirical Research Background

Intermediate, Individual Level, and Biological Factors:

To begin with, it's important to note that literature has not only looked into the impact of macro level stressors on the outcome of preterm birth amongst mothers. In fact, much research has examined the impacts of intermediate, individual level, and biological factors on this health outcome including maternal age, marital status, health behaviors, genetic differences, as well as community factors (Behrman and Butler 2007).

Beginning with maternal age, multiple studies have shown that those mothers less than 16 years of age as well as those age 35 and older are at an increased risk for preterm delivery (Behrman and Butler 2007). While the exact reasoning for why older mothers have this increased risk is unknown, it is theorized that the increased risk amongst younger mothers is perhaps due either to their "biological immaturity" or "an increased prevalence of other risk factors associated with their generally poor socioeconomic condition" (Behrman and Butler 2007). However, simultaneously, this association between maternal age and preterm birth is not constant across races. Instead, among African Americans, the preterm birth rate is shown to increase at a younger age as compared to whites (Behrman and Butler 2007).

In terms of marital status, research has shown that women who are unmarried have a greater association with preterm birth than married women. It has been suggested that the reason for this disparity is that unmarried mothers tend to have less social support/resources (Behrman and Butler 2007). However, once again, the relative protective factor of marriage does not carry equal weight across racial groups. While there has been research into whether health behaviors such as differing smoking or drug use between racial groups is a likely cause

for the disparity, "a few studies have concluded that the contributions of behavioral risk factors during pregnancy to racial disparities in birth outcomes such as preterm birth or low birth weight appear to be modest" (Behrman and Butler 2007). Furthermore, the improper use of prenatal care among African American women has also shown to not be the sole cause of the disparity in pregnancy outcomes between African American and white women (Behrman and Butler 2007).

So what is it then that creates these disparities between race if not for health behaviors or socioeconomic status? Research has hypothesized that the genetic differences between races could perhaps attribute to it, however still falls short of confirming this hypothesis. Firstly, it is unknown exactly which genes contribute to these racial disparities in pregnancy outcomes. While research has shown that interleikin-6 (IL-6), gamma interferon (IFN- γ), and tumor necrosis factor alpha (TNF- α) have all been shown to be involved in the pathology of preterm birth, there has not been shown to be a clear pattern of difference between races in terms of their expression of all of the genes (Behrman and Butler 2007). It is also not clear how the genes interact with the environment to produce differences in pregnancy outcomes between races.

Lastly, research has looked at more intermediate level characteristics which could potentially play a role in preterm delivery, specifically community factors. Researchers argue that adverse social contexts can potentially affect the health of an individual. "Social environment refers to the level of neighborhood cohesion or disorganization, norms of reciprocity, civic participation, crime, socioeconomic compositions, residential stability, and related attributes" (Behrman and Butler 2007). While research has shown that poorer

pregnancy outcomes have been associated with community level variables, once again when comparing between race, African American mothers are still shown to be more likely to have poorer pregnancy outcomes than white mothers even after controlling for individual and community level factors (Behrman and Butler 2007).

The Racism Related Stress Model:

This then leads us to the Racism-Related Stress Model, which explains that minorities are at a higher risk of exposure to stress because of their experiences with racism (Harrell 2000). This increased stress ultimately results in racial health disparities.

Many studies have shown that through interactions between disenfranchised and nondisenfranchised people that are viewed as discriminatory, health is harmed as a result of the stress process, which is activated (Krieger 1990). Racism, ranging from institutional racism to interpersonal racial discrimination, can be harmful to individuals who are faced with it. Research suggests that stress from racism acts as a mechanism in the creation of such health disparities between people of color and whites in the United States (Brown 2003; Jones 2000; Williams 2012; Williams and Mohammed 2013; Williams, Yu, and Jackson 1997; Daniels 2019). Such stress arousal impacts the health of the individual by affecting their physiological function and health behaviors (Aneshensel 1992).

Studies have shown that physiologic stress due to psychological stressors can lead to a greater risk of preterm birth and low birth weight (Dole et al. 2003; Dunkel-Schetter 2009; Hilmert et al. 2014). In particular, the race has been shown to be a strong indicator of adverse birth outcomes, specifically low birth weights and preterm births, defined as birth prior to 37 weeks. Preterm birth is of primary importance as it has been shown to be a cause of low birth

weight and an indicator of infant mortality (Prussing 2014). "Studies consistently report PTD [preterm delivery] rates at least 2-3 times higher among African Americans than white Americans" (Prussing 2014). Furthermore, research has shown that mothers who experience racial discrimination have flatter diurnal cortisol slopes and a lower cortisol awakening response, which increases the risk for poor pregnancy outcomes (Kivlighan et al. 2008; Seckl and Meaney 2004).

The "Trump Effect":

However, what is of particular interest to this study is the idea of potential increases in the outcome of PTB among such predisposed groups across the time period of the 2016 election. Previous research has shown the clear impact that President Trump's election had on hate crimes and racial biases (Edwards and Rushin 2018). In Edwards and Rushin's paper, they examined what has been called the "Trump Effect" by many media commentators. "We find compelling evidence to support the Trump Effect hypothesis. Using time series analysis, we show that Donald Trump's election in November of 2016 was associated with a statistically significant surge in reported hate crimes across the United States, even when controlling for alternative explanations" (Edwards and Rushin 2018). The authors go on to explain that counties that voted for President Trump by the widest margins also showed to have the greatest increases in hate crimes. They propose a theory claiming that it was not merely Trump's rhetoric during his campaign, which caused hate crimes to increase, but his election, which "validated this rhetoric in the eyes of perpetrators and fueled the hate crime surge" (Edwards and Rushin 2018).

Further research indicated that the "probability of reporting a racial bias increased by 2.3 percentage points within an interval of +-15 days around the election of Donald Trump" (Giani and Meon 2019). The same article found that such perceived biases decreased when Barack Obama won his first mandate and did not change when George W. Bush and Barack Obama won their second mandates. "One explanation holds that this sequence of events reflected a shift in social norms: while pro-racial equality attitudinal trends in the U.S. had spread optimism about the future of race relations, Donald Trump's win signaled that social norms had shifted towards a greater acceptance of racist attitudes" (Giani and Meon 1, 2019).

Collateral Effects Hypothesis:

However, how could such increases in racial biases and tensions potentially be related to the individual outcomes of preterm births amongst vulnerable groups? While many studies show that "direct" racial discrimination allows for women who experience it to have three times the chances of having adverse birth outcomes in comparison to women who do not, forms of indirect racism such as vicarious racism and major racist events have not been studied in as great detail (Collins et al. 2000; Williams and Mohammed 2009; Gee and Ford 2011). "Less is known about how vicarious racism experiences—secondhand experiences either observed by or reported to the respondent by others—impact pregnancy health, though Black women report vicarious racism as a significant source of stress (Nuru-Jeter et al. 2009). There is some evidence suggesting a significant association between vicarious racism and both preterm birth and low birth weight (Dominguez et al. 2008; Hilmert et al. 2014)" (Daniels 6, 2019).

Williams and Mohammed (2009) theorize that race-related traumatic events that are highly publicized can have "collateral effects" on the health of a group. This theory has been

supported by a recent study that showed that African Americans who lived in states that had one or more police killings of unarmed African American men had worse mental health outcomes within the three months after the occurrence (Bor et al. 2018; Daniels 2019).

There have also been multiple previous studies that have shown that the collateral effect of traumatic race-related events has had an impact on the rate of preterm births amongst racial and ethnic groups that experienced race-related stressors. For example, Krieger et al. found that compared to the period of time before the U.S. presidential nomination (1 September 2015 to 31 July 2016), in the post-inauguration period (1 January 2017 to 31 August 2017) the preterm birth rate increased among foreign-born Hispanic women with Mexican or Central American ancestry as well as women from the Middle East/North Africa and the travel ban countries (Krieger 2018). This particular article used the example of "heightened antiimmigrant, anti-Hispanic, and anti-Muslim policies, discrimination and hate crimes" as severe sociopolitical stressors which they proposed could have health implications for certain groups. Similarly, Gemmill et al. looked into the outcomes of Latina women after the 2016 presidential election. They compared this number with the number expected had the election not taken place, and found that "in the 9-month period beginning with November 2016, an additional 1342 male (95% CI, 795-1889) and 995 female (95%CI, 554-1436) preterm births to Latina women were found above the expected number of preterm births had the election not occurred" (Gemmill et al. 2019).

Similarly, Novak et al. found that there was a change in birth outcomes among babies born to Latina mothers after a major immigration raid in Postville, Iowa, in 2008. This particular immigration raid was the largest single-site federal immigration raid in the history of the U.S.

Following the occurrence, "infants born to Latina mothers had a 24% greater risk of low birthweight (LBW) after the raid when compared with the same period one year earlier" (Novak et al. 839, 2017). On the other hand, there was no change seen amongst infants born to non-Latina White mothers.

HYPOTHESES

The analysis and findings of this paper look specifically at the state of Virginia, which experienced the highly publicized Unite the Right rally in August 2017. Research has shown that racism-related stress has an impact on pregnancy outcomes, specifically increased preterm births amongst vulnerable populations. In conjunction with this, research has also shown that the perceived racial biases and hate crimes were significantly increased surrounding the time of Donald Trump's election. Looking through the theoretical lens of Critical Race Theory, the Racism-Related Stress Model, and the Collateral Effects Hypothesis, similar to Daniels' study, I make several hypotheses. The first group of hypotheses deals with the correlation between time period and preterm birth outcomes across racial groups.

1A: Between time period 1 (During the campaign to nomination) and 2 (following Nomination to Inauguration), preterm birth rates will increase for non-Hispanic Blacks, Hispanics, and the "Other" racial group, while the preterm birth rate for non-Hispanic Whites will remain the same.

1B: Between time period 2 (following Nomination to Inauguration) and 3 (post-Inauguration), preterm birth rates will increase for non-Hispanic Blacks, Hispanics, and the "Other" racial group, while the preterm birth rate for non-Hispanic Whites will remain the same.

1C: Between time period 3 (post-inauguration) and 4 (post-Unite the Right Rally), preterm birth rates will increase for non-Hispanic Blacks, Hispanics, and the "other" racial group, while the preterm birth rate for non-Hispanic Whites will remain the same.

1D: Between time period 1 (During the campaign to nomination) and 4 (post-Unite the Right Rally), preterm birth rates will increase for non-Hispanic Blacks, Hispanics, and the "other" racial group, while the preterm birth rate for non-Hispanic Whites will remain the same.

1E: Between time period 1 (During the campaign to nomination) and 3 (post-inauguration), preterm birth rates will increase for non-Hispanic Blacks, Hispanics, and the "other" racial group, while the preterm birth rate for non-Hispanic Whites will remain the same.

The second group hypothesizes that racial group will be associated with the outcome of preterm birth across all time periods.

2A: Non-Hispanic Black, Hispanic, and Other mothers will have a higher rate of preterm births in time period 1 than non-Hispanic White mothers.

2B: Non-Hispanic Black, Hispanic, and Other mothers will have a higher rate of preterm births in time period 2 than non-Hispanic White mothers.

2C: Non-Hispanic Black, Hispanic, and Other mothers will have a higher rate of preterm births in time period 3 than non-Hispanic White mothers.

2D: Non-Hispanic Black, Hispanic, and Other mothers will have a higher rate of preterm births in time period 4 than non-Hispanic White mothers.

METHODS

The methods of this study are based primarily on the statistical analysis done by Krieger et al. in their piece looking into the impact of sociopolitical stressors on preterm births

in New York City before and after the 2016 election (Krieger et al. 2018). Krieger et al. calculated their PTB rates across the city and by the mother's race/ethnicity, ancestry, and nativity groupings. They then calculated rate ratios to find if there was a change in the rates between time periods. Similarly, this study utilizes the birth records collected by the Center for Disease Control WONDER database from September 2015 through December 2017 for the state of Virginia (n=269842).

Dataset:

The Center for Disease Control Wide-ranging Online Data for Epidemiologic Research (CDC WONDER) Online Database provides public-use data on a variety of topics including Cancer Statistics, AIDS Public Use Data, Detailed Mortality, Sexually Transmitted Disease Morbidity, Births, and many others. For the purposes of this study, the Natality dataset was used. The Natality dataset through CDC WONDER utilizes birth certificates between the years 1995-2018 to derive its data and provides counts of live births occurring within the United States to U.S. residents. The dataset provides counts based on multiple demographic characteristics such as the state and county of residence of the mother, the mother's race, and the mother's age and health and medical items. The CDC WONDER Database used data based on obstetrical estimates from birth certificates to give data on weeks of gestation as well as self-reported data from the birth certificate to classify mothers' race. The Natality data are separated into four online databases based on changes in data reporting standards. For the purposes of this study, I utilized the "Natality for 2007-2018" database which included the necessary data for the time period of interest (September 2015 to December 2017). However, beginning in 2016, all jurisdictions began reporting race consistent with the 1997 Office of

Management and Budget standards as a "single race" as opposed to "bridged race." "Single race is defined as one race reported on the birth certificate" (CDC WONDER). While in 2015, the racial categories included American Indian/Alaska Native, Asian/Pacific Islander, Black/African American, or White, beginning in 2016 the racial categories changed to include American Indian/Alaska Native, Asian, Black/African American, Native Hawaiian/Other Pacific Islander, White, or More than one race. In terms of Hispanic Origin, the options of Hispanic/Latino, Not Hispanic/Latino, or Unknown remained the same across the entire time period of interest. This particular database fits the needs of this study because not only does it provide populationlevel data, it also provided data on a monthly basis for the time periods which were needed to answer the particular research questions posed.

Independent Variables:

The main independent variables in this study are the time periods and racial groups. Krieger et al. looked at the birth outcomes of Hispanic, Asian/Pacific Islander, White non-Hispanic, Black non-Hispanic, and other women and also take a step further to look into the ancestry of said women, especially looking into whether they were from a country where there were travel bans imposed, etc. On the other hand, this study looks simply at the outcomes of four different racial groups: Black non-Hispanic, White non-Hispanic, Hispanic, and Other. The "other" category includes Asians, Pacific Islanders, Native Hawaiians, American Indians, and Alaska Natives while excluding those of mixed race and unidentified race.

While Krieger et al. utilized the three time periods of the 2016 election (campaign, nomination to the inauguration, and post-inauguration), this study also looks at these three time periods in addition to the four months following the Unite the Right rally in Charlottesville,

VA. Similar to Krieger et al., this study also looked at one particular region of the United States which had been affected by a traumatic race-related event (in the case of NYC this was federal immigration raids aimed at Hispanics, while in the case of this study Charlottesville, VA was the location of the Unite the Right rally).

Time Period 1: During the presidential campaign, before candidate nominations (September 2015 to July 2016)

Examples of the potentially harmful rhetoric during this period include the following:

- His labeling of Mexican immigrants as "rapists" who are "bringing crime and drugs" to the U.S. when he launched his campaign
- His call for a ban of all Muslims entering the country
- His response to a question regarding whether all 1.6 billion Muslims harbor a hatred for the U.S. being "a lot of them."
- His refusal in February 2016 to disavow David Duke and the Klu Klux Klan
- At the 2016 Republican convention, Trump took on the position of the "law and order" candidate... "an obvious dog whistle playing to white fears of black crime, even though crime in the U.S. is historically low" (Lopez 2019).

Time Period 2: Candidate Nomination to Inauguration (August 2016 to December 2016) Examples of the potentially harmful rhetoric during this period include the following:

• His plea to black voters, claiming, "You're living in poverty, your schools are no good, you have no jobs, 58 percent of your youth is unemployed. What the *** do you have to lose?" (Lopez 2019).

Time Period 3: Post-Inauguration (January 2017 to August 2017)

Examples of the potentially harmful rhetoric during this period include the following:

- His stereotyping of April Ryan (a black reporter) who questioned whether he planned to meet with the Congressional Black Caucus; his response was to ask her to set up the meeting
- His continual attack of NFL players who silently protested against systemic racism in America during the national anthem (Lopez 2019)

Time Period 4: Post- Unite the Right Rally (August 2017 to December 2017) Examples of the potentially harmful rhetoric during this period include the following:

- The violent Unite the Right rally in Charlottesville, VA, in August 2017 where Klansmen, white supremacists, and neo-Nazis marched in the open chanting, "You will not replace us."
- Trump's response to the rally, claiming that there were "some very fine people on both sides" (Lopez 2019)

Outcome:

The dependent variable in this study is the pregnancy outcome of preterm birth rates. Preterm birth rate was defined as birth prior to 37 weeks of gestation. The CDC WONDER dataset used the standard of Obstetric/Clinical Gestation Estimate to provide the gestation period. The options on the dataset included "All Weeks," "Under 20 weeks", "20-27 weeks", "28-31 weeks", "32-33 weeks", "34-36 weeks", "37-38 weeks", and "39 weeks". When pulling data for preterm birth rates, "Under 20 weeks", "20-27 weeks", "28-31 weeks", "32-33 weeks", and "34-36 weeks" were selected to provide a count of preterm births for each racial/ethnic group within each time period, while "All Weeks" was selected to provide a total count of births for each racial/ethnic group within each time period.

Data Analysis:

In order to analyze the data, similar to Krieger et al., based on the raw counts of preterm births for each racial/ethnic group within each time period of interest, rates were calculated. For example, for non-Hispanic Black mothers within time period 1 (September 2015 to July 2016), the CDC WONDER dataset provided the relevant information that within the state of Virginia, 2513 infants were born under 37 weeks gestation while 19378 were born total to this group. This allowed me to calculate the rate that 12.97% of non-Hispanic Black mothers gave birth preterm within the time period of interest. I was able to calculate the rates for all racial/ethnic groups of interest (non-Hispanic Blacks, non-Hispanic Whites, Hispanics, and Other) within all time periods of interest.

Following calculations of rates, I was able to conduct trend analysis by calculating rate ratios to determine if there was a significant change in the rates between time periods (i.e., time period 2 rate/time period 1 rate) across the different racial/ethnic groups. In order to determine significance, I calculated 95% confidence intervals of the difference in proportions between the two groups of interest (i.e., between time period 2 rate of non-Hispanic blacks versus time period 1 rate of non-Hispanic blacks).

Lastly, I was interested in also seeing potential differences between racial/ethnic groups across all time periods. I did so by comparing rates of preterm births amongst non-Hispanic Blacks with non-Hispanic Whites, Hispanics with non-Hispanic Whites, and lastly, the Other category with non-Hispanic Whites across all time periods. Once again, in order to

determine significant differences between racial/ethnic groups, I calculated 95% confidence intervals of the difference in proportions between the two groups of interest (i.e., between the time period 4 rate of Hispanics with the time period 4 rate of non-Hispanic Whites).

RESULTS

Overall, between September 2015 and December 2017, the total preterm birth rate in Virginia was 9.47% (n=269842 births and 25563 preterm births) (Table 1). The highest preterm birth rates were seen among the non-Hispanic Black women (13.08%) while the lowest preterm birth rates were seen among women in the 'Other' category (8.39%) (Table 1).

Preterm Birth Outcomes Across Time Periods:

When comparing the preterm birth rates between time periods, the total PTB rate increased from 9.37% to 9.67% between the first and second time period (before the U.S. presidential nomination versus after) (Table 1). For non-Hispanic Black mothers, the greatest increase in preterm birth rates similarly occurred between the first and second time periods, with the rate increasing by 0.61%. Similarly, for Hispanic mothers, their preterm birth rate increased by 0.78%. On the other hand, between the first and second time periods, the preterm birth rate of non-Hispanic White mothers only increased by 0.11%. Similarly, the preterm birth rate of the Other group only increased by 0.23% (Table 1). While the non-Hispanic White mothers and the mothers from the Other group did not have major changes in preterm birth rates across the four time periods, non-Hispanic Black mothers, as well as Hispanic mothers, did show significant changes across time periods. In the time period following the events of the Unite the Right Rally in August 2017, the preterm birth rate for non-Hispanic Black mothers decreased significantly from 13.49% to 12.31% (Table 1 and Table 3). The percentage of non-

Hispanic Black mothers that gave birth preterm in time period 3 is estimated to be between 0.25 and 2.07% higher than the corresponding percentage of non-Hispanic Black mothers that gave birth preterm in time period 4 (Table 3). Following the Unite the Right Rally, the PTB rate for Hispanic mothers, in contrast to that of non-Hispanic Black and White mothers, continued to increase (rising from 8.82% to 9.02%). When comparing the change in preterm birth rate for Hispanics between the first and last time periods, it also became clear that the percentage of preterm births for the Hispanic mothers in the time period following the Unite the Right rally is estimated to be between 0.07 and 1.78% higher than the corresponding percentage of Hispanic mothers in the first time period (Table 3).

When analyzing rate ratios, the two values which stood out, in particular, were those of non-Hispanic Black mothers and Hispanic mothers preterm birth outcomes between the third and fourth time periods and first and fourth time periods respectively (0.913 and 1.11) (Table 2). The former value for non-Hispanic Black mothers shows a decrease from Donald Trump's post-inauguration period to the time period immediately following the Unite the Right rally. On the other hand, the latter value for Hispanic mothers shows an increase from the pre-nomination period to the time period following the events in Charlottesville (Table 2). However, it should be noted that Hispanic mothers showed a similar, albeit insignificant, increase between the first and second time periods (1.10) (Table 2).

The overall trend which could be seen amongst the total population was an increase in PTB rate between the first and second time periods followed by a slight plateau between the second and third time periods, and finally, a decrease in preterm birth rates between the third

and fourth time periods. This trend is echoed in the non-Hispanic Black and 'other' populations. However, non-Hispanic Whites and Hispanic mothers deviate from this trend (figure 2).

Comparing Preterm Birth Outcomes Between Race/Ethnicity Group:

When analyzing the difference between race/ethnicity group by time period, it became clear quite quickly that the greatest difference was between non-Hispanic Blacks and non-Hispanic whites. After conducting data analysis, results showed that while other minority groups may have shown slightly higher preterm birth rates than their non-Hispanic White counterparts, the only group which had a significant difference from the White group was, in fact, the non-Hispanic Blacks (Table 4). During Time Period 1, the percentage of preterm births for the non-Hispanic Black sample is estimated to have been between 3.99 and 5.05% higher than the corresponding percentage of preterm births for the non-Hispanic White sample. Similarly, during Time Period 2, the percentage of preterm births for the non-Hispanic Black sample is estimated to have been between 4.22 and 5.81% higher than the corresponding percentage of preterm births for the non-Hispanic throughout all time periods tested (Table 4).

DISCUSSION

My findings indicate that the time periods had an impact on the outcome of preterm deliveries amongst non-Hispanic Blacks and Hispanics, albeit differently from what I hypothesized. While I initially hypothesized that non-Hispanic Black mothers and Hispanic mothers would have increased preterm birth rates following the inauguration of Donald Trump as well as in the months following Unite the Right rally, my results only partially validated this hypothesis.

First and foremost, non-Hispanic Black women showed the greatest increase in preterm birth rate following the candidate nomination of Donald Trump and, in contrast to my hypothesis, a decrease in preterm birth rate following the Unite the Right rally (Table 1). Previous research supports the outcome of an increase following the candidate nomination of Donald Trump due potentially to the harmful political rhetoric which was prevalent during that particular time period (Krieger et al. 2018; Gemmill et al. 2018). However, while Krieger and Gemmill each respectively found that Hispanic women had increased levels of preterm births during the time period of the 2016 election, the results of this study add to the research by showing that there was also an increase in preterm birth rates for non-Hispanic Black women following Donald Trump's candidate nomination and inauguration (Table 1).

This result aligns with the Collateral Effects Hypothesis, implying that the effects of traumatic events or even the effects of potentially harmful political rhetoric could have an impact on health outcomes for vulnerable populations (Bor et al. 2018; Daniels 2019).

However, alternatively, non-Hispanic Black women also showed a significant decrease in their preterm birth rate following the Unite the Right rally in August 2017, which did not support my hypothesis. I had hypothesized that, due to Critical Race Theory, the Racism-Related Stress Model, and the Collateral Effects Hypothesis, the preterm birth rates for vulnerable racial populations would increase following what could be described or seen as stressful race-related traumatic events or speech. The Unite the Right rally, in particular, was an event that I believed could have had an impact on the community of Black women in the area surrounding Charlottesville, VA due to the rally having both extremely racist and misogynistic undertones (Atkinson 2018; Szilagyi 2017). "...By referring to 'our homeland,' the white

supremacist speaker suggested that Black American citizens are unwelcome intruders in the US...by claiming that the street is 'theirs,' the demonstrators made it clear that, in their opinion, certain groups should be excluded from the national community" (Szilagyi 2017). Following the events of Charlottesville, the response from the Oval Office, claiming that there were "very fine people on both sides" provided an institutional level of a lack of disapproval for the actions of the White supremacists, which once again led to my thought that there would be an increase in preterm birth outcomes for non-Hispanic Black women following the event.

However, the decrease of 1.18% in preterm birth rates for non-Hispanic Black women between the third and fourth time periods was unprecedented following my review of previous literature. One example which could potentially provide an explanation is the historically low unemployment rate for black Americans as of December 2017. "The numbers found that in December, the unemployment rate held steady at 4.1 percent for Americans of all races. Among black Americans, the numbers fell to 6.8 percent unemployment, the lowest rate recorded since the BLS began breaking down the number by race in the 1970s" (Lockhart 2018). In a study done in the *European Journal of Epidemiology* in 2008, results showed that unemployed women entering pregnancy had a significantly higher risk of preterm delivery (Rodrigues and Barros 2008).

This decrease could also potentially be attributed to an increase in community ties within the Black community in Virginia following the Unite the Right rally of August 2017. "Black Charlottesville has dealt with racism, has been born and raised under statues of Lee and Jefferson, and has fought the Klan. And it has lived with—and lives with—white supremacy" (Newkirk 2017). The area surrounding Charlottesville has a long, dark history of white

supremacy, and according to Newkirk's article in the Atlantic, it is this history "that animates much of the black response to the resurgence of violent rallies in the area" (Newkirk 2017). Rather than the rallies inciting fear and stress upon the Black community, it instead could have brought to light issues that otherwise went unnoticed, and potentially gave the community an opportunity for their voices to be heard.

For non-Hispanic Black women, studies have consistently shown a significantly higher level of preterm births as compared to non-Hispanic White women. This consistently higher level of preterm birth is often thought to be attributed to education level or income, however many studies have shown that despite education level or income, Black women still have higher rates of preterm birth as compared to Whites (Dominguez 2011). "Although health improves in a stepwise fashion as socioeconomic resources increase, racial disparities persist at each rung of the socioeconomic ladder. In the case of infant mortality, the gap actually widens as socioeconomic status improves...Even second generation high SES African American mothers have been reported to have two times the rate of LBW and three times the rate of PTD as similar Whites" (Dominguez 2011). What truly acts as a determining factor in the outcomes of preterm births amongst Blacks is the racism that is embedded on an institutional level that produces social disadvantages that impact health, "independently of personal perceptions of unfair treatment" (Dominguez 2011). While Black Americans were targeted through sociopolitical rhetoric through Donald Trump's campaign as well as through the chants of the alt-right groups during the Unite the Right rally, it could be said that their consistently high level of institutional disadvantage did not change significantly during the time period of interest, leading to generally stagnant levels of preterm birth rates during the first three time periods.

On the other hand, results for Hispanic women showed both an increase in preterm birth rates following Donald Trump's candidate nomination as well as a greater increase following the Unite the Right rally (Table 1). This overall increase aligned with my hypothesis as well as with the results of Krieger and Gemmill, who also found that the preterm birth rate for Hispanic women increased steadily following the events of the 2016 election. Furthermore, these results align with the Collateral Effects hypothesis, Critical Race Theory, and the Racism-Related Stress model. Throughout the course of the 2016 election, Donald Trump's political rhetoric regarding Hispanics, especially through his ongoing discussion of immigration policy, could have had major implications on Hispanic mothers' preterm birth outcomes by acting as a sociopolitical stressor. Examples of potentially harmful sociopolitical rhetoric/actions aimed at Hispanics during this time period include:

- Trump's statement regarding how "When Mexico sends its people, they're not sending their best... They're bringing crime. They're rapists'" (Krieger et al. 1147, 2018).
- His Executive Order to build a border wall with Mexico and to stop federal funding to sanctuary cities (Krieger et al., 2018)
- The increase of Immigration and Customs Enforcement raids across the country in February 2017

My results suggest that there were increases in severe stressors, including those associated with harmful sociopolitical rhetoric of the 2016 election, which could have played a role in the small increases in the preterm birth rates amongst vulnerable populations, especially Hispanic women. While this study did not include data on potential confounding variables such as income or education level, similar to Krieger et al., "the risk increases observed in this study are

unlikely to be due to changes in other sociodemographic or medical factors, given the short time frame of observation" (Krieger et al. 1151, 2018; Novak et al. 2017; Mutambudzi et al. 2017). However, this is not to say that it would not be worthwhile to include such information in future studies.

Furthermore, while this study only looked at the preterm birth outcomes within the state of Virginia, future studies could look at other areas in the United States that were potentially impacted by other traumatic racism-related events, such as the Charleston church shooting in 2015. While the CDC WONDER dataset did not provide data within the county of interest, other studies could also look more closely at the Albemarle County, where Charlottesville is located, in order to get an even more precise image of the impact that the event could have had on the community. Additionally, future studies could look more closely at other racial/ethnic groups, in particular those from the Middle East and travel ban countries.

TABLES AND FIGURES

	Total births	Preterm births	PTB rate	Time period 1: during campaign	Time period 2: nomination to inauguration	Time period 3: Post-	Time Period 4: Post-Unite the Right Rally,
	(n)	(n)	(%)	Rate (%)	Rate (%)	inauguration	Charlottesville, VA
						Rate (%)	Rate (%)
Total	269842	25563	9.47%	9.37%	9.67%	9.60%	9.47%
Non-Hispanic Black/African American	49347	6454	13.08%	12.97%	13.58%	13.49%	12.31%
Non-Hispanic White	132795	11279	8.49%	8.45%	8.56%	8.47%	8.55%
Hispanic	33128	2842	8.58%	8.09%	8.87%	8.82%	9.02%
Other ₁	19015	1596	8.39%	8.15%	8.38%	8.70%	8.56%

Table 1: Preterm Birth Rate for Each Time Period by Race/Ethnicity, Virginia, September 2015 to December 2017

1. Asian, Pacific Islander, Native Hawaiian, American Indian, Alaska Native (excluding mixed race and those of unidentified race)

Table 2: Rate ratios for each time period by race/ethnicity, Virginia, September 2015 to December 2017

	Rate ratio (time period 2/time period 1)	Rate ratio (time period 3/time period 2)	Rate ratio (time period 4/time period 3)	Rate ratio (time period 3/time period 1)	Rate ratio (time period 4/time period 1)
Total	1.03	0.993	0.986	1.03	1.01
Non-Hispanic Black	1.05	0.993	0.913	1.04	0.949
Non-Hispanic White	1.01	0.989	1.01	1.00	1.01
Hispanic	1.10	0.995	1.02	1.09	1.11
Other ₁	1.03	1.04	0.984	1.07	1.05

1. Asian, Pacific Islander, Native Hawaiian, American Indian, Alaska Native (excluding mixed race and those of unidentified race)

Table 3: 95% CI for Difference Between Time Periods by Race/Ethnicity Group

	Non-Hispanic Whites	Non-Hispanic Blacks	Hispanics	Other ₁
Time Period 1 vs. Time	(-0.0053, 0.0032)	(-0.0146, 0.0025)	(-0.0163, 0.0008)	(-0.0134, 0.0088)
Period 2				
Time Period 2 vs. Time	(-0.0038, 0.0056)	(-0.0085, 0.0103)	(-0.009 <i>,</i> 0.0099)	(-0.0156, 0.0091)
Period 3				
Time Period 3 vs. Time	(-0.0055 <i>,</i> 0.0039)	(0.0025 <i>,</i> 0.0207)*	(-0.0115, 0.0075)	(-0.0111, 0.0139)
Period 4				
Time Period 1 vs. Time	(-0.0041, 0.0037)	(-0.0129, 0.0026)	(-0.0151, 0.0005)	(-0.0158, 0.0047)
Period 3				
Time Period 1 vs. Time	(-0.0053, 0.0033)	(-0.0018, 0.0146)	(-0.0178, -0.0007)*	(-0.0154, 0.0071)
Period 4				

1. Asian, Pacific Islander, Native Hawaiian, American Indian, Alaska Native (excluding mixed race and those of unidentified race) Notes: *Rejects the null of no difference between the two samples

Table 4: 95% CI for Difference Between Race/Ethnicity Group by Time Period

	Time Period 1: During campaign	Time Period 2: Nomination to inauguration	Time Period 3: Post- inauguration	Time Period 4: Post-Unite the Right Rally, Charlottesville, VA
Non-Hispanic Blacks vs. Non-Hispanic Whites	(-0.0505, -0.0399)*	(-0.0581, -0.0422)*	(-0.0570, -0.0433)*	(-0.0452, -0.0301)*
Hispanics vs. Non- Hispanic Whites	(-0.0016, 0.0089)	(-0.0111, 0.0049)	(-0.0104, 0.0035)	(-0.0127, 0.0333)
Other ₁ vs. Non-Hispanic Whites	(-0.0035, 0.0096)	(-0.0081, 0.0117)	(-0.0111, 0.0065)	(-0.0101, 0.0099)

1. Asian, Pacific Islander, Native Hawaiian, American Indian, Alaska Native (excluding mixed race and those of unidentified race) Notes: *Rejects the null of no difference between the two samples Figure 1: Visualization of Theoretical Framework



Figure 2: Preterm births before, during, and after 2016 election and also following Unite the Right Rally in August 2017 in Charlottesville, VA. Virginia, by race/ethnicity for total population, non-Hispanic blacks, non-Hispanic whites, Hispanics, and others



REFERENCES

Aneshensel, Carol S. 1992. "Social Stress: Theory and Research." Annual Review of

Sociology 18(1):15–38.

- Atkinson, David C. 2018. "Charlottesville and the Alt-Right: a Turning Point?" *Politics, Groups, and Identities* 6(2):309–15.
- Behrman, Richard E. and Adrienne S. Butler. 2007. *Preterm Birth: Causes, Consequences, and Prevention*. Washington, D.C.: National Academies Press.
- Berlatsky, Noah. 2020. "Trump Voters Motivated by Racism May Be Violating the Constitution. Can They Be Stopped?" *NBCNews.com*. Retrieved February 6, 2020 (<u>https://www.nbcnews.com/think/opinion/trump-voters-motivated-racism-may-be-</u> <u>violating-constitution-can-they-ncna1110356</u>).
- Bonilla-Silva, Eduardo. 2010. *Racism without Racists: Color-Blind Racism and the Persistence of Racial Inequality in the United States*. Lanham: Rowman & Littlefield Publishers.
- Bor, Jacob, Atheendar S. Venkataramani, David R. Williams, and Alexander C. Tsai. 2018. "Police Killings and Their Spillover Effects on the Mental Health of Black Americans: A Population-Based, Quasi-Experimental Study." *The Lancet* 392(10144):302–10.
- Brown, Tony N. 2003. "Critical Race Theory Speaks to the Sociology of Mental Health: Mental Health Problems by Racial Stratification." *Journal of Health and Social Behavior* 44(3):293– 301.

Centers for Disease Control and Prevention. CDC Wonder. http://wonder.cdc.gov/. April 1995.

Crenshaw, Kimberle. 1993. "Mapping the Margins: Intersectionality, Identity Politics, and

Violence against Women of Color." Stanford Law Review 43(6):1241.

- Daniels, Kathryn P. 2019. "Black Health Matters: The Collateral Effects of Police Brutality on Pregnancy Health." American Sociological Association- Conference Papers.
- Delgado, Richard, Jean Stefancic, Angela Harris, Jean Stefancic, and Angela Harris. 2017. *Critical Race Theory (Third Edition): An Introduction*. New York: NYU Press.
- Dole, Nancy et al. 2003. "Maternal Stress and Preterm Birth." *American Journal of Epidemiology* 157(1):14–24.
- Dominguez, Tyan Parker, Christine Dunkel-schetter, Laura M. Glynn, Calvin Hobel, and Curt A. Sandman. 2008. "Racial Differences in Birth Outcomes: The Role of General, Pregnancy, and Racism Stress." *Health Psychology* 27(2):194–203.
- Dominguez, Tyan Parker. 2011. "Adverse Birth Outcomes in African American Women: The Social Context of Persistent Reproductive Disadvantage." *Social Work in Public Health* 26(1):3–16.
- Dunkel-Schetter, Christine. 2009. "Stress Processes in Pregnancy and Preterm Birth." *Current Directions in Psychological Science* 18(4):205–9.

Feagin, Joe R. 2013. Systemic Racism: A Theory of Oppression. New York: Routledge.

- Gee, Gilbert C. and Chandra L. Ford. 2011. "Structural Racism and Health Inequalities: Old Issues, New Directions." *Du Bois Review* 8(1):115–32.
- Gemmill, Alison et al. 2019. "Association of Preterm Births Among US Latina Women With the 2016 Presidential Election." JAMA Network Open 2(7).
- Golash-Boza, Tanya. 2016. "A Critical and Comprehensive Sociological Theory of Race and Racism." *Sociology of Race and Ethnicity* 2(2):129–41.

- Giani, Marco and Pierre-Guillaume Méon. 2019. "Global Racist Contagion Following Donald Trumps Election." *British Journal of Political Science* 1–8
- Harrell, Shelly P. 2000. "A Multidimensional Conceptualization of Racism-Related Stress: Implications for the Well-Being of People of Color." *American Journal of Orthopsychiatry* 70(1):42–57.
- Hilmert, Clayton J. et al. 2014. "Lifetime Racism and Blood Pressure Changes during Pregnancy: Implications for Fetal Growth." *Health Psychology* 33(1):43–51.
- Hispanics in Philanthropy. 2017. "Gender Norms: A Key to Improving Outcomes Among Young Latinas." *TrueChild.org*. Retrieved (https://hiponline.org/wpcontent/uploads/2017/03/Young-Latinas-Feminine-Norms-HIP.pdf).
- Jones, Camara P. 2000. "Levels of Racism: A Theoretic Framework and a Gardener's Tale." American journal of public health 90(8):1212–15.
- Keneally, Meghan. 2018. "What to Know about the Violent Charlottesville Protests and Anniversary Rallies." *ABC News*. Retrieved March 6, 2020

(https://abcnews.go.com/US/happen-charlottesville-protest-anniversary-

weekend/story?id=57107500).

- Kivlighan, Katie T., Janet A. DiPietro, Kathleen A. Costigan, and Mark L. Laudenslager. 2008. "Diurnal Rhythm of Cortisol during Late Pregnancy: Associations with Maternal Psychological Well-Being and Fetal Growth." *Psychoneuroendocrinology* 33(9):1225–35.
- Klein, Adam. 2019. "From Twitter to Charlottesville: Analyzing the Fighting Words Between the Alt-Right and Antifa." *International Journal of Communication* 13:297–318.

- Krieger, Nancy, Mary Huynh, Wenhui Li, Pamela D. Waterman, and Gretchen Van Wye. 2018.
 "Severe Sociopolitical Stressors and Preterm Births in New York City: 1 September 2015 to 31 August 2017." *Journal of Epidemiology and Community Health* 72(12):1147–52.
- Krieger, Nancy. 1990. "Racial and Gender Discrimination: Risk Factors for High Blood Pressure?" Social Science & Medicine 30(12):1273–81.
- Lange, Jeva. 2018. "61 Things Donald Trump Has Said about Women." *The Week All you need to know about everything that matters*. Retrieved March 6, 2020

(https://theweek.com/articles/655770/61-things-donald-trump-said-about-women).

Leonhardt, David and Ian Prasad Philbrick. 2018. "Donald Trump's Racism: The Definitive List, Updated." *The New York Times*. Retrieved March 6, 2020

(https://www.nytimes.com/interactive/2018/01/15/opinion/leonhardt-trump-racist.html).

- Lockhart, P. R. 2018. "Trump Says He Deserves Credit for the Lowest Black Unemployment Rate in Decades. He Doesn't." *Vox*. Retrieved March 2, 2020 (https://www.vox.com/policy-andpolitics/2018/1/18/16902390/trump-black-unemployment-rate-record-decline).
- Lopez, German. 2019. "Donald Trump's Long History of Racism, from the 1970s to 2019." *Vox*. Retrieved March 2, 2020 (<u>https://www.vox.com/2016/7/25/12270880/donald-trump-</u> <u>racist-racism-history</u>).
- Mutambudzi M, Meyer JD, Reisine S, *et al*. A review of recent literature on materialist and psychosocial models for racial and ethnic disparities in birth outcomes in the US, 2000-2014. *Ethn Health* 2017;22:311–32.
- Newkirk, Vann R. 2017. "Black Charlottesville Has Seen This All Before." *The Atlantic*. Retrieved March 6, 2020 (https://www.theatlantic.com/politics/archive/2017/08/black-community-

charlottesville-response/537285/).

- Novak NL, Geronimus AT, Martinez-Cardoso AM. Change in birth outcomes among infants born to Latina mothers after a major immigration raid. *Int J Epidemiol* 2017;46:839–49.
- Nuru-Jeter, Amani et al. 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.
- Omi, Michael and Howard Winant. 2016. "Racial Formation in the United States." in Social Theory Re-Wired: New Connections to Classical and Contemporary Perspectives: Second Edition.
- Onion, Amanda, Missy Sullivan, and Matt Mullen. 2018. "The 2016 U.S. Presidential Election." *History.com*. Retrieved March 8, 2020 (https://www.history.com/topics/us-presidents/us-presidential-election-2016).
- Prussing, Erica. 2014. "Contextualizing Racial Disparities in Preterm Delivery: A Rhetorical Analysis of U.S. Epidemiological Research at the Turn of the 21st Century." *Social Science & Medicine* 115:82–93.
- Reid, Pamela Trotman and Lillian Comas-Diaz. 1990. "Gender and Ethnicity: Perspectives on Dual Status." *Sex Roles* 22(7-8):397–408.
- Rodrigues, Teresa and Henrique Barros. 2008. "Maternal Unemployment: an Indicator of Spontaneous Preterm Delivery Risk." *European Journal of Epidemiology* 23(10):689–93.

- Rosenthal, Lisa and Marci Lobel. 2011. "Explaining Racial Disparities in Adverse Birth Outcomes: Unique Sources of Stress for Black American Women." *Social Science & Medicine* 72(6):977–83.
- Rushin, Stephen and Griffin Sims Edwards. 2018. "The Effect of President Trumps Election on Hate Crimes." SSRN Electronic Journal.
- Seckl, Jonathan R. and Michael J. Meaney. 2004. "Glucocorticoid Programming." Annals of the New York Academy of Sciences 1032(1):63–84.
- Settles, Isis H. 2006. "Use of an Intersectional Framework to Understand Black Women's Racial and Gender Identities." *Sex Roles* 54(9-10):589–601.
- Solorzano, Daniel G. 1998. "Critical Race Theory, Race and Gender Microaggressions, and the Experience of Chicana and Chicano Scholars." *International Journal of Qualitative Studies in Education* 11(1):121–36.
- Szilagyi, A. 2017. "Discourse and discrimination in Charlottesville: The rhetoric of white supremacists during the violent unrest in August 2017". *Lodz Papers in Pragmatics*.
- Vines, Anissa I., Myduc Ta, Denise Esserman, and Donna D. Baird. 2009. "A Comparison of the Occurrence and Perceived Stress of Major Life Events in Black and White Women." *Women* & *Health* 49(5):368–80.
- Williams, David R. 2012. "Miles to Go before We Sleep: Racial Inequities in Health." *Journal of health and social behavior* 53(3):279–95.
- Williams, David R. and Selina A. Mohammed. 2013. "Racism and Health II: A Needed Research Agenda for Effective Interventions." *American Behavioral Scientist* 57(8).

Williams, D. R., Y. Yu, and J. S. Jackson. 1997. "Racial Differences in Physical and Mental Health." Journal of Health Psychology 2:335–51.