



Contents lists available at ScienceDirect

Social Science & Medicine

journal homepage: www.elsevier.com/locate/socscimed

The effects of whiteness on the health of whites in the USA

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ARTICLE INFO

Article history:

Received 26 October 2016

Received in revised form

21 June 2017

Accepted 27 June 2017

Available online xxx

Keywords:

Racism
Whiteness
Whites
Health
USA

ABSTRACT

Whites in the USA are the dominant racial group, with greater than average access to most material and social rewards. Yet, while whites have better outcomes than other racial groups on some health indicators, whites paradoxically compare poorly on other measures. Further, whites in the USA also rank poorly in international health comparisons. In this paper, we present a framework that combines the concept of whiteness—a system that socially, economically, and ideologically benefits European descendants and disadvantages people in other groups—with research from a variety of fields in order to comprehensively model the social factors that influence whites' health. The framework we present describes how whiteness and capitalism in the USA shape societal conditions, individual social characteristics and experiences, and psychosocial responses to circumstances to influence health outcomes. We detail specific examples of how social policies supported by whiteness, the narratives of whiteness, and the privileges of whiteness may positively and negatively affect whites' health. In doing so, we suggest several areas for future research that can expand our understanding of how social factors affect health and can contribute to the patterns and paradoxes of whites' health. By expanding research to include theoretically-grounded analyses of the dominant group's health, we can achieve a more complete picture of how systems of racial inequity affect health.

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For over a century, scholars have described the effect of whites' racial dominance on the health of African Americans (Du Bois, 1899 [1996]; Frazier, 1925). More recent formulations, like the social determinants of health approach, continue to examine the effects of racial inequity on the health of blacks and other people of color by examining the health consequences of where people live, learn, work, play, and worship (Williams et al., 2010; see also Link and Phelan, 1995). This approach is well-founded, because people of color are disadvantaged on access to a broad range of health-promoting resources and face higher exposure to multiple stressors, adversities, and social conditions that are linked to poorer health outcomes (Williams, 2012). In this paper, we expand the social determinants of health perspective to explicitly consider how the system of racial inequity affects the health of whites. Specifically, we propose a framework that combines critical approaches to the study of race and research from other fields to provide a complex picture of how whites' health is affected by their position

in the racialized social system. *Our framework points to how a racialized social system of whiteness benefits whites' health in some ways while adversely affecting whites' health in other ways.*

On most measures, whites in the United States have better average physical health than African Americans, Native Americans, and Latinos with long-term residence in the USA (Williams, 2012; National Center for Health Statistics, 2016). Yet, whites also have equal or poorer mental health than African Americans, greater health decline than blacks and Latinos during the recent economic downturn, worse physical health than Asian Americans and recent Latino immigrants on many measures, and poor health on international comparisons (Case and Deaton, 2015; National Research Council and Institute of Medicine, 2013; National Center for Health Statistics, 2016). To date, we do not have a framework that can account for the paradox of whites' poor health on selected indicators, despite their many advantages in the racialized social system. The framework we present can guide comprehensive understanding of whites' health by examining how whiteness—a system that socially, economically, and ideologically benefits European descendants and disadvantages others—affects whites' health.

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The social determinants of health literature has documented the health-promoting effects of racial inequity for whites as members of the dominant racial group. Others have described how Critical Race Theory can be applied to public health practice in order to reduce racial inequities in health (Ford and Airhihenbuwa, 2010). We do not reprise those literatures here. Instead, our analysis provides insight into whites' poor health on some measures while continuing to attend to whites' greater power in the racialized social system overall. This analysis is important because it outlines a framework that is grounded in the particularities of the United States' racial and economic context to provide a comprehensive perspective to explain whites' health outcomes.

Other countries show generally similar patterns of racial inequity in health (c.f., Bramley et al., 2004; Nazroo et al., 2007; Williams, 2012; Dominguez et al., 2015), but space limitations do not permit a comparative approach here. While the scope of our analysis is limited, our framework can provide the impetus for further research in the USA and elsewhere. A focus on how whiteness affects whites can better elucidate the complex ways that race and health are connected. We begin by describing past research on whites' health and explaining whiteness as a theoretical tool for understanding social systems. We then introduce our framework and illustrate a few of its potential applications.

1. Background

1.1. Patterns of whites' health

Health patterns by race are complicated in the USA. For many indicators of overall health, such as infant mortality, and age-specific mortality, non-Hispanic whites (hereafter, "whites") have better outcomes than black Americans and Native Americans, but worse than Asian/Pacific Islanders and Latinos (National Center for Health Statistics, 2016; Williams et al., 2010). Yet, the patterns depend on many factors, such as age and nativity. For example, whites and Latinos have comparable rates of mortality at younger ages, but whites have a health advantage compared to Latinos after age 34 (Williams et al., 2010). Morbidity data reveal that for some indicators of health, the health profiles of foreign-born Latinos are similar to whites, while those of U.S.-born Latinos are similar to African Americans (Williams, 2012). A recent study, discussed more below, suggests that whites' midlife mortality advantage may be declining as well (Case and Deaton, 2015).

The picture is further complicated when we turn to indicators of mental health. For example, national data on treated and untreated psychiatric disorders reveal that whites have higher rates of lifetime and past year psychiatric disorders than blacks, Asians, and most Latinos (Miranda et al., 2008). White males and females also have age-adjusted death rates from suicide that are two to three times higher than those of their black, Asian, and Latino peers. Further, among 12th graders nationally, white students have rates of alcohol use and binge drinking that are at least twice as high as those of their black counterparts (National Center for Health Statistics, 2016). Research also indicates that whites tend to have lower levels of flourishing than blacks (Keyes, 2007, 2009). Flourishing refers to a positive state of mental health characterized by the absence of mental disorders along with high levels of psychological well-being on multiple dimensions, including positive emotions and high social and psychological functioning (Keyes, 2007).

In international comparisons, the USA fares poorly in terms of health. According to the United Nations Development Programme, in 2014, the USA ranked 35th in the world on life expectancy at birth (Jahan, 2015). Strikingly, given the life expectancy of blacks and whites in the USA in 2014, if white America were a country, it

would be 34th in the world on life expectancy, while black America would be 96th (National Center for Health Statistics, 2016). The life expectancy of whites in the USA ranks behind countries like South Korea, Chile, Greece, Cyprus, and Cuba. The poorer health of Americans compared to people in other rich nations is evident at all ages, from birth to age 75 (National Research Council and Institute of Medicine, 2013). A comparison of national data for the U.S. and England found that whites with the highest levels of income and education in the U.S. had comparable rates for some common health outcomes, such as diabetes and heart disease, to whites with the lowest income and education levels in England (Banks et al., 2006). Thus, the majority of Americans, including most whites, are far less healthy than they could or should be.

A few scholars have looked explicitly at whites' health in relation to the system of racial inequity (e.g., Fujishiro, 2009; detailed below). For example, Kwate and Goodman (2014) describe a complicated relationship between whites' perceptions of how welcome black families are in their predominantly white neighborhoods, neighborhood and individual-level demographic characteristics, and health. Their results suggest that whites who are less clearly dominant in their class position and are a numeric majority have poorer self-rated health. Another study (Lee et al., 2016) looks at the relationship between individual and community-level racial prejudice and mortality, finding that racial prejudice increases whites' (as well as blacks') risk of mortality, even when controlling for individual and community characteristics. Interestingly, they find that mortality is highest for individuals whose prejudice is discordant with their community (i.e., those with high prejudice in a low prejudice community or the reverse). Their analysis suggests that community social capital, such as civic groups, public facilities, and voter participation, accounts for the effect of prejudice. These studies demonstrate the potential for new insights into the health effects of the racialized social system, including better understanding of whites' health. However, without a well-articulated conceptual framework for interpreting how whiteness relates to health for white Americans, the emerging studies do not provide a coherent picture of the effects of whiteness on whites' health. Our aim in this paper is to provide a framework that contextualizes previous studies and scaffolds future work on whites' health outcomes. Before we describe our framework, we explain the critical race theories that undergird our approach.

1.2. Whiteness as a racialized social system

We use the term *whiteness* to refer to the racialized social system in the USA. Bonilla-Silva (1997) theorizes how societies are partially structured by the placement of actors in racial categories or races "at the economic, social, and ideological level" (1997: 469). The racial categories are not static, but are socially and historically created and recreated in relation to one another (Ignatiev, 1995; Brodtkin, 1998). The focus of this paper, however, is not on who currently fits in these categories, but on how these categories function within a racialized social system. Not all whites are subject to the same experiences or privileges, as we know that class and gender—among other structures—shape how individuals experience whiteness and its attendant resources. Yet, since its inception, the racial hierarchy of the USA has placed whites at the top, with people of color defined as deficient. Bonilla-Silva's three-part approach—economic, social, and ideological—guides us as we theorize how whiteness both promotes and limits whites' health.

In the United States, our racialized social system—based in racial capitalism and histories of settler colonialism and slavery—is organized to benefit white people over Native Americans, Native Hawaiians and other Pacific Islanders, Africans and African Americans, Latinos, and Asians (Robinson, 2000; Glenn, 2002; Feagin,

2006; Melamed, 2015). In an attempt to impede cross-race interactions and alliances, promoting racial solidarity among whites of different classes was a central function of the “white” category at its inception (Roediger, 1999; Glenn, 2002). Rather than becoming less important over time, white identity continues to organize political interests in the USA. For example, 2016 election exit polls indicate that whites voted for Trump over Clinton by 21 percentage points (58%–37%), while blacks and Latinos strongly preferred Clinton (by 80 and 36 percentage points, respectively) (Tyson and Maniam, 2016). The naturalization of these solidarities and their concomitant conflicts is facilitated by the state through the institutionalization of racial hierarchy. From Supreme Court decisions that defined the boundaries of racial categories to policy designed to provide federally-subsidized home mortgages nearly exclusively to whites, the state has played a key role in the development of the racialized social system in the USA (Bonilla-Silva, 1997; Zinn, 2005).

The interconnectedness of racialized social systems and capitalism is of particular importance for understanding whiteness in the USA. Racial and economic structures developed in tandem in the USA, because “racism enshrines the inequalities that capitalism requires” (Melamed, 2015:77). Colonial and early Americans had an economic system that necessitated land and labor, prompting the racialization and dehumanization of African and Native peoples for the benefit of the newly constructed “white” economic elite (Zinn, 2005). Recognizing the connections between whiteness and capitalism will help illuminate more fully how whiteness affects health in contradictory ways.

In addition to the social and economic elements of racialized social systems, ideologies help individuals make sense of racial categories and patterns of inequity (Bonilla-Silva, 1997). Racial ideologies are frameworks and narratives that help explain the racial world and that nearly everyone knows and most of the population accepts as true. Racial ideologies, like all ideologies, must be flexible to be effective and therefore shift overtime to correspond to the particular social and economic arrangements of a society (Hall, 1986). For example, although biological racism was acceptable at the turn of the twentieth century, it did not reflect the social arrangements of the post-Civil Rights era, which led to the development of color-blind racism. Most importantly, in order to explain and justify a system of whiteness, American racial ideologies exclude discussions of structural racism. Further, because

dominant ideologies provide explanations that do not include racism or implicate whites in the system of racial inequity, most whites fail to recognize how the racialized social system benefits their group (Lewis, 2004). As a result, many whites believe it is the failure of minorities to embrace and practice core American values of personal responsibility, character, and hard work that account for racial disparities in society (Bobo et al., 2012; Davey, 2009). Here we see how racial ideologies and economic ideologies overlap to support economic and social policies (Hohle, 2015). It is this system of economic, social, and ideological forces designed to advantage whites and the economic elite that we will apply to understanding whites' health.

2. Framework for studying whiteness and whites' health

The goal of this paper is to combine the theoretical perspective of whiteness as a racialized social system and empirical work from a range of fields to provide a framework that illustrates multiple pathways by which whiteness can operate to affect whites' health. Fig. 1 presents key pathways linking whiteness to health and provides examples of concepts that fall under each of the categories. We organize the pathways connecting whiteness and health outcomes into three broad areas: societal conditions, individual social characteristics and experiences, and psychosocial responses. These areas progress from society to the individual and, finally, to health outcomes.

As shown in the figure, the ideology and history of whiteness, including the racial categories themselves, help create inequitable societal conditions, such as social policies, economic conditions, and societal events. In this framework, societal conditions directly affect individual social characteristics and experiences while also moderating psychosocial responses. Whiteness also directly impacts individual social characteristics and experiences, which include socioeconomic status, social connections, beliefs and narratives, social identities, and stressors. These characteristics then shape experiences. Together, societal conditions and individual social characteristics and experiences affect the psychosocial responses that are more proximate determinants of health.

In the following sections, we detail how some of these factors connect whiteness as a racialized social system to whites' health. As we explain, some mechanisms are “race neutral,” in that they do

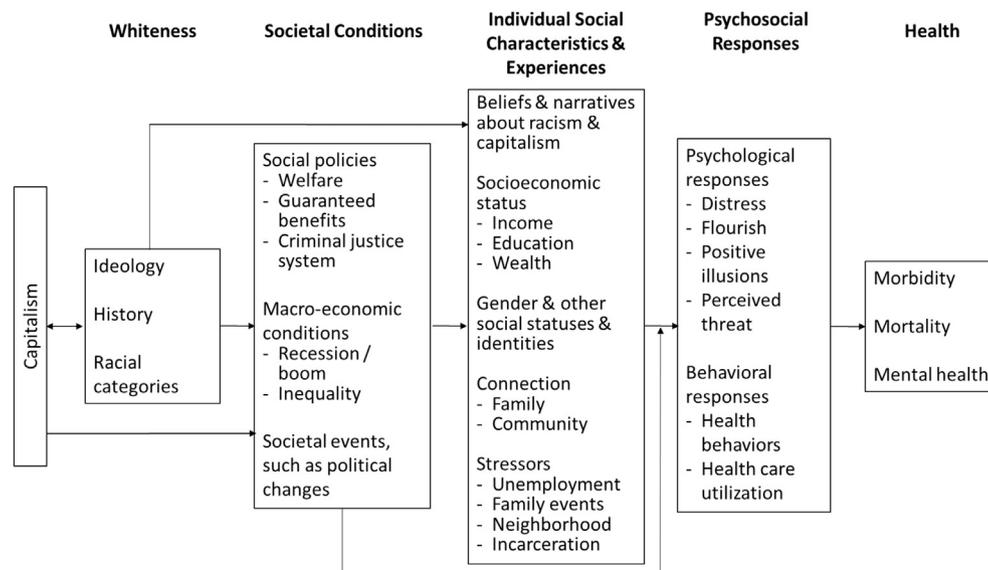


Fig. 1. Framework describing the relationship between whiteness and health.

not produce racially disparate outcomes, while others are racialized in their effects, because of racial differences in exposure or impact, or both. Space does not permit exploration of all of the factors in the model. Consequently, we selected examples that illustrate the range of analytic possibilities that a lens of whiteness can provide for understanding whites' health. Specifically, we examine how social policies, beliefs and narratives, and individual privileges may shape experiences in ways that may promote or diminish whites' health.

2.1. Societal conditions: social policy

As described above, whiteness developed to support elite economic interests and remains linked to these interests today. In this section, we will show how ideologies that support capitalism and whiteness intermingle and reinforce one another, leading most whites to reject policies that would support public policy that promotes good health. We propose that *the limited economic safety net and few guaranteed benefits for workers puts a ceiling on the potential physical health that the population can achieve, which disproportionately harms people of color, but can also harm whites who are numerically larger.*

Compared to other wealthy countries, the USA has a weak welfare system and guarantees few benefits to low income individuals or households. Other wealthy countries generate poverty rates similar to or greater than the USA, but their welfare system buffers much of their population from experiencing poverty. For example, both Canada and the USA have child poverty rates of 25.1 percent before taxes and transfers; but post-taxes and transfers, the USA's child poverty rate is 23.1 percent, while Canada's is 13.3 percent (UNICEF, 2012). The disjointed social welfare system in the USA is designed to discourage its use through time-consuming and complicated application procedures, time limits on its use, and work requirements (Desmond, 2016). These policies find support by playing on whites' desire to restrict people of color's access to resources as well as the belief that individuals should succeed through personal hard work (Bell, 1992; Gilens, 1999; Haney-Lopez, 2014).

While these restrictive social policies have grown from beliefs about the undeservingness of people of color, the result most commonly harms whites, who, in contrast to the perceptions of many Americans, constitute the plurality of the poor. Basic income, food security, and access to affordable, quality health care promote good physical health (Braveman et al., 2011), which suggests that the weak welfare safety net may contribute to whites' poor standing on international health comparisons. This hypothesis could be tested with class and race-stratified international comparisons like that conducted by Banks et al. (2006) showing that whites in the USA suffer worse health than whites in England at the same socioeconomic status. The value of an even broader comparative approach has been demonstrated by Carnoy and Rothstein (2013) who showed that the large proportion of US children in poverty accounts for its poor performance on international achievement tests. However, poverty rates alone are unlikely to account for observed patterns of poor relative health among white Americans.

Racially-motivated opposition to social programs extends beyond programs that only provide means-tested benefits to people who earn low incomes. Some policies that would disproportionately help the poor would also benefit some in the middle class. For example, the Affordable Care Act (ACA), also known as Obamacare, provided insurance to 20 million Americans, many in the middle class (Uberoi et al., 2016). However, research reveals that many whites viewed Obamacare as a program that would disproportionately benefit minorities and that racial prejudice was a

driver of opposition to the ACA as well as past proposed health care legislation (Tesler, 2012; Quadagno, 2004).

While health insurance has a clear link to whiteness and population health, other social policies can also affect health directly and indirectly. For example, paid leave for parents to take care of a sick child is associated with better child health (Heymann et al., 2013). Similarly, maternity leave policies have been associated with reduced neonatal and infant mortality (Nandi et al., 2016). Yet, the USA is weak on these policies. Earle et al. (2011) show that all but one of 22 countries in the world that are economically competitive and have a low unemployment rate have paid maternity leave for new mothers and new fathers, parental leaves to attend to children's healthcare needs, breast-feeding breaks, paid vacation leave, and a weekly day of rest. The only country in their study that lacks these is the USA, which only has breast feeding breaks as a result of the recent ACA legislation. The USA also has the least generous sick leave policies of these 22 countries (Heymann et al., 2010). If, for example, a worker needs cancer treatment that will require a 50-day absence from work, the worker in all countries, except the USA, is guaranteed a paid leave from work for the entire period. Recent estimates by Pichler and Ziebarth suggest that comprehensive sick leave policies in some US cities helped prevent about "100 influenza-like infections per week per 100 K population" (2016:33). Another study (Beckfield and Bamba, 2017) finds that the generosity of sick, pension, and unemployment benefits is associated with life expectancy at birth and at age 65. In both immediate and lagged tests, weak benefits help account for the poor international health standing of the USA. The study did not examine racial differences in the impact of these policies, but it is likely that there is an opportunity to identify which social policies in the USA help account for whites' poor health on international comparisons. Domestic research demonstrating an association among community racial prejudice, community social capital, and mortality among whites suggests that prejudice does impact communities in ways that can affect health (Lee et al., 2016). Future research should further examine the effect of whiteness and economic and social policies on health, with attention to how racial animosity is linked to restrictive policies and may account for whites' poor health in international comparisons.

Finally, economic inequality in the USA, which is at very high levels historically and in international comparisons (Piketty and Saez, 2014), presents another potential pathway connecting social policies to health. Whiteness encourages whites to reject policies designed to help the poor and reduce inequality because of animosity toward people of color as well as being unaware that the poor include a great many white people. Income inequality is hypothesized to affect health through three primary mechanisms that likely interact: 1) its effect on absolute income, the effects of which we discussed above, 2) the negative psychological effects of comparing oneself to more wealthy people, and 3) the "pollution effects" that result when elites' income and social position remove them from the rest of the population (Kawachi and Subramanian, 2014:127). Research on the health effects of economic inequality among the states in the USA finds that higher proportions of black residents are associated with greater economic inequality and poorer health among whites (Subramanian and Kawachi, 2003). Future research that more systematically examines how racial attitudes, social policies, and inequality relate to each other and combine to affect whites' health can enhance our understanding of the impact of whiteness on social policy and health.

2.2. Individual social characteristics: beliefs and narratives

Dominant ideologies are the beliefs and narratives that support existing social structures. Ideologies help individuals make sense of

their social reality while legitimizing the current social order. In this section, we turn to how some of *the beliefs and narratives of whiteness may promote whites' health, while others may harm it, depending on whether white individuals are achieving their personal goals*. As examples, we describe how whites' expectations for success, responses to setbacks, and illusions about meritocracy may affect their health.

2.2.1. Negative health consequences

The racial ideologies of whiteness include whites' expectation of material and social success, particularly in comparison to people of color. The expectation is so strong, and the power of whiteness to obfuscate the workings of the racialized social system so effective, that although empirical evidence suggests that whites experience racial discrimination at markedly lower rates than minorities, perceptions of white victimhood are common. Maly and Dalmage (2015) describe how whites maintain a positive white identity by creating stories of a better racial past that was disrupted by institutions or a racial "other," creating a narrative in which they are victims. Survey data match with these qualitative findings. A national survey found that 57% of white Americans believe that life has changed for the worse since the 1950s and 50% believe that discrimination against whites is as big of a problem as discrimination against blacks in the USA (Jones et al., 2015). Among working class whites the percentages rise to 62% and 60%, respectively.

Research suggests that unmet expectations for success may take a heavy toll on whites' health. Kessler (1979) noted nearly 40 years ago that whites and high socioeconomic status persons suffer more emotional distress than their socially-disadvantaged counterparts when exposed to an equivalent stressor. A large multi-site psychiatric study found that lower socioeconomic status white males had higher rates of psychiatric disorders than their black counterparts (Williams et al., 1992). A recent study found that during the period of economic decline between 1999 and 2013, middle-aged whites with a high school education or less, experienced a decline in life expectancy in contrast to a trajectory of increasing life expectancy for their black and Hispanic peers (Case and Deaton, 2015). Suicide, opioid overdose, and alcohol misuse as reflected in chronic liver disease and cirrhosis were the three causes of death responsible for this pattern of worsening health, and other national data suggested that high levels of emotional distress and hopelessness were the underlying drivers (Case and Deaton, 2015). While some population changes (e.g., an aging population, greater overall educational attainment) temper some conclusions (e.g., Gelman and Auerbach, 2016), it appears that the recent economic downturn, characterized by stagnant wages and high unemployment and underemployment, has led to high levels of hopelessness and psychological distress for low income whites.

More generally, whites have the highest suicide rate of all racial groups in the U.S. and this pattern has existed for over 100 years (National Center for Health Statistics, 2016). For example, in 2014, the suicide rate for whites was three times higher than that of blacks (Table 17). Suicide risk is especially elevated for white males and increases with age for this group. In 2014, for example, white males 65 years of age and over had a suicide rate that was six times higher than white females, four times higher than black males and 28 times higher than black females (National Center for Health Statistics, 2016: Table 30). Future research should examine the relationship between whites' beliefs about whites' position in society and their mental health on multiple domains, testing whether evaluation of personal success moderates the association for particular mental health outcomes.

Research on flourishing—optimal levels of mental health—suggests mechanisms that may link whites' beliefs and stories to their mental health (Keyes, 2009). When speculating about the source of

blacks' psychological resilience in the face of interpersonal and institutional discrimination, Keyes describes two lines of research that may also explain why whites turn to victim narratives and why this narrative is psychologically harmful. First, Keyes suggests that black Americans may have better mental health because they are more likely to make positive meaning of negative experiences. McAdams and colleagues (1993; 2001) find that psychological well-being, both among adults at mid-life and college students, is better among people with life stories that include "redemption"—a positive emotion at the conclusion of a difficult experience—rather than "contamination"—concluding with a negative emotion. Second, Keyes (2009) draws attention to research on blacks' greater sense of connection across generations, which is associated with narratives of redemption (Hart et al., 2001; Newton and Baltys, 2014).

Applying these ideas to whites, future research could profitably explore how the culture and narratives of whiteness may contribute to the paradox of whites' comparatively poor mental health. While both dominant and subordinate groups are subject to dominant ideologies, subordinate groups often produce counter narratives as forms of resistance to their oppression. For example, storytelling by elders offers alternative, and sometimes empowering, narratives that help marginalized groups to thrive in the face of adversity (Fabius, 2016). Such stories could model positive meaning making—redemption narratives—that support positive mental health. In contrast, whites' stories of victimhood may not support positive mental health. Lack of such redemption narratives shared across generations may shape how whites interpret negative experiences. Kessler (1979) similarly speculated that socially advantaged groups may be less emotionally flexible and have fewer tools for coping with adversity, because they were not socialized to expect it. That is, their past collective and individual experiences that primarily dealt with success do not provide opportunities to learn to cope with adversity.

Several studies suggest that whites and/or higher socioeconomic individuals indeed have limited ability to positively respond to the stress caused by loss of status. For example, Newman (1988:49), reports that white-collar workers have difficulty making meaning of their job loss. Their belief in meritocracy leads them to blame themselves rather than external forces for their situation, a response that may harm the health of people of any race (Kwate and Meyer, 2010). However, in contrast to whites, blacks are more likely to rely on structural explanations for accounting for their adversities and disappointments and this system blame orientation is protective of their mental health (Neighbors et al., 1995). Other research shows the difficulty that those with more economic advantage have in coping with economic loss. An analysis of national panel data found that a large loss of income (50% or more) predicted elevated mortality risk more strongly among individuals from middle income households than for those from low income households (McDonough et al., 1997).

Mental health struggles associated with status loss may also help account for whites' elevated mortality risk during challenging times. Keyes and Simones (2012) show that languishing, rather than flourishing, predicts mortality. Some research suggests that this effect may be stronger for whites. For example, one study found that whites—but not blacks—with depressive symptoms are more likely to experience future chronic medical conditions (Assari et al., 2015). Such a link may help explain why the physical health consequences of mental health problems may be greater for whites. The relationships among whiteness, personal success, economic conditions, psychological well-being, and physical health offer many opportunities to better understand whites' mental and physical health during bad economic times. More generally, extant research suggests that past experiences of economic advantage and

the ideological beliefs that support whiteness may make a loss of economic and social status particularly challenging for whites. Future research on the paradox of whites' mental health should more systematically explore how whiteness shapes meaning making, generativity, redemption stories, and the conditions under which these influence whites' mental health when they experience adversity or a loss of status. As indicated in Fig. 1, the impact of life events is mediated by social policies that could provide a safety net to those experiencing a personal problem. Therefore, future research should also examine how societal conditions interact with individual experiences.

2.2.2. Positive health consequences

While some of the beliefs and narratives of whiteness may negatively affect whites' physical and mental health, others may have mixed or positive effects. Although whites' beliefs have shifted in response to recent, highly-publicized police violence, whites still tend to believe that people of color are not systematically disadvantaged and that outcomes are determined by a meritocratic system. Public opinion data from the spring of 2016 show that a quarter or less of white Americans believe that blacks are treated less fairly than whites when applying for loans, at work, in stores, or when voting; fifty percent believe that blacks are treated less fairly by the police (Pew Research Center, 2016). In a society with widespread and publicized racial inequality and racial discrimination, these beliefs do not match easily accessible, and sometimes highly visible, information.

Beliefs maintained by “looking at known facts in a particular light, because a different slant would yield a less positive picture, or beliefs that have yet to yield any factual basis of support” (Taylor, 1983:1161) have been labeled positive illusions. Some research suggests that positive illusions might improve some whites' psychological and physical well-being. Often mastery, self-enhancement, and meaning are supported by positive illusions. Taylor et al. (2000) also find that positive illusions can extend longevity for people with terminal illness. The belief among many whites that they have achieved their goals (professional or personal) because the USA is a meritocracy permits them to attribute success to their own hard work, a core belief in the American Dream (Johnson, 2015). Fujishiro's (2009) study also provides some evidence that positive illusions may improve whites' health. She finds that whites who report that they are treated neither better nor worse than people in other racial groups at work have better health than whites with other views of the racial dynamics at their workplace. A potential explanation for this pattern is that whites who believe in a meritocracy and racial equality—a positive illusion for successful whites—receive a psychological benefit from believing that their achievements are based on their own merit. In contrast, whites who report being treated worse than people in other racial groups have poorer health, which may be because they subscribe to the victim narrative described above. Fujishiro (2009) offers another explanation, suggesting that collective guilt may result in whites who report being treated better than people from other racial groups having poorer health. Additional research could evaluate these and other potential psychological pathways between whites' beliefs about racial equality and health, with particular attention to whether the effects vary by views of one's success.

2.3. Individual social characteristics: economic and social privileges

The preceding sections described some potential negative health effects of whiteness for whites' health. However, the primary goal of whiteness is to provide whites with advantages relative to people of color. In this section, we begin by briefly describing

existing research on how whiteness historically provided people labeled as white with material and social advantages and privileges. We then suggest new routes for research that would further elucidate how the *relative material and social privileges experienced by whites may benefit whites' health compared to people of color in the USA*.

In the USA, many policies and practices operate to produce material advantages for whites that tend to enhance health. For example, for over 30 years in the mid-20th century, the government of the United States guaranteed home loans for white borrowers applying to purchase a home in stably white neighborhoods (Katznelson, 2005). The effects of this policy persist today, with continued better treatment of whites in the housing market and most whites living in segregated neighborhoods (Pager and Shepherd, 2008). The residential segregation of whites is a central determinant of racial inequity, because it ensures greater access of whites (compared to blacks and others) to socioeconomic mobility by ensuring greater access to high quality elementary and high school education, readiness for higher education, employment opportunities, and higher quality neighborhoods and housing (Massey and Denton, 1993).

The privileges produced by systemic whiteness are not limited to material resources. Whites also gain many social advantages in the racialized social system. For example, whites receive more affirmation through the media, from who is featured in children's books (Welch, 2016) to who is in front of and behind the camera (Hunt et al., 2016). New technologies provide additional opportunities for old patterns of interpersonal discrimination to emerge. For example, new manifestations of whiteness include racial disparities in the sharing economy, with white hosts and guests on Airbnb being more likely to be successful on the site (Edelman et al., 2017). Experiences of discrimination and unfair treatment are forms of stress and are connected to health outcomes for both minorities and whites (Williams and Mohammed, 2009; Paradies et al., 2015). Yet, whiteness hides whites' relative freedom from racial discrimination from most whites. Prior research has given scant attention to when and how whites perceive their advantages and the conditions under which this affects their health. This is a priority for future research.

Future research could also benefit from applying a lens of whiteness to research on cumulative advantage. Cumulative advantage research suggests that inequality at one age predicts increasingly disparate outcomes at later ages (Merton, 1968; DiPrete and Eirich, 2006). It may operate through a path dependency set by exposure to a privilege (e.g., prestigious education) and/or by persistent exposure to positive conditions (e.g., accrual of repeated advantages). A cumulative health advantage for those with more education has been demonstrated through midlife in the United States (Ross and Wu, 1996; Willson et al., 2007) and even in Sweden, a much more egalitarian society (Leopold, 2016). At the same time, researchers who ask whether the disadvantages faced by people of color accumulate have found mixed results. Shuey and Willson (2008) analyze data from the Panel Study of Income Dynamics and find increasing black-white health disparities in self-rated health. They also find that the health returns to more education are greater for whites than for blacks, but that the returns on wealth and income are similar. Brown et al. (2012) also present a complicated picture with Health and Retirement Survey data. Whites have a cumulative advantage compared to blacks at ages 51–62 for some health outcomes, but not at older ages or compared to Mexican Americans. These studies highlight the need for studies that identify the conditions under which various societal privileges of whiteness accumulate for whites and the extent to which these patterns are racially distinctive.

The approach of examining advantages across the life course

could also be applied to studying the cumulative advantage of avoiding stress. A great deal of research has demonstrated that stress affects health through its physiological impact on the body and behavioral responses to stress (Seeman et al., 2010; Thoits, 2010). Wealth and whiteness reduce the risk of exposure to a broad range of negative stressors, such as crime, employment discrimination, and incarceration. Across multiple types of acute and chronic stressors, black and US-born Latino adults report higher levels of stress and the greater clustering of multiple stressors compared to whites (Sterthal et al., 2011). This elevated exposure to stress of racial minorities begins early in life. A recent national study of over 84,000 children and adolescents found higher levels of adverse childhood experiences among blacks and Latinos when compared to whites (Slopen et al., 2016b). Importantly, fewer adverse childhood experiences are associated with lower rates of harmful health behaviors and health problems among adults (Shonkoff, 2012). These studies highlight the need for longitudinal studies of stress experiences over the lifetime. Beginning with a comprehensive characterization of “adverse childhood experiences,” future research needs to apply newly developed instruments that capture stress over the life course in all of its complexity to racial disparities in health (e.g., Toussaint et al., 2016). This research could reveal the extent of the patterning of exposure and avoidance of particular stressors by race and assess the health benefits, if any, that whites experience due to a lifetime of lower exposure to acute and chronic stressors.

Future research should also examine whether material resources, particularly those linked to whiteness and wealth, can mitigate some of the negative effects of stressful experiences. The USA does not have social policies that guarantee workplace policies like vacation or a living wage, but whites' labor market advantage and markedly higher levels of wealth means that they are more likely to have a job that provides paid vacation time, wealth that allows flexibility in the use of income, and adequate income to participate in stress-reducing activities. Future studies should assess how such advantages accumulate over the life course to improve whites' health. A recent study shows that greater childhood emotional and instrumental support is associated with better physiological functioning several decades later, controlling for many potentially confounding factors (Slopen et al., 2016a). This study did not find racial differences in childhood support. Future research should confirm these findings and expand measures of psychosocial resources over the life course to include religious involvement and other forms of support and participation over the lifetime. Additionally, future research should consider the extent to which particular types of social support, material resources, employment benefits or other privileges over the life course can mitigate at least some of the adverse effects of particular stressful experiences. Our current understanding is limited with regards to how income, education, wealth, and other material advantages and aspects of white privilege can protect whites from the negative effects of particular stressors, as well as, from processes of stress proliferation (e.g., job loss leading to financial stress, which leads to dissolution of a marriage, which leads to housing loss) (Malat et al., forthcoming). We also need to identify the mechanisms that undergird any observed effects.

Efforts to assess the potential protective effects of white privilege in reducing the negative by-products of stress on health should also consider the potential effects of individuals' social networks and community. Whiteness promotes segregated neighborhoods, families, friendships, work relationships. Because the social networks of whites tend to consist mainly of other whites, they are less likely than blacks, Latinos, or Native Americans to have family members or close friends who experience the challenges of poverty or other negative consequences of racism. For example, white

women are less likely than their black peers to give social and material support to poorer relatives and less likely to receive such support (Jackson and Williams, 2006). In addition, whites are far less likely than blacks to have an incarcerated family member (12% of white women compared to 44% of black women) (Lee et al., 2015). Because whites are less likely to die prematurely, and because they have racially homogeneous friends and family, whites are also less likely to have close friends or relatives who die prematurely. Thus, whites appear to be protected from at least some stressful experiences by having white social networks that share their economic and racial privilege. Future research should quantify how the social aspects of white privilege can affect health.

3. Conclusion

The goal of this paper is to provide a framework for using whiteness as a theoretical tool to better understand whites' health. We explain that whiteness structures inequities at multiple levels of analysis. Past research has importantly demonstrated the negative health consequences of this system for people of color, particularly in comparison to whites. Our framework suggests that the picture is complicated, with whiteness sometimes leading to negative health consequences for a large number of whites. We illustrate how whiteness may affect whites' health in three areas: social policy, beliefs and narratives, and privileges. Our analysis demonstrates how a lens of whiteness can motivate research that accounts for whites' poor health in international comparisons and poor mental health compared to people of color in the USA as well as whites' health advantages in other areas. This provides a more complete picture of how systems of racial inequity affect health by centering their effects on dominant group members.

We have not exhausted the potential utility of applying the theoretical tools of whiteness to the study of the health of whites. For example, we did not examine the potential questions suggested by intersectional approaches that simultaneously consider multiple social identities (e.g., race, class, gender, sexuality), nor did we discuss how this framework could be adapted to other countries. Nonetheless, we have demonstrated that such an approach may provide insight into the patterns and paradoxes of whites' health in a particular context.

For centuries scholars have recognized that social inequity produces health inequities (e.g., Engels, 1887 [1958]). Yet, the ideologies of whiteness and capitalism repeatedly draw our attention away from comprehensive social policies that would improve health and toward individualistic explanations for health inequities (e.g., genetic differences, personal responsibility, and health behaviors). While this paper has detailed some negative effects of whiteness on the health of whites, research clearly shows that it harms people of color more often. In order to improve health for all, whiteness and its ideological, economic, and social consequences should be carefully delineated and systematically dismantled.

Acknowledgements

David R. Williams received financial support from grant P3022586 from the WK Kellogg Foundation.

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