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Abstract

The study sought to explore the relationship between general stress, discrimination, internalized stigmas, social support, and physical health outcomes among lesbian, gay, and bisexual people of color. A relationship between discrimination and emotional and physical health has been established among sexual minorities (Frost, Lehavot, & Meyer, 2015) and racial and ethnic groups (Hahm, Ozonoff, Gaumond, & Sue, 2010), aligning with the theories of minority stress (Brooks, 1981; Meyer, 2003). Internalized stigmas (i.e., internalized racism and homonegativity) and social support have also been shown to influence general physical health. The current study explored whether (a) greater levels of general stress, internalized stigmas, perceived discrimination, and lower levels of social support would predict an increase in physical health symptoms; and (b) greater levels of discrimination would predict an increase in physical health symptoms after controlling for all other variables and relevant demographics. All predictor variables and the interactions of perceived discrimination x internalized racism and perceived discrimination x internalized homonegativity were entered into a hierarchical regression model. Perceived general stress, internalized racism, perceived discrimination, and perceived discrimination x internalized racism were found to be significant predictors of physical health symptoms.

Introduction

Researchers have investigated mental health risks from specific diagnoses (e.g., anxiety disorders, depression, etc.) to health-related behaviors (i.e., suicide and mental-health seeking) among the lesbian, gay, and bisexual (LGB) population (Boehmer, Miao, Linkletter, & Clark, 2012; Cochran, Sullivan, & Mays, 2003; Kashubeck-West & Szymanski, 2008), while focusing minimally on physical health disparities (Boehmer, 2002). It was not until the past decade that overall physical health disparities were explored and linked to sexual minority identities (Lick, Durso, & Johnson, 2013). Similarly, the identities of racial and ethnic minorities have been linked to both poorer psychological and physical health (Borrell & Dallo, 2008; Park, Jang, Lee, & Chiriboga, 2013). Little research, however, has examined individuals with intersecting sexual and racial and ethnic minority identities. Exploration of the link between minority identities and physical health is essential, as quality of life and mortality attenuates with poorer physical health symptoms.

The link between minority identities and poorer health has been conceptualized and explained by *minority stress* (Brooks, 1981; Meyer, 1995). According to theories of minority stress, individuals from minority populations are considered by the majority group to be socially inferior groups, leading to substandard treatment by society as a whole. These attitudes and behaviors toward minority populations lead to both general and common life stressors, as well as unique stressors directly related to one's minority status. Meyer's (2003) theory of minority stress posits that health is influenced by multiple factors, including perceived discrimination, internalized stigma, and social support. Similarly, Brooks (1981) explained minority stress as involving "antecedent

stressors of culturally sanctioned, categorically ascribed inferior status, resultant prejudice and discrimination, the impact of these forces on the cognitive structure of the individual, and the consequent readjustment or adaptational failure” (p. 84). The minority stress model does not emerge from one particular theory; rather, it was inferred from a number of sociological and social psychological theories (Meyer, 2003).

A large and influential factor on the health outcome of minority populations, as conjectured in the theory, is perceived discrimination and victimization based on minority status. Both racial/ethnic and sexual minorities experience significant levels of discrimination, including physical assaults, sexual assaults, verbal assaults, and institutionalized discrimination (Balsam, Rothblum, & Beauchaine, 2005; Jones, 1997). These incidents of discrimination result in physiological stress arousal, as well as psychological distress, leading to poorer physical and mental health. This ongoing stress process can lead to life-long abnormalities, particularly if these experiences of discrimination tend to occur early in life and continue throughout (D’Augelli, Grossman, & Starks, 2005).

Berkman and Syme (1979) and Hefner and Eisenberg (2009) investigated the link between stress and health, discovering that social support acted as a buffer between the two. A plethora of investigations have linked social support with a number of aspects of health and illness (Dean & Lin, 1977; Murawski, Penman, & Schmitt, 1978). Among minority populations, social support, as defined by a relationship that communicates care and acceptance, belongingness, and value (Cobb, 1976), is of key importance to maintain psychological and physical health (Meyer & Frost, 2013). Because minority groups often feel inferior and are constantly targets of bigotry,

support and acceptance from others promotes a sense of safety and general care. In fact, physiological evidence has been discovered supporting the role of social support on physical health in minority groups (Uchino, 2004). Positive social support has also been shown to attenuate emotional and psychological distress (Masini & Barrett, 2007; Wong, Wu, Gregorich, & Pérez -Stable, 2014). Further, social support and social ties have been linked to positive and negative health behaviors, with positive support typically leading to reduced risky behaviors and increased health-promoting behaviors (Umberson & Montez, 2010).

Internalized stigma or internalized oppression, known as the appropriation of negative attitudes toward one's own minority identity, has also been linked to a number of negative outcomes, including psychological distress and poorer health (Butler, Tull, Chambers, & Taylor, 2002; Denton, Rostosky, & Danner, 2014; Newcomb & Mustanski, 2010). The internalization of these oppressive attitudes is likely a result of external discrimination (Clark, Coleman, & Novak, 2004; Solorzano, Ceja, & Yosso, 2000). People of color may experience internalized racism, while sexual minorities may experience internalized homonegativity, both of which impact health.

More recently, scholars have addressed multiple minority stress and multiple minority groups (Bowleg, Huang, Brooks, Black, & Burkholder, 2003; Grollman, 2014; Nabors et al., 2001), concepts stemming from the theory of minority stress (Brooks, 1981; Meyer, 1995). The effects of multiple and intersecting disadvantaged statuses have also been referenced as the *double jeopardy hypothesis* (Beale, 1979; Dowd & Bengston, 1978). Exploration of multiple minority stress illustrates the impact of different identities and their relationship to stress, rather than considering the impact of

just one identity at a time. For example, an individual who identifies as both a person of color and a sexual minority will likely face discrimination and prejudice for both of the marginalized identities. Heterosexist and homonegative attitudes will likely be elicited both from their racial/ethnic community, as well as the general population. Similarly, racially discriminatory attitudes will also likely be elicited from others in the LGB community, along with the general population.

Similarly, and slowly being addressed by multicultural researchers and academicians, is the theory of intersectionality (Collins, 1990; Crenshaw, 1989) among minorities. This theory acknowledges the ways in which gender, race, class, and sexuality work together to create inequality, which has also been considered the interlocking system of oppression (Collins, 1990). It suggests that sociological theories and paradigms tend to focus on one identity variable (e.g., sexual identity, race/ethnicity, socioeconomic status) at a time, rather than addressing the intersecting minority identities impacting a single person. Discrimination resulting from these intersecting identities is multiplicative vs additive. Because “different dimensions of social life cannot be separated into discrete or pure strands” (Brah & Phoenix, 2004, p. 76), intersectionality aims to focus on the person as a whole.

Working primarily from theories of minority stress (Brooks, 1981; Meyer, 1995), the purpose of the current study is to explore the influence of perceived discrimination, internalized stigmas, and social support on physical health among LGB people of color. Prior studies have explored these minority identities separately, or by teasing them apart, which contradicts the major premise of intersectionality. Further,

studies have explored minority stress and mental health, with very little mention of physical health (Lick, Durso, & Johnson, 2013).

Of note, the terms “LGB” and “sexual minorities” will be used interchangeably throughout this manuscript. Also, the terms “people/person of color” and “racial/ethnic minorities” will be used interchangeably throughout, as similar to existing literature.

Literature Review

As noted previously, intersectionality largely focuses on the interaction of social identities and the unique experiences that follow. It should be noted that intersectionality research does not come without its challenges. Most studies addressing stress in relation to sexual minority and racial/ethnic statuses use additive approaches to analyzing data. These additive approaches indicate that stigmatized identity will increase social inequality, leading an individual to be multiply oppressed because of the combination of marginalized identities. Accordingly, this approach suggests that each identity is separate, independent, and capable of being quantified, ultimately defying the purpose of the study of intersectionality. For example, the experience of someone identifying as, (a) black, (b) lesbian, and (c) a woman, does not equate to the experience of someone identifying as a black lesbian woman. Further, with regard to perceived discrimination, it is difficult for individuals to determine whether they are being victimized due to their racial/ethnic status or their sexual minority status, or some combination of both. Thus, additive approaches have validity concerns, depending on constructs being measured.

Despite its limitations, however, researchers argue that it is nearly impossible to avoid an additive perspective (Bowleg, 2008), particularly during early stages of research of multiply oppressed individuals. Rather, researchers have been encouraged to focus on meaningful investigations to ultimately lead to advocacy and health promotion among, for example, LGB people of color. The current study strives to assess for overall perceived discrimination or victimization without attempting to deconstruct or separate the different identity statuses of each person.

It should also be noted that the purpose of this study is not to determine whether individuals with more than one minority status (e.g., an LGB person of color) experience greater stress or health disparities than a people with one or no identified minority status (e.g., an LGB white individual). Research comparing higher status groups to lower status groups has been suggested to portray dominant groups as the “norm,” thus the minority group as the “effect to be explained” (Hegarty & Pratto, 2001, p. 723). Rather, the aim of the current study is to investigate the relationship between the indicated variables among the targeted population. As indicated by Enns (2012): “Counseling psychologists should continue to study neglected groups...without comparing their experiences to the normative standard of dominant group members” (p. 414).

Stress Processes

Before discussing the unique characteristics of minority stress, it is necessary to understand the process of stress from both physiological and psychosocial perspectives. Aneshensel (1992) conceptualizes stress as “a state of arousal resulting either from the presence of socioenvironmental demands that tax the ordinary adaptive capacity of the individual or from the absence of the means to attain sought-after ends” (p. 16). Stress is considered to be an internal arousal, while stressors are considered to be external demands or circumstances. Goldstein and Kopin (2007) described the relationship between stress and *homeostasis*, a term coined by Walter Cannon (1929). Homeostasis describes the maintenance of functioning within acceptable ranges of several physiological variables, such as blood glucose and core body temperature.

Psychosocial threats were later added as potential threats to a homeostatic state, potentially resulting in stress. Further, stress was noted to be:

...a consciously or unconsciously sensed threat to homeostasis, in which the response has a degree of specificity, depending, among other things, on the particular challenge to homeostasis, the organism's perception of the stressor and the perceived ability to cope with it (Goldstein & Kopin, 2007, p. 111).

Physiology of stress. In order to understand the impact stress has on emotional and physical health, it is important to understand the physiological processes and pathways of stress arousal. This process is often described from a systems perspective, given the multidimensional nature of all physical components in action. Many processes are included in the response to stress, including the nervous system, the endocrine system, and the immune system. Cannon (1935), in a seminal reading on homeostasis, noted that stressors play a significant role in the interruption of a body's homeostatic condition. These stressors threaten homeostasis via the appraisal that external stimuli are negative, further causing the body to engage in protection utilizing multiple pathways.

The autonomic nervous system acts as the initial and immediate response to a stressor, causing the body to move into a "fight or flight" response. The activation of the sympathetic nervous system (i.e., the "fight or flight" center) causes a release of the hormone epinephrine (adrenaline). Physiological changes, such as increased heart rate, blood pressure, and senses, occur within seconds. The endocrine system, composed of glands, is also triggered by a stressor and reacts more slowly than the sympathetic processes. Although multiple glands are triggered during stress arousal, the gland with

the largest direct impact on stress response is the adrenal gland. The adrenal gland contains the adrenal medulla, which secretes epinephrine as the sympathetic nervous system does. The effects are considered to be intermediate in time (i.e., 20 – 30 seconds), following the more immediate effects of the sympathetic system.

A longer lasting pathway of stress in the response process includes the neuroendocrine pathway, primarily the HPA axis (i.e., hypothalamus, pituitary gland, and adrenal glands). The HPA axis relies on a series of hormonal signals to keep the sympathetic nervous system active. The hypothalamus releases corticotropin-releasing hormone (CRH), which travels to the pituitary gland, triggering the release of adrenocorticotropic hormone (ACTH). Upon the effects of ACTH, the adrenal cortex releases several stress hormones, including those that generate glucose and break down fats for energy. Two other hormones, vasopressin and thyroxin, work similarly and impact blood volume and metabolic rate. This process, to prepare the body to combat threatening stimuli, occurs within minutes, and may have effects lasting for weeks after initial response.

Ultimately, when the threat passes, the parasympathetic nervous system steps in and attempts to return the body to homeostasis. The combinations of these neural and hormonal pathways are extremely important to both physical and emotional survival. However, it is when these same pathways are employed incessantly that stress begins to take a toll on health. Constant pressure causes “wear and tear” in blood vessels, which may have lethal effects on humans. Evidence has linked persistent and recurrent stressors to psychological distress, physical morbidity, and mortality (Liem & Liem, 1978; Wheaton, 1983). For example, chronic stress can cause the stress arousal system

to work constantly, leading to symptoms such as hypertension, insomnia, and gastrointestinal problems. There is also evidence linking the role of stress to upper respiratory tract infections, autoimmune diseases, viral infections, asthma, and delayed wound healing (Cohen, Jannecki-Diverts, & Miller, 2007).

Psychosocial stress and minority stress. Given the physiological impact chronic stress has on human functioning, it is of little surprise that individuals facing a number of external stressors are at increased risk of poor health. Although theories of stress initially focused primarily on personal and physical stressors, a significant amount of research has since explored environmental conditions that contribute to stress and psychological and physical health (Aneshensel, 1992). In particular, social scientists began to link conditions in the environment to poor mental and physical health outcomes. At an individual level, the experiences of stress are understood by the person's characteristics, experiences, and history. Stress related to systemic structures, on the other hand, are linked due to the experience of exclusion from full participation in the social system or participation that does not meet an individual's expected returns (Pearlin, 1989). These systemic conditions of stress and tension are significantly more prevalent among some social groups when compared to others, which is largely due to inequality in the system (Pearlin, 1989). Aneshensel (1992) noted that the maintenance of the social system, particularly by majority groups, creates tension between an individual and social collectivity, even for "perfectly ordinary people integrated into the normative structures of society" (p. 33).

Meyer's theory of minority stress (2003) suggests that many discrepancies in health among minority groups are primarily related to psychosocial stressors, which

may impact physical health (Brooks, 1981; Meyer, 1995; Meyer, 2003). This stress results from both an increase in major adverse life events and prejudice-related life events (Meyer, Schwartz, & Frost, 2008). Being members of disadvantaged social groups automatically expose individuals to stigma, prejudice, and discrimination. Being members of the human race also expose individuals to general stressors that are faced by most of the population, minority and non-minority alike. The combination of stressors, particularly in excess, results in even greater levels of stress leading to health-related conditions, such as mental and physical disorders, health behaviors, and a poor quality of life in minorities.

This framework posits that minority stress initially emerges from general environmental circumstances, which include advantages and disadvantages related to a number of demographic factors (e.g., socioeconomic status, religion, geographic location). Minority status, such as sexual orientation and race/ethnicity, overlaps with these general circumstances. The overlap leads to unique stressors faced by a minority individual, whether they are general stressors (e.g., loss of a loved one or job loss) or stressors related to minority identity (e.g., discrimination in employment or physical attacks based on minority status). Further, minority status typically leads to development of a *minority identity*, which can cause negative perceptions of the self or, alternatively, positive perceptions (e.g., connection to other minorities). The summation and interaction of these factors may ultimately lead to poorer health outcomes.

Meyer and Frost (2013) described two unique categories of stressors faced by minority populations separate from acute major stressful events common among the

general population. They identified *structural exclusion* as the exclusion of a particular population from resources or advantages. Historically, marriage inequality for same-sex couples in certain states was an example of structural exclusion. These stressors reflect Pearlin's (1989) suggestion that tension and stress among particular communities are often a result of inequality, not at any fault to the victims of discrimination.

Everyday discrimination, on the other hand, was described by Meyer and Frost (2013) as minor incidents or stressors that require little adaptation. These may also be considered *microaggressions*, defined by Sue and colleagues (2007) as "brief and commonplace daily verbal, behavioral and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults to the target person or group" (p. 273). For a person of color, microaggressions may include, "You don't talk like a Black person" or "Your English is good." Sexual minorities may hear statements such as, "You're really pretty for a lesbian" or "You just haven't met the right guy yet." As indicated, these are likely not perceived by the perpetrator as discriminatory or offensive and are often believed to be harmless (Smith, Allen, & Danley, 2007). Though a single incident of everyday discrimination does not share the same magnitude as being physically assaulted, these events likely cause damage as they accumulate over time (Meyer, Ouellette, Haile, & McFarlane, 2011).

Although the Brooks and Meyer's theories of minority stress were initially developed to describe the stressors faced by sexual minorities, many studies have substantially addressed this model with other marginalized populations. It appears that many minority populations or low status groups, such as lower socioeconomic status

(SES), non-heterosexual, gender-nonconforming, and physically disabled individuals, face unique stressors that are not typically encountered by the majority population (Biasco, Goodwin, & Vitale, 2001; O'Brien, Latner, Ebnetter, & Hunter, 2013; Snyder, Carmichael, Blackwell, Cleveland, & Thornton, 2009). The frequent incidences of prejudice and discrimination, or the anticipation of experiencing them, tax physiological and emotional resources, ultimately leading to psychological or physical distress. Sociologist Emile Durkheim (1951) suggested that society itself stands as a stressor for marginalized populations because the dominant social structures and values are not aligned with the minority group. Explaining physical distress among minority individuals may be as simple as pointing toward these overall stressors, as increased perceived discrimination and general stress is related to poorer health (Williams, Yu, Jackson, & Anderson, 1997). Because stressors and the influence of discrimination are unique to each minority group (Meyer, 2003), however, brief reviews for the LGB population, racial/ethnic population, and LGB people of color will be provided.

Health Disparities

Comparing the health disparities among the different populations and identities is not the purpose of this study. However, it is important to recognize the presence of disparities among the LGB and racial/ethnic populations. The recognition of these persistent health problems among minority populations highlights the importance of the current study.

Health disparities among racial/ethnic minority groups. Health disparities among racial and ethnic individuals in the United States have been comprehensively

explored, indicating greater prevalence of poor health, health risks, and chronic illnesses (Borrell & Dallo, 2008; Park, Jang, Lee, & Chiriboga, 2013). For example, African American individuals have shown a higher prevalence of heart disease (Brown & Mensah, 2007), diabetes (Narayan, Boyle, Thompson, 2003), high blood pressure (Burt et al., 1995), and asthma (Gorman & Chu, 2009) when compared to White individuals.

Some studies have indicated that after controlling for covariates, such as SES and physical activity, the discrepancies between racial groups regarding physical health diminishes. For example, Williams, Yu, Jackson, and Anderson (1997) found that higher income markedly reduced the physical health differences among different races. However, other studies have noted that racial differences existed for overall health, heart disease, mortality, hypertension, and obesity among people of color at every level of SES (e.g., Pamuk, Makuk, Heck, & Reuben, 1998). For instance, African American women with at least a college degree still have a higher infant mortality rate than women of other races who have not completed high school (Kleinman & Kessel, 1987).

DeSantis and colleagues (2007) investigated cortisol slopes among African American, Hispanic, and Caucasian youth; flatter cortisol slopes have been associated with both negative emotion and poorer health. Findings suggested that after controlling for covariates, both African American and Hispanic youth had flatter slopes throughout the day than Caucasian youth, suggesting that physiological responses to stress begin in childhood. August and Sorkin (2010) also found that overall health disparities continued throughout the lifetime, as older adults still had poorer health after adjusting for SES differences. These findings contradict the findings of Williams et al. (1997), suggesting minority groups have poorer health outcomes despite level of income.

There have also been discrepancies among research results related to the level of acculturation and health among ethnic minorities. Acculturation has been described as a process by which cultural and psychological changes occur among foreign-born individuals exposed to a new cultural environment (Berry, 1997). Research has suggested that increased acculturation to the host culture increases the likelihood of improved health among some immigrant groups (Dunlop, Song, Manheim, Daviglus, & Chang, 2007). For instance, Hispanic individuals who had to be interviewed in Spanish (suggesting lower acculturation to the host culture) had a higher risk of developing a physical disability when compared to Hispanic individuals who were able to be interviewed in English (Dunlop et al., 2007). However, there have been a number of studies suggesting that higher acculturation is linked to poorer health (e.g., Lum & Vanderkaa, 2010; Myers & Rodriguez, 2003). For instance, higher acculturation has been positively correlated with diabetes, obesity, coronary heart disease, hypertension, and cancer (Myers & Rodriguez, 2003).

Health disparities among LGB groups. The heightened presence of emotional and psychological distress with regard to sexual minorities has been extensively addressed in research (Cochran, Sullivan, & Mays, 2003; Herek & Garnets, 2007). For example, Herek and Garnets (2007) reported sexual minorities had a higher prevalence of diagnosable mental health disorders. Increased rates of depression, anxiety, and suicide are also more prevalent for sexual minorities (Cochran, Sullivan, & Mays, 2003). Studies regarding physical health of sexual minorities, including disability prevalence, negative health symptom prevalence, and poorer health behaviors have recently been included in the literature base (e.g., Blosnich, Farmer, Lee, Silenzio, &

Bowen, 2014; Fredriksen-Goldsen, Kim, & Barkan, 2012; Ward, Dahlgamer, Galinsky, & Joestl, 2014) and suggest significant discrepancies compared to their heterosexual counterparts (Kessler, Mickelson, & Williams, 1999).

Overall, the growing body of research specifically investigating physical health among LGB individuals suggests a wide array of difficulties, ranging from poor overall health to increased risk of specific diseases. For example, while investigating health disparities and risks of older LGB individuals, Fredriksen-Goldsen, Kim, Barkan, Muraco, and Hoy-Ellis (2013) discovered there was a significantly greater risk for developing disabilities and health problems among sexual minorities when compared to their heterosexual counterparts. More specifically, lesbian and bisexual women were at greater risk of cardiovascular disease and obesity, while gay and bisexual men reported poorer overall physical health.

Lifetime prevalence of disability has also been shown to be higher among sexual minorities, as LGB adults with disabilities were found to be significantly younger than heterosexual adults with disabilities (Fredriksen-Goldsen, Kim, & Barkan, 2012). Despite controlling for covariates of disability, lesbian and bisexual women and bisexual men still reported significantly higher rates of disability (Fredriksen-Goldsen et al., 2012). Bisexual men were also more likely to be diagnosed with diabetes (Fredriksen-Goldsen et al., 2013) and asthma (Blosnich et al., 2014). Other studies have revealed that bisexual women had poorer general health (Fredriksen-Goldsen, Kim, Barkan, Balsam, & Mincer, 2010) and a higher risk of obesity (Fredriksen-Goldsen et al., 2013; Ward, Dahlgamer, Galinsky, & Joestl, 2014) than lesbian women and heterosexual women.

Health disparities in LGB POC. Differences have been noted among LGB people of color when compared to individuals with one marginalized status (e.g., White gay individuals). For example, in assessing for health-related behaviors among lesbian and bisexual women of color, it was found that African American lesbian and bisexual women tended to use tobacco and alcohol at higher rates as compared to heterosexual women (Mays, Yancey, Cochran, Weber, & Fielding, 2002). Further, both Hispanic and African American lesbian and bisexual women were more likely to be obese, and African American lesbian and bisexual women had higher rates of tobacco use and heavy alcohol consumption compared to heterosexual women of various racial/ethnic identities. Risk behaviors, such as unprotected sex among older men with HIV, have been found to be increased for African American gay and bisexual men as compared to white gay and bisexual men (Siegel, Schrimshaw, & Karus, 2004), and only a small percentage of men of color across all ages who had sex with men reported having rectal screenings for sexual transmitted infections (Siconolfi et al., 2013).

Perceived Victimization & Discrimination

Mays and Cochran (2001) described perceived discrimination as the subjective experience of discrimination rather than the objective. For instance, one person may appraise a negative event as being discrimination while another person does not. Perceived discrimination is generally explored in research because perceptions of discrimination may vary from person to person.

Discrimination toward racial/ethnic groups. In 2001, a report on mental health indicated that discrimination had a negative impact on mental and physical health of racial minorities (U.S. Department of Health & Human Services; DHHS, 2001).

Racism and discriminatory behaviors toward racial and ethnic groups have been pervasive throughout generations and are deeply embedded in the American culture. Jones (1997) defined three domains of racism: individual, institutional, and cultural. *Individual racism* represents the negative attitudes and acts that express a person's prejudices toward particular races. *Institutional racism* includes the policies and procedures of overall institutions and systems that are nurtured and created by individual racism. For instance, a person may not consciously be engaging in individual racist acts, but may be unknowingly participating in institutional racism based on the subtle and embedded nature of prejudice. *Cultural racism* is considered a result of the privileged group's power to determine values, beliefs, attitudes, and practices, which become ascribed to American culture and therefore permissible. Slavery and racial segregation are two examples of cultural racism that were once practices based on values and beliefs believed to be natural.

Negative stereotypes are often so deeply rooted that individuals who do not identify as racist and prejudiced still serve as perpetrators. Nosek and colleagues (2007) discovered that nearly 70% of research participants had implicit biases that favored White individuals over Black individuals. Further, Americans in general have high levels of negative feelings and beliefs about Black and Latino groups (Nosek et al., 2007). According to the Federal Bureau of Investigations (FBI) Hate Crimes Statistic Report, the percentage of reported hate crimes in the United States that are racially motivated hover around 50% (FBI, 2013). Despite increased education, awareness, and continued integration over the years, crimes perpetrated on people of color have not diminished.

Perceptions of discriminatory experiences also vary. Black, Asian, and Hispanic individuals have been reported to be more likely to identify a situation as discriminatory than White individuals (Biasco, Goodwin, & Vitale, 2001), suggesting that discrimination is frequently invalidated for people of color by White individuals. This is prevalent in today's society with regard to both individual experiences and more systemic experiences. For example, some individuals consider people of color as being targeted by law enforcement, while others disagree. However, research overall has continued to document the greater discrimination targeting people of color (Armstrong et al., 2013; Biasco, Goodwin, & Vitale, 2001). This discrimination and victimization results in inequalities that persist in multiple contexts of American society including housing, labor markets, criminal justice, and education, as well as other forms of institutional racism (Blank, National Academies Press, Dabady, & Citro, 2004).

Different racial and ethnic groups have been shown to be susceptible to various types of discrimination and stereotypes. For example, Sue, Bucceri, Lin, Nadal, and Torino (2007) noted that Asian Americans experienced microaggressions suggesting that they are viewed as aliens, despite their citizenship status. They are frequently ascribed with intelligence, despite their varied educational backgrounds, and oftentimes their interethnic differences are invalidated. African American/Black individuals often face stereotypes suggesting they are lazy, unintelligent, have poor morals, and are usually involved in criminal activities (Drake, 1987). Native Americans are stereotypically thought to be lazy, alcoholics, and the recipients of unearned money (Chang & Kleiner, 2003). Though these attitudes may be more common among White

individuals, people of color are also susceptible to experiencing these biases against racial minorities, including those in their own racial/ethnic group.

Discrimination based on racial and ethnic identification occurs in many places, including healthcare settings. People of color, when compared to white individuals, are more likely to report experiencing perceived interpersonal and institutionalized discrimination in healthcare settings, which leads to lower trust and satisfaction with healthcare providers (Hausmann, Kwoh, Hannon, & Ibrahim, 2013; Sorkin, Ngo-Metzger, & De Alba, 2010). This perception is not without supporting evidence, as physicians have been found to have an implicit preference for White individuals over Black individuals, leading to biased treatment recommendations regarding care (Sabin, Nosek, Greenwald, & Rivara, 2009). Racial and ethnic minorities have indicated experiencing microaggressions in “safe” therapeutic settings (e.g., counseling) as well. For example, Owen, Tao, Imel, Wampold, and Rodolfa (2014) found that over half (i.e., 53%) of clients reported that a microaggression occurred in therapy, with only 24% of the clients feeling comfortable enough to discuss it with their counselors.

Even among faculty in academic institutions, where one would assume the professionals are on fairly level playing fields, discrimination is evident. Peterson, Friedman, Ash, Franco, & Carr (2004) found that faculty of color, both underrepresented and non-underrepresented on campus, were more likely to perceive racial/ethnic bias in their academic environment. These reports included discrimination from superiors and colleagues, despite similar output of papers, salaries, and rankings. Despite similar professional statuses, it appears that people of color are often still considered second-class and inferior to their White counterparts.

Minority stress & racial/ethnic minority group health. As predicted by theories of minority stress (Meyer, 2003), perceived racial discrimination increases the risk of poorer physical health (Hahm, Ozonoff, Gaumond, & Sue, 2010), as well as mental health (Williams, Neighbors, & Jackson, 2003). Meta-analyses and population-based studies have consistently found this to be true among racial and ethnic minorities (e.g., Pascoe & Smart, 2009; Williams & Mohammed, 2009; Williams, Neighbors, & Jackson, 2003), especially for African Americans (Anderson, 2012; Hausmann, Jeong, Bost, & Ibrahim, 2008). For example, Anderson (2012) noted that perceived racist treatment among racial/ethnic minorities predicted overall poorer emotional and physical health. Unhealthy behaviors as a method of coping with a hostile environment act as an additional factor to greater chronic health conditions (Jackson, Knight, & Rafferty, 2010). A lifetime exposure to discrimination through systemic barriers leads to significant social and economic hardships that place people of color at a greater risk for poor physical outcomes (Sellers, 2001).

Exploring from a physiological perspective, Wagner, Tennen, Finan, Ghuman, and Burg (2013) explored the relationship between self-reported racial discrimination and endothelial reactivity. Endothelial dysfunction is defined as “an imbalance of vasoconstricting and vasodilating forces” (pg. 214) and is typically present in the early stages of coronary heart disease. They discovered that women reporting greater instances of lifetime racial discrimination attenuated endothelial recovery, without other variables (e.g., mood, other life stressors, personality traits) better accounting for the effect. Akdeniz et al. (2014) utilized neuroimaging technology to examine stress processes for healthy individuals with German lineage and healthy individuals from

other ethnic backgrounds (e.g., Italian lineage) currently living in Germany. In response to stress, ethnic minorities displayed significantly higher chronic stress levels and activation in areas related to stress processes. Significant correlations were discovered between perceived discrimination and stress activation. Lipid dysregulation has also been found among African Americans, leading to a greater risk of cardiovascular disease, as a result of perceived discrimination (Mwendwa et al., 2011). Interestingly, Collins and colleagues (2004) discovered that African American women who gave birth to infants with a very low birth weight also reported increased levels of discrimination throughout their lifetimes.

Discrimination toward LGB individuals. Although the American Psychological Association (APA; 1975) removed homosexuality as a diagnostic disorder 40 years ago, the long-standing history of discrimination and prejudice toward LGB individuals remains. One could argue that younger generations have become more progressive with regard to issues related to diversity, which has resulted in political changes such as marriage equality and benefits for same-sex partnerships; however, the incidences of discrimination are still ever-present. For example, the FBI Hate Crimes Statistic Reports (2013) reveals that hate crimes related to sexual orientation have increased over the years, from 17.1% in 2005 to 20.8% in 2013. Further, it should be noted that these reported crimes are only a fraction of the discrimination occurring for sexual minorities. It could be argued that the reports of hate crimes have increased due to changes in hate crime laws, increased education and expectations that law enforcement will investigate reports; on the other hand, one could make the argument that because there has been significant progress for liberation of

sexual minorities, their visibility is more present which may lead to increased targeting. However, the FBI describes hate crimes as “crimes of hate and prejudice” (FBI Hate Crimes, n.d.), which does not account for the everyday discriminatory events experienced at a more frequent rate. For example, a study by Martin and Alessi (2012) discovered that 72% of self-identified gay and bisexual men experienced bias-related discrimination.

High school has been known to be a significant source of abuse and discrimination for LGB youth (D’Augelli, Pilkington, & Hershberger, 2002). The Seattle Teen Health Risk study (Bagley and Tremblay, 2000) noted that LGB youth were three times more likely to have been in a physical altercation requiring medical treatment and almost twice as likely to have been threatened by a weapon. In fact, discrimination of sexual minorities tends to occur early in life, potentially even before a child enters school. For instance, D’Augelli, Grossman, and Starks (2005) found that when parents suspected their child’s LGB status or gender non-conformity, they tended to make more anti-gay remarks. Balsam, Rothblum, and Beauchaine (2005) explored the relationships between traumatic victimization over the course of the lifespan by recruiting LGB participants, who then recruited their sibling(s). This study was unique, particularly because the heterosexual counterparts were comparable to the LGB participants with regard to demographic backgrounds (e.g., race/ethnicity, SES, age cohort). Findings suggested that physical and sexual victimization during childhood and adulthood were greater for LGB identified individuals. Even more interesting was that LGB siblings were at greater risk for victimization at home than their heterosexual siblings living in the same house. The results suggest that children and adolescents

being bullied and victimized at schools are likely also at risk of being victimized in their own homes.

Students with a sexual minority status sometimes yearn to advance to a college or university to escape the scrutiny of family and friends. Unfortunately, this scrutiny and discrimination still exists for LGB undergraduates on campus. After a sample of 121 LGB students completed surveys regarding harassment on campus, D'Augelli (1992) found that 77% had been verbally insulted, with 49% experiencing it more than once, and 27% had been threatened with physical violence. When asked about personal safety based on their status, 72% of the participants reported fearing for their safety, and 57% reported making conscious changes in behavior to evade the harassment and abuse on campus.

Katz-Wise and Hyde (2012) conducted a meta-analysis to determine the prevalence and types of discrimination experienced by sexual minorities by compiling the results of studies from 1992 to 2009. With regard to change over time for samples from the United States, rates of sexual assaults from family, sexual assaults from members outside of family, and physical assaults from family increased over time. Sexual harassment and workplace discrimination also increased as compared to the earlier studies. With regard to frequency, it was confirmed that LGB individuals reported greater rates of discrimination than heterosexual individuals; further, males were victimized at higher rates than females. Additional differences in discrimination within the LGB population have also been reported. For example, Kuyper and Vanwesenbeeck (2011) indicated that bisexual women and men and gay men more often experienced sexual coercion as compared to heterosexual individuals.

Employment is also a substantial challenge among sexual minorities, particularly in states that do not protect employees from sexual orientation-based workplace discrimination. For example, the majority of states do not enforce non-discrimination laws covering LBG or gender identity protection (ACLU, n.d.). Employees who do not conceal their sexual minority status have been found to experience more discrimination and harassment at work than those who are less open (Sears & Mallory, 2007). Nevertheless, individuals who choose to conceal their identities are still met with stress due to the burden of concealment and the fear of getting caught (Pachankis, 2007).

For LGB individuals, perceived discrimination or victimization is pervasive throughout many relationships. Similar to experiences of racial and ethnic minorities, Shelton and Delgado-Romero (2013) described invalidating experiences in psychotherapy, noting that microaggressions occur frequently, even in the expected safety of a therapeutic environment. This qualitative study discovered a number of themes related to counselor behaviors, including (a) assuming that sexual orientation is the cause of all presenting issues; (b) avoiding and minimizing of sexual orientation; (c) attempts to over-identify with lesbian, gay, bisexual, transgender, and queer (LGBTQ) clients; (d) stereotypical assumptions about LGBTQ clients; (e) expressions of heteronormative bias; (f) assuming that LGBQ individuals need psychotherapeutic treatment; and (g) warning about the dangers of identifying as LGBTQ.

Minority stress & health in LGB groups. As consistent with the Minority Stress Model (Meyer, 2003), lifetime discrimination and victimization has significantly accounted for poor health and increased disability status among LGB individuals

(Fredriksen-Goldsen et al., 2012). Internalized stigma has also been shown to be an indicator of poor physical health (Denton, Rostosky, & Scales, 2014; Fredriksen-Goldsen et al., 2012). For instance, LGB individuals who experienced a prejudice-related life event (e.g., being assaulted based on sexual orientation) have been reported to be almost three times more likely to report a serious physical health problem over a one year period when compared to those who did not experience a similar life event, even after controlling for covariates such as age, gender, and stressors not related to prejudice (Frost, Lehavot, & Meyer, 2015). Huebner and Davis (2007) found that discrimination was linked to an increase in sick days and physician visits among gay and bisexual men.

As previously mentioned, concealment of sexual minority status is yet another stressor that poses a health risk for sexual minorities. For example, gay men who concealed their gay identity experienced an increased incidence of infectious diseases (e.g., bronchitis, sinusitis, and tuberculosis) and cancers (Cole, Kemeny, Taylor, Visscher, & Fahey, 1996). In contrast, a separate study discovered that for HIV-positive gay men, HIV infection progressed more rapidly for men who were out than those who concealed their gay identities (Cole, Kemeny, Taylor, & Visscher, 1996). Similarly, Huebner and Davis (2005) compared the salivary cortisol of gay and bisexual men with different levels of sexual orientation concealment and found that increased levels of cortisol were associated with sexual orientation disclosure. This suggests that disclosure may lead to greater risk of discrimination and physiologically arouse cortisol responses leading to health issues. Thus, sexual minorities who conceal

and sexual minorities who disclose their identities may be in a double bind, with either choice impacting health negatively (Lick, Durso, & Johnson, 2013).

Hatzenbuegler and McLaughlin (2014) discovered objective physiological stress effects among sexual minorities, noting that the chronic stress of stigma during adolescence creates a long-lasting biological effect. They found that the HPA axis functioning (see previous discussion) becomes dysregulated, which is linked to adverse health outcomes, including metabolic syndrome and cardiovascular disease. The effects of chronic stigma and discrimination shared similar biological effects as general traumatic life experiences. Investigating endocrine stress reactivity among sexual minority men and women has yielded results somewhat inconsistent with the previous studies. Juster et al. (2015) collected salivary cortisol samples throughout a 2-hour afternoon visit after individuals were exposed to a well-validated psychosocial stressor. Lesbian and bisexual women revealed higher cortisol stress reactivity 40 minutes after the stress exposure when compared to heterosexual women. Gay and bisexual men, however, displayed lower overall concentrations throughout testing compared with heterosexual men. These results seem to contradict other studies; though it might be a result of simulated stress experiences versus actual stressors related to anti-gay experiences.

Internalized Oppression

As indicated in the theory of minority stress, experiences of discrimination (either in a direct or indirect form) may cause minority individuals to experience subsequent internal stress processes related to these discriminated identities.

Internalized oppression, specifically internalized racism or internalized homonegativity

(also known as internalized homophobia and internalized heterosexism), has been highlighted in research addressing the impact of marginalized identities. *Internalized oppression* is the internalization of negative attitudes and beliefs of one's own minority group or identity typically as a result of frequent discriminatory events, both on an individual and sociopolitical level. Extending beyond external discrimination, internalized oppression negatively impacts the way an individual feels about their identity, features, or other aspects of themselves associated with their marginalized identity. To little surprise, research has linked the relationship between external discrimination and internalized oppression (Clark, Coleman, & Novak, 2004; Solorzano, Ceja, & Yosso, 2000), as well as internalized oppression and emotional and physical health among minority individuals (Butler, Tull, Chambers, & Taylor, 2002; Denton, 2014; Newcomb & Mustanski, 2010).

Internalized racism. People of color experiencing internalized racism may express shame or hate for their racial identity. Williams and Williams-Morris (2000) described internalized racism as “acceptance, by marginalized racial populations, of the negative societal beliefs and stereotypes about themselves” (p. 255). Not only is the external discrimination expected to impact overall health due to directly related stress processes, but the aversion regarding being a member of an undesirable racial group may lead to levels of unique stress, causing psychological distress and lower levels of self-esteem (Franklin-Jackson & Carter, 2007). Szymanski and Stewart (2010) discovered that the relationship between racial discrimination and psychological distress was moderated by internalized racism. Messages with racist undertones constantly bombarding people of color may lead to greater internalized racism, leading these

individuals to dislike themselves, other members of their racial group, or physical characteristics representative of their racial group (Fischer & Moradi, 2001).

Graham, West, Martinez, and Roemer (2016) recently published a study investigating internalized racism and racist experiences on anxious arousal and stress symptoms among Black Americans. They discovered that internalized racism mediated the relationship between frequency of racist events and both anxious arousal and stress symptoms. These results reiterate the notion that internalized racism is a direct consequence of recurrent experiences of racism (Speight, 2007), which in turn impacts overall health.

Chambers et al. (2004) examined the relationship of internalized racism to body fat distribution and insulin resistance in Black children between the ages of 14 and 16 years in Barbados. Results discovered that for girls, waist circumference, body mass index (BMI), and insulin resistance was significantly correlated with internalized racism. The relationship between internalized racism and metabolic conditions remained significant even after controlling for age, income, birth weight, hostility, physical activity, and familial history of diabetes. Results from this study are alarming as it suggests that the effects of internalized racism begin to effect physical health well before a child reaches adulthood.

Asian individuals may experience the internalization of racial stereotypes differently due to the “model minority myth,” which suggests that Asians may portray several positive traits such as high educational attainment and employment, with fewer adjustment difficulties (Fong, 2008; Sue, S., Sue, D., Sue, L., & Takeuchi, 1995). However, Gupta, Szymanski, and Leong (2011) discovered that higher levels of

endorsement of positive Asian stereotypes among Asian Americans were related to an increase in both somatic physical and psychological distress.

Internalized homonegativity. Internalized heterosexism is described as being an insidious stress process because it stems from heterosexist social attitudes, causing persistent self-degradation even if the individual does not experience direct devaluation from the environment (Meyer & Dean, 1998). External discrimination has been associated with increased internalized heterosexism and discomfort about one's sexual identity (Denton, Rostosky, & Danner, 2014; Wright & Wegner, 2012). Though individuals may not have been overtly harassed or discriminated against due to sexual orientation, they are aware of the risk based on observation and vicarious learning related to others' hardships, potentially leading to devaluation of their own identity. Not only does the internalization of oppression impact mental health, it is also associated with behaviors that may lead to poorer health via increased alcohol and drug use (Weber, 2008).

In addition to many research studies focusing on singular internalized oppression (i.e., heterosexism *or* racism), there has been an increase in exploration of the additive and interactive effects of multiple internalized oppressions on mental health outcomes. The additive viewpoint suggests that each additional oppressed identity would contribute to an increase in negative effects (e.g., mental health problems). For instance, if a person experiences internalized racism and internalized heterosexism, this perspective suggests they will likely incur more negative effects than someone with either internalized racism or internalized heterosexism. From the intersectional perspective, however, it is suggested that multiplicative interactive effects of these

internalized oppressions may exist. For example, internalized racism may interact and intensify internalized heterosexism, which would lead to an increase in negative effects (Landrine, Klonoff, Alcaraz, Scott, & Wilkins, 1995).

Velez, Moradi, and DeBlaere (2015) discovered that perceived racial and heterosexist discrimination, as well as internalized heterosexism (but not internalized racism) significantly accounted for psychological distress in Latino adults. Though interactive effects were not discovered for psychological distress, they were discovered for self-esteem. More specifically, internalized oppression related to one marginalized identity (e.g., internalized racism) reduced self-esteem when perceived discrimination related to another identity (e.g., sexual minority discrimination) was high. When exploring internalized oppression in African American adults, Szymanski and Gupta (2009) found that both internalized heterosexism and internalized racism uniquely predicted psychological distress; further, there was no significant interaction. Among non-heterosexual Asian-American individuals, racial discrimination and internalized heterosexism were associated with psychological distress, though the interaction of racial and heterosexist discrimination and the interaction between internalized racism and internalized heterosexism were not shown to be significant (Szymanski & Meyer, 2008). Thus far, research results have been fairly consistent in pointing out the unique associations that perceived discrimination and internal oppression have on overall psychological health. However, the interaction among multiple internalized oppressions and multiple perceived discriminations is less clear in regard to physical health versus psychological health and distress.

Social Support

Meyer's Minority Stress Theory (2003) posits that social support presents as a buffer to influence mental and physical health for the minority population. *Social support* has been defined in numerous ways over the past few decades. Thoits (1995) defined social support as a coping resource, similar to a "social fund" (pg. 64), from which individuals can draw when in distress. Cobb (1976) suggested social support results when an individual feels (a) cared for and loved, (b) esteemed and valued, and (c) a sense of belongingness to a network of communication and mutual obligation. Shumaker and Brownell (1984) defined social support as "an exchange of resources between at least two individuals perceived by the provider or the recipient to be intended to enhance the well-being of the recipient" (p. 13). It has also been defined as "perceived or actual instrumental and/or expressive provisions supplied by the community, social networks, and confiding partners" (Lin, 1986, p. 18). Meyer (2003) described social support as a coping resource for minority groups, and primarily described it as experiencing a positive membership in a minority group.

In addition to the various theorized definitions, there also exist distinct types of social support. *Expressive or emotional support* refers to feedback from others that communicates care and acceptance, further reinforcing an individual's self-esteem and competence (Lockery, 1991). *Social integration* refers to a feeling of community and general belongingness (Lockery, 1991). *Instrumental support* refers to aid in which an individual is provided tangible assistance while in need, such as transportation, money, or babysitting (Cohen & Wills, 1985; Lockery, 1991). Finally, *informational support* refers to providing guidance, advice, or solutions to problems an individual is facing.

Among the various types of social support, George (1989) posited that expressive support is likely the most influential against emotional distress, particularly because psychological and emotional distress should be alleviated by emotional support.

There are also distinctions between *actual* social support and *perceived* social support. Actual social support refers to the specific and objective support transactions, focusing more on frequency. Perceived social support, on the other hand, refers to perceptions about support, including the availability and quality of it. Interestingly, perceived support has been deemed more important than actual support in predicting adjustment to stress (Wethington & Kessler, 1986). McDowell and Serovich (2007) discovered that among HIV-positive persons, perceived social support was significantly predictive of better mental health while actual support had minimal effect. Other studies have discovered that actual and perceived social supports are not correlated and yield distinctly different relationships with distress (George, 1989; Wethington & Kessler, 1986).

A debate regarding whether social support is directly related to the severity of psychological and physical symptoms (i.e., *main effect model*) or whether it acts as a buffer between stressful events and symptoms (i.e., *buffering model*) (Cohen & Wills, 1985) exists. In theory, both may be valid depending on the circumstances. The buffering model (Cohen & Wills, 1985) posits that social support acts as a buffer to protect persons from the influence of stressful events. This model suggests that support may intervene between the stressful event and the reaction by either preventing or attenuating the response. According to the model, the perception that others can provide resources may redefine the potential harm. Second, the support may tranquilize

the neuroendocrine system, potentially leading to less reactivity to perceived stress. Therefore, during times of stress, individuals with low levels of social support may experience more symptoms of poor health when compared to individuals with high levels of social support. The main effect model proposes that social support has a beneficial effect on an individual with or without the presence of stress. More specifically, an individual's well being will increase with greater social support, despite the existence of stressors.

Despite the theorized differences in the impact of social support on wellbeing, most researchers have based studies and hypotheses on the buffering theory. A significant amount of research has been published regarding the mediating role of social support between stressful events and psychological maladjustment. Hefner and Eisenberg (2009) and Frey, Beesley, and Miller (2006) found that college students with lower levels of social and relational support had an increased likelihood of experiencing mental health problems. Schaefer, Coyne, and Lazarus (1981) found that perceived social support was not predictive of physical health, but rather depression and low morale. Nonetheless, a sense of belonging has also been shown to predict better health perceptions for women and fewer physical symptoms for men (Hale, Hannum, & Espelage, 2005).

Taking this link one step further, studies have shown that greater levels of social and community ties lead to longer lives (House, Robbins, & Metzner, 1982). For example, the risk of death is almost twice as high for both men and women with fewer social ties, even after SES and health behaviors were taken into account (Berkman & Syme, 1979). Socially isolated adults with coronary artery disease were also found to

be 2.4 times more likely to die of a subsequent cardiac death when compared to peers who were more socially connected (Brummet et al., 2001).

These effects suggest that social support plays an important role in physiological processes (Uchino, Cacioppo, Kiecolt-Glaser, 1996). Support may trigger physiological sequelae, such as lowering stress hormones, blood pressure, and heart rate, which would both benefit health and reduce arousal levels (Uchino, 2006). Immune and endocrine systems are benefited by support through the reduced impact of physiological systems engaged in stress responses (Uchino, 2004). For example, children brought up in emotionally supportive households have been found to develop healthier regulatory systems (e.g., metabolic, autonomic), which likely has longitudinal consequences for adult health (Taylor, Repetti, & Seeman, 1997).

A significant amount of research regarding social support and physiological responses has focused on marriages. For example, newly married heterosexual individuals (i.e, wives and husbands) displayed lower levels of cortisol responses to conflict when spousal support was satisfactory (Heffner, Kiecolt-Glaser, Loving, Glaser, & Malarkey, 2004). Ewart (1993) and Kiecolt-Glaser et al. (1993) discovered that marital conflict produced substantial negative changes in cardiovascular, neuroendocrine, and immune functioning in adults.

In addition to these direct physiological effects, social support can also impact overall health by promoting healthy (vs. risky) behaviors. Supportive relationships allow for overall health maintenance by increasing behaviors such as medication compliance and smoking cessation (Brownell & Shumaker, 1984; Porter, 1969). Caplan, Robinson, French, Caldwell, and Shinn (1976) discovered that perceived

support from spouses, friends, and health care providers was linked to an increase in motivation to adhere to medical regimens.

Stephoe, Wardle, Pollard, Canaan, and Davies (1996) investigated the link between social support, health behaviors, and stress among university students during academic examination sessions. They discovered a significant increase in smoking behaviors among women with lower levels of social support during this time. Further, alcohol consumption reduced during the examination period for individuals with greater levels of support; for individuals with low levels of support, alcohol consumption significantly increased. Interestingly enough, at baseline levels, individuals with higher levels of social support consumed alcohol at a higher rate than those with lower levels of support. Steptoe et al. (1996) suggested this likely reflected a greater level of social drinking unrelated to the stress process.

Ramirez-Valles, Dirkes, and Barrett (2014) discovered that for older gay men, perceived health positively correlated with the number of sources of emotional support. Among LGB individuals over 50 years old, support from friends, but not support from family, predicted higher psychological quality of life and fewer symptoms of emotional distress (Masini & Barrett, 2007). It was suggested that this could be due to generational differences and attitudes toward non-heterosexual identity. Given the greater levels of stigma years ago, it is likely that individuals identifying as LGB found support outside of the family, creating a chosen family. Doty, Willoughby, Lindahl, and Malik (2010) reported that among young LGB individuals, higher levels of support buffered against the negative effects of stress related to sexuality.

With regard to racial and ethnic minorities, community studies have discovered a link between mortality related to health events and social support systems (James & Kleinbaum, 1976; Nesper, 1975; Nesper, Tyroler, & Cassel, 1971). For example, a lack of a secure social support system was related to stroke mortality among Black individuals (Nesper, 1975; Nesper, Tyroler, & Cassel, 1971). Among non-White individuals, mortality as a result of hypertension was linked to support systems that were not secure (James & Kleinbaum, 1976). Social support also may contribute to health promoting or risk-taking behaviors leading to mortality or health difficulties. For instance, Buttram, Kurtz, and Surratt (2013) discovered that lower levels of social support contributed to higher rates of substance abuse and risky sexual behaviors among Black men.

Among Korean American older persons, emotional support has been found to serve as a buffer against life stress (Lee, Crittenden, & Yu, 1996). Interestingly, Wong, Gregorich, and Perez-Stable (2014) noted that emotional support had a strong effect on both physical and mental health for older women from all racial groups in their sample (i.e., White, Latino, and Asian) except for African-American women, further noting that emotional support was the most important type of support. However, Ben-Ari and Gil (2004) found that despite greater levels of social support than their European counterparts, racial minorities reported significantly greater levels of distress. This suggests that people of color may require even greater levels of social support than White individuals to alleviate the emotional distress stemming from a lifetime of discrimination or that social support alone is not sufficient to alleviate the distress.

Overall, the link between support and health outcome has been clearly demonstrated and is largely undisputed within the general population. Among

marginalized populations, however, the link has been examined to a lesser degree, and has primarily been examined with regard to mental health rather than physical health. Although there is evidence that LGB people of color report fewer dimensions of social support when compared to white LGB individuals (Frost, Meyer, & Schwartz, 2016), there has been little exploration with regard to the impact of social support on physical health among LGB people of color.

Racial/Ethnic Minority LGB Groups

As previously mentioned, health disparities and risks have been revealed for racial and ethnic groups, as well as for sexual minority groups. However, research addressing the stress of the two intersecting identities (i.e., an LGB person of color) is minimal, especially with regard to physical health. The research that has investigated LGB people of color has addressed lower self-esteem, increased psychological distress, and increased stigma (Craig & Keane, 2014; Sandil, Robinson, Brewster, Wong, & Geiger, 2015; Szymanski & Sung, 2010) rather than physical health and symptoms.

It could be posited that individuals identifying as members of both marginalized groups (i.e., racial/ethnic and LGB) experience greater risk because they are multiply disadvantaged, as the double jeopardy hypothesis would suggest (Beale, 1979). Grollman (2014) recently discovered that individuals who identified with having more than one disadvantaged status were more likely to experience poorer physical health than counterparts who were singly disadvantaged. These burdens appeared to be a result of greater rates of social stressors, such as discrimination, which were more prevalent among multiple minority individuals versus single minority individuals. As the literature suggests, discrimination toward both the LGB and racial/ethnic

communities is extensive. For LGB people of color, the risk of discrimination from individuals from the dominant culture (i.e., heterosexual White individuals), as well as from within their own marginalized communities, leads to an overall increase in experiences of discrimination. For instance, their racial or ethnic community may be a source of stress related to their sexual orientation, while their LGB community may be a source of stress related to their racial and ethnic background.

Some studies, however, postulate that there is no additional distress in LGB people of color. For instance, despite increased psychological distress among LGB people of color versus heterosexual people of color, LGB people of color were not found to experience additional distress for their dual minority status (Hayes, Chun-Kennedy, Edens, & Locke, 2011). Moradi et al. (2010) found that there were very few differences in perceived stigma between LGB White individuals and LGB individuals of color. Chen and Tryon (2012) discovered that among Asian American gay men racial minority stress did not predict psychological distress, while sexual minority stress did. These results suggest that LGB people of color may be more resilient in developing greater support systems, strengths, or coping mechanisms as a result of navigating their multiple minority statuses or that distress related to minority statuses may be context-specific.

Research Questions

The review of the literature outlined the pervasive impact perceived discrimination has on the health of both the LGB population and racial and ethnic minorities, primarily as two separate and distinct groups. The majority of research has also explored the impact of discrimination on mental health and psychological distress,

rather than overall physical health outcomes. However, more recently, researchers have begun to investigate the intersecting identities of LGB people of color. According to minority stress theories (Brooks, 1981; Meyer, 2003), as well as the double jeopardy hypothesis (Dowd & Bengston, 1978), LGB people of color would be predicted to have greater levels of stress, ultimately leading to greater health disparities. However, to fully understand the link between perceived discrimination of LGB people of color and health, it is crucial we also examine and control for the influence of other factors that could play a role in health outcomes. For example, as discussed, discrimination has been linked to increased internalized oppression (Clark, Coleman, & Novak, 2004; Solorzano et al., 2000). Further, social support has been found to impact health outcomes (e.g., Ramirez-Valles et al., 2014).

Minority stress models (Brooks, 1981; Meyer, 2003) have been explored time and time again. However, research is limited regarding the application of this model to LGB people of color. Even further, exploring the impact of the components of perceived discrimination, internalized oppression, and social support outcomes among this population is very limited. This study aims to more fully explore the applicability of the minority stress process for LGB people of color.

In summary, the review of the literature sheds light on the dearth of research exploring racial and ethnic health disparities among sexual minorities. Minority stress appears to be a significant culprit with regard to negative health outcomes for individuals in racial/ethnic minorities and sexual minorities. Research has linked the impact stress has on physical bodies, including attenuation of the immune system

(Miller & Chen, 2010; Padgett & Glaser, 2003) and increased risk of chronic diseases, such as cardiovascular disease and cancer (Cohen, Jacnicki-Deverts, & Miller, 2007).

Based on the literature indicating that increased stress processes are linked to marginalized minority statuses, likely due to discrimination and internalized oppression related to these minority identities, as well as the evidence indicating that social support influences overall health, understanding how these variables interrelate to influence physical health is important for targeting prevention and treatment interventions. As previously suggested by studies related to minority stress, controlling for the impact of internalized stigmas, general stress, and social support is not expected to fully account for the relationship between discrimination and health symptoms among LGB People of color. Thus, the research questions include:

Question 1: Do perceived discrimination, internalized oppression, general stress, and perceived social support significantly predict physical health symptoms after controlling for relevant demographics?

Question 2: Does perceived discrimination significantly predict physical health symptoms after controlling for internalized oppression, social support, general stress, and relevant demographics?

Question 3: Does internalized oppression moderate the relationship between perceived discrimination and physical health?

Method

Participants

The participants' ages ranged from 18 to 47 years old, with 26.4 as the mean age. Of the 132 participants, 83 identified as female (62.9%), 41 as male (31.1%), 2 as female to male transgender (1.5%). Six participants (4.5%) specified a gender identity not listed (e.g., gender neutral, androgynous). Regarding sexual orientation, 24.4% ($n = 32$) identified as gay, 34.1% ($n = 45$) as lesbian, 33.3% ($n = 44$) as bisexual, and 8.3% ($n = 11$) entered identity not listed (e.g., queer, pansexual, omnisexual). Eighty-three percent ($n = 98$) of participants indicated they were not diagnosed with a physical medical diagnoses or disability.

Participants were asked to report their highest level of education attained; nearly ten percent ($n = 13$) earned a high school diploma or GED, 34.8% ($n = 46$) reported some college, 5.3% ($n = 7$) reported an associates degree, 28% ($n = 37$) reported a bachelor's degree, 15.2% ($n = 20$) reported a Master's degree, 5.3% ($n = 7$) reported a doctoral degree, and 1.5% ($n = 2$) earned a Professional Degree.

In terms of race and ethnicity, 17.8% ($n = 23$) of the participants identified as Black/African American, 33.3% ($n = 43$) as Hispanic/Latino, 22.5% ($n = 29$) as Asian, 4.7% ($n = 4$) as Native American, and 21.7% ($n = 28$) as Mixed Race/Multi-racial. The largest percentage (46.2%; $n = 61$) of participants reported being single, while 38.6% ($n = 51$) were partnered or in a committed relationship, 12.9% ($n = 17$) were married, .8% ($n = 1$) were separated, and 1.5% ($n = 2$) were divorced. In addition, the largest percentage of participants (27%; $n = 33$) reported earning between \$20,000 and \$39,999, while 24.6% ($n = 30$) reported a yearly income of less than \$20,000, 14.7% ($n = 19$) reported a yearly income of \$40,000 or more.

= 18) between \$40,000 and \$59,999; 10.7% ($n = 13$) between \$60,000 and \$79,999; 8.2% ($n = 10$) between \$80,000 and \$99,999; and 14.8% ($n = 18$) over \$100,000.

Measures

Participants were asked to provide answers to a number of demographic questions, such as age, self-identified gender, sexual orientation, race/ethnicity, educational level, and income level (See Appendix B). Following the demographic questions, the measures assessing for perceived discrimination, internalized racism, internalized homonegativity, social support, and physical health symptoms were presented in random order.

The Cohen-Hoberman Inventory of Physical Symptoms (CHIPS; Cohen & Hoberman, 1983). CHIPS is a 33-item questionnaire developed to measure perceived burden from physical symptoms. This measure asks participants to respond to the question, “How much were you bothered by,” with 33 specific symptoms following. Sample items include, “sleep problems,” “migraine headache,” and “feeling low in energy.” Participants are asked to respond to the extent to which these symptoms distressed them within the past 2 weeks on a 5-point scale ranging from 0 – 4 (0 = *have not been bothered* and 4 = *has been an extreme bother*; range = 0 to 132). Higher total scores indicate greater levels of distress due to physical symptoms. Internal consistency has been demonstrated with a $\alpha = .88$ (Cohen & Hoberman, 1983). Construct validity was also supported via a moderate correlation with depressive symptomology ($r = .44$) as measured by the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977), as well as positive significant correlations with use of student health facilities. The Cronbach’s alpha for the current study was .91.

Perceived Victimization Inventory (PVI). The PVI is a 14-item questionnaire utilized to measure the extent of perceived harassment, rejection, and discrimination based on participants' minority status. The PVI was modified from Szymanski's Heterosexist Harassment, Rejection, and Discrimination Scale (HHRDS; 2006) by Greshman (2012). Items were modified by Greshman to reflect overall minority identities rather than a specific lesbian identity and the measure was named the PVI. For example, an item from the original measure was modified from, "How many times have you been verbally insulted because you are a lesbian?" to "How many times have you been verbally insulted because of your minority status?"

Additional PVI items include, "How many times have you been made fun of, picked on, pushed, shoved, hit, or threatened with harm because of your minority status" and "How many times have you been treated unfairly by your employer, boss, or supervisors because of your minority status?" Participants are asked to respond to the frequency to which they experienced particular events within the past year, using a 6-point scale ranging from 1 – 6 (1 = *if the event has never happened* to 6 = *if the event happened almost all of the time [more than 70% of the time]*); score range = 14 to 84). Higher scores indicate greater levels of perceived discrimination related to their marginalized identities.

Greshman (2013) yielded a Cronbach's alpha of .87 using the PVI. Internal consistency for the original instrument, the HHRDS, has also been demonstrated with adequate reliability for the total scale ($\alpha = .90$) (Szymanski, 2006). HHRDS construct validity has been supported by significant positive correlations with psychological

distress and the test-retest stability coefficient after 3 weeks was .89 for the total scale (Szymanski, 2006). The PVI's Cronbach's alpha for the current study was .89.

Perceived Stress Scale (PSS; Cohen & Williamson, 1988). The MSPSP is a 10-item instrument that assesses perception of stress. More specifically, this scale measures the degree to which an individual will appraise a situation within the last month to have been stressful. Items include, "how often have you been upset because of something that happened unexpectedly," "how often have you felt confident about your ability to handle your personal problems," and "how often have you felt that you were on top of things?" Participants are asked to respond with how often they feel that particular way on a 5-point scale ranging from 1 – 5 (1 = *Never* to 5 = *Very Often*; total score range 10 – 60). Higher total scores indicate greater levels of perceived stress over the past month.

Internal consistency has been demonstrated with adequate reliability for the total scale ($\alpha = .78$) (Cohen & Williamson, 1988). The PSS was also associated with greater depressive symptoms related to stressful life events (Kuiper, Olonger, & Lyons, 1986), suggesting construct validity. Cronbach's alpha for the current study was .88.

Internalized Homonegativity Scale (Revised Internalized Homophobia Scale [IHP-R]; Herek, Cogan, & Gillis, 2009). The IHP is a 5-item instrument that was shortened from Martin and Dean's (1987) Internalized Homophobia Scale. This scale assesses the level of internalized stigma among gay, lesbian, bisexual, and other individuals who do not identify as heterosexual. It refers to personal acceptance and endorsement of the individual's value system and self-concept (Herek, Gillis, & Cogan, 2009). Items include, "I wish I weren't lesbian/gay/bisexual/non-heterosexual," "If

someone offered me the chance to be completely heterosexual, I would accept the chance,” and “I have tried to stop being attracted to the same sex in general.”

Participants are asked to provide an honest rating about the degree to which they agree or disagree with the statements. Participants respond on a 5-point scale ranging from 1 – 6 (1 = *Disagree Strongly* to 5 = *Agree Strongly*; total score range 10 – 50). Higher total scores indicate greater levels of internalized stigma.

Internal consistency has been demonstrated with adequate reliability for the total scale ($\alpha = .82$) (Herek, Cogan, & Gillis, 2009). Lower levels of internalized homonegativity were also associated with greater disclosure and positive feelings about membership in the sexual minority community. The Cronbach’s alpha for the current study was .83.

Internalized Racism (Appropriated Racial Oppression Scale (AROS); Campon & Carter, 2015). The AROS is a 24-item instrument that measures beliefs, attitudes, and emotional reactions of internalized racial oppression in people of color. Although there are four subscales (i.e., emotional responses, American standard of beauty, devaluation of own group, and patterns of thinking), only the total scale was of interest for this study. Items include, “people of my race don’t have much to be proud of,” “people take racial jokes too seriously,” and “when I look in the mirror, sometimes I do not feel good about what I see because of my race.” Participants are asked to respond with the level to which they agree or disagree with each statement on a 7-point scale ranging from 1 – 7 (1 = *Strongly Disagree* to 7 = *Strongly Agree*; total score range 24 – 168). Higher total scores indicate greater levels of internalized racism.

Internal consistency has been demonstrated with adequate reliability for the total scale ($\alpha = .90$) (Campon & Carter, 2015). Greater levels of internalized racism were also associated with higher symptoms of anxiety and depression, suggesting construct validity. Further, individuals with higher internalized racism were more likely to score high on denial of white privilege, unawareness of institutional racism, and denial of blatant racial discrimination based on the Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000). The Cronbach's alpha for the current study was .88.

Social Support (Medical Outcomes Study Social Support Survey (MOS-SSS; Sherbourne & Stewart, 1991). The MOS-SSS is a 19-item instrument that measures social support within multiple dimensions, including emotional/informational, tangible, affectionate, and positive social interaction. Participants are asked to indicate how often they receive particular types of social support when needed on a 5-point scale ranging from 1 – 5 (1 = *None of the Time* to 5 = *All of the Time*; total score range 19 – 95). Higher total scores indicate higher availability of social support.

Internal consistency has been demonstrated with adequate reliability for the total scale ($\alpha = .97$) (Sherbourne & Stewart, 1991). Increased social support availability has been found to be related to lower levels of loneliness, increased family and marital functioning, and mental health (Sherbourne & Stewart, 1991). The Cronbach's alpha for the current study was .96.

Procedure

Participants were recruited using a snowball sampling method via the social networking websites Facebook and Twitter, and postings to the American Psychological

Association's Division 44 (i.e., Society for the Psychological Study of Lesbian, Gay, Bisexual, and Transgender Issues) and Division 17 (i.e., Society for Counseling Psychology) listservs. A mass recruitment email with the survey link was also sent to university students, faculty, and staff. The researcher contacted acquaintances, colleagues, and others in the community (e.g., student groups, churches) who met the criteria. Included in the e-mail or recruitment letter was a brief summary of the study, Institutional Review Board (IRB) approval information, and the link to the survey, which took approximately 15 minutes to complete. Prior to beginning the online survey, participants were directed to the introduction page, which included their required consent. The researcher also requested that each participant forward the survey to others who might meet the criteria.

Following the completion of the survey, participants had the opportunity to enter their e-mail address for a random drawing. Those participants who provided their e-mail addresses were entered into a random drawing from which 10 participants received a \$20 amazon.com gift certificate. The e-mail addresses were no way linked to their completed survey.

The survey was developed using Qualtrics software and was housed on the Center for Educational Development and Research (CEDaR) server. The account was accessible only with the researcher's login information and only the researcher had access to survey responses. No identifying information was gathered, keeping survey responses anonymous. The survey was posted in English on Qualtrics after approval for the study was obtained from the University of Oklahoma Institutional Review Board. Responses were collected in March of 2016.

Data Analyses

Preliminary analyses were conducted to examine the relationships among variables, including demographic variables. Any demographics found to be relevant were controlled for in subsequent analyses. A hierarchical regression analysis was conducted; the criterion variable was overall physical health symptoms, and the predictor variables were perceived discrimination, perceived general stress, internalized homonegativity, internalized racism, and social support. The first step entered general stress in order to partial out general life stressors that were not necessarily directly related to minority statuses. Social support was entered into the second step to partial out its effects as the buffering hypothesis suggests social support may influence the relationship between life stressors and distress. Internalized racism and internalized homonegativity were entered into the third step in order to explore the main effects of these variables. The fourth step introduced perceived discrimination to examine the unique variance accounted for beyond that of the other variables. The final step included two interactions: perceived discrimination x internalized racism and perceived discrimination x internalized homonegativity, to determine if the interactive effects of these minority stressors uniquely contribute to physical health symptoms.

As previously noted, research questions were posited due to the exploratory nature of the study: (a) Do perceived discrimination, internalized stigmas, perceived social support, and general stress significantly predict physical health symptoms after controlling for relevant demographics? (b) Does perceived discrimination significantly predict physical health symptoms after controlling for internalized stigmas, social

support, and general life stressors? (c) Does internalized oppression moderate the relationship between perceived discrimination and physical health?

Results

Preliminary Analyses

Preliminary analyses were performed to explore normality, linearity, and homoscedasticity and were within normal limits. No extreme outliers were present in this sample.

Prior to running the regression model, relationships between physical health symptoms and other measures were explored using Pearson product-moment correlations (see Table 1). All predictor measures were significantly correlated with physical health symptoms: perceived general stress ($r = .26, p < .01$), social support ($r = -.26, p < .01$), internalized homonegativity ($r = .29, p < .01$), internalized racial stigma ($r = .35, p < .01$), and perceived discrimination ($r = .46, p < .01$). The measures had small to medium correlations with one another (Cohen, 1988, pp. 79–81), none of which indicated multicollinearity.

Demographic variables were explored with Pearson correlations, t -tests, and ANOVAS. There was a small, negative correlation between education and physical health symptoms ($r = -.22, p < .05$). Subsequently, a regression model was run with education entered into Step 1 to determine the predictability value. Because education was not shown to be a significant predictor in the regression model, it was removed from the final step to increase power of the regression model. No other continuous demographic variables showed significance regarding physical health symptoms; thus, no demographic variables were included in the hierarchical regression model.

Regarding independent samples t -tests and ANOVAS assessing the relationship between the categorical demographic variables and physical health symptoms, no

significant differences were discovered. Of particular note, there were no significant differences in physical health symptoms between individuals diagnosed with a medical issue and those who were not. Also, relationships between demographic variables and predictor measures were examined. Interestingly, there was a significant difference between males and females for both internalized homonegativity ($p < .01$) and internalized racial stigma ($p < .05$), with males reporting greater levels of these internalized stigmas.

Multiple Regression Model

A hierarchical multiple regression was employed to assess whether general stress, social support, internalized racial stigma, internalized homonegativity, perceived discrimination, internalized homonegativity x perceived discrimination, and internalized racism x perceived discrimination predicted physical health symptoms (see Table 2). The sum scores of all variables were converted to centered-means to avoid multicollinearity. Hence, the centered means were used in the hierarchical regression.

The adjusted R^2 explained by the total model was .40 ($F[7,107] = 11.84, p = .000$). As shown in Table 2, General Perceived Stress was entered at Step 1 and demonstrated significance, Adjusted $R^2 = .19, F(1, 113) = 28.07, p < .001$. Social support was entered into Step 2, which did not explain any additional variance in physical health after controlling for perceived stress. Internalized homonegativity and internalized racial stigma were simultaneously entered into Step 3 and demonstrated significance, $\Delta R^2 = .10, \Delta F(4,110) = .20, p < .01$, with adjusted $R^2 = .27$. The significance was attributable to internalized racism. Finally, Perceived Discrimination

was found to be significant at the fourth step, $\Delta R^2 = .10$, $\Delta F(5,109) = 17.8$, $p < .001$, with adjusted $R^2 = .37$.

In order to explore whether the interaction of discrimination and internalization of stigmas uniquely predict physical health symptoms, the interaction terms (i.e., internalized racism and perceived discrimination and internalized homonegativity and perceived discrimination) were entered as a block at the last step. The block was significant and explained 4% of the variance, $\Delta F(7,107) = 3.7$, $p < .05$, with the significance attributable to the interaction of internalized racism x perceived discrimination. This interaction illustrates that the relationship of internalized racism and physical health symptoms changed depending on perceived discrimination. Specifically, the association between the internalized racism and physical health symptoms is stronger when perceived discrimination is greater.

For the total model, perceived stress, internalized racial stigma, perceived discrimination, and the interaction of perceived discrimination and internalized racism were individually significant in predicting physical health symptoms, with general stress being the strongest predictor, followed by perceived discrimination and internalized racism, then the interaction of perceived discrimination and internalized racial stigma.

Discussion

The purpose of the study was to explore the influence of general stress, internalized stigma, social support, and perceived discrimination on physical health among LGB people of color. A hierarchical multiple regression was utilized to examine the relationships between these predictor variables and physical health, and the interaction of internalized stigmas (i.e., internalized racism and internalized homonegativity) and perceived discrimination.

The current study adequately explores the first research question. The full model including general perceived stress, perceived discrimination, internalized racism, internalized homonegativity, social support, internalized racism x perceived discrimination, and internalized homonegativity x perceived racism significantly accounted for significant variance in physical health symptoms. The second research question was also supported. That is, after controlling for all other predictor variables and interactions, perceived discrimination was still a significant predictor of physical health outcomes. Interestingly, the relationship between perceived discrimination and physical health symptoms was negative.

General stress, perceived discrimination, and internalized racial stigma were individual significant predictors of physical health symptoms. As expected, general perceived stress was a significant predictor to physical health symptoms; the relationship between stress and health is well documented within the literature base (Liem & Liem, 1978; Wheaton, 1983). These results are also consistent with previous studies indicating that perceived discrimination is a significant contributor to physical health outcomes (Frost, Lehavot, & Meyer, 2015; Wagner et al., 2012). As previously

mentioned, experiences of discrimination range from institutionalized discrimination to physical assaults, all of which increase the physiological stress arousal and lead to greater physical health symptoms (Liem & Liem, 1978). Lastly, the impact of internalized racial stigma was also supported and consistent with previous findings (Graham, West, Martinez, & Roemer, 2016; Gupta, Szymanski, & Leong, 2011; Szymanski & Stewart, 2010). As noted, physical health begins to show signs of decline as early as childhood for individuals experiencing internalization of racial stigma (Butler et al., 2004). Given the pervasiveness of racial oppression via both covert and overt discrimination, it does not come as a surprise that the impact of internalized racism maintains its influence into adulthood due to constant “wear and tear” of the body. Further, given the increased media coverage of racism and deadly force against racial/ethnic minorities over the last several years, internalization of racism may be influenced. However, because the interaction of perceived discrimination and internalized racism was significant, the effects of these two constructs on physical health are best understood by examining this particular interaction.

The significant interaction of perceived discrimination and internalized racism on physical health is noteworthy. Not only do perceived discrimination and internalized racism have individual direct effects on physical health, the interaction between them also shows a unique impact on physical health. Specifically, the relationship between internalized racism and physical health symptoms becomes stronger among people who report higher levels of discrimination as a result of their minority statuses. This significant interaction may be suggestive of fewer available resources to buffer or cope with these external and internal experiences. For instance, increased perceived

discrimination as a result of minority identities and the internalization of stigma individually tax an individual's mental and physical resources. Thus, when including the interaction of these experiences, there may be fewer resources available to buffer against the effects. Consequently, one can conjecture that in response to higher levels of perceived discrimination and fewer available resources, an individual may begin to internalize the discriminatory experiences in order to cope. However, this rise in internalization increases minority stressors, which then contributes to poorer physical health. This is not entirely surprising, as the link between discrimination and internalized stigma (Clark, Coleman, & Novak, 2004; Solorzano, Ceja, & Yosso, 2000) as well as internalized stigma and health (Butler et al., 2002; Denton, 2014; Newcomb & Mustanski, 2010) has been established.

Further, there may be a cyclical relationship between discrimination and internalization of stigma. If perceived discrimination and internalization increase together, the internalization could serve to make one more aware of discrimination without interpreting it as the fault of the oppressor. This internalization may result in the individual coping by blaming the self (i.e., one's minority status) in an effort to gain control or make sense of the discrimination. For example, someone who believes they are less attractive due to their lack of typical European features may actually be more aware of other's comments about their appearance. Rather than interpreting this as problematic on the part of the person commenting, the individual may interpret it as a problem with the self due to their minority identity (internalization). Therefore, internalization does not prevent, and could actually increase, awareness of the discrimination. This proposed increased awareness may be explained by confirmatory

bias (i.e., looking for confirmation that one is “less than” due to minority identity). The increased awareness due to internalization then increases perceived discrimination, thus continuing the cycle. This cycle offers one possible explanation for the significant interaction effect. Overall, the interaction is important, as it illustrates the limitations of additive approaches in measuring multiple marginalized populations and their experiences. Additive approaches may not capture the complete interrelationships among the interacting variables.

Interestingly, social support did not significantly predict physical health outcomes, despite a significant amount of research identifying social support as a buffer to the impacts of stress (Cohen & Wills, 1985). However, as mentioned previously, social support’s influence on the physical health of LGB people of color is minimal (Frost, Meyer, & Schwartz, 2016). With regard to people of color, Ben-Ari and Gil (2004) found that despite greater levels of social support than Whites, African Americans still reported higher levels of distress. However, Frost, Meyer, and Schwartz (2016) recently discovered that among LGB people of color, fewer dimensions of social support were reported when compared to the support systems of LGB white individuals. It may be more salient to determine an individual’s utilization of existing social support rather than the general existence of specific dimensions of perceived social support. Also, Frost, Meyer, and Schwartz (2016) indicated that LGB individuals typically relied on social support from other LGB individuals, typically from the same racial/ethnic background. Thus, it may be important in the future to assess for the existence of social support from people with whom individuals identify.

Internalized homonegativity did not significantly contribute to physical health symptoms. This lack of significance is somewhat surprising, particularly because several studies have discovered a link between internalized homonegativity and mental and/or physical health (Herek, Gillis, Cogan, & Glunt, 2009; Szymanski, 2006; Szymanski & Gupta, 2009). Further, Velez, Moradi, & DeBlaere (2015) and Szymanski and Meyer (2008) had contradictory findings with regard to internalized stigmas, noting that internalized homonegativity was significant, but not internalized racism among Latino and African American adults. Similarly, Chen and Tyron (2012) found that among Asian-American gay men, only stress related to sexuality was significant in predicting psychological distress. Despite the different findings, the significance of only one internalized stigma may be explained by the notion that LGB people of color are more resilient, thus potentially contradicting the double jeopardy hypothesis which posits that individuals with more than one minority identity will experience greater levels of distress (Beale, 1979; Dowd & Bengston, 1978).

Resilience among LGB people of color in response to stigma has been documented in the literature (e.g., Adams, Cahill, & Ackerlind, 2005; Bowleg, Huang, Brooks, Black, & Burkholder, 2003). This perspective asserts that LGB people of color possess resources, including self-protective strategies that serve to mitigate health effects from minority stressors. Meyer (2015) describes resilience as a process of stress buffering, further noting that it includes any mechanism that leads to positive adaptations to minority stressors. This includes the decision to conceal or disclose sexual orientation, which may influence the experience of discrimination. For example, if an individual chooses not to disclose their sexual minority status, internalized

homonegativity may be lower due to the reduced levels of direct victimization. This is consistent with other studies suggesting that sexual minority status disclosure leads to greater health risks when compared to individuals who conceal their sexual minority identities (Cole et al., 1996; Huebner and Davis, 2005). Conversely, racial identity concealment is less feasible, which does not allow for individuals to easily avoid discrimination based on racial/ethnic minority status and increasing the risk of internalization of racial stigma, ultimately increasing the possibility of physical health symptoms. Thus, despite these unique adaptations to maneuver the environment from homonegative discrimination, these stress-buffering resources may be finite and become taxed by racial discrimination.

Nevertheless, countering the double jeopardy hypothesis based on results only addressing internalized experiences rather than overall experiences related to each minority identity may be rash. Further, this particular study focused on physical health symptoms rather than psychological distress, unlike the others (Cochran, Sullivan, & Mays, 2003; Herek & Garnets, 2007; Velez, Moradi, and DeBlaere, 2015; & Williams, Neighbors, & Jackson, 2003). In addition, this study investigated LGB individuals from all racial/ethnic minority backgrounds rather than one particular group, yielding more generalizable results to explain the impact of minority stressors on people of color. This is important because it speaks to the experience of people of color as a whole, living in a white-dominant society. While the experiences of each individual are varied and important, the purpose of exploring multiple racial/ethnic minorities as a group is intended to document the shared experiences of people of color as they experience

discrimination in a white-dominant society and how that discrimination impacts their physical health.

Because the link between discrimination and internalized oppression is clear, it is important to highlight that these internalized stigmas should not be viewed as caused by the victims of the oppression or stigmatization, as some may assert (Pyke, 2010). Blaming the oppressed, or victim blaming, suggests that it is the victim who allows for discrimination to impact the way they feel about themselves or perceive their own identities, rather than faulting an institutionalized system inundated with discrimination. Scholars exploring resiliency also make note that focusing on stress adaptability among minorities may also signify an attitude suggesting minority individuals should be more resilient, which reduces the responsibility of the social environment (Meyer, 2015). However, this study suggests that even for individuals with lower levels of internalized stigmas, the discrimination they experience still influence their health negatively. This further suggests that minority stress is ultimately a problem of the culture of which the individual is part, and not the individual.

Historically, LGB people of color have been minimally explored among researchers. Although there has been a recent increase in research among this population, this particular study is unique as it explores physical health symptoms as opposed to psychological distress or general well being. Overall, the results are in support of the theories of minority stress (Brooks, 1981; Meyer, 2003) suggesting that independent to general stress, unique stressors as a result of minority identities negatively influence health. The additive perspective with regard to discrimination based on separate minority identities was not explored; however, the additive

perspective with regard to internalization of stigmas resulting from separate minority identities was explored but not supported. Further, this study is unique as it explored the interaction of perceived discrimination and internalized oppressions, which ultimately establishes the influence of interacting minority stressors on physical health.

Limitations and Future Directions

Although this study generally supports the existence of minority stress and its impact on physical health, there are some limitations to the study. A larger sample size would have resulted in more power to detect effects and allowed for additional analyses. Further, this study utilized a snowball method to recruit participants, which may have limited generalizability and increased the potential for sampling bias. For instance, the current sample was primarily comprised of adults in early and middle adulthood. Participants required access to the Internet, which may have limited participation. Future research may consider paper-pencil surveys in addition to Internet surveys in order to recruit a wider range of participants. Also, the size of subsamples (e.g., racial/ethnic, gender identity) was too small to confidently interpret the results of between-group differences. It may be useful for future studies to examine specific racial and ethnic or gender identity groups. In addition, given the various identities with which an individual may identify, there are several other potential intersections to be explored in the future. For example, future studies may explore gender differences on levels of perceived discrimination or how gender intersects with LGB and racial minority identities.

Lastly, because this was a correlational study, causation cannot be determined. However, the development of an a priori theoretical framework built upon a prior theory

(i.e., Minority Stress) and previous research findings strengthen the validity of this study's findings.

Clinical Implications

Results from this study yield several important clinical implications. First, clinicians are encouraged to practice from a social justice standpoint. Specific to psychologists, Goodman and colleagues (2004) note that social justice in this line of work includes “scholarship and professional action designed to change societal values, structures, policies, and practices, such that disadvantaged or marginalized groups gain increased access to these tools of self-determination” (p. 795). This includes recognizing and examining our own values and beliefs, sharing power, giving voice to the oppressed, raising consciousness, building on strengths, and fostering growth and empowerment among minority individuals (Goodman et al., 2004). This is also consistent with the American Psychological Association’s guidelines for practicing with LGB clients (APA, 2000), particularly with regard to examining one’s own beliefs and values and recognizing the impact of social stigmatization on individual health.

As healthcare professionals working from a social justice lens, it is important to understand that the sociopolitical climate likely plays a larger than expected role in current physical health symptoms among LBG people of color (Morrow & Hawxhurst, 1998). Thus, when conceptualizing issues and offering treatment options, it is necessary to take the entire person and social system into account. These more holistic interventions must consider experiences of discrimination, especially if brought up by the patient/client. Some suggest that the general promotion of awareness of an individual’s multiple oppressions on overall health would be beneficial, as well as

attending to the sociocultural context in which an individual lives (Szymanski & Meyer, 2008). For instance, providers should listen for language that may be suggestive of internalization of oppression related to minority statuses or reports of victimization that may be a result of their minority status, particularly when determining whether presenting difficulties are likely a result of general stress or minority stress.

In addition, clinicians must understand and recognize the number of factors that may influence the health of LGB people of color. Although it can be detrimental for clinicians to assume one's minority identities is a presenting problem, recognizing the impact of discrimination on other processes, such as internalized stigmas, is of great importance. However, although targeting internalized stigma may be a focus of treatment, clinicians should be cautious as to not presume internalized stigmas are the fault of LGB people of color. As previously mentioned, facilitating understanding and awareness of the influence of oppression is important while still promoting adaptability and resilience to these unique stressors multiply oppressed individuals face regularly. This includes potential referrals to resources such as support groups, community centers, or readings that promote LGB and/or people of color.

Finally, systemic intervention is vital to continue shifting the negative experiences of LGB people of color. Promoting resiliency and coping (e.g., utilization of social support) is helpful and an effective method to deal with systemic issues; however, changes in the environment targets the source of these issues. These include changes in policy or laws that advance equality among all individuals, such as protection from discrimination in the workplace and increasing access to health care services for populations that historically have a more difficult time with healthcare

access. Psychologists have an ethical responsibility to advocate for these systemic changes.

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Appendix A: Tables

Table 1

Means, Standard Deviations, and Intercorrelations of Perceived Stress, Social Support, Internalized Homonegativity, Internalized Racism, Perceived Discrimination, and Physical Health Symptoms

<i>Variable</i>	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1. PSS	33.22	4.37	---	-	.27**	.30**	.19**	.26**
				.34**				
2. MOS-SSS	73.11	17.68		---	-	-.19*	-.17*	-
					.30**			.26**
3. IHS	9.17	4.65			---	.36**	.30**	.29**
4. AROS	68.16	28.11				---	.25**	.35**
5. PVI	29.85	11.35					---	.46**
6. CHIPS	58.70	18.22						---

Note. PSS measured general stress with the Perceived Stress Scale (Cohen & Williamson, 1988). MOS-SSS measured support with the Medical Outcomes Study Social Support Survey (Sherbourne & Stewart, 1991). IHP measured internalized homonegativity with Revised Internalized Homophobia Scale (Herek, Cogan, & Gillis, 2009). AROS measured internalized racism with the Appropriated Racial Oppression Scale (Campon & Carter, 2015). PVI measured perceived discrimination with the Perceived Victimization Scale originated by (Szymanski, 2006). CHIPS measured physical health symptoms with the Cohen-Hoberman Inventory of Physical Symptoms (Cohen & Hoberman, 1983).

* $p < .05$; ** $p < .01$.

Table 2

Summary of Final Step of the Five-Step Hierarchical Multiple Regression Analysis for Variables Predicting Physical Health Symptoms

<i>Variable</i>	B	SE B	β	R^2	ΔR^2
Step 1				.20***	
Perceived General Stress	1.19	.22	.45***		
Step 2				.20	.00
Social Support	-.04	.98	-.04		
Step 3				.30***	.10**
Internalized Homonegativity	.15	.36	.04		
Internalized Racism	.22	.06	.31**		
Step 4				.40***	.10***
Perceived Discrimination	-.21	.34	-.31**		
Step 5				.44***	.04*
Internalized Homonegativity X Perceived Discrimination	-.02	.03	-.05		
Internalized Racism X Perceived Discrimination	.01	.01	.22**		

* $p < .05$. ** $p < .01$. *** $p < .001$.

Appendix B: Demographic Questionnaire

(1) Age: _____

(2) Sex:

- a. Male
- b. Female

(3) Gender:

- a. Male
- b. Female
- c. MtF Transgender
- d. FtM Transgender
- e. Please Specify _____

(4) What is the highest level of education completed?

- a. Less than high school
- b. High school/GED
- c. Some college
- d. 2-year college degree
- e. 4-year college degree
- f. Master's degree
- g. Doctorate degree
- h. Professional degree
- i. Other (please specify): _____

(5) Household Income Level:

- a. Under \$20,000
- b. \$20,000 - \$29,999
- c. \$30,000 - \$39,999
- d. \$40,000 - \$49,999
- e. \$50,000 - \$59,999
- f. \$60,000 - \$69,999
- g. \$70,000 - \$79,999
- h. \$80,000 - \$89,999
- i. \$90,000 - \$99,999
- j. \$100,000 to \$109,999
- k. \$110,000 to \$119,999
- l. \$120,000 to \$129,999
- m. \$130,000 to \$139,999
- n. \$140,000 to \$149,999
- o. over \$150,000

(6) Relationship Status:

- a. Single
- b. Partnered/Committed
- c. Married
- d. Separated
- e. Divorced
- f. Widowed
- g. Please Specify _____

(7) Ethnicity/Race (select all that apply):

- a. Black/African Descent
- b. White/European Descent
- c. Latino/Hispanic
- d. Asian/Pacific Islander
- e. Native American
- f. Multi-racial/Multi-ethnic
- g. Please Specify _____

(8) Sexual Orientation/Identity:

- a. Gay
- b. Lesbian
- c. Bisexual
- d. Heterosexual/Straight
- e. Please Specify _____

(9) Do you have any physical health problems or medical diagnoses (diabetes, cancer, obesity, etc.)?:

- a. Yes
Please Specify _____
- b. No

Appendix C: Perceived Victimization Inventory

Please think carefully about events that you have experienced within the PAST YEAR as you answer the questions below. Read each question and indicate the number that best describes events in the Past Year, using these rules. PLEASE NOTE THAT MINORITY STATUS REFERS TO RACE/ETHNICITY AND SEXUAL ORIENTATION.

- 1-If the event has NEVER happened to you;
 - 2-If the event happened ONCE IN A WHILE (less than 10% of the time);
 - 3-If the event happened SOMETIMES (10-25% of the time);
 - 4-If the event happened A LOT (26-49% of the time);
 - 5-If the event happened MOST OF THE TIME (50-70% of the time);
 - 6-If the event happened ALMOST ALL OF THE TIME (more than 70% of the time).
-
1. How many times have you been treated unfairly by teachers or professors because of your minority status?
 2. How many times have you been treated unfairly by your employer, boss, or supervisors because of your minority status?
 3. How many times have you been treated unfairly by your co-workers, fellow students, or colleagues because of your minority status?
 4. How many times have you been treated unfairly by people in service jobs (by store clerks, waiters, bartenders, waitresses, bank tellers, mechanics, and others) because of your minority status?
 5. How many times have you been treated unfairly by strangers because of your minority status?
 6. How many times have you been treated unfairly by people in helping jobs (by doctors, nurses, psychiatrists, caseworkers, dentists, school counselors, therapists, pediatricians, school principals, and others) because of your minority status?
 7. How many times were you denied a raise, a promotion, tenure, a good assignment, a job, or other such thing at work that you deserved because of your minority status?
 8. How many times have you been treated unfairly by your family because of your minority status?
 9. How many times have you been called a Homophobic or Racist name?
 10. How many times have you been made fun of, picked on, pushed, shoved, hit, or threatened with harm because of your minority status?
 11. How many times have you been rejected by family members because of your minority status?
 12. How many times have you been rejected by friends because of your minority status?

13. How many times have you heard negative remarks from family members because of your minority status?
14. How many times have you been verbally insulted because of your minority status?

Appendix D: Cohen-Hoberman Inventory of Physical Symptoms

Mark the number for each statement that best describes HOW MUCH THAT PROBLEM HAS BOTHERED OR DISTRESSED YOU DURING THAT PAST TWO WEEKS INCLUDING TODAY. Mark only one number for each item. At one extreme, **0 means that you have not been bothered by the problem.** At the other extreme, **4 means that the problem has been an extreme bother.**

HOW MUCH WERE YOU BOTHERED BY:

1. Sleep problems (can't fall asleep, wake up in middle of night or early in morning)	0	1	2	3	4
2. Weight change (gain or loss of 5 lbs. or more)	0	1	2	3	4
3. Back pain	0	1	2	3	4
4. Constipation	0	1	2	3	4
5. Dizziness	0	1	2	3	4
6. Diarrhea	0	1	2	3	4
7. Faintness	0	1	2	3	4
8. Constant fatigue	0	1	2	3	4
9. Headache	0	1	2	3	4
10. Migraine headache	0	1	2	3	4
11. Nausea and/or vomiting	0	1	2	3	4
12. Acid stomach or indigestion	0	1	2	3	4
13. Stomach pain (e.g., cramps)	0	1	2	3	4
14. Hot or cold spells	0	1	2	3	4
15. Hands trembling	0	1	2	3	4
16. Heart pounding or racing	0	1	2	3	4
17. Poor appetite	0	1	2	3	4
18. Shortness of breath when not exercising or working hard	0	1	2	3	4
19. Numbness or tingling in parts of your body	0	1	2	3	4
20. Felt weak all over	0	1	2	3	4
21. Pains in heart or chest	0	1	2	3	4
22. Feeling low in energy	0	1	2	3	4
23. Stuffy head or nose	0	1	2	3	4
24. Blurred vision	0	1	2	3	4
25. Muscle tension or soreness	0	1	2	3	4
26. Muscle cramps	0	1	2	3	4
27. Severe aches and pains	0	1	2	3	4
28. Acne	0	1	2	3	4
29. Bruises	0	1	2	3	4
30. Nosebleed	0	1	2	3	4
31. Pulled (strained) muscles	0	1	2	3	4
32. Pulled (strained) ligaments	0	1	2	3	4
33. Cold or cough	0	1	2	3	4

Appendix E: Appropriated Racial Oppression Scale

This questionnaire is designed to measure people’s social attitudes, beliefs, feelings and behaviors concerning race. There are no right or wrong answers---everyone’s experience is different. We are interested in YOUR experiences with race. Be as honest as you can in your responses.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Disagree Somewhat	Neutral	Agree	Agree Somewhat	Agree Strongly

1. Although discrimination in America is real, it is definitely overplayed by some members of my race.
2. People of my race don’t have much to be proud of.
3. “Good hair” (i.e. straight) is better.
4. I dont really identify with my racial group’s values and beliefs.
5. People take racial jokes too seriously.
6. I feel that being a member of my racial group is a shortcoming.
7. I prefer my children not to have broad noses.
8. When interacting with other members of my race, I often feel like I don’t fit in.
9. When I look in the mirror, sometimes I do not feel good about what I see because of my race.
10. I find people who have straight and narrow noses to be more attractive.
11. In general, I am ashamed of members of my racial group because of the way they act.
12. It is compliment to be told, “You don’t act like a member of your race.”
13. I would like my children to have light skin.
14. Sometimes I have a negative feeling about being a member of my race.
15. People of my race shouldn’t be so sensitive about race/racial matters.
16. Whites are better at a lot of things than people of my race.
17. I wish my nose were narrower.
18. I feel critical about my racial group.
19. Whenever I think a lot about being a member of my racial group, I feel depressed.
20. I find persons with light skin-tones to be more attractive.
21. I wish I could have more respect for my racial group.
22. I wish I were not a member of my race.
23. There have been times when I have been embarrassed to be a member of my race.
24. Because of my race, I feel useless at times.

Appendix F: Internalized Homonegativity Scale

The following are some statements that individuals can make about being gay/lesbian/bisexual/non-heterosexual. Using the scale below, please give your honest rating about the degree to which you agree or disagree with each statement.

1	2	4	5	7
Disagree Strongly	Disagree	Neutral	Agree	Agree Strongly

1. I wish I weren't lesbian/gay/bisexual/non-heterosexual
2. I have tried to stop being attracted to the same sex in general
3. If someone offered me the chance to be completely heterosexual, I would accept the chance
4. I feel that being lesbian/gay/bisexual/non-heterosexual is a personal shortcoming for me
5. I would like to get professional help in order to change my sexual orientation from lesbian/gay/bisexual/non-heterosexual to straight

Appendix G: MOS-SSS

People sometimes look to others for companionship, assistance, or other types of support. How often is each of the following kinds of support available to you if you need it? Circle one number on each line.

1	2	3	4	5
None of the time	A little of the time	Some of the time	Most of the time	All of the time

1. Someone you can count on to listen to you when you need to talk
2. Someone to give you information to help you understand a situation
3. Someone to give you good advice about a crisis
4. Someone to confide in or talk to about yourself or your problems
5. Someone whose advice you really want
6. Someone to share your most private worries and fears with
7. Someone to turn to for suggestions about how to deal with a personal problem
8. Someone who understands your problems
9. Someone to help you if you were confined to bed
10. Someone to take you to the doctor if you needed it
11. Someone to prepare your meals if you were unable to do it yourself
12. Someone to help with daily chores if you were sick
13. Someone who shows you love and affection
14. Someone to love and make you feel wanted
15. Someone who hugs you
16. Someone to have a good time with
17. Someone to get together with for relaxation
18. Someone to do something enjoyable with
19. Someone to do things with to help you get your mind off things

Appendix H: Perceived Stress Scale

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate by circling how often you felt or thought a certain way.

1	2	3	4	5
Never	Almost Never	Sometimes	Fairly Often	Very Often

1. In the last month, how often have you been upset because of something that happened unexpectedly?
2. In the last month, how often have you felt that you were unable to control the important things in your life?
3. In the last month, how often have you felt nervous and “stressed”?
4. In the last month, how often have you felt confident about your ability to handle your personal problems?
5. In the last month, how often have you felt that things were going your way?
6. In the last month, how often have you found that you could not cope with all the things that you had to do?
7. In the last month, how often have you been able to control irritations in your life?
8. In the last month how often have you felt that you were on top of things?
9. In the last month, how often have you been angered because of things that were outside of your control?
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

Appendix I: Institutional Review Board Approval Letter



Institutional Review Board for the Protection of Human Subjects Approval of Initial Submission – Exempt from IRB Review – AP01

Date: February 24, 2016

IRB#: 6515

Principal Investigator: Deborah Lee Dorton

Approval Date: 02/24/2016

Exempt Category: 2

Study Title: Discrimination, Internalized Stigma, and Social Support on Physical Health of LGB People of Color

On behalf of the Institutional Review Board (IRB), I have reviewed the above-referenced research study and determined that it meets the criteria for exemption from IRB review. To view the documents approved for this submission, open this study from the *My Studies* option, go to *Submission History*, go to *Completed Submissions* tab and then click the *Details* icon.

As principal investigator of this research study, you are responsible to:

- Conduct the research study in a manner consistent with the requirements of the IRB and federal regulations 45 CFR 46.
- Request approval from the IRB prior to implementing any/all modifications as changes could affect the exempt status determination.
- Maintain accurate and complete study records for evaluation by the HRPP Quality Improvement Program and, if applicable, inspection by regulatory agencies and/or the study sponsor.
- Notify the IRB at the completion of the project.

If you have questions about this notification or using iRIS, contact the IRB @ 405-325-8110 or irb@ou.edu.

Cordially,

A handwritten signature in black ink that reads 'Lara Mayeux'.

Lara Mayeux, Ph.D.
Vice Chair, Institutional Review Board

Appendix J: Institutional Review Board Modification Approval Letter



Institutional Review Board for the Protection of Human Subjects

Approval of Study Modification – Expedited Review – AP0

Date: March 09, 2016

IRB#: 6515

Principal Investigator: Deborah Lee Dorton

Reference No: 649913

Study Title: Discrimination, Internalized Stigma, and Social Support on Physical Health of LGB People of Color

Approval Date: 03/09/2016

Modification Description:

PI will ask faculty advisor to send recruitment email to OU Norman Campus to request participation.

The review and approval of this submission is based on the determination that the study, as amended, will continue to be conducted in a manner consistent with the requirements of 45 CFR 46.

To view the approved documents for this submission, open this study from the My Studies option, go to Submission History, go to Completed Submissions tab and then click the Details icon.

If the consent form(s) were revised as a part of this modification, discontinue use of all previous versions of the consent form.

If you have questions about this notification or using iRIS, contact the HRPP office at (405) 325-8110 or irb@ou.edu. The HRPP Administrator assigned for this submission: Karen Braswell.

Cordially,

A handwritten signature in black ink that reads 'Lara Mayeux'.

Lara Mayeux, Ph.D.
Vice Chair, Institutional Review Board