Applying Intergroup Relations Research to Understanding LGB Health Disparities

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Abstract

This chapter describes how intergroup processes and stigma contribute to pervasive health disparities that exist between LGB and heterosexual individuals. In particular, we focus on how the hierarchical organization of groups and the intergroup dynamics that arise from this structure operate at structural, interpersonal, and intrapersonal levels to impact psychological and physiological processes that negatively influence health among LGB individuals. We focus on how these various manifestations of stigma act as additional stressors with which LGB individuals must contend and how this stress impacts health via stress-related physiological reactivity, coping strategies, and health care interactions. Throughout we highlight how specific aspects of LGB identities (i.e. concealability, and "non-tribal" nature) present concerns that diverge from those documented in research on race and gender-based stigmas. We end by discussing areas for future research and implications for social policy and interventions.

Keywords: stigma, health, LGB, intergroup relations

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Relative to heterosexuals, LGB people rate their overall health to be poorer and report a greater number of acute and chronic health symptoms (for a review, see Lick, Durso, & Johnson, 2013). Understanding the source of these disparities and reducing their prevalence represent pressing social issues that social psychological theories of intergroup relations are well positioned to address. This chapter describes how intergroup processes and stigma contribute to the pervasive health disparities that exist between LGB and heterosexual individuals (Williams & Mann, in press). Drawing on recent models (Hatzenbuehler, 2009; Major, Mendes & Dovidio, 2013; Meyer, 2013), we outline the structural, interpersonal, and intra-individual factors associated with intergroup dynamics and membership in a devalued social group that act as sources of increased stress in the lives of LGB individuals. These stressors negatively affect the health of LGB individuals through three primary pathways: by increasing physiological reactivity, by increasing engagement in maladaptive coping strategies that have negative implications for health, and by impairing health care interactions (Figure 1). We conclude with a brief discussion of future directions and applications.

Intergroup Structure and Stigma

Research on intergroup processes is rooted in the assumption that, as humans, we have a natural and automatic tendency to categorize ourselves and others based on shared characteristics (Brewer, 1988). Such categorization is necessary to render a complex social world navigable. Social categories activate automatic evaluations and beliefs about members of groups, allowing people to make inferences quickly and with minimal effort (Dovidio & Gartner, 2010). Not only are social groups viewed in distinct ways, they are also differentially valued. Across all societies, groups are hierarchically organized such that some groups are afforded higher value and greater

social status than others (Sidanius & Pratto, 1999). Moreover, individuals are motivated to uphold the social system to which they belong (Jost, Banaji, & Nosek, 2004), even when they themselves are members of lower status groups. One way they do so is through group stereotypes that justify the relative position of lower status groups. In most cultures, LGB individuals are marginalized, devalued, relegated to lower status compared to heterosexual individuals, and must contend with multiple forms of discrimination (Amnesty International, 2015).

Insights from research on intergroup relations are essential to our understanding of social stigma. A stigma is any characteristic that marks an individual as different, devalued, and negatively stereotyped within a particular social context (Crocker, Major, & Steele, 1998; Goffman, 1963). Link and Phelan (2001) argue that stigma begins with the aforementioned social categorization processes, whereby individuals distinguish and label differences and then link these to negative stereotypes. These stereotypes justify separating and marginalizing "them" as a distinctly different social group from "us." Categorization, negative stereotyping, and segregation of social groups lead stigmatized individuals to experience status loss and encounter discrimination at the structural and interpersonal levels. Sometimes negative stereotypes and devaluation are internalized, leading to self-stigma.

Stigmas vary in several ways. Goffman (1963) distinguished among three types of stigmas: *tribal* – those based on inherited group characteristics such as race; *abominations of the body* – those based on physical features such as obesity; and *blemishes of character* – those based on a perceived moral failing such as drug addiction. Crocker et al. (1998) emphasized that stigmas also vary in the extent to which they are concealable (vs. immediately visible to social perceivers) and perceived as under individual control (vs. uncontrollable). The majority of intergroup research has focused race and ethnicity, stigmatizing characteristics that are "tribal,"

typically visible to others, and are not seen as under personal control. In contrast, LGB identities are often seen as resulting from a *blemish of character*, which can result in antipathy rooted in moral evaluations and moral emotions (i.e., disgust; Haidt & Kesebir, 2010), are generally concealable, which can lead to unique challenges (Pachankis, 2007), and are perceived by many to be controllable, which can lead to blame attributions and justification of negative social treatment (Weiner, Perry, and Magnusson, 1988). Thus, while LGB individuals share many of the same stressors as members of other stigmatized groups, several features of LGB identities and the stigma associated with them lead to unique concerns that may ultimately impact health.

Stressors Associated with LGB Stigma

Structural sources of stress. As noted above, societies are structured hierarchically, with some groups having more power and status than others and thus greater ability to influence the resources and outcomes of other groups. Because people derive self-esteem from their group memberships, people are motivated to view their social groups positively and to enhance and justify the higher position of their group relative to other groups (Tajfel & Turner, 1986). One consequence is that members of higher status groups often exploit and discriminate against members of lower status groups. Institutional and societal practices set in place by powerful higher status groups can limit the resources and opportunities available to members of lower status groups. This in turn, can increase the latter's stress exposure (e.g., Link & Phelan, 2001).

In the case of LGB individuals, structural stigma manifests in a variety of ways, including same-sex marriage bans, a lack of legal protections against discrimination in employment and housing, exclusion from military and religious institutions, and in some cases criminalization of same-sex sexual behavior. Such policies are associated with greater stress and distress among LGB individuals. Within the U.S., LGB individuals living in states with more heterosexist

policies exhibit greater psychiatric distress (Hatzenbuehler, McLaughlin, Keyes, & Hasin, 2010). Policies and institutions that disadvantage lower status groups not only act as stressors by creating barriers to resources and opportunities, but also reaffirm perceived differences between groups which, in turn, are used to justify further differential treatment. For example, marriage is an institution that confers both tangible (e.g., tax breaks, health care benefits) and symbolic (e.g., recognition, inclusion) benefits that have implications for health (Herek, 2011). A study of gay men living in Massachusetts found that they made fewer medical and mental health care visits after marriage equality was passed in that state in 2003 (Hatzenbuehler, et al., 2012). This reduction in health care visits occurred independent of relationship status, suggesting that is was due to the symbolic and status implications of marriage equality rather than specific, tangible benefits. Still, passing marriage equality legislation does not necessarily erase the psychological stress associated with LGB identities as debate leading up to and following this ultimately positive outcome may reify perceived group differences and increase stress as opponents question the normality and morality of LGB individuals (Fingerhut, Riggle, & Rotosky, 2011).

Interpersonal sources of stress. Group categorization is accompanied by group evaluation and stereotyping on the part of both in- and out-group members. For stigmatized groups, these evaluations and stereotypes are negative. LGB individuals, for example, are perceived as engaging in behaviors that violate notions of purity and sanctity (Haidt & Kesebir, 2010), which elicit feelings of disgust, a moral emotion. Prejudicial attitudes and negative emotions toward LGB individuals, in turn, can lead to interpersonal discrimination. LGB individuals experience high rates of discrimination and harassment in the workplace and in educational settings (Meyer, 2013), as well as high rates of property crimes, threats of violence, verbal harassment, and actual violence (Herek, 2009). Indeed, Herek (2009) found that

approximately 25% of LGB individuals report experiencing violence, property crime, or attempted crime and 50% report experiencing verbal harassment. Although acts of harassment and violence are primarily enacted by straight-identified individuals, some research suggests that for some, anti-LGB harassment may be an attempt to prevent themselves or others from realizing their own same-sex attractions (Weinstein, et al., 2011). Experiencing these interpersonal forms of prejudice undermines the health of LGB individuals directly by increasing risks of bodily harm and stress exposure, and indirectly by reducing socio-economic status through restricted occupational and academic opportunities and achievement (Major, et al., 2013).

Unlike individuals with tribal stigmas (e.g., ethnic minorities), LGB individuals are unlikely to be born into a community of others who share this identity. LGB individuals may therefore also frequently encounter prejudice and rejection from their family members (Pachankis, Goldfried, & Ramrattan, 2008; Ryan, Legate & Weinstein, 2015). One study found that only about half of mothers and one-third of fathers were perceived by their LGB children to be accepting of their identity (D'Augelli, 2006). Not only are such rejection experiences stressful, they also increase vulnerability to poor health by removing important sources of social support, which is known to buffer against the negative effects of stress (e.g., Cohen, 2004). Indeed, multiple studies converge to indicate that LGB individuals lack social support and that this mediates the relation between distal stressors and psychological distress (see Hatzenbuehler, 2009, for a review).

Experiencing interpersonal discrimination is stressful not only in the moment in which it occurs, but also has a lasting influence via the information it conveys about one's identity, the world, and the type of treatment one can expect (Herek, Gillis, & Cogan, 1999). Instances of rejection, discrimination, and violence convey that the world is dangerous, unpredictable, unfair,

and uncontrollable, cognitions known to negatively impact health (Williams & Mohammed, 2009). These instances also communicate that one's social identity is devalued and subject to social exclusion, threatening core needs for self-esteem and belongingness (Major et al., 2013)

Intra-individual factors and stress. People are generally aware of culturally held stereotypes about the groups to which they belong, and of how their groups are evaluated in the larger society. For members of stigmatized groups, this awareness is often accompanied by fear that they might be viewed through the lens of negative stereotypes about their group, and/or mistreated on the basis of their membership (Crocker, et al., 1998; Meyer, 2003; Steele, Spencer, & Aronson, 2002). The psychological state of concern that one might be devalued, discriminated against, rejected, or stereotyped because of one's social identity has been termed *social identity threat* (Major & O'Brien, 2005; Steele et al., 2002). Notably, social identity threat is a *situational threat* – it is activated in situations in which one's identity is salient and there exists potential for negative stereotyping and devaluation. A wide variety of situations can trigger social identity threat, from overhearing a "gay joke" at work to seeing media coverage of anti-LGB referenda. When activated, social identity threat leads to increased stress and associated affective, cognitive, and physiological consequences (Schmader, Johns, & Forbes, 2008).

Although social identity threat is situationally activated, individuals vary in their chronic sensitivity to and concerns about identity-based devaluation (Major et al., 2013). This sensitivity is captured in measures of race or sexual orientation-based rejection sensitivity (Mendoza-Denton, Downey, Purdie, Davis, & Pietrzak, 2002; Pachankis, et al., 2008), as well as stigma consciousness (Pinel, 1999). Those who score high on these measures are more likely to report having experienced discrimination in the past and more likely to expect and perceive it in future interactions (Herek, 2009; Steele et al., 2002). For example, Pachankis and colleagues (2008)

found that gay men who experienced rejection from their parents were particularly sensitive to future rejection on the basis of their sexual orientation.

Situational factors that activate social identity threat as well as chronic sensitivity to identity-based rejection can manifest in increased *vigilance* for signs of mistreatment and greater attention to potential threats, even at a preconscious level (Kaiser, Vick, & Major, 2006). These processes may lead individuals to interpret events or interactions as discriminatory even when underlying motives are ambiguous or not specifically identity-related (Major et al., 2013). Chronic concerns and sensitivity to rejection are also associated with increased worry, uncertainty, and rumination, cognitions that are experienced as stressful (Williams & Mohammed, 2009). Chronic activation of stigma concerns thus influences how individuals appraise and respond to identity-relevant situations in ways that can exacerbate stress.

LGB individuals may attempt to minimize their stigma concerns and potential for mistreatment by concealing their identity from others. However, concealing one's identity may act as a form of social identity threat as individuals monitor what they say and do, maintain vigilance for cues that they have been found out, and worry about the consequences that may follow if they are (e.g., Critcher & Ferguson, 2011). Unfortunately, "coming out" does not necessarily reduce stress. Concern over whether, when, and to whom to disclose one's sexual orientation is also a form of social identity threat that can similarly increase stress and tax cognitive resources (Madera, 2010; Pachankis, 2007). Given that most LGB individuals are not 'out' to all people or in all contexts, and that they regularly face new disclosure opportunities, sexual identity concealment and disclosure may act as a significant source of stress (e.g., Mohr & Fassinger, 2000).

Under some circumstances, members of devalued groups may internalize the negative

societal attitudes towards and stereotypes associated with their group membership, applying those attitudes and stereotypes towards themselves and other members of their group. This process of directing negative social attitudes toward the self is termed self-stigma. Self-stigma is especially likely when important others evince negative attitudes (Pachankis, et al., 2008). Self-stigma, also called "internalized homophobia" when applied to LGB individuals, is a source of stress shown to be associated with poorer mental and physical health (Meyer, 2003).

In summary, like other socially devalued groups, LGB individuals are exposed to structural (e.g., restrictive laws), interpersonal (e.g., prejudiced attitudes and behavior on the part of others) and intra-individual (e.g., heightened awareness of and sensitivity to stigma-related concerns) sources of stress that can negatively affect health. In the next section, we discuss three pathways by which the stress associated with LGB stigma may affect long-term health among LGB individuals: increased physiological stress reactivity, maladaptive coping and health-related behaviors, and less effective health-care interactions.

From Group Devaluation to Poorer Health

Stress-Related Physiological Reactivity

Experienced or anticipated unfair treatment based on one's group membership, i.e., discrimination, is often appraised as stressful (Major & O'Brien, 2005). Events and interactions that are appraised as stressful activate the hypothalamic-pituitary-adrenal cortical (HPA) axis, which stimulates a cascade of biological responses including the release of the stress hormone cortisol and increases in vascular resistance (i.e., blood pressure; Blascovich & Mendes, 2010). Worry, distrust, rumination, and uncertainty about discrimination have been shown to increase blood pressure, decrease heart rate variability, and increase cortisol (Williams & Mohammed, 2009). When experienced chronically, activation and dysregulation of the HPA axis can increase

the risk of cardiovascular disease and other stress-related ailments (Juster, McEwen, & Lupien, 2010).

Although much is known about physiological responses to stress in general, to date little research has examined the physiological response to stigma-related stress among LGB individuals. Of the few studies conducted thus far, most have focused on cortisol production. Findings of these studies, however, raise more questions than they answer. For example, Hatzenbuehler and McLaughlin (2014) found that LGB young adults who grew up in states with greater structural stigma evidenced blunted cortisol responses (interpreted as consistent with patterns resulting from childhood trauma) following a laboratory stress task compared to LGB participants who grew up in states with fewer restrictive policies. Examining interpersonal level influences, Burton, Bonanno, and Hatzenbuehler (2014) found that perceived parental support was associated with reduced cortisol reactivity during the same laboratory stress task, while support from peers did not show a similar buffering effect.. Comparing the diurnal cortisol levels of LGB and heterosexual participants, another study found that total cortisol output did not differ by sexual orientation (Juster, Smith, Ouellet, Sindi, & Lupien, 2013). However, LGB individuals who had disclosed their sexual orientation evidenced lower levels of cortisol upon awakening than did those who had not disclosed, which the authors interpreted as indicating that disclosing to family may protect against physiological stress reactivity. Yet another study found that gay men who revealed their sexual orientation at work evidenced *higher* total levels of cortisol during the workday than did those who concealed their identity at work (Huebner & Davis, 2005).

These results appear contradictory in that both greater exposure to structural stigma (stress-inducing) and greater perceived parental support (stress-buffering) were associated with

reduced cortisol reactivity. Moreover, concealment predicted both higher and lower cortisol levels depending on how and in what context cortisol was assessed. These results are particularly difficult to interpret as which patterns of cortisol reactivity are adaptive and which are maladaptive is an empirical question requiring further investigation (Adam & Kumari, 2009). In general, however, research suggests that *dysregulation* of the HPA axis is associated with negative health outcomes (Blascovich & Mendes, 2010). Such dysregulation can manifest in reduced or increased cortisol-reactivity and/or in the form of an excessive or flattened diurnal slope (Adam & Kumari, 2009). More research is needed to clarify associations between patterns of cortisol reactivity (in response to laboratory tasks and over the course of the day) and health as well as how the timing of stress exposure and assessment impacts this relationship. In addition, greater attention to other physiologic responses to LGB stigma is needed.

Maladaptive Coping and Health Relevant Behaviors

Discrimination may also negatively affect the health of members of devalued groups through the coping strategies members of these groups employ to deal with identity-related stress (Major et al., 2013). In the context of a stressor, coping refers to conscious attempts to regulate one's emotional, cognitive, and behavioral responses in service of mitigating the experience of stress (Major & O'Brien, 2005; Lazarus & Folkman, 1984). Coping strategies include those designed to address the source of the stress (problem-focused) as well as those aimed at reducing the negative emotions associated with the stress (emotion-focused; Lazarus & Folkman, 1984). One means of coping with the negative emotions associated with discrimination-related stress is to engage in escape or avoidance coping such as drinking, smoking, or other substance use. LGB individuals are more likely than heterosexuals to use and abuse a variety of substances and use is greater among those with higher levels of internalized homophobia, consistent with the idea that

substance use is a strategy for escaping negative emotions (Pascoe & Smart Richman, 2009). Hatzenbuehler, Corbin, and Fromme (2011) tested the role of coping motives directly, finding that experiencing discrimination is associated with greater alcohol-related problems and that this effect is mediated by coping motives.

Engaging in unhealthy behaviors may also be due to the depletion of executive resources. Contending with discrimination and social identity threat is an inherently effortful process. Vigilance for rejection-related cues, suppression of automatically activated stereotypes, and regulation of behavior and resulting emotions all constitute demands and thus consume executive resources (Schmader et al., 2008). Decreased executive resources limit individuals' ability to avoid unhealthy but tempting behaviors, such as drinking alcohol, smoking cigarettes, eating unhealthy foods, or taking recreational drugs (e.g., Inzlicht & Kang, 2010). The reduction of executive resources also makes it more difficult to engage in health promotion behaviors such as exercising and preparing healthy food (Major et al., 2013).

Another strategy for coping with group devaluation is to conceal one's group membership if it is not readily visible to others. LGB individuals often attempt to cope with their stigmatized identity by concealing it from others, particularly in contexts where support is perceived to be unlikely (Legate, Ryan, & Weinstein, 2012). While this problem-focused coping strategy can sometimes prevent one from facing harassment or discrimination, it carries with it different costs with potentially negative health implications (Pachankis, 2007). First, concealing one's identity requires constant monitoring and has been shown to deplete cognitive resources, detrimentally impacting performance on cognitive tasks (Crichter & Ferguson, 2011). The depletion of executive resources due to concealment means that these resources are not available to cope with daily stressors and other situational demands and thus may exacerbate both

psychological and physiological stress. Additionally and as discussed above, the vigilance and monitoring associated with concealing are themselves sources of identity-related stress.

Second, concealing one's identity also precludes one from behaving authentically in interpersonal interactions. This may make it difficult to connect with others, jeopardize existing relationships, and impede the ability to form new ones. Identity concealment makes it especially difficult to form connections with similar others (Beals, Peplau, & Gable, 2009), which are critical to combating internalized negative stereotypes. Frable, Platt, and Hoey (1998) found that, compared to those whose stigmas were visible, individuals with concealable stigmas had less contact with similar others, but that when contact did occur it had a greater positive impact on well-being. Concealment may therefore limit opportunities for social support, a factor known to influence health outcomes (Cohen, 2004). Thus, in attempting to cope with identity threat via concealment, stress and the negative health outcomes that follow may actually be compounded.

Health Care Interactions

Intergroup processes can also undermine the health of members of devalued groups by impairing the quality and quantity of their contact with medical professionals who belong to higher status groups. For example, health care providers evince bias against LGB individuals (Sabin, Riskind, & Nosek, 2015), which may lead to poorer treatment outcomes even in the absence of overt mistreatment. Research in the race domain has shown that providers' implicit bias can undermine the clinical interaction and influence treatment recommendations (for a review, see Zestcott, Blair, & Stone, 2016). Moreover, patient worries about being negatively stereotyped or judged by health care providers may undermine doctor-patient communication by increasing anxiety, reducing cognitive resources, and promoting concealment among LGB individuals (Fingerhut and Abdou, in press). These processes may undermine LGB individuals'

ability to understand and comply with health directives, ask clarifying questions, and provide pertinent health behavior information to their provider. Such breakdowns in communication can lead to poorer quality health care decisions and outcomes as fear of negative treatment may lead LGB individuals to delay or avoid seeking health services altogether. In sum, bias on the part of providers as well as the identity threat-related processes that emerge from awareness of these biases may impact health by reducing the quality and quantity of health care LGB individuals receive. Examining the consequences of LGB-related stigma in health care interactions is a newly emerging area of research. As such, much more research is needed to elucidate how stigma within the health care environment impacts LGB health.

Discussion

Reducing the prevalence of health disparities between LGB and heterosexual individuals is a pressing social issue that social psychological theories of intergroup relations and stigma are well positioned to address. Despite recent progress, LGB individuals as a group continue to be devalued or stigmatized in society. Our review indicates that this group devaluation and the intergroup processes that flow from it leads to structural disadvantages, to subtle and overt forms of discrimination, to social identity threat, and sometimes to self-stigma. The stress resulting from these structural, interpersonal, and intrapersonal sources of threat contribute to poorer health among LGB individuals relative to heterosexuals (Lick et al., 2013).

As a group, LGB individuals face identity concerns, such as concealability and rejection from close others, that set them apart from most groups typically discussed in the intergroup literature (e.g., different racial groups, nationalities, religious groups), and that expose them to different and additional stressors. Greater consideration of how stigma associated with LGB identities can be integrated into the literature on intergroup processes and social identity threat is

thus called for. Importantly, sexual orientation does not operate in isolation, but rather intersects with other social identities including race, gender, (dis)ability status, and social class to produce unique experiences and barriers. Yet little research has explored the intersectionality of these identities (Consolacion, Rusell, & Sue, 2004). Moving forward, researchers should consider stigmatized identities in concert rather than isolation to increase understanding of how multiple stigmatized identities exert additive or interactive effects on health (for a recent example, see Grollman, 2014).

Much of the research cited throughout has been conducted within the U.S. Yet, countries vary considerably in the amount of structural and interpersonal stigma directed at LGB individuals. While some countries (e.g., Canada) have moved beyond marriage equality to also extend anti-discrimination protection to LGB individuals, numerous other countries not only lack marriage equality but also criminalize homosexuality (e.g., Iran; Amnesty International, 2015). Although the intergroup processes linking LGB identity and health may generalize across cultures and contexts, their relevance and prominence are likely to differ with the extent of devaluation. For example, concealment is likely to be a more prominent stressor in particularly hostile environments, whereas in less hostile (but still anti-LGB) contexts LGB individuals may contend more with interpersonal forms of stigma.

It is also important to consider how the intergroup approach presented here aligns with existing frameworks that focus specifically on LGB identities and stressors, particularly minority stress research (Meyer, 2003). The approach we present here parallels the minority stress framework in its attention to stigma-related sources of stress, but adds to this framework an emphasis on the social structural factors that give rise to discrimination and stigma, as well as the role of psychological, physiological, and social processes in mediating the relationship between

minority status and health (see Hatzenbuehler, 2009 for a complimentary approach to integrating multiple literatures on LGB stress, health, and well-being).

Interventions/Applications

How can we improve the health of members of groups that must contend with pervasive social devaluation and discrimination, such as LBG individuals? At the structural level, implementing affirmative policies (e.g., marriage equality) can provide material benefits as well as intangible psychological benefits, such as a sense of value (Herek, 2011), that can translate into better health outcomes. Indeed, structural changes have been shown to have salubrious effects at the individual level (e.g., Hatzenbuehler, et al.,, 2010; Hatzenbuehler et al., 2012) and interact with individual-level phenomena to influence health (e.g., Pachankis, Hatzenbuehler, & Starks, 2014). Additional large-scale, longitudinal research examining the chain of causality and the proximal processes by which structural change affects health is needed, such as research investigating the effect of policy change on experiences of and attributions to discrimination.

At the interpersonal level, intergroup research and theory suggest that one means of reducing stigma-related stress among LGB persons is to target the negative group-based stereotypes and attitudes, broadly held, that underlie behavioral expressions of prejudice. Continued visibility of positive and affirmative images of LGB individuals is critical to changing these attitudes, especially among heterosexuals. Indeed, one of the strongest predictors of LGB affirmative attitudes is contact with LGB-identified individuals (Lewis, 2011), consistent with research and theory on intergroup contact (Crocker, et al., 1998). It will also be important for researchers going forward to examine the role of implicit and explicit attitudes in predicting behavior toward LGB individuals. Providing education about LGB issues may also be effective in improving social support available to LGB individuals, which is known to buffer against the

negative health effects of stress (Cohen, 2004).

Interventions may also be designed to target the intrapersonal processes that contribute to social identity threat and stigma-related stress. For example, interventions that frame adversity as short-lived and shared have been shown to break the psychological link between adversity and threats to belongingness and to lead to health and well-being benefits for African American college students (Walton & Cohen, 2011). Similar interventions might be applied in LGB centers, workplaces, schools, and on college campuses to reduce LGB health disparities. Relatively small steps can also communicate support and decrease uncertainty about belongingness. For example, safe space stickers and inclusive health care forms may signal acceptance and reduce uncertainty about how one will be treated and. Improving the support available to LGB individuals and taking steps to convey belongingness offer a productive means of intervention and one that may have an immediate impact on individual lives. Interventions can also target negative cognitions and maladaptive coping among LGB persons. For example, a program of cognitive behavioral therapy has been shown to successfully reduce symptoms of depression, alcohol abuse, and unsafe sexual contact among gay and bisexual men (Pachankis, Hatzenbuehler, Rendina, Safren, & Parsons, 2015). Continued research is needed to develop and test interventions specifically designed to improve LGB health outcomes.

The documented disparities in the health of LGB individuals represent a major social and public health issue world-wide. Though researchers have begun to explicitly examine the mechanisms that underlie these disparities, more work is needed to integrate existing theories, delineate individual, contextual, and identity-related factors that moderate experiences and psychological processes, and to develop and test the efficacy of interventions aimed at reducing stress and improving the health of LGB individuals.

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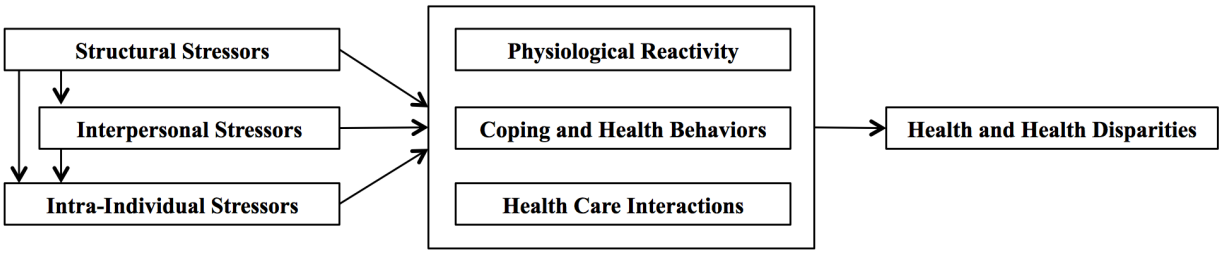

Figure 1. Theoretical model: From intergroup structure to health disparities

Author Bios

William Ryan is a doctoral candidate at University of California, Santa Barbara. Will's research interests center on threat, diversely defined and assessed. His work (so far) has focused on threat in relation to homophobia, gender stereotypes, and disclosure and concealment of stigmatized identities. His research employs diverse methods including cardiovascular reactivity measures and neuroimaging techniques and he devotes a significant portion of his time to methodological questions related to these approaches.

Jeffrey Hunger is a doctoral candidate at the University of California, Santa Barbara. He earned a BA in Psychology from the University of Minnesota in 2009 and a MA in Experimental Psychology from California State University, Fullerton in 2011. Broadly speaking he is interested in how being the target of stigma and discrimination can undermine psychological and physical health. Much of his current research is concerned with the effects of weight- and race-based social identity threat.

Brenda Major is a Distinguished Professor in the Department of Psychological and Brain Sciences at the University of California, Santa Barbara, and past Fellow of the Center for Advanced Study in the Behavioral Sciences. She has authored more than 160 journal articles and book chapters, and edited two books. She received the 2012 Kurt Lewin Award from the Society for the Psychological Study of Social Issues (SPSSI), the 2014 Scientific Impact Award from Society of Experimental Social Psychology, the 2015 Campbell Award from the Society for Personality and Social Psychology, and the 1996, 1998 and 2014 Gordon Allport Intergroup Relations Prize from SPSSI. Her research examines the psychology and effects of stigma, including how people perceive and cope with discrimination and justify inequality.