DOI: 10.1111/spc3.12638

RESEARCH ARTICLE

WILEY

An ignored minority status: Consequences for sexual minorities living in a biased society

Michael A. Trujillo D | Wendy Berry Mendes D

Department of Psychiatry, University of California, San Francisco, San Francisco, California, USA

Correspondence

Michael A. Trujillo, Carnegie Mellon University, 5000 Forbes Ave., Pittsburgh, PA 15213, USA. Email: mtrujillo@cmu.edu

Funding information

National Institute of Mental Health, Grant/ Award Number: T32 MH019391

Abstract

Sexual minority is an umbrella term used to describe individuals who identify as lesbian, gay, bisexual, or queer and/or engage in sexual behavior with individuals of the same sex or gender. Drawing on previous models (Hatzenbuehler, 2009; Major et al., 2013; Meyer, 2003; Ryan et al., 2017) and social psychological theory, this article outlines the social and health consequences of the stigma associated with being a sexual minority and the societal, social, and intrapersonal factors that might lead to these health and social disparities. We highlight key responses to stigmatization such as physiological responses, affect, and behavioral reactions that may contribute directly and/or indirectly to health outcomes. In doing so, we propose that the stigma of sexual minority identity, manifested at multiple levels, is associated with disparities in health and social outcomes and that social psychology can provide a useful lens to begin to reduce health disparities.

1 | INTRODUCTION

In this article we provide a social-psychological lens to understand the processes that might be implicated in health disparities among sexual minorities. Drawing on classic and contemporary theories, we review the social psychological literature as it pertains to the unique characteristics of sexual minorities and its contribution to the stigmatization of sexual minorities including structural, interpersonal, and intrapersonal processes. We then examine three domains—affective, physiological, and behavioral responses—that may serve as mechanisms that link sexual orientation stigma to health outcomes. We conclude with areas for future research that address gaps in the literature and point to social psychological approaches that may serve to increase social belonging and well-being.

In Figure 1, we present a model of how stigma might impact sexual minorities' health. We take a multilevel approach to stigma and review structural level factors such as institutional policies, cultural norms, and societal practices (a) that shape interpersonal and intrapersonal experiences of stigma. At the interpersonal level, negative stereotypes and perceptions of controllability contribute to experiences of rejection and victimization (b) that, with structural stigma, impacts negative appraisals, emotions, and behaviors directed towards the self (c). These stigma processes yield responses across three domains. At the affective level, sexual minorities might experience hypervigilance, rumination, and loneliness (d). Sexual minorities may experience chronic biological dysregulation (e) as well as engage in decisions to conceal their stigmatized identity, engage in negative health behaviors, and social avoidance (f). Through these domains, stigma exposure can contribute to worse mental, physical, and social health of sexual minorities (g, h, i).

2 | SEXUAL ORIENTATION HEALTH DISPARITIES

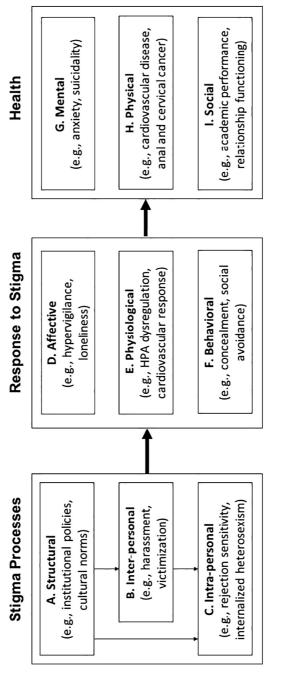
A focus on health outcomes by sexual orientation has received significant consideration only in the past 2 decades (Cochran & Mays, 2000a, 2000b; Dean et al., 2000). This work has historically been limited as few nationally representative surveys have collected data on sexual orientation with more recent studies beginning to identify disparities in health in the US and abroad (Bränström et al., 2016; Bränström & Pachankis, 2018; Gonzales & Henning-Smith, 2017). One of the consistent findings in the health disparities literature is that sexual minorities report poorer mental health across a number of outcomes, with stigma-related stressors (e.g., harassment) associated with these disparities. Experiences of discrimination based on sexual identity have been positively associated with depression (Feinstein et al., 2012), anxiety (Mereish & Poteat, 2015), suicidality (Haas et al., 2011), and having any psychiatric disorder (Rodriguez-Seijas et al., 2019). Intrapersonal factors, notably internalized sexual stigma, have also been linked to mental health problems (Berg et al., 2016).

Disparities in physical health by sexual orientation exist and persist with much of the early literature devoted to HIV among sexual minority men. Recently, the field has diversified to examine a broader range of health outcomes such as respiratory conditions (Gonzales & Henning-Smith, 2017), cardiovascular disease (Caceres et al., 2017), cancer (Quinn et al., 2015), and evidence elevated mortality risk compared to heterosexuals (Cochran et al., 2016). There is increasing evidence that experiences of minority stress, the excess stress individuals experiences as a result of their stigmatized identity (Meyer, 2003), are linked to physical health ailments. In short, minority stress is an important contributor to physical health outcomes for sexual minorities (Lick et al., 2013).

Sexual minorities also experience disparities in social outcomes including in employment, academics, and relational outcomes. Sexual minorities report less income, more job-related stress (Wilson et al., 2021), and less job satisfaction (Drydakis, 2019). Compared to heterosexuals, sexual minorities also report lower grade point averages (Russell et al., 2001), more truancy (Birkett et al., 2014), and often consider dropping out of post-secondary education in their first year (Rankin et al., 2010). Disparities in sexual minorities' relationships are also evidenced by a higher prevalence of intimate partner violence (Longobardi & Badenes-Ribera, 2017), worse romantic relationship functioning (Doyle & Molix, 2015b), and generally worse social health (Doyle & Molix, 2016), all of which are linked to stigma exposure.

3 | STIGMA CHARACTERISTICS OF LESBIAN, GAY, BISEXUAL, OR QUEER IDENTITY

Stigma is defined as an attribute that is deeply discrediting or discreditable reducing the whole person to a tainted one within a particular context (Crocker et al., 1998; Goffman, 1963). In this way, sexual minorities have historically been devalued and believed to be a product of moral failure because of their sexual orientation. The belief that sexual minorities "choose" to violate the values of society (i.e., heterosexuality) serves as rationalization for negative consequences including anti-gay discrimination (Reyna et al., 2014) and anti-gay policies (Haider-Markel & Jos-



Conceptual model illustrating stigma processes and its negative consequences for sexual minorities FIGURE 1

lyn, 2008). From a target's perspective, individuals with a particular stigma are also impacted by the perceived controllability of their stigmatized identity. Sexual minorities who believe their stigmatized identity is within their control may engage in behaviors that distance themselves from this identity, whereas others may feel freer in their identity expression (Whisman, 1996). Actively trying to escape their stigmatized identity may result in increased shame and internalized stigma (Major et al., 2018), which have downstream implications for their health and well-being (e.g., not getting tested for HIV).

The concealability of a stigma can fundamentally impact the stigmatized individuals' experiences. While individuals with visible stigmas may navigate their environment by managing their social interactions, those with concealable stigmas often contend with fear of discovery and inauthenticity in social interactions. Navigating disclosure is often of primary concern for sexual minorities and involves decisions around when, how, and to whom to disclose their stigmatized identity (Derlega & Berg, 1987). Importantly, "coming out" for sexual minorities is not a singular event but is rather a series of decisions on whether to disclose based on new contexts (Pachankis, 2007). Discovery of a stigmatized identity can result in denial of resources (e.g., housing), especially if laws are not in place that protect stigmatized individuals from such action.

4 | STIGMA AS A MULTILEVEL CONSTRUCT

4.1 | Structural stigma

While lesbian, gay, bisexual, or queer (LGBQ) individuals share similar stressors as members of other stigmatized groups, there are unique features associated with an LGBQ identity and its associated stigma. At a macro level, sexual minorities are susceptible to structural stigma which is reflected in the institutional policies and cultural norms that limit access to resources, protections, and opportunities (Hatzenbuehler, 2016). These practices are a way of signaling a group-based social hierarchy and help to legitimize a vision of society where dominant groups (e.g., heterosexuals) are superior to subordinate groups (e.g., non-heterosexuals; Sidanius & Pratto, 2012). These policies, practices, and norms have downstream effects on interpersonal and intrapersonal stigma that may have deleterious consequences for the stigmatized.

Historically, sexual minorities are subjected to numerous laws and policies that keep sexual minorities at a distance. Considering that the experience and response to stigma is context specific (Lamont et al., 2016), there is significant variability in the policies and protections across the globe. For instance, research finds a low degree of structural stigma (e.g., legal protections against discrimination) in much of Northern and Western Europe and portions of Latin America while much of Asia, Sub-Saharan Africa, and Eastern Europe demonstrate more stigma against sexual minorities (Pachankis & Bränström, 2019). Not surprisingly, sexual minorities residing in high stigma environments report poorer quality of life. Additionally, many of these high stigma environments do not collect data on sexual orientation posing a challenge for documenting the consequences of stigma. Policies that negatively target sexual minorities reinforce the group hierarchy that they are inferior and inevitably impact interpersonal relationships and personal factors for sexual minorities (e.g., concealment).

4.2 | Interpersonal stigma

The categorization of individuals into social groups helps simplify our world as categorization can occur effortlessly and provides heuristics and stereotyped beliefs about group members. For sexual minorities, stereotypes have been overwhelmingly negative. Though there has been a considerable shift in attitudes, sexual minorities continue to be subjected to negative attitudes (ILGA, 2017). This is closely aligned with sexual minorities being stereotyped as deviants (National Institutes of Health, 2011) and immoral (Reyna et al., 2014), which elicit reactions such as anger

and disgust (Giner-Sorolla et al., 2012). Considering that stereotypes shape specific emotional reactions and behaviors individuals have towards sexual minorities (Cuddy et al., 2008), discrimination is a likely result. Sexual minorities experience profound levels of harassment, discrimination, and violence (Federal Bureau of Investigations, 2018; Katz-Wise & Hyde, 2012) across multiple domains including the workplace, healthcare settings, and public.²

Considering the different forms of interpersonal stigma, treatment from families of origin play a unique role that can contribute to long-term social and health outcomes. The number of individuals who identify as LGBQ is growing (Gallup, 2019) with younger individuals more likely to be "out" (Gates, 2017). Social rejection from family members is a potent stressor and fear of familial rejection is a primary reason why sexual minority youth fail to disclose their sexual orientation (Pilkington & D'Augelli, 1995). A negative response from family when coming out can impact future disclosure and sense of the world as safe and predictable, laying the foundation for how sexual minorities learn to interact with the world. Additionally, individuals conceive a sense of identity through their interactions with others (Mead, 1934) and early negative interactions with family likely contribute to negative self-perceptions and decreased sense of self-worth (Robinson, 1995).

Interpersonal interactions with strangers are compounded by decisions regarding deliberate disclosures of sexual orientation and the perspective that LGBQ identity might not be easily concealable. That is, there exists competing literatures regarding perceiver's accuracy in detecting sexual orientation from images of individuals—so called "gaydar." On the one hand, researchers point to a large body of evidence that shows that people can perceive sexual orientation from facial cues (e.g., Rule et al., 2017). On the other hand, evidence of facial cues leading to accurate identification of sexual orientation has been questioned on its methodological approaches such artificiality of the lab (e.g., Cox et al., 2017). We will not try to resolve this debate other than to underscore the complexity of whether sexual orientation is immediately apparent to observers, easily concealable by the target, or somewhere in between, presenting challenges for those managing a sexual minority identity. These challenges may add emotional and cognitive load to an already complex social situation, which may increase stress and negative affect of sexual minorities that we describe below.

4.3 | Intrapersonal stigma

The perception of being stigmatized or devalued is stressful and can impact sexual minorities' appraisals, emotions, and behaviors (Major et al., 2013). To varying degrees, sexual minorities accept the legitimacy of society's negative regard for LGBQ people, which leads to self-denigration, known as internalized heterosexism (Meyer & Dean, 1998). Because of continued exposure to the disregard of sexual minorities as well as early socialization experiences, internalized heterosexism never completely abates and is integrated into sexual minorities' self-perception that can lead to feelings of guilt, shame, and low self-esteem that can contribute to mental health problems (Meyer, 2003). For instance, some sexual minorities may choose to engage in "conversion therapy" as a way to rid themselves of shame around same-sex attraction or behavior (Tozer & Hayes, 2004), which may inadvertently increase internalized heterosexism and cause distress. Importantly, other sexual minorities are forced into "therapy" for fear of being rejected by family—an act of survival that has a debilitating impact on mental health (Blosnich et al., 2020).

Sexual minorities may also worry about being perceived themselves through the lens of being judged on a negative stereotype and/or being devalued on the basis of their group membership, termed social identity threat (Aronson & McGlone, 2009; Steele et al., 2002). Even in the absence of specific stereotypes or discrimination, a variety of situational cues may signal threat or exclusion. For instance, the lack of same-sex imagery when opposite-sex imagery is present in a medical clinic may suggest sexual minorities are not welcome. Nevertheless, social identity threat is stressful and leads to a cascade of cognitive, affective, and physiological consequences (Schmader et al., 2008).

Experiences with stigma may also make some sexual minorities more sensitive to threats to their social identity and/or to cues that suggest forthcoming social rejection. Individuals high on rejection sensitivity are more likely to expect future rejection and experience concern about rejection than those who score low (Downey & Feldman, 1996).

Indeed, rejection sensitivity has been proposed as a possible mediator linking rejection to poor mental health (Feinstein, 2019).

5 | RESPONSES TO LGBQ STIGMATIZATION

Collectively, sexual minorities experience stigma at structural, interpersonal, and intrapersonal levels that have important social and health consequences. Here we outline how responses to stigmatization may lead to health disparities among sexual minorities focusing on affective, physiological, and behavioral responses.

5.1 | Affective responses

Chronic exposure to stigma may impact health via diverse affective responses including active environmental monitoring for cues that may lead to future rejection known as hypervigilance (Major & O'Brien, 2005; Mendes & Muscatell, 2018). Used as a defense strategy, hypervigilance may engender thoughts and behaviors that protect the self from encountering harm; however, it may also foster rejection by signaling this expectation to others. Sexual minorities also have to maintain vigilance for threats of their stigmatized identity being discovered and expectation of rejection as a possible response (Pachankis, 2007). Experiences with stigma leads to increased vigilance to environmental threats (Pachankis et al., 2008) subsequently impacting anxiety (Feinstein et al., 2012). Hypervigilance can also alter physiological functioning. Though there remains scant literature among sexual minorities, work among the general population demonstrates that individuals more vigilant to negative social messages evidenced heightened blood pressure (Gump & Matthews, 1998).

As a maladaptive form of emotion regulation, sexual minorities are likely to engage in rumination, or passive and repetitive focus on the symptoms of distress and on its origins and consequences (Nolen-Hoeksema et al., 2008). Internalized stigma, management of a concealable stigma, and expectations of rejection, as forms of stigma-related stress (Major & O'Brien, 2005; Meyer, 2003), encourage greater rumination among sexual minorities. For instance, sexual minorities engage in more rumination compared to their heterosexual peers (Hatzenbuehler, McLaughlin, et al., 2008) and this is associated with distress (Hatzenbuehler, Dovidio, et al., 2009). There is increasing evidence for rumination as mediator of sexual stigma and mental health (Szymanski et al., 2014; Timmins et al., 2020) underscoring its importance as an underlying mechanism.

Social rejection can also have significant consequences for loneliness. It can disrupt social relationships and hinder social connection with significant others. Experiences and fear of rejection may lead sexual minorities to avoid close relationships contributing to loneliness, a significant risk factor for poor health (Cacioppo et al., 2015). Compared to heterosexuals, sexual minorities report greater loneliness (Doyle & Molix, 2016) and supports prior evidence that loneliness is more likely among stigmatized groups (Cacioppo et al., 2015). While many sexual minorities are now turning to social networking sites to establish and develop social connections to combat loneliness (Ceglarek & Ward, 2016) and explore their sexual identity (Harper et al., 2016), they can simultaneously become exposed to cyberbullying (Cooper & Blumenfeld, 2012). Experiences of stigma have been linked to loneliness (Doyle & Molix, 2015a) with increasing indication that loneliness may be a causal mechanism underlying the association between stigma and health among sexual minorities (Mereish & Poteat, 2015).

5.2 | Physiological responses

Experiences with stigma can elicit a range of physiologic activity in response. Despite the literature on the physiology of stigma broadly, there has limited work on the physiological response to sexual stigma. There have been previous

efforts to synthesize the literature examining how sexual stigma "gets under the skin" (e.g., hypothalamic-pituitary-adrenal-axis dysregulation; Lick et al., 2013); however, differences in time scale across studies (e.g., acute vs. chronic physiologic responses), physiologic markers examined (e.g., cortisol, cardiovascular recovery), and contexts (e.g., disclosed vs. not disclosed sexual minorities) has yielded mixed results (Cook et al., 2017; Hatzenbuehler & McLaughlin, 2014; Huebner & David, 2005; Juster et al., 2013; Parra et al., 2016).

To understand these mixed results, it is important to recognize that physiologic responses can be leveraged for two common purposes: (1) to provide dynamic and unobtrusive measures of affective responses, particularly responses that individuals might be reluctant or unable to report on, and (2) as biological outcomes that might be mechanistic that links psychological states with health outcomes. Conflating these two purposes can be problematic because short-term changes do not have perfect associations with long-term alterations, and physiological responses associated with health outcomes can be more difficult to obtain. Thus, knowing the goal for one's study is imperative, which then dictates the measures collected, the context of the study, and the interpretation of the responses.

There is a long history of psychologists leveraging physiologic responses to understand affective states, and this is apparent for topics that might include sensitive information that people might be unwilling to disclose or when beliefs or attitudes about a topic are not fully recognized (Blascovich & Mendes, 2010). Physiologic responses are also useful in studies when dynamic changes are occurring and pausing the study to obtain a self-reported response might interrupt the flow. For example, if one were interested in assessing affective responses during a conversation with a stranger that becomes progressively friendlier or more combative, on-line peripheral physiologic changes offer a glimpse into the psychological states while allowing the conversation to flow naturally.

If the goal is to capture these affective responses, there are a class of physiologic outcomes that are useful. These include neural responses measured with functional magnetic resonance imaging or electroencephalography, peripheral physiology including autonomic nervous system responses, electromyography (muscle movement changes), and enteric system (changes in gastrointestinal responses), neuroendocrine to assess changes in hormones, and immune system parameters to track changes in pro- or anti-inflammatory cytokines, as one example.

However, it is important to note that physiologic responses are not invariant to affective/psychological states—there are no context-free one-to-one mappings of a psychological state with a physiologic response (Mendes, 2016). The relationship between a psychological state and a physiologic response can be increased by constraining the context, obtaining multiple physiologic responses, and examining temporal features of the physiologic response. For example, skin conductance provides an easy and accessible measure of activity in the eccrine (sweat) glands that is associated with changes in sympathetic nervous system activation. Skin conductance is high in sensitivity—increases with a variety of affective states and responds quickly (within 2 to 3 s)—but low in specificity—many psychological states are associated with increases in skin conductance. This presents challenges in an unconstrained setting when interpreting a skin conductance increase.

The other approach when integrating physiological responses into a research program is to interpret physiologic responses as part of the *mechanism* that links psychological states to disease outcomes. For instance, repeated acutely stressful situations may create wear and tear on physiologic systems that then make one more vulnerable to illness or a chronic steady state suppresses healthy biological functioning. It is important to consider the differences, though, between *mechanism* and *pathway*. The former suggests a specific causal link from both the psychological state to the physiologic responses and then the physiologic response to the disease state. In contrast, a pathway simply acknowledges that there are multiple systems in the body with reciprocal influences and while one might observe an association among psychological states, physiologic outcomes, and disease, this does not mean there is a direct causal link.

Physiologic outcomes that are on the pathway are often the focus in stigma health research likely due to the ease in obtaining these measures. For biological measures that are mechanisms requires the identification of pre-disease indicators, which need more sophisticated approaches. One example of a pre-disease marker is circulating angiogenic cells (CAC; see Aschbacher, et al., 2017). CAC's function is to migrate to growth cells and low migration prospectively predicts carotid artery thickness (Keymel et al., 2008). To determine CAC migration requires considerable resources and often is out of scope of a social and personality psychologists' expertise and budget. We note this simply to provide

a sense of how complicated it is to directly link psychological states with disease, and researchers might be better off examining physiologic correlates that are part of the pathway.

Physiologic correlates include easy to obtain responses like resting blood pressure and heart rate variability and are related to predictors and consequences of disease states. A single measure of cortisol is typically not useful as a "biomarker" but diurnal cortisol—how cortisol fluctuates across the day—can be useful from a health perspective. Healthy daily cortisol fluctuations are characterized by a *cortisol awakening response* (CAR), a sharp increase in cortisol after awakening, followed by a slow decline throughout the day. However, factors like day of the week and work/school schedule influence CAR. More problematic are how to interpret CARs given a lack of guidelines of what is "high" or "low." Both hypo and hyper-cortisol reactions might be unhealthy, but how does one make that determination? If one group of participants show a larger (or smaller) CAR than another group, a flaw would be to call the marginalized group as having a dysregulated response. This dilemma underscores the importance of obtaining large samples, controlling for contributing but extraneous variables (e.g., lifestyle), looking at both within and between subjects for variation, and most critically looking at additional outcome variables to aid in interpretation.

5.3 | Behavioral responses

Sexual minorities also engage in several behavioral strategies in response to stigma. An active strategy is to engage in escape or avoidance behaviors as a way to cope with sexual stigma (Major et al., 2013). For instance, sexual minorities are more likely to engage in diverse unhealthy behaviors (e.g., smoking) than their heterosexual peers (Gonzales et al., 2016) and that stigma is an underlying cause of these disparities (Bränström & Pachankis, 2018). Engagement in unhealthy behaviors may be an active response to blunt or numb the negative experiences. Considering that one of the few spaces historically considered safe from victimization is the gay and lesbian bar (Sell & Silenzio, 2013), unhealthy behaviors may also be perceived as normative (Hatzenbuehler, Corbin, et al., 2008) and acceptable (Remafedi, 2007) and subsequently become culturally embedded within sexual minority spaces. Bars, for instance, have been seen as important for building relationships in the community and deriving social support, creating an environment that may perpetuate unhealthy behaviors but reduce stress (Brown et al., 2014; Parks, 1999).

Possessing a concealable stigma also requires sexual minorities to manage decisions around concealment of their stigmatized identity. Concealment—the motivation to prevent disclosure of one's stigmatized identity (Jackson & Mohr, 2016)—may serve as an adaptive coping strategy to avoid future victimization in the short-term and in high stigmatized environments (Pachankis & Bränström, 2018). For instance, sexual minorities are estimated to conceal more in high stigma environments reducing the impact of stigma on well-being across the globe (Pachankis & Bränström, 2019). Despite increasing evidence that the impact of concealment is context dependent, it is nonetheless an important source of stress and has significant consequences as a long-term process. The threat of discovery and the potential consequences of that discovery engenders preoccupation with their environment, which can be cognitively taxing (Grier et al., 2003). Chronic self-regulation around concealing a stigmatized identity can lead to a depletion of cognitive resources necessary for an array of self-regulatory tasks (Madera, 2010), subsequently impacting executive functioning and physical stamina (Critcher & Ferguson, 2014). That sexual minorities must contend with regular decisions around concealment and disclosure may make them more vulnerable to its negative consequences.

By extension, sexual minorities may engage in effortful avoidance of situations where social rejection may occur, leading to social avoidance and isolation (Pachankis, 2007). The anticipation of negative evaluation may restrict individuals from social interactions to circumvent negative consequences, and subsequently forming social bonds. For individuals concealing their identity, the threat of discovery may lead to similar outcomes and limit the ability to attain important social support. In a daily diary study, sexual minorities reported greater isolation on days when stigma-related stressors occurred compared to non-stressor days, and that this was associated with less reported social support (Hatzenbuehler, Nolen-Hoeksema, et al., 2009). Reduced or limited access to social support has significant consequences for positive identity development (Gallor & Fassinger, 2010) and mental health (Trujillo et al., 2020).

Social isolation has been found to mediate the relationship between both interpersonal (Lewis et al., 2017) and intrapersonal (Lewis et al., 2016) stigma and psychological distress and unhealthy behaviors, supporting social isolation as a potential mechanism linking stigma to health.

6 | SEXUAL MINORITY RESILIENCE

In spite of their experiences with stigma, sexual minorities exhibit profound levels of resilience and manifestations of thriving (de Lira & de Morais, 2018; Kwon, 2013; Meyer, 2015). A burgeoning area of work examines positive identity, strengths, and cultural adaptions that have developed in response to heterosexism among sexual minorities (Szymanski & Gonzalez, 2020). For instance, while "coming out" can be stressful, it is also a period when sexual minorities "come in" to their true sense of self, which can be self-affirming and promote a sense of authenticity and well-being (Riggle et al., 2008). Adopting a new identity as LGBQ also initiates connection to similar others and socialized to the values and traditions of a community (Rust, 1996), including support, guidance, and mentoring. Connection to the greater LGBQ community contributes to greater self-worth and sense of belonging facilitating health and well-being (Frost & Meyer, 2012; Perrin et al., 2020).

Common for sexual minorities is the creation of new family structures defined by identity and community connection known as chosen families (Hammack et al., 2019). As a response to family rejection (Weston, 1997), chosen families are typically organized around friendship networks culminating in "friends as family" (Weinstock, 2000) offering guidance biological families may not be adept to do (e.g., navigating heterosexism). Chosen families are an important source of social and emotional support (Levitt et al., 2015). At a community level, sexual minorities also report engaging activism as an empowerment strategy in response to oppression (Szymanski & Gonzalez, 2020) and a way to advocate for one's own and others' interests (Riggle et al., 2018). Though work is still necessary to understand the factors that promote resilience and the role that it plays in response to stigma (Szymanski & Gonzalez, 2020), it is evident that sexual minorities demonstrate numerous characteristics that imbue them with an ability to flourish in society.

7 | SUGGESTIONS FOR FUTURE RESEARCH

Sexual minority health has become a pressing concern for scholars, policymakers, and medical professionals worldwide. With increasing interest in sexual minority health, the growing LGBQ community, and the fluctuating attitudes towards sexual minorities, future work is necessary to mitigate the deleterious effects of stigma. We outline four areas that future researchers could engage in to achieve a comprehensive knowledge of how stigma affects health.

7.1 | Examination of stigma across multiple levels

Stigma is inherently a multilevel construct yet social psychological research more frequently examines one level in isolation (i.e., interpersonal or intrapersonal stigma). While individual level factors are perceived to be the most amenable to interventions, researchers should examine cross-level relationships considering their contribution to health and health disparities (Richman & Hatzenbuehler, 2014). For instance, Clark et al. (2020) identified an increase in discrimination among sexual minorities who lived in states that saw an increase in state-level protective policies towards sexual minorities, suggesting short-term negative consequences to shifts in societal stigma. Considering how swiftly attitudes have changed towards sexual minorities, a cross-level analysis of stigma can more clearly articulate the stigma process as well as identify which forms are most meaningful for sexual minority health.

7.2 Dynamic interactions between targets and perceivers

Fundamental to the field of psychology is understanding how people feel, think, and act in everyday social interactions. For sexual minorities, dyadic intergroup interactions with a non-sexual minority are likely to be common. These experiences can produce misunderstandings between interaction partners based on prior experience as well as attitudes towards and beliefs of (non-)sexual minorities. Dyadic interactions can reveal prejudice and discrimination that can shape an individual's worldview, sexual minorities' perceived value, and response to future stigma experiences. Social interactions are also where identity disclosure is likely to occur having implications for sexual minorities.

However, dynamic social interactions between sexual and non-sexual minorities has been limited. Research on intergroup social interactions, particularly between those with non-concealable stigmas and the non-stigmatized, demonstrates physiological arousal, and varied affective and behavioral responses based on an individual's motivations, goals, and social context (Richeson & Shelton, 2010). Yet, limited research has examined concealable stigmas including sexual orientation in dyadic social interactions from both the perceiver and target's perspective. Additionally, little is known how sexual orientation shapes physiological influence between perceivers and targets. Prior research demonstrates that interactions with "devalued" individuals elicit more threat responses whereas interactions with higher status individuals elicit more challenge responses (Mendes et al., 2002). Insofar as intergroup interactions can create anxiety via an increase in perceived demands (e.g., uncertainty; Blascovich & Mendes, 2000) and that higher status members can physiologically influence lower status members (Kraus & Mendes, 2014), little is known how this extends to interactions among people with different sexual orientations. Future work examining both the perceiver and target's perspective is important for understanding the implications for sexual minorities as they navigate their social interactions with non-sexual minorities.

7.3 | Experiences of daily life

A fruitful area of research is examining experiences in daily life for sexual minorities. While the control of a laboratory setting offers clear advantages in terms of isolating key ingredients that contribute to distress or resilience, examining daily life offers clear ecological validity. Specifically, how situational context might alter affective well-being pinpoints the open questions regarding how identity management, as it relates to disclosure and concealment, interacts with environmental context and individual features. For example, does concealment of sexual identity at the workplace differ from concealment with family and how do individual factors like rejection sensitivity moderate associations? Advances in ecological momentary assessment paired with physiologic wearables allow for an unprecedented window into daily experiences that will allow for a more comprehensive portrait of how sexual orientation plays out in daily life.

7.4 | Social belonging

The field would also benefit from research examining social belonging among sexual minorities. Not feeling like one belongs can undermine one's self-concept, resilience, and sense of authenticity (Waller, 2020). For sexual minorities, holding a stigmatized identity inherently predisposes them to social exclusion and results in their underrepresentation across diverse settings. However, individuals with concealable stigmas have the ability to "pass" as an ingroup member, affording them certain privileges and attain a sense of belonging (Bosson et al., 2012). Conversely, sexual minorities may derive greater benefit from belonging to the LGBQ rather than the general community due to experiences with heterosexism (McLaren et al., 2007). Considering many sexual minorities seek a connection to the LGBQ community as a way to increase feelings of social belonging (Kwon, 2013), sexual minorities may be less motivated to establish social connections with outgroup members and undermine the positive consequences associated with LGBQ community affiliation. Future work should aim to more explicitly examine social belonging experimentally and

WILEY 11 of 16

via interventions to understand which type of belonging (LGBQ specific or general) may be most beneficial and the benefits it confers.

8 | CONCLUSION

A growing body of research reveals sexual minorities experience considerable health disparities compared to heterosexuals, likely driven by exposure to stigma. In this article, we proposed three domains as potential mechanisms that link stigma to health among sexual minorities. Yet, there remains considerable work to do. Though this work may be tedious, we are confident that the knowledge gained from such work is vital for improving the lives of those who society has historically ignored.

ACKNOWLEDGMENT

This study was funded by grant T32 MH019391 from the National Institute of Mental Health.

ORCID

Michael A. Trujillo https://orcid.org/0000-0002-3540-8415 Wendy Berry Mendes https://orcid.org/0000-0003-4453-1201

ENDNOTES

- While this review will speak to sexual minorities generally, there are substantive differences within this population (e.g., bisexual, pansexual, queer) that we are unable to acknowledge but is important to recognize (see Feinstein & Dyar, 2017). Additionally, this review will focus on sexual orientation and not gender identity, which may exclude some transgender and gender nonconforming individuals who do not identify as sexual minorities.
- ² The minority stress theory—the prevailing theory linking stigma and health among sexual minorities—proposes that exposure to distal (i.e., interpersonal stigma) and proximal stressors (i.e., intrapersonal stigma) contributes to disparities in mental health outcomes (Meyer, 2003). While this manuscript aims to provide a social-psychological lens towards health disparities, future scholars are encouraged to read this foundational text.

REFERENCES

- Aronson, J., & McGlone, M. S. (2009). Stereotype and social identity threat. In T. D. Nelson (Ed.), Handbook of prejudice, stereotyping, and discrimination (p. 153–178). Taylor & Francis. https://doi.org/10.1016/B978-0-12-374714-3.X0001-8
- Aschbacher, K., Milush, J. M., Gilbert, A., Almeida, C., Sinclair, E., Epling, L., Grenon, S. M., Marco, E. J., Puterman, E., & Epel, E. (2017). Chronic stress is associated with reduced circulating hematopoietic progenitor cell number: A maternal caregiving model. *Brain, Behavior, and Immunity*, 59, 245–252. https://doi.org/10.1016/j.bbi.2016.09.009
- Berg, R. C., Munthe-Kaas, H. M., & Ross, M. W. (2016). Internalized homonegativity: A systematic mapping review of empirical research. *Journal of Homosexuality*, 63(4), 541–558. https://doi.org/10.1080/00918369.2015.1083788
- Birkett, M., Russell, S. T., & Corliss, H. L. (2014). Sexual-orientation disparities in school: The mediational role of indicators of victimization in achievement and truancy because of feeling unsafe. *American Journal of Public Health*, 104(6), 1124–1128. https://doi.org/10.2105/AJPH.2013.301785
- Blascovich, J., & Mendes, W. B. (2000). Challenge and threat appraisals: The role of affective cues. In J. Forgas (Ed.), Feeling and thinking: The role of affect in social cognition (pp. 59–82). Cambridge University Press.
- Blascovich, J., & Mendes, W. B. (2010). Social psychophysiology and embodiment. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), Handbook of social psychology (pp. 194–227). John Wiley & Sons, Inc.
- Blosnich, J. R., Henderson, E. R., Coulter, R. W. S., Goldbach, J. T., & Meyer, I. H. (2020). Sexual orientation change efforts, adverse childhood experiences, and suicide ideation and attempt among sexual minority adults, United States, 2016–2018. American Journal of Public Health, 110(7), 1024–1030. https://doi.org/10.2105/AJPH.2020.305637
- Bosson, J. K., Weaver, J. R., & Prewitt-Freilino, J. L. (2012). Concealing to belong, revealing to be known: Classification expectation and self-threats among persons with concealable stigmas. *Self and Identity*, 11(1), 114–135. https://doi.org/10.1080/15298868.2010.513508

- Bränström, R., Hatzenbuehler, M. L., Pachankis, J. E., & Link, B. G. (2016). Sexual orientation disparities in preventable disease: A fundamental cause perspective. *American Journal of Public Health*, 106(6), 1109–1115. https://doi.org/10.2105/AJPH.2016.303051
- Bränström, R., & Pachankis, J. E. (2018). Sexual orientation disparities in the co-occurrence of substance use and psychological distress: A national population-based study (2008–2015). Social Psychiatry and Psychiatric Epidemiology, 53(4), 403–412. https://doi.org/10.1007/s00127-018-1491-4
- Brown, M., Bettani, S., Knopp, L., & Childs, A. (2014). The gay bar as a place of men's caring. In A. Gorman-Murray & P. Hopkins (Eds.), *Masculinities and place* (pp. 299–315). Ashgate.
- Caceres, B. A., Brody, A., Luscombe, R. E., Primiano, J. E., Marusca, P., Sitts, E. M., & Chyun, D. (2017). A systematic review of cardiovascular disease in sexual minorities. *American Journal of Public Health*, 107(4), 570. https://doi.org/10.2105/AJPH.2016.303630a
- Cacioppo, S., Grippo, A. J., London, S., Goossens, L., & Cacioppo, J. T. (2015). Loneliness: Clinical import and interventions. Perspectives on Psychological Science, 10(2), 238–249. https://doi.org/10.1177/1745691615570616
- Ceglarek, P. J. D., & Ward, L. M. (2016). A tool for help or harm? How associations between social networking use, social support, and mental health differ for sexual minority and heterosexual youth. *Computers in Human Behavior*, 65, 201–209. https://doi.org/10.1016/j.chb.2016.07.051
- Clark, K., Lunn, M., Lev, E., Trujillo, M., Lubensky, M., Capriotti, M., Obedin-Maliver, J., & Flentje, A. (2020). Policy protections and their relationship to discrimination and victimization among sexual and gender minority people. In APHA's 2020 Virtual Annual Meeting and Expo, October 24–28, APHA.
- Cochran, S. D., Björkenstam, C., & Mays, V. M. (2016). Sexual orientation and all-cause mortality among US adults aged 18 to 59 years, 2001-2011. American Journal of Public Health, 106(5), 918–920. https://doi.org/10.2105/AJPH.2016.303052
- Cochran, S. D., & Mays, V. M. (2000a). Lifetime prevalence of suicide symptoms and affective disorders among men reporting same-sex sexual partners: Results from NHANES III. *American Journal of Public Health*, 90(4), 573–578. https://doi.org/10.2105/AJPH.90.4.573
- Cochran, S. D., & Mays, V. M. (2000b). Relation between psychiatric syndromes and behaviorally defined sexual orientation in a sample of the US population. *American Journal of Epidemiology*, 151(5), 516–523. https://doi.org/10.1093/oxfordjournals.aje.a010238
- Cook, S. H., Juster, R.-P., Calebs, B. J., Heinze, J., & Miller, A. L. (2017). Cortisol profiles differ by race/ethnicity among young sexual minority men. *Psychoneuroendocrinology*, 75, 1–4. https://doi.org/10.1016/j.psyneuen.2016.10.006
- Cooper, R. M., & Blumenfeld, W. J. (2012). Responses to cyberbullying: A descriptive analysis of the frequency of and impact on LGBT and allied youth. *Journal of LGBT Youth*, 9(2), 153–177. https://doi.org/10.1080/19361653.2011.649616
- Cox, W. T. L., Devine, P. G., Bischmann, A. A., & Hyde, J. S. (2017). Ecological invalidity of existing gaydar research: In-lab accuracy translates to real-world inaccuracy: Response to Rule, Johnson, & Freeman (2016). *The Journal of Sex Research*, 54(7), 820–824. https://doi.org/10.1080/00224499.2017.1278570
- Critcher, C. R., & Ferguson, M. J. (2014). The cost of keeping it hidden: Decomposing concealment reveals what makes it depleting. *Journal of Experimental Psychology: General*, 143(2), 721–735. https://doi.org/10.1037/a0033468
- Crocker, J., Major, B., & Steele, C. (1998). Social stigma. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), Handbook of social psychology (pp. 504–553). McGraw-Hill.
- Cuddy, A. J. C., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stere-otype content model and the BIAS map. Advances in Experimental Social Psychology, 40, 61–149. https://doi.org/10.1016/S0065-2601(07)00002-0
- de Lira, A. N., & de Morais, N. A. (2018). Resilience in lesbian, gay, and bisexual (LGB) populations: An integrative literature review. Sexuality Research and Social Policy, 15(3), 272–282. https://doi.org/10.1007/s13178-017-0285-x
- Dean, L., Meyer, I. H., Robinson, K., Sell, R. L., Sember, R., Silenzio, V. M. B., Wolfe, D., BowenDeborah, J., Bradford, J., Rothblum, E. D., Scout, M. A., White, J., & Dunn, P. (2000). Lesbian, gay, bisexual, transgender health: Findings and concerns. *Journal of the Gay and Lesbian Medical Association*, 4(3), 102–151.
- Derlega, V. J., & Berg, J. H. (1987). Self-disclosure: Theory, research, and therapy. Plenum Press.
- Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology*, 70(6), 1327–1343. https://doi.org/10.1037/0022-3514.70.6.1327
- Doyle, D. M., & Molix, L. (2015a). Perceived discrimination and social relationship functioning among sexual minorities: Structural stigma as a moderating factor. *Analyses of Social Issues and Public Policy*, 15(1), 357–381. https://doi.org/10.1111/asap.12098
- Doyle, D. M., & Molix, L. (2015b). Social stigma and sexual minorities' romantic relationship functioning: A meta-analytic review. Personality and Social Psychology Bulletin, 41(10), 1363–1381. https://doi.org/10.1177/0146167215594592
- Doyle, D. M., & Molix, L. (2016). Disparities in social health by sexual orientation and the etiologic role of self-reported discrimination. Archives of Sexual Behavior, 45(6), 1317-1327. https://doi.org/10.1007/s10508-015-0639-5
- Drydakis, N. (2019). Sexual orientation and labor market outcomes. IZA World of Labor, 111(2), 1–11. https://doi.org/10.15185/izawol.111.v2

- Federal Bureau of Investigations. (2018). 2017 hate crime statistics.
- Feinstein, B. A. (2019). The rejection sensitivity model as a framework for understanding sexual minority mental health. *Archives of Sexual Behavior*, 1, 3. https://doi.org/10.1007/s10508-019-1428-3
- Feinstein, B. A., & Dyar, C. (2017). Bisexuality, minority stress, and health. Current Sexual Health Reports, 9(1), 42–49. https://doi.org/10.1007/s11930-017-0096-3
- Feinstein, B. A., Goldfried, M. R., & Davila, J. (2012). The relationship between experiences of discrimination and mental health among lesbians and gay men: An examination of internalized homonegativity and rejection sensitivity as potential mechanisms. *Journal of Consulting and Clinical Psychology*, 80(5), 917–927. https://doi.org/10.1037/a0029425
- Frost, D. M., & Meyer, I. H. (2012). Measuring community connectedness among diverse sexual minority populations. *The Journal of Sex Research*, 49(1), 36–49. https://doi.org/10.1080/00224499.2011.565427
- Gallor, S. M., & Fassinger, R. E. (2010). Social support, ethnic identity, and sexual identity of lesbians and gay men. *Journal of Gay & Lesbian Social Services*, 22(3), 287–315. https://doi.org/10.1080/10538720903426404
- Gallup. (2019). Gay and lesbian rights: Gallup historical trends. https://news.gallup.com/poll/1651/gay-lesbian-rights.aspx
- Gates, G. J. (2017). In U.S. more adults identifying as LGBT. https://news.gallup.com/poll/201731/lgbt-identification-rises.aspx
- Giner-Sorolla, R., Bosson, J. K., Caswell, T. A., & Hettinger, V. E. (2012). Emotions in sexual morality: Testing the separate elicitors of anger and disgust. Cognition & Emotion, 26(7), 1208–1222. https://doi.org/10.1080/02699931.2011.645278
- Goffman, E. (1963). Stigma: Notes on the management of spoiled identity. Simon & Schuster.
- Gonzales, G., & Henning-Smith, C. (2017). Health disparities by sexual orientation: Results and implications from the behavioral risk factor surveillance system. *Journal of Community Health*, 42(6), 1163–1172. https://doi.org/10.1007/s10900-017-0366-z
- Gonzales, G., Przedworski, J., & Henning-Smith, C. (2016). Comparison of health and health risk factors between lesbian, gay, and bisexual adults and heterosexual adults in the United States: Results from the National Health Interview Survey. JAMA Internal Medicine, 176(9), 1344–1351. https://doi.org/10.1001/jamainternmed.2016.3432
- Grier, R. A., Warm, J. S., Dember, W. N., Matthews, G., Galinsky, T. L., Szalma, J. L., & Parasuraman, R. (2003). The vigilance decrement reflects limitations in effortful attention, not mindlessness. *Human Factors*, 45(3), 349–359.
- Gump, B. B., & Matthews, K. A. (1998). Vigilance and cardiovascular reactivity to subsequent stressors in men: A preliminary study. *Health Psychology*, 17(1), 93–96. https://doi.org/10.1037/0278-6133.17.1.93
- Haas, A. P., Eliason, M., Mays, V. M., Mathy, R. M., Cochran, S. D., D'Augelli, A. R., Silverman, M. M., Fisher, P. W., Hughes, T., Rosario, M., Russell, S. T., Malley, E., Reed, J., Litts, D. A., Haller, E., Sell, R. L., Remafedi, G., Bradford, J., Beautrais, A. L., & Clayton, P. J. (2011). Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: Review and recommendations. *Journal of Homosexuality*, 58(1), 10–51. https://doi.org/10.1080/00918369.2011.534038
- Haider-Markel, D. P., & Joslyn, M. R. (2008). Beliefs about the origins of homosexuality and support for gay rights: An empirical test of attribution theory. *Public Opinion Quarterly*, 72(2), 291–310. https://doi.org/10.1093/poq/nfn015
- Hammack, P. L., Frost, D. M., & Hughes, S. D. (2019). Queer intimacies: A new paradigm for the study of relationship diversity. The Journal of Sex Research, 56(4-5), 556-592. https://doi.org/10.1080/00224499.2018.1531281
- Harper, G. W., Serrano, P. A., Bruce, D., & Bauermeister, J. A. (2016). The internet's multiple roles in facilitating the sexual orientation identity development of gay and bisexual male adolescents. *American Journal of Men's Health*, 10(5), 359–376. https://doi.org/10.1177/1557988314566227
- Hatzenbuehler, M. L. (2009). How does sexual minority stigma "get under the skin"? A psychological mediation framework. *Psychological Bulletin*, 135(5), 707–730. https://doi.org/10.1037/a0016441. How
- Hatzenbuehler, M. L. (2016). Structural stigma: Research evidence and implications for psychological science. *American Psychologist*, 71(8), 742–751. https://doi.org/10.1037/amp0000068
- Hatzenbuehler, M. L., Corbin, W. R., & Fromme, K. (2008a). Young adults and their heterosexual peers: Results from a prospective study. Developmental Psychology, 44(1), 81–90.https://doi.org/10.1037/0012-1649.44.1.81. Trajectories
- Hatzenbuehler, M. L., Dovidio, J. F., Nolen-Hoeksema, S., & Phills, C. E. (2009a). An implicit measure of anti-gay attitudes: Prospective associations with emotion regulation strategies and psychological distress. *Journal of Experimental Social Psychology*, 45(6), 1316–1320. https://doi.org/10.1016/j.jesp.2009.08.005
- Hatzenbuehler, M. L., & McLaughlin, K. A. (2014). Structural stigma and hypothalamic-pituitary-adrenocortical axis reactivity in lesbian, gay, and bisexual young adults. *Annals of Behavioral Medicine*, 47(1), 39–47. https://doi.org/10.1037/a0030561.Striving
- Hatzenbuehler, M. L., McLaughlin, K. A., & Nolen-Hoeksema, S. (2008b). Emotion regulation and internalizing symptoms in a longitudinal study of sexual minority and heterosexual adolescents. *Journal of Child Psychology and Psychiatry*, 49(12), 1270–1278. https://doi.org/10.1111/j.1469-7610.2008.01924.x
- Hatzenbuehler, M. L., Nolen-Hoeksema, S., & Dovidio, J. (2009b). How does stigma "get under the skin"?: The mediating role of emotion regulation. *Psychological Science*, 20(10), 1282–1289. https://doi.org/10.1111/j.1467-9280.2009.02441.x
- Huebner, D. M., & David, M. C. (2005). Gay and bisexual men who disclose their sexual orientations in the workplace have higher workday levels of salivary cortisol and negative affect. *Annals of Behavioral Medicine*, 30(3), 260–267. https://doi.org/10.1207/s15324796abm3003_10

- ILGA. (2017). Minorities report 2017: Attitudes to sexual and gender minorities around the world.
- Jackson, S. D., & Mohr, J. J. (2016). Conceptualizing the closet: Differentiating stigma concealment and nondisclosure processes. Psychology of Sexual Orientation and Gender Diversity, 3(1), 80–92. https://doi.org/10.1037/sgd0000147
- Juster, R.-P., Smith, N. G., Ouellet, É., Sindi, S., & Lupien, S. J. (2013). Sexual orientation and disclosure in relation to psychiatric symptoms, diurnal cortisol, and allostatic load. *Psychosomatic Medicine*, 75(2), 103–116. https://doi.org/10.1097/PSY.0b013e3182826881
- Katz-Wise, S. L., & Hyde, J. S. (2012). Victimization experiences of lesbian, gay, and bisexual individuals: A meta-analysis. *The Journal of Sex Research*, 49(2–3), 142–167. https://doi.org/10.1080/00224499.2011.637247
- Keymel, S., Kalka, C., Rassaf, T., Yeghiazarians, Y., Kelm, M., & Heiss, C. (2008). Impaired endothelial progenitor cell function predicts age-dependent carotid intimal thickening. *Basic Research in Cardiology*, 103(6), 582–586. https://doi.org/10.1007/s00395-008-0742-z
- Kraus, M. W., & Mendes, W. B. (2014). Sartorial symbols of social class elicit class-consistent behavioral and physiological responses: A dyadic approach. *Journal of Experimental Psychology: General*, 143(6), 2330–2340. https://doi.org/10.1037/xge0000023
- Kwon, P. (2013). Resilience in lesbian, gay, and bisexual Individuals. *Personality and Social Psychology Review*, 17(4), 371–383. https://doi.org/10.1177/1088868313490248
- Lamont, M., Silva, G. M., Welburn, J., Guetzkow, J., Mizrachi, N., Herzog, H., & Reis, E. (2016). Getting respect: Responding to stigma and discrimination in the United States, Brazil, and Israel. Princeton University Press.
- Levitt, H. M., Horne, S. G., Puckett, J., Sweeney, K. K., & Hampton, M. L. (2015). Gay families: Challenging racial and sexual/gender minority stressors through social support. *Journal of GLBT Family Studies*, 11(2), 173–202. https://doi.org/10.1080/1550428X.2014.958266
- Lewis, R. J., Mason, T. B., Winstead, B. A., Gaskins, M., & Irons, L. B. (2016). Pathways to hazardous drinking among racially and socioeconomically diverse lesbian women: Sexual minority stress, rumination, social isolation, and drinking to cope. *Psychology of Women Quarterly*, 40(4), 564–581. https://doi.org/10.1177/0361684316662603
- Lewis, R. J., Winstead, B. A., Lau-Barraco, C., & Mason, T. B. (2017). Social factors linking stigma-related stress with alcohol use among lesbians. *Journal of Social Issues*, 73(3), 545–562. https://doi.org/10.1111/josi.12231
- Lick, D. J., Durso, L. E., & Johnson, K. L. (2013). Minority stress and physical health among sexual minorities. *Perspectives on Psychological Science*, 8(5), 521–548. https://doi.org/10.1177/1745691613497965
- Longobardi, C., & Badenes-Ribera, L. (2017). Intimate partner violence in same-sex relationships and the role of sexual minority stressors: A systematic review of the past 10 years. *Journal of Child and Family Studies*, 26(8), 2039–2049. https://doi.org/10.1007/s10826-017-0734-4
- Madera, J. M. (2010). The cognitive effects of hiding one's homosexuality in the workplace. *Industrial and Organizational Psychology*, 3(1), 86–89. https://doi.org/10.1111/j.1754-9434.2009.01204.x
- Major, B., Dovidio, J. F., Link, B. G., & Calabrese, S. K. (2018). Stigma and its implications for health: Introduction and overview. In B. Major, J. F. Dovidio, & B. G. Link (Eds.), *The oxford handbook of stigma, discrimination, and health* (pp. 3–28). Oxford University Press.
- Major, B., Mendes, W. B., & Dovidio, J. F. (2013). Intergroup relations and health disparities: A social psychological perspective. *Health Psychology*, 32(5), 514–524. https://doi.org/10.1037/a0030358
- Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56(1), 393–421. https://doi.org/10.1146/annurev.psych.56.091103.070137
- McLaren, S., Jude, B., & McLachlan, A. J. (2007). Sexual orientation, sense of belonging and depression in Australian men. *International Journal of Men's Health*, 6(3), 259–272. https://doi.org/10.3149/jmh.0603.259
- Mead, G. H. (1934). Mind, self, and society. University of Chicago Press.
- Mendes, W. B. (2016). Emotion and the autonomic nervous system. In L. F. Barrett, M. Lewis M, & J. Haviland-Jones (Eds.), Handbook of emotions (pp. 166–181). Guilford Publications.
- Mendes, W. B., Blascovich, J., Lickel, B., & Hunter, S. (2002). Challenge and threat during social interaction with white and black men. *Personality and Social Psychology Bulletin*, 28(7), 939–952. https://doi.org/10.1177/01467202028007007
- Mendes, W. B., & Muscatell, K. A. (2018). Affective reactions as mediators of the relationship between stigma and health. In B. Major, J. F. Dovidio, & B. G. Link (Eds.), *The Oxford handbook of stigma, discrimination, and health* (pp. 265–283). Oxford University Press.
- Mereish, E. H., & Poteat, V. P. (2015). A relational model of sexual minority mental and physical health: The negative effects of shame on relationships, loneliness, and health. *Journal of Counseling Psychology*, 62(3), 425–437. https://doi.org/10.1037/cou0000088
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, 129(5), 674–697. https://doi.org/10.1016/j.biotechadv.2011.08.021.Secreted.
- Meyer, I. H. (2015). Resilience in the study of minority stress and health of sexual and gender minorities. *Psychology of Sexual Orientation and Gender Diversity*, 2(3), 209–213. https://doi.org/10.1037/sgd0000132

- Meyer, I. H., & Dean, L. (1998). Internalized homophobia, intimacy, and sexual behavior among gay and bisexual men. In G. M. Herek (Ed.), Stigma and sexual orientation: Understanding prejudice against lesbians, gay men, and bisexuals (4th ed., pp. 160–186). SAGE Publications.
- National Institutes of Health. (2011). The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding. National Academy of Sciences.
- Nolen-Hoeksema, S., Wisco, B. E., & Lyubomirsky, S. (2008). Rethinking rumination. *Perspectives on Psychological Science*, 3(5), 400–424. https://doi.org/10.1111/j.1745-6924.2008.00088.x
- Pachankis, J. E. (2007). The psychological implications of concealing a stigma: A cognitive-affective-behavioral model. *Psychological Bulletin*, 133(2), 328–345. https://doi.org/10.1037/0033-2909.133.2.328
- Pachankis, J. E., & Bränström, R. (2018). Hidden from happiness: Structural stigma, sexual orientation concealment, and life satisfaction across 28 countries. *Journal of Consulting and Clinical Psychology*, 86(5), 403–415. https://doi.org/10.1037/ccp0000299
- Pachankis, J. E., & Bränström, R. (2019). How many sexual minorities are hidden? Projecting the size of the global closet with implications for policy and public health. *PloS One*, 14(6). https://doi.org/10.1371/journal.pone.0218084
- Pachankis, J. E., Goldfried, M. R., & Ramrattan, M. E. (2008). Extension of the rejection sensitivity construct to the interpersonal functioning of gay men. *Journal of Consulting and Clinical Psychology*, 76(2), 306–317. https://doi.org/10.1037/0022-006X.76.2.306
- Parks, C. A. (1999). Lesbian social drinking: The role of alcohol in growing up and living as lesbian. *Contemporary Drug Problems*, 26(1), 75–129. https://doi.org/10.1177/009145099902600105
- Parra, L. A., Benibgui, M., Helm, J. L., & Hastings, P. D. (2016). Minority stress predicts depression in lesbian, gay, and bisexual emerging adults via elevated diurnal cortisol. *Emerging Adulthood*, 4(5), 365–372. https://doi.org/10.1177/2167696815626822
- Perrin, P. B., Sutter, M. E., Trujillo, M. A., Henry, R. S., & Pugh, M. (2020). The minority strengths model: Development and initial path analytic validation in racially/ethnically diverse LGBTQ individuals. *Journal of Clinical Psychology*, 76(1), 118–136. https://doi.org/10.1002/jclp.22850
- Pilkington, N. W., & D'Augelli, A. R. (1995). Victimization of lesbian, gay, and bisexual youth in community settings. *Journal of Community Psychology*, 23(1), 34–56.
- Quinn, G. P., Sanchez, J. A., Sutton, S. K., Vadaparampil, S. T., Nguyen, G. T., Green, B. L., Kanetsky, P. A., & Schabath, M. B. (2015). Cancer and lesbian, gay, bisexual, transgender/transsexual, and queer/questioning (LGBTQ) populations. CA: A Cancer Journal for Clinicians, 65(5), 384–400. https://doi.org/10.3322/caac.21288
- Rankin, S., Blumenfeld, W. J., Weber, G. N., & Frazer, S. (2010). State of higher education for lesbian, gay, bisexual, and transgender people: Campus pride 2010 national college climate survey. Campus Pride.
- Remafedi, G. (2007). Lesbian, gay, bisexual, and transgender youths: Who smokes, and why? *Nicotine & Tobacco Research*, 9(Suppl. 1), 65–71. https://doi.org/10.1080/14622200601083491
- Reyna, C., Wetherell, G., Yantis, C., & Brandt, M. J. (2014). Attributions for sexual orientation vs. Stereotypes: How beliefs about value violations account for attribution effects on anti-gay discrimination. *Journal of Applied Social Psychology*, 44(4), 289–302. https://doi.org/10.1111/jasp.12226
- Richeson, J. A., & Shelton, J. N. (2010). Intergroup dyadic interactions. In J. F. Dovidio, M. Hewstone, P. Glick, & V. M. Esses (Eds.), The sage handbook of prejudice, stereotyping, and discrimination (pp. 276–293). Sage.
- Richman, L. S., & Hatzenbuehler, M. L. (2014). A multilevel analysis of stigma and health: Implications for research and policy. Policy Insights from the Behavioral and Brain Sciences, 1(1), 213–221. https://doi.org/10.1177/2372732214548862
- Riggle, E. D. B., Rostosky, S. S., Drabble, L., Veldhuis, C. B., & Hughes, T. L. (2018). Sexual minority women's and gender-diverse individuals' hope and empowerment responses to the 2016 presidential election. *Journal of GLBT Family Studies*, 14(1–2), 152–173. https://doi.org/10.1080/1550428X.2017.1420853
- Riggle, E. D. B., Whitman, J. S., Olson, A., Rostosky, S. S., & Strong, S. (2008). The positive aspects of being a lesbian or gay man. Professional Psychology: Research and Practice, 39(2), 210–217. https://doi.org/10.1037/0735-7028.39.2.210
- Robinson, N. S. (1995). Evaluating the nature of perceived support and its relation to perceived self-worth in adolescents. Journal of Research on Adolescence, 5(2), 253–280. https://doi.org/10.1207/s15327795jra0502_5
- Rodriguez-Seijas, C., Eaton, N. R., & Pachankis, J. E. (2019). Prevalence of psychiatric disorders at the intersection of race and sexual orientation: Results from the national epidemiologic survey of alcohol and related conditions-III. *Journal of Consulting and Clinical Psychology*, 87(4), 321–331. https://doi.org/10.1037/ccp0000377
- Rule, N. O., Johnson, K. L., & Freeman, J. B. (2017). Evidence for the absence of stimulus quality differences in tests of the accuracy of sexual orientation judgments: A reply to Cox, devine, Bischmann, and Hyde (2016). *The Journal of Sex Research*, 54(7), 813–819. https://doi.org/10.1080/00224499.2016.1205547
- Russell, S. T., Seif, H., & Truong, N. L. (2001). School outcomes of sexual minority youth in the United States: Evidence from a national study. *Journal of Adolescence*, 24(1), 111–127. https://doi.org/10.1006/jado.2000.0365

- Rust, P. C. (1996). Finding a sexual identity and community: Therapeutic implications and cultural assumptions in scientific models of coming out. In E. D. Rothblum & L. A. Bond (Eds.), Primary prevention of psychopathology (17, pp. 87–123). SAGE Publications.
- Ryan, W. S., Hunger, J. M., & Major, B. (2017). Applying intergroup relations research to understanding LGB health disparities. *Journal of Social Issues*, 73(3), 477–492. https://doi.org/10.1111/josi.12227
- Schmader, T., Johns, M., & Forbes, C. (2008). An integrated process model of stereotype threat effects on performance. *Psychological Review*, 115(2), 336–356. https://doi.org/10.1037/0033-295X.115.2.336
- Sell, R. L., & Silenzio, V. M. B. (2013). Lesbian, gay, bisexual, and transgender public health research. In M. D. Shankle (Ed.), The handbook of lesbian, gay, bisexual, and transgender public health: A practioner's guide to service. Harrington Park Press.
- Sidanius, J., & Pratto, F. (2012). Social dominance theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), Handbook of theories of social psychology (2, pp. 418–438). SAGE. https://doi.org/10.4135/9781446249222.n47
- Steele, C. M., Spencer, S. J., & Aronson, J. (2002). Contending with group image: The psychology of stereotype and social identity threat. *Advances in Experimental Social Psychology*, 34, 379–440.
- Szymanski, D. M., Dunn, T. L., & Ikizler, A. S. (2014). Multiple minority stressors and psychological distress among sexual minority women: The roles of rumination and maladaptive coping. *Psychology of Sexual Orientation and Gender Diversity*, 1(4), 412–421. https://doi.org/10.1037/sgd0000066
- Szymanski, D. M., & Gonzalez, K. A. (2020). The role of resilience in sexual and gender minority mental health. In E. D. Rothblum (Ed.), *The oxford handbook of sexual and gender minority mental health* (pp. 429–442). Oxford University Press.
- Timmins, L., Rimes, K. A., & Rahman, Q. (2020). Minority stressors, rumination, and psychological distress in lesbian, gay, and bisexual individuals. *Archives of Sexual Behavior*, 49(2), 661–680. https://doi.org/10.1007/s10508-019-01502-2
- Tozer, E. E., & Hayes, J. A. (2004). Why do individuals seek conversion therapy?: The role of religiosity, internalized homonegativity, and identity development. *The Counseling Psychologist*, 32(5), 716–740. https://doi.org/10.1177/0011000004267563
- Trujillo, M. A., Perrin, P. B., Henry, R. S., & Rabinovitch, A. E. (2020). Heterosexism and suicidal ideation: Racial differences in the impact of social support among sexual minority adults. *Crisis*, 41(6), 429–436. https://doi.org/10.1027/0227-5910/a000657
- Waller, L. (2020). Fostering a sense of belonging in the workplace: Enhancing well-being and a positive and coherent sense of self. In S. Dhiman (Ed.), *The Palgrave handbook of workplace well-being* (pp. 1–27). Palgrave Macmillan UK.
- Weinstock, J. S. (2000). Lesbian friendships at midlife: Patterns and Possibilities for the 21st century. *Journal of Gay & Lesbian Social Services*, 11(2–3), 1–32. https://doi.org/10.1300/J041v11n02_01
- Weston, K. (1997). Families we choose: Lesbians, gays, kinship. Columbia University Press.
- Whisman, V. (1996). Queer by choice: Lesbians, gay men, and the politics of identity. Routledge.
- Wilson, B. D. M., Gordon, A. R., Mallory, C., Choi, S. K., & Badgett, M. V. L. (2021). Health and socioeconomic well-being of LBQ women in the US.

AUTHOR BIOGRAPHIES

Michael A. Trujillo is an Assistant Professor of Psychology at Carnegie Mellon University. He completed his PhD in Health Psychology from Virginia Commonwealth University and was an NIMH T32 post-doc at University of California San Francisco. His research areas focus on psychobiological pathways linking social stress to health as well as the collective and personal strengths that promote resilience among stigmatized populations.

Wendy Berry Mendes is the Sarlo/Ekman Endowed Professor of Human Emotion at University of California San Francisco. She previously held the John Loeb Associate Professor Chair at Harvard University. Her research focuses on psychophysiology responses to affective states and some of her research areas include prejudice and discrimination, stigma, physiologic synchrony, and emotions across the lifespan.

How to cite this article: Trujillo, M. A., & Mendes, W. B. (2021). An ignored minority status: Consequences for sexual minorities living in a biased society. *Social and Personality Psychology Compass*, e12638. https://doi.org/10.1111/spc3.12638