The Benefits and Challenges of Health Disparities and Social Stress Frameworks for Research on Sexual and Gender Minority Health

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Abstract

Research on the health of sexual and gender minority populations has been predominantly framed within the context of health disparities and social stress. Findings produced from research employing health disparities and social stress frameworks have spurred significant advancements in basic and applied science on sexual and gender minority health, and been useful in arguing for removal of discriminatory social policies. Critiques of these frameworks suggest their dominant role in the research literature risks an artificially narrow portrayal of relevant lived experience, and further pathologizes and stigmatizes sexual and gender minority populations. Methodological challenges involve the measurement of explanatory variables within comparative research designs. By taking stock of benefits and challenges, suggestions can be made for future research designed to maximize benefits of health disparities and social stress frameworks for understanding and improving health of sexual and gender minority populations in ways responsive to critiques while recognizing variability in lived experience.

Keywords: sexual minorities, gender minorities, minority stress, stigma, health disparities

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Disparities have been consistently documented between heterosexual and sexual minority populations (i.e., lesbian, gay, bisexual, queer, and other individuals who do not identify as heterosexual), as well as between cisgender and gender minority (i.e., transgender and genderqueer individuals), across multiple domains of health (for a review, see Williams & Mann, in press). These persistent differences in health are theorized to be caused by the devalued and disadvantaged statuses surrounding sexual and gender minority populations that stem from a prevailing culture of stigma (Bockting et al., 2013; Hatzenbuehler et al., 2013; Herek, 2007; Meyer, 2003; Williams & Mann, in press).

Scholars working across epidemiological, sociological, and psychological perspectives have traditionally theorized sexual and gender minority health disparities within social stress models (Aneshensel et al., 1991; Frost, 2011; Meyer, 2003; Meyer & Frost, 2013). These models recognize that sexual and gender minority individuals are exposed to greater amounts of social stress as a result of their stigmatized status and have access to fewer coping resources than their heterosexual and cisgender peers (e.g., Meyer et al., 2008). Social stress models therefore offer an explanation for the existence of sexual and gender minority health disparities; health disparities are caused by excess exposure to social stress and diminished coping resources as a result of sexual and gender minorities' social disadvantage and stigmatized statuses (Schwartz & Meyer, 2010). As a result, health disparities and social stress frameworks have been the dominant approach to researching the health of sexual and gender minority populations. However, by focusing on differences in health at the group level, individual variability in the experience of stigma and oppression are often misrepresented or even ignored, risking an

inaccurate portrayal of the health of the group. As a result, health disparities and social stress frameworks present both benefits and challenges to the study of sexual and gender minority health.

This paper outlines the benefits and challenges for research, intervention, and social change efforts focused on understanding and improving sexual and gender minority health. Specifically, I will discuss the benefits offered from health disparities and social stress frameworks to sexual and gender minority health in (a) advancing basic and applied scientific knowledge, and (b) the advancement of advocacy and policy change efforts. I will next highlight some of the challenges these frameworks pose including (a) methodological challenges, (b) competing agendas and disagreements about the value of disparities frameworks across disciplines, and (c) the potential unintended consequences that applying health disparities frameworks can have in shaping understandings of sexual and gender minority health. Finally, I end with some recommendations for future research on sexual and gender minority health that can take advantage of the benefits of health disparities frameworks while addressing these key challenges.

Benefits of a Disparities Framework

Benefits to Basic and Applied Science

Approaching the study of sexual and gender minority health from a disparities framework has numerous benefits, including the advancement of social scientific theories and their application within the health sciences. In particular, the development of minority stress theory (DiPlacido, 1998; Meyer, 1995, 2003; Meyer & Frost, 2013; Williams & Mann, in press) has proven especially useful for integrating concepts from social epidemiology and social psychology in attempts to provide an explanation for the existence of health disparities facing

sexual minority populations. The minority stress framework originally articulated five stressors contributing to the added stress burden of sexual minority individuals relative to their heterosexual peers: acute stressful life events caused by prejudice (e.g., bias-motivated assault, being fired from a job); chronic everyday forms of discrimination (e.g., receiving poorer services in stores, social avoidance); expectations of rejection; managing the visibility of one's sexual minority identity (stigma concealment); and self-stigmatization or internalized homophobia (Meyer, 2003). Recent efforts have expanded this set of stressors to include structural stigma in the form of institutionalized heterosexism (e.g., discriminatory social policies), and non-event stress, which occurs as a result of positive events not happening as a result of prevailing social stigma (Frost & LeBlanc, 2015; Hatzenbuehler, 2014; Meyer, Ouellette, Haile, & McFarlane, 2011).

Studies employing the minority stress framework have concluded that exposure to a variety of these stressors is related to a multitude of mental health problems including: mood and anxiety disorders, subthreshold depressive symptoms, substance misuse, and suicide ideation, as well as lower levels of psychological and social well-being (see Meyer & Frost, 2013 for a review). Additionally, emerging evidence has suggested that exposure to minority stress results in increased physical health problems (Frost, Lehavot, & Meyer, 2015) and may underlie disparities between sexual minority and heterosexual populations in physical health outcomes (Lick, Durso, & Johnson, 2013) as well as health risk behaviors, such as substance use and unsafe sex (e.g., Ryan et al., 2009). Some studies investigating disparities that have employed a minority stress approach have even shown that when exposure to factors indicative of minority stress are analytically controlled, differences between heterosexual and sexual minority individuals in negative health outcomes are substantially attenuated (e.g., Frost & LeBlanc,

2015; Mays & Cochran, 2001). Additionally, due to the minority stress framework's specification of the stress and coping pathways by which the stigmatized social status attached to being a sexual minority impacts their health, clinical interventions have emerged that seek to target those pathways amenable to change in efforts to reduce the incidence of negative health outcomes in sexual minority populations (Chaudoir, Wang, & Pachankis, in press).

As a result of its success in theorizing, studying, and addressing stigma as the root cause of health disparities based on sexual orientation, the minority stress framework has been extended to explain health disparities in other populations based on gender and race/ethnicity (e.g., Bockting, 2009; Frost, 2011a; Hendricks & Testa, 2012). For example, Bockting and colleagues have extended the minority stress model to demonstrate the negative health impact that exposure to unique stigma-related stressors can have among transgender individuals in the US (Bockting et al., 2013). However, additional theoretical and empirical work is necessary in order to fully articulate the specific ways in which the minority stress model may function differently within studies of sexual and gender minority populations (e.g., stigma concealment may operate differently with regard to sexual and gender identities). Additionally, research has yet to employ the minority stress model in specific attempts to explain health disparities between cisgender and gender minority populations. Although there is much still to be done, minority stress theory has clearly provided a unifying framework for understanding the social origins of sexual and gender minority health disparities, and produced a body of evidence that challenges the assumption that such differences in health outcomes are inherent to sexual and gender minority identities in and of themselves.

Benefits to Advocacy and Policy Change Efforts

On a policy level, research utilizing disparities and stress frameworks has produced

findings that document the damaging effects that social stigma and power imbalances (e.g., heterosexist and cisgenderist opportunity structures) can have on the health of sexual and gender minority populations (e.g., Hatzenbuehler et al., 2013). As a result, this research has been employed in successful attempts to challenge social policies that discriminate against sexual and gender minority populations (Herek, 2006).

The most recent example of the successful positioning of social science research in policy change efforts concerns the legality of same-sex marriage in the US. One study, conducted by Wight and colleagues, utilized existing epidemiological surveillance data in the state of California (where same-sex marriage was legal for a period of time) to demonstrate that those sexual minorities who were in legally recognized marriages had better mental health than their sexual minority peers who were not in legally recognized marriages (Wight, LeBlanc, & Badgett, 2013). Also, and perhaps more importantly from a policy standpoint, the mental health of legally married sexual minorities did not differ from the health of legally married heterosexuals, but non-married heterosexuals demonstrated better mental health than non-married sexual minorities. These findings were taken to indicate that differential access to legal marriage may be a contributing factor to the oft-observed mental health disparities between heterosexuals and sexual minorities.

The utility of this and other studies employing a disparities framework is evidenced in its inclusion in Amicus Briefs filed on behalf of organizations such as the American Psychological Association and the American Psychiatric Association (see APA Amicus Briefs by Issue for a full list of Amicus Briefs filed in response to legal proceedings relevant to sexual and gender minority issues) in US Supreme court cases; the inclusion of experts on minority stress and sexual minority health disparities called on to testify as expert witnesses in related court

proceedings, and, ultimately, referenced by judges and other decision makers in their accounting for their decisions on such cases. In addition to the issue of equal marriage rights, social scientific research utilizing a disparities framework has been cited in legal victories surrounding the decriminalization of same-sex sexual behavior, same-sex parent adoption, and inclusion of sexual minorities in the military. Disparities and social stress frameworks will also likely prove useful in understanding how legal barriers that prevent gender minority individuals from full participation in social institutions (e.g., parenting, the military, access to housing) contribute to negative health outcomes.

Challenges Associated with Disparities and Stress Frameworks

Methodological Challenges

In order to effectively employ a disparities framework in studies ultimately useful for the reasons previously outlined, several methodological challenges must be overcome in the context of studying the health of sexual minority populations in particular. Many of these challenges have been substantially documented, and include (a) defining who "counts" as a sexual or gender minority individual given sexual orientation can be defined using sexual identity, behavior, and/or desire (Parks et al., 2009); (b) considering gender identity and sex at birth as distinct constructs that should both be accounted for in adequately defining gender minority populations (Sausa, Sevelius, Keatley, Iñiguez, & Reyes, 2009); and (c) obtaining statistically adequate and representative samples of sexual and gender minority populations within disparities research is difficult given no sampling frame exists for "hidden populations" (Meyer & Wilson, 2009; Rothblum, 2007; Umberson et al., 2015).

Although often manifested in challenges regarding measurement, conceptual issues arise in attempts to account for social psychological factors theorized to *explain* health disparities. For

example, the minority stress framework (Meyer, 2003) suggests that health disparities exist between sexual and gender minority and heterosexual and cisgender populations largely because of the *unique* stressors that sexual and gender minorities experience, as previously outlined. However, heterosexual and cisgender individuals do not experience/are not exposed to many of these minority stressors, making it difficult to examine whether the lack of those stressors explain their better outcomes. Thus, methodological challenges arise in research involving between-group designs that examine factors unique to one group's experience in explaining a difference in outcomes between the groups (for detailed exploration of this challenge, see Schwartz & Meyer, 2010). Take for example, the minority stressor of internalized homophobia. Several studies have examined the impact that internalized homophobia can have on the health of sexual minority individuals in within-group studies (e.g., Frost & Meyer, 2009; Herrick et al., 2013). Internalized homophobia is therefore likely a key part of the additional stress burden that sexual minorities are exposed to relative to heterosexuals. However, in a between-group design necessary to directly investigate whether minority stress explains health disparities based on sexual orientation, it is not possible to include internalized homophobia in explanatory models given it cannot be measured among heterosexuals beyond the mere absence of it. Similar problems would arise with regard to constructs like "passing" in investigations of the role of minority stress in health disparities based on gender identity, because cisgender individuals do not experience stress related to passing as cisgender. As a result, the majority of research on stigma and its impact on sexual and gender minority health has utilized on within-group designs. This approach is useful in understanding the association between stigma and health (e.g., Lewis et al., in press; Scandurra, Amodeo, Valerio, Bochicchio, & Frost, in press; Williams, Mann, & Fredrick, in press), but lacks the ability to examine the extent to which stigma explains a given

health disparity (Schwartz & Meyer, 2010).

Competing Agendas and Discipline-Specific Perspectives

Several policy-making bodies and funding sources remain reluctant to recognize the importance of sexual and gender minority health within a disparities framework. For example, Healthy People 2020 calls for the elimination of health disparities based on sexual orientation (US Department of Health and Human Services, 2012). However, as of the time of this writing, the US National Institutes of Health's definition of health disparity populations excludes sexual and gender minorities (Minority Health and Health Disparities Research and Education Act, United States Public Law 106-525). The importance of this omission may be tied to subsequent funding of large-scale data collection efforts and decisions to include or omit questions about sexual orientation and behavior, gender identity, and minority stressors in population-based health surveys and public health surveillance data.

Tensions also arise in conceptualizing variability in health outcomes within sexual and gender minority populations. Epidemiological literatures have historically emphasized the concepts of "double jeopardy" and additive burden (Dowd & Bengtson, 1978; Lin & Ensel, 1989) in theorizing and testing how sexual orientation, gender, race, and other social statuses combine to "influence" health. Within this approach to disparities research, the more stigmatized social statuses one occupies, the more stress and the more negative health problems individuals should expect to experience. Alternatively, social psychological and feminist perspectives utilize an intersectionality framework (Rosenthal, 2016) in examining lived experience for those with multiple marginalized identities. Within an intersectionality approach to disparities research, it is not expected that all disadvantaged social statuses result in the same increase in exposure or health risk, but rather unique social positions exist at the "intersection" of

various privileged and disadvantaged statuses and thus result in unique health benefits and/or risk (Bowleg, 2008).

The conceptual and analytical challenges raised by these two sometimes-competing perspectives are difficult to overcome within a disparities framework (Bauer, 2014; Bowleg, 2012; Meyer et al., 2008). For example, epidemiological research has focused on group differences and the multiplicative interaction between multiple identity categories in its attempts to assess intersectionality within research based on quantitative data. However, such an analytic approach is based on what could be described as a fallacy of analytic isolation, in which the association between a given identity status and health outcome can be isolated from other identity statuses that relate to individuals' social positions that are inseparable in their lived experience. As a result, much of the work on intersectionaltiy in sexual and gender minority health has employed qualitative designs (e.g., Bauer, 2014; Bowleg, 2008; de Vries, 2012). Although such an approach allows for a better understanding of health within social positions resulting from simultaneously lived identities and group memberships, qualitative designs lack the ability to explain health disparities at the population level. Indeed, much attention is currently being paid to address these tensions between theory and method in the use of mixed methods designs and the employment of dimensional rather than categorical operationalizations of identity (Bauer, 2014; Stirratt et al., 2008).

Unintended Consequences

Some scholars have argued against the utility of a disparities framework, suggesting that it is not appropriate to compare the experience of a disadvantaged minority group with a dominant majority group. Doing so risks further portraying the disadvantaged group as "sick" or "damaged" as a group thereby perpetuating the social stigma that underlies the very disadvantage

theorized to be the root of any disparity (e.g., Braveman, 2006).

Take, for example, the large body of social and health science research on HIV/AIDS among sexual and gender minority populations. Most of the large-scale research on the health of these populations has been funded within an overarching HIV/AIDS umbrella (e.g.. Coulter, Kenst, Bowen, & Scout, 2014). Thus, much of the published research on this population concerns predictors of sexual risk and related health risk behaviors (e.g., substance use). The result is a body of literature on a population that some have argued fails to represent the broader range of concerns that sexual and gender minorities experiences in daily life, and therefore may even perpetuate health disparities affecting these populations (e.g.. Coulter et al., 2014; Silvestre, 1992). Importantly, these critiques do not say research on HIV/AIDS and health risk behaviors is not valuable, but rather that more attention needs to be paid to diversity of lived experience, to produce a more accurate—and ultimately more useful—body of evidence regarding factors that both harm *and* promote health in these populations. Given these factors are embedded in and perpetuated by systems of power and oppression, research designs that limit their foci to group differences in either aspects of negative health or positive outcomes (e.g., resilience) are not equipped to adequately address the root "cause" of disparities (e.g., Fine, 2005).

Additionally, the sole focus on analyses of group differences between majority and minority sexual or gender populations to employ a disparities framework often omits within-group variability. For example, within the population of sexual minority individuals, there are important subgroup differences in mental health such that bisexuals often evidence higher rates of mental health problems than lesbian and gay individuals (e.g., Jorm et al., 2002; Kertzner et al., 2009). Important individual variability also exists with regard to the distribution of the health outcome under study in any analysis of between-group disparities. In other words, the majority

of sexual and gender minority individuals do not evidence any given negative health outcome under examination within a study of health disparities, although they are portrayed at the population level as "sicker" than heterosexual and cisgender populations as a result of a between-group comparative frame. Attention is often lacking within such comparative analyses of the population-specific factors that may contribute to within group variability in health, such as minority-specific coping, support, and resilience factors. Although not the primary aim of analyses of population health disparities, these are nonetheless important unintended consequences of disparities research that deserve careful attention from researchers in their presentation of findings so that the above-mentioned mischaracterizations of sexual and gender minority lives can be avoided.

Recommendations for Future Research

Despite the challenges associated with applying disparities and social stress models in studying the health of sexual and gender minority populations, the utility of such theoretical frameworks to understand and address important health problems in marginalized populations cannot be overlooked. The following recommendations for future research are offered in efforts to maximize the utility of a disparities framework in researching sexual and gender minority health, while at the same time addressing the challenges outlined above.

Maintaining Simultaneous Focus on Risk and Resilience

A disparities framework essentially involves investigations of the population-level or average differences between the majority and minority and do not consider the variability in outcomes on which the minority population as a whole exhibits poorer health compared to the majority. In other words, many sexual and gender minority individuals live happy and healthy lives that are not characterized by illness and disorder (Riggle et al., 2008). Accounting for the

negative effect of social disadvantage and stigma on health, as well as when individuals are able to thrive despite the negative social climate, is of vital importance to bring disparities research more in line with the reality of sexual and gender minority individuals' lived experience (Fine, 2005; Fine & Cross, 2016; Frost, 2011b).

Thus, one approach to address this limitation is to consider disparities within a larger model of factors that result in *both* the negative effects of stigma (e.g., minority stress) as well as factors that contribute to stress resistance and resilience (e.g., individual coping resources, social support, community connectedness, meaning making, and activism) (Herrick et al., 2014; Meyer, 2015; Singh et al., 2011). This approach would increase the potential of frameworks, such as the minority stress model, to explain the multitude of factors and mechanisms contributing to health disparities, that may not be explained by excess stress exposure alone (e.g., Frisell, Lichtenstein, Rahman, & Långström, 2010). This approach to disparities research may also help to avoid "blaming the victim" (i.e., faulting those who are not resilient in the face of social disadvantage) by accounting for how disadvantage can affect increased stress exposure as well as diminished access to coping resources (e.g., Meyer et al., 2008).

Expanding Outcomes and Explanatory Factors

Following general models of social stress and health (e.g., Aneshensel et al., 1991), the effects of minority stress on health are theorized *not* to be specific to any given disorder or condition and are intended to be extended to health more generally. For example, the minority stress framework was designed to explain sexual orientation-based health disparities in mental health as a general domain of health, rather than disparities in specific mental health disorders, such as major depressive disorder or generalized anxiety (Meyer, 2003). This is because the hypothesized explanation for health disparities is social stigma, which should (in theory) impact

a given domain of health (e.g., mental health) containing multiple indicators in aggregate, as opposed to impacting one indicator (e.g., major depressive disorder) but not another (generalized anxiety disorder). In practice, a disparity in a specific disorder or health condition may not be explained by stigma and social disadvantage. However, when such null findings do occur, they cannot be taken to indicate that stigma and social disadvantage can be ruled out as a potential "cause" of observed disparities. A focus on disparities in domains of health (e.g., physical health, mental health) rather than disorder/disease (asthma, major depressive disorder) would protect against such "false null" findings and the implied conclusion that stigma and social disadvantage do not matter for sexual and gender minority health. Efforts to build transdiagnostic outcomes (e.g., Caspi et al., 2013) may also be of use in efforts to be more inclusive in focusing disparities research on domains of health rather than specific disorders (e.g., Eaton, 2014).

Similar recommendations can be made in conceptualizing and measuring the full range of explanatory factors that correspond to stigma and social disadvantage. As noted above, a challenge to disparities research on sexual and gender minority health disparities is that attempting to explain them using the minority stress framework cannot measure unique forms of social stress across all groups in a comparative design (Schwartz & Meyer, 2010). However, there are some forms of minority stress that can theoretically be experienced by both dominant and marginalized groups; for example, a cisgender man could theoretically expect to be rejected as a result of his gender depending on the context. Thus, researchers utilizing a disparities frame can adapt measures of minority stress constructs—like expectations of rejection—so that they can account for stress exposure in the form of some minority stressors across heterosexual and cisgender and sexual and gender minority populations.

To illustrate, Williams and colleagues (1997) everyday discrimination measure takes a two step approach to first assessing how often (i.e., frequency) an individual has experienced various forms of differential treatment (e.g., poor service in stores, being treated in a disrespectful manner, etc.), followed by the individuals' attribution for that treatment in a second step (e.g., did it happen because of race, gender, sexual orientation, etc.). In employing this measure of discrimination, total scores can be computed based solely on responses to the frequency items, regardless of attribution. This would allow for the creation of a total everyday discrimination score that is comparable across all groups in a comparative design (e.g., heterosexual vs. sexual minority individuals, cisgender vs. gender minority individuals). As a result, everyday discrimination can be examined as an explanation for differences in a given health outcome or domain between the groups.

Addressing the Role of Changing Social Climate in Disparities Research

Although sexual and gender minority health disparities persist, there is clear evidence that the social climate for sexual and gender minority individuals in Western contexts has drastically improved over the past decade (e.g., Brewer, 2014; Lax & Phillips, 2009). The effects of these social changes on health must be accounted for in disparities research given their impact on health may not be universally positive. First it remains to be seen whether these changes in public opinion translate to the level of diminished prejudice and discrimination at the interpersonal level. Just as racism has changed overtime from overt to implicit forms, stigma and prejudice against sexual and gender minority individuals may be changing form as well and thus new measures may be needed to assess such experiences (Hatzenbuehler et al., 2009; Krieger et al., 2010). Take also, for example, findings that young sexual and gender minority individuals are coming of age in a time when sexual orientation and sexual minority statuses are

potentially not as defining of differentness in lived experience in the ways they have been for previous generations (e.g., Cohler & Hammack, 2007; Ghaziani, 2011; Savin-Williams, 2005). Additionally, sexual and gender minority seniors are more "out" about their sexual orientation and gender identities within the health care system and assisted living contexts, while previous generations have not been as visible (e.g., Hillman & Hinrichsen, 2014). These two examples, drawing on the unique experiences of different age cohorts, highlight the potential importance of utilizing a life course developmental framework in studying sexual and gender minority health (Institute of Medicine, 2011).

Summary and Conclusions

The growing body of research documenting the multitude of outcomes in which disparities exist between sexual and gender minority populations and their heterosexual and cisgender peers has proven useful within the basic and applied sciences as well as within social and policy change efforts. The development and employment of the minority stress framework has resulted in the specification of social stress mechanisms that potentially explain health disparities and can therefore be targeted by emerging interventions. Despite these advancements, there is a great deal left to do in order to achieve the aims of sufficiently documenting, understanding, and addressing health disparities based on sexual orientation and gender identity. By expanding research designs to account for the broader array of explanatory factors specified of the minority stress model, broadening the outcomes and domains of health measured, and paying more attention to variability within both population subgroups and daily lived experience, social scientific research employing a health disparities frame can give rise to advancements that further benefit sexual and gender minority individuals' lives.

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