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SPECIAL SECTION: BISEXUAL HEALTH

Introduction to the Special Section on Bisexual Health: Can You See Us Now?

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Abstract
Despite comprising the largest proportion of the "lesbian, gay, and bisexual" population, research focusing on the unique health concerns and needs of bisexual individuals is relatively scarce. While health disparities are increasingly well documented among lesbian, gay, bisexual, and transgender individuals relative to their heterosexual and cisgender counterparts, gaps remain in our basic understanding of how health status, behaviors, and outcomes vary within these groups, especially bisexual individuals. The lack of specified research on bisexual health is even more curious given that, when separated from both heterosexual and gay/lesbian individuals, bisexual individuals consistently report higher rates of a wide range of negative health outcomes, including mood and anxiety disorders, substance use, suicidality, as well as disparities related to healthcare access and utilization. Indeed, in scientific research, mass media, and in public health interventions, bisexual individuals remain relatively invisible. This Special Section represents an effort to shed light on a new generation of quantitative, qualitative, and mixed methods research studies that examine health-related concerns, outcomes, and intervention opportunities specifically among diverse samples of bisexual individuals from a variety of social and cultural contexts. The research herein focuses on intersections of multiple identities, the development of new measures, the use of large national data sets, and diverse groups of self-identified bisexual men (who tend to be least visible in health research). Findings from these studies will significantly advance our knowledge of factors associated with health disparities, as well as health and well-being more generally, among bisexual individuals and will help to inform directions for future health promotion research and intervention efforts.

Keywords Bisexuality · Bisexual health · Sexual orientation · Sexual identity · LGBT · Sexual and gender minority (SGM)

Introduction

Preface

Can You See Us Now?

Eight years ago, the Institute of Medicine (IOM) published a landmark report "to evaluate current knowledge of the health status of lesbian, gay, bisexual, and transgender (LGBT) populations; to identify research gaps and opportunities; and to outline a research agenda to help the National Institutes of Health (NIH) focus its research in this area" (Institute of Medicine, 2011).

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This publication had far-reaching impact, including the National Institute on Minority Health and Health Disparities (NIMHD) classifying sexual and gender minority (SGM) individuals as a health disparity population. According to the NIH, "(s)exual and gender minority" is an umbrella term that encompasses lesbian, gay, bisexual, and transgender populations as well as those whose sexual orientation, gender identity and expressions, or reproductive development varies from traditional, societal, cultural, or physiological norms (Alexander, Parker, & Schwetz, 2016). The IOM report also acknowledged, "(w)hile LGBT populations often are combined as a single entity for research and advocacy purposes, each is a distinct population group with its own specific health needs."

Despite this substantial progress, there is one domain that has changed little in the ensuing years—that is the lack of attention to and acknowledgement of bisexual persons as a distinct group under the "LGBT" umbrella. Many scientific journal special issues and reports that supposedly focus on "LGBT health" lack a single piece about bisexual-identified populations

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specifically. With the exception of sexual risk behaviors, bisexual men and women are often relegated to the background or treated as an afterthought in most current scientific and advocacy discussions of "LGBT health."

What makes this especially concerning is the mounting body of evidence that points to pronounced physical, mental, and other health disparities among bisexual groups, above and beyond those experienced by lesbian and gay groups (Bostwick, Boyd, Hughes, & McCabe, 2010; Conron, Mimiaga, & Landers, 2010; Dodge et al., 2016; Feinstein & Dyar, 2017; Helms & Waters, 2016; Herek, 2002; Roberts, Horne, & Hoyt, 2015). Despite this pattern of uniformly poor health outcomes among bisexual populations, research on sexual minority groups often forgoes meaningful distinctions between the health and life experiences of bisexual and gay/lesbian groups. This is especially true for bisexual-identified men, who, outside of the realm of HIV/AIDS, have received little to no study and are often treated as merely an extension of gay men e.g., "gay/bisexual men" (Sandfort & Dodge, 2008). Consequently, we have yet to identify those factors that account for health disparities among bisexual individuals specifically.

Although the 2011 IOM report on LGBT health emphasized the pressing need for more health research on bisexual persons, the field of bisexual health research has remained (perhaps not surprisingly) relatively invisible. While social and behavioral health research has flourished on numerous other sexual minority topics—including "gay marriage," "gay-identity development," and increasingly positive societal attitudes toward "homosexuality" (or "gays and lesbians"), research remains relatively limited on the health and lives of bisexual people, especially at the intersections of diverse racial/ethnic, socioeconomic, gender minority, and other cultural factors (Dodge et al., 2016).

With all this in mind, the question emerges—when is our moment of recognition, of intervention, perhaps even of celebration? When will bisexual people and populations be *seen*, and be seen as something other than a "new trend" or "lying" (Carey, 2005)? It was not in the 1970s, with an infamous *New York Times* article in which bisexuality was trivialized as a new and glamorous trend among Studio 54 supermodels and David Bowie (may his bisexual soul rest in peace) ("Bisexual Chic: Anyone Goes," 1974). It was not in the 1980s, at the dawn of the HIV epidemic, when the Centers for Disease Control and Prevention portrayed this so-called "bridge population" as spreading HIV from "closeted" bisexual men to their presumably monogamous, heterosexual female partners (Doll, Myers, Kennedy, & Allman, 1997; McKirnan, Stokes, Doll, & Burzette, 1995). It was not in the 1990s, in which yet another mass media cover story, this time in *Newsweek*, claimed the "discovery" of this new thing called "bisexuality" (Leland, 1995). Nor was it on the popular television sitcom *Friends* (which incidentally included an ongoing bisexual subtext in the plot) when the character Phoebe Buffay performed a guitar sing-along to a group of children with the lyrics, "sometimes men love women, sometimes men love men, and then there are bisexuals, though some just say they're kidding themselves" (Lembeck, 1996). And it was certainly not in the 2000s when sensationalizing, even demonizing, portrayals of Black behaviorally bisexual men "on the Down Low (DL)" exploded on the Oprah Winfrey Show (King, 2004), and subsequently in botched public health efforts (Malebranche, 2008). Characterizations of Black men "on the DL" presented them as predatory vectors of disease transmission whose lack of disclosure of same-sex behavior was due to deception and "internalized homophobia," rather than taking into account the real-life contexts and consequences of such disclosure in this previously ignored population (Dodge, Jeffries, & Sandfort, 2008). Indeed, this hysteria led to a cottage industry of self-help books and resources meant to educate women on "how to know if your partner is on the DL," and how to strategically evacuate such relationships (Browder & Hunter, 2005).

Bisexuality Is Not New

Is our moment now? Can you see us now? If not, why not? Bisexuality is certainly not new. Although the existence of bisexuality has been well documented across cultures since antiquity (Cantarella, 1992), scientific and media endeavors aimed at "proving the existence of bisexuality" have cyclically repeated themselves over recent decades (Carey, 2005; Denizet-Lewis, 2014). Research on the existence of bisexual behavior and identity is not uncharted territory. Alfred Kinsey's pioneering sexuality research at Indiana University showed that, in addition to exclusively heterosexual and exclusively homosexual individuals, substantial numbers of men and women in the U.S. reported sexual attractions and involvement with individuals of more than one gender (Kinsey, Pomeroy, & Martin, 1948; Kinsey, Pomeroy, Martin, & Gebhard, 1953). While the term "bisexual" itself has only come into common usage as a sexual orientation and identity label in the early- to mid-twentieth century (Angelides, 2001), the existence of individuals who are attracted to, engage in sexual behavior with, and love other individuals regardless of gender has likely been with us since the dawn of time.

And, yes, fluidity in attractions and desires has spilled over into fluidity of diverse labels and definitions. Thus, you will find terms including bisexual, bisexual+, bi+, queer, non-monosexual, pansexual, "mostly gay," and "mostly straight" in contemporary popular culture and research, including some of the work presented in this Special Section. Again, these varied experiences and expressions of fluid sexual identities are not new. We see this from the time of Catullus, who claimed no sexual identity label yet wrote erotic and love poems to men and women, both as himself and under his female pseudonym "Lesbia," in the early A.D. years (Cantarella, 1992) to more recently in 2018 when musician Janelle Monáe proudly

declared, "I'm a free-ass motherfucker" (Ongley, 2018). Even though decades (if not centuries) of cross-cultural documentation in art, artifacts, history, literature, and more recently, scientific research clearly demonstrates wide variability in sexual behaviors, attractions, and identities, the intelligibility of bisexuality specifically is continuously contested. This is ironic given the substantial amount of recent research that demonstrates sexual fluidity (including in relation to identity) is common, particularly with work focused on women (Diamond, 2000, 2008; Diamond, Dickenson, & Blair, 2017) and more recently on men (McCormack & Savin-Williams, 2018; Savin-Williams, 2017; Vrangalova & Savin-Williams, 2012). Additionally, recent psychophysiological research has examined issues such as relationships of sexual identity and category-specific sexual response (or not) to sexual stimuli with connotations for bisexual women (Chivers, 2017), as well as bisexual men (Rieger et al., 2013; Rosenthal, Sylva, Safron, & Bailey, 2012). While this body of work has not yet explicitly linked psychophysiological findings with potential health outcomes, future cross-disciplinary research could certainly yield interesting findings regarding physical, mental, and other health implications for diverse groups of bisexual individuals.

Bisexuality Is Not Rare

In addition to not being "new," bisexuality is not at all rare. Indeed, in numerous samples (including population-based samples), bisexual individuals outnumber exclusively homosexual individuals. Interpretation of data on the general prevalence of bisexuality requires a nuanced approach. Regarding *behavioral bisexuality*, several large empirical studies from the U.S. show that differences exist across studies in terms of the period of measurement of sexual behavior. One nationally representative study in the mid-1990s showed that behavioral bisexuality was roughly between 0.7 and 5.8% (respectively, in the previous year and since puberty) in the general population of the U.S. (Laumann, Gagnon, Michael, & Michaels, 1994). In terms of *self-identified bisexuality*, using the National Survey of Sexual Health and Behavior, Herbenick et al. (2010) found that bisexual identity among men was between 1.5% among adolescents, ages 14–17 years, and 2.6% among adults; among women, rates of bisexual identity ranged between 3.6% among adults and 8.4% among adolescents, compared to women who identify as lesbian at 0.2% among adult women and 0.9% among adolescents.

Bisexuality Is Not Monolithic

As noted, population-based studies have demonstrated that bisexual behavior and identities are just as, if not more, common than exclusively homosexual behavior or lesbian/gay identities. What is also often lost, or invisible, is the demographic diversity that exists under the bisexual umbrella. For instance, reported rates of behavioral and self-identified bisexuality are often higher among African-American and Latinx individuals than among White individuals (Gates, 2010; Ghabrial & Ross, 2018; Herek, Norton, Allen, & Sims, 2010), with bisexuality often reported most frequently among multiracial persons as well (Herek et al., 2010). Bisexual persons live in small cities and large, in regions throughout the U.S., and are significantly more likely than gay/lesbian counterparts to be parents (Bartelt, Bowling, Dodge, & Bostwick, 2017; Herek et al., 2010). Finally, studies among transgender populations (perhaps our closest allies in the struggle for visibility and validation within the "LGBT" community) consistently show large percentages of participants who identify as bisexual or another non-monosexual identity. In a study by the National Center for Transgender Equality, 14% of participants identified as bisexual, 18% as pansexual, and 21% as queer (James et al., 2016). In one of the first studies ever to use data from a probability sample of transgender persons, Meyer, Brown, Herman, Reisner, and Bockting (2017) found that transgender groups were over 5.5 times more likely to identify as bisexual than cisgender counterparts.

In short, as noted in Paula Rodriguez-Rust's epic social science reader nearly two decades ago, scientific and scholarly literature has been quietly and steadily amassing "proof" of the existence of bisexuality for well over a century (Rust, 2000). Despite research (including in the general population of the U.S.) which clearly demonstrates wide variability and fluidity in sexual behaviors, desires, attractions, and identities (Fu et al., 2018), the stability and comprehensibility of bisexuality, and bisexual identity, are continuously called into question. Despite evidence demonstrating that bisexual-identified people actually make up the majority of the "LGBT" community (Brown, 2017; Movement Advancement Project, 2016), and despite racial/ethnic, gender and geographic diversity, the reality of bisexual people's existence has shifted in and out of focus every decade for at least the last 40 years or more.

To See and Be Seen: Our Time is Now

This Special Section aims to make visible the unique health needs and experiences of diverse bisexual people, as well as to highlight the next generation of research on bisexual health. The work presented herein starts to correct for the persistent disregard for, invisibilizing and/or pathologizing of bisexual persons across a host of disciplines and literatures (e.g., LGBT health, queer theory, and epidemiology) and seeks to establish and further our understanding of the status of bisexual persons' physical, mental, and overall health.

Discussion

Content of Our Special Section

Dedication to Dr. Judith Bradford

Sadly, Dr. Judith (Judy) Bradford, Co-Director of The Fenway Institute, passed away on February 11, 2017. As you will read in the In Memoriam tributes from Drs. Kenneth Mayer and Tonda Hughes, Judy was a pioneer in LGBT health research in the U.S., expanding the lens beyond HIV and sexual risk. She was the first research scientist to head an NIH-funded population studies center focused on LGBT health, including a T32 predoctoral training program that facilitated a new generation of LGBT health researchers. As a member of the Council of the NIMHD, she was a key leader in guiding NIH policy on sexual and gender minority health. Judy was a tireless scientist, mentor, advocate, and friend whose wisdom is greatly missed.

One of Judy's last endeavors before her passing was to bring bisexual health research specifically to the fore. Along with Dr. Bostwick and Ellyn Ruthstrom from the Boston-based Bisexual Resource Center, Judy helped to organize an international bisexual health research roundtable. In summer 2014, with support from The Fenway Institute, we brought in approximately 20 participants from a wide range of academic, practice, and community affiliations to discuss future research focused specifically on the health needs and concerns of bisexual individuals. An outgrowth of this meeting was the formation of the Bisexual Research Collaborative on Health (or BiRCH). Thanks to a core infrastructure grant from the Indiana University School of Public Health-Bloomington provided to Dr. Dodge, we were able to accomplish important foundational work related to creating the tentative mission, vision and goals for BiRCH. Yet just as we had completed the years-long work of solidifying our structure, we experienced Judy's untimely loss.

The mission of BiRCH has been to facilitate and promote community-informed research across multiple disciplines on the health needs of bisexual individuals and related communities. We have sought to encourage research and inspire increased awareness in improving bisexual health needs through the combination of academic study, an intersectional lens, and community-based advocacy. While loosely structured from the start and on relative hiatus following Judy's death, BiRCH has provided numerous opportunities for connections and collaborations that have led to many of the papers you will find within this Special Section, including our own. Without Judy, we may not have met—or we most certainly would have met under different circumstances, which likely would not have yielded the wonderful collaboration we share today. It is for this reason that we dedicate this Special Section to the memory of Dr. Judith Bradford. The areas of focus around which our call for papers was structured represent some of the issues that Judy was most passionate about throughout her career, including population-based research, transgender health, working with older adult and aging populations, and work that was attendant to racial and ethnic diversity within LGBT communities, including bisexual communities.

Focus on Intersections

To the extent that we have developed a literature around bisexual health beyond just sexual risk behaviors, the work amassed to date, whether using probability or convenience sampling, has often been racially homogenous (Ghabrial & Ross, 2018). Additionally, transgender and gender non-conforming identities and communities are still relatively unacknowledged or accounted for in research to date. Thus, we are pleased to feature a number of papers that sought to address the complexity of intersecting minority and other identities, along axes of sexual identity, racial/ethnic identity, gender identity, and parenthood identity.

Bostwick and colleagues explored how intersecting sexual identity and racial/ethnic identities may influence associations between victimization and depression. Using data from a community-based sample, they compared Black, Latina, and White bisexual and lesbian women and found notable differences. Black bisexual and lesbian women were significantly less likely to meet criteria for lifetime depression, despite reporting the highest levels of lifetime victimization, whereas Latina groups did not differ from White counterparts.

Doan Van and colleagues captured self-reported discrimination experiences among bisexual adults, how such experiences subjectively affected their participants' health and well-being, and strategies for coping with discrimination. Their sample included transgender and non-binary persons (13% of total sample). Doan Van et al. found that for many participants, discriminatory experiences occurred at the intersection of multiple identities, that depression and anxiety were frequently noted as consequences of discrimination, and that social support was invaluable when coping with discrimination.

A brief report from Rahman, Li, and Moskowitz provides much-needed information related to the sexual health and knowledge of transgender bisexual + persons and cisgender bisexual + women, including attitudes toward sexual health, and access to and utilization of care. Similar to a handful of other studies, transgender bisexual + groups reported less engagement with health care providers, lower rates of being insured and less comfort with healthcare providers.

Bowling and colleagues explore an interesting and rarely considered sub-population in research on the intersection of multiple identities, specifically being bisexual as well as being a parent. As with bisexual individuals, in general, bisexual parents have been notably absent from prior research on parenting,

despite comprising the largest proportion of parents among "lesbian, gay, and bisexual" individuals. In an exploratory qualitative study of bisexual parents from across the U.S., they found a diversity in the intentions and ways bisexual individuals become parents, similar to parents of other sexual identities, as well as some unique experiences related to the intersection of both bisexual and parenting identities.

Lastly, in his practical commentary, Muñoz-Laboy provides an opportunity for critical reflection for researchers whose work focuses on bisexuality, also relevant to other sexuality researchers, on how to take into consideration (or not) racism and ethnic oppression when dealing with ethnically or racially diverse bisexual samples. His paper calls for more intentional thought and dialogue among researchers collecting data in multiracial, multi-ethnic groups in order to identify gaps, areas of further research, and interventions to enhance the science on bisexuality at the intersection between racial–ethnic identities.

Taken together, these papers demonstrate the diversity and complexity of bisexual communities and identities. Many also highlight the ways in which intersecting minority and other identities can contribute to differential health outcomes *within* bisexual populations. While these studies tended to focus on outcomes and experiences that were generally negative, there is a great need to also consider the manner in which bisexual and other co-occurring identities might operate to provide protective factors and positive life experiences. For example, Flanders and colleagues (featured in this Special Section) provide a new measure that includes *microaffirmations* in order to offer a more holistic picture of bisexual-specific experiences, which in turn may positively influence and affect health.

Focus on New Measures and Approaches

Papers by both Flanders and colleagues, and Beach and colleagues provide information on new measures designed to capture the unique experiences of bisexual people. Extending previous work related to bisexual microaggressions (Bostwick & Hequembourg, 2014), Flanders and colleagues give us an innovative measure that captures both microaggressions and microaffirmations among bisexual women. The *Bisexual Microaggression and Microaffirmation Scales for Women* (BMMS-W) moves us beyond solely capturing negative or dis-affirming experiences and has the potential to offer a more complete picture of bisexual women's identity-related experiences. Similarly, Beach and colleagues provide an overview of a new measure, the BIAS-b, the Bisexualities: Indiana Attitudes Scale–bisexual, which is one component of the BIAS (Dodge et al., 2016; Friedman et al., 2014). The BIAS-b is distinctive in that it assesses bisexual people's own perceptions of others' attitudes toward them, rather than capturing specific experiences e.g., "Someone said I should pick a side." One's own sense of how others view them, or meta-perceptions, has been linked to mental health, particularly as it relates to negative meta-perceptions (Moritz & Roberts, 2018); however, this has yet to be explored among sexual minority groups or bisexual individuals specifically. In a nationally representative probability sample, Beach and colleagues found that bisexual individuals' meta-perceptions aligned with themes of confusion, incapability of monogamy, promiscuity, and instability ("just a phase"). Additionally, however, some participants reported others' positive perceptions of them as bisexual individuals, highlighting the importance of further work on affirming identity experiences.

Dyar and colleagues provide their useful psychometric study of a shortened version of the Anti-Bisexual Experiences Scale (ABES) (Brewster & Moradi, 2010). The ABES was one of the first validated measures to specifically assess bisexual persons' identity experiences. They enhance the usability of the measure by shortening it by half, while retaining its underlying structure. In addition to demonstrating the validity of the "brief" version, Dyar and colleagues also test the measures' applicability across genders and non-monosexual identities and confirm the utility of the ABES among a diversity of groups.

Choi and colleagues present a novel new approach to understanding bisexual individuals' experiences and expressions of their bisexual identity, and how varying degrees of commitment to and expression of a bisexual identity may, in turn, influence associations with health and well-being. Using latent class analysis, Choi et al. point to three distinct categories that inform a bisexual identity typology: Ambivalent, Vigilant, and Affirmative. These categories are differentially associated with anxiety, depression, and self-esteem, and membership is further distinguished by both gender and race/ethnicity, wherein men and people of color are less likely to belong to the Affirmative profile.

Visibility, or lack thereof, among bisexual people continues to be a significant problem and source of concern. In a preliminary investigation, Davila and colleagues sought to record if and how bisexual + people engage in techniques and actions to make their bisexual + identity visible to others. Relying on both a quantitative measure, as well as text box data, they found that a little more than half of participants reported engaging in deliberate attempts to make their bisexual or non-monosexual identities visible.

These works present new ways to measure and assess the unique experiences of bisexual populations, while considering interactions and experiences that are *both* positive and negative for bisexual people in their day-to-day lives. Further, Choi's innovative work creating a typology within bisexual groups not only broadens our understanding of diverse expressions of bisexuality, but also provides food for thought related to sexual identities writ large, and how we might advance our thinking as it pertains to aspects and dimensions of sexual orientation and their relative associations with health behaviors and outcomes.

Focus on the Use of Population Level Data

The incorporation of sexual orientation measures into large, national probability samples continues to yield important insights about the relationship between sexual orientation and health at the population level. When researchers examine bisexual groups separately from lesbian and gay groups, we continue to see different patterns of risk and protective factors within sexual minority groups. We see this in papers by Dyar and colleagues and also Wardecker and colleagues. Dyar and colleagues extend our understanding of health and sexual orientation by focusing on physical health outcomes; additionally, they consider how race and dimensions of sexual orientation operate in tandem to influence health. The Wardecker paper uses longitudinal data to assess life satisfaction over time. The general trend was an increase in life satisfaction as people aged. Yet, when sexual orientation was taken into account, bisexual persons did not demonstrate an increase in life satisfaction over time, and generally reported lower life satisfaction than heterosexual individuals. Gay and lesbian groups did not differ from heterosexual groups.

In their exhaustive meta-analysis related to suicidality among bisexual persons, Salway and colleagues considered a number of study-level variables when calculating pooled estimates and overall odds ratios for suicidal ideation and attempt. Among a number of compelling findings, they found that significant differences between bisexual and lesbian/gay groups, i.e., higher risk of suicidality among bisexual groups, were only present in general population probability samples. This is yet another finding that demonstrates how critical it is to include sexual orientation questions in probability studies, and further, how sexual minority populations should be disaggregated in analyses whenever possible, such that within group differences can be identified.

These three papers expertly highlight how measurement of sexual orientation dimensions in large-scale population-based studies allows for bisexual people, and our health concerns, to be *seen* and better understood. These papers in particular work together to offer a more complex picture of the context in which bisexual health disparities likely implicate and inform one another. Suicidality, physical health conditions and disorders, and decreased life satisfaction over the life course may operate synergistically to create the broad-scale disparities that we see. Future work must also more closely consider the role of socioeconomic disparities as drivers of health inequities, as certainly lower socioeconomic status is associated with poorer mental and physical health, as well as lower life satisfaction.

Focus on Diverse Groups of Self-Identified Bisexual Men

Much of the previous literature focusing specifically on bisexual men has considered sexual behavior (and most often sexual risk behavior) as the key operationalization of bisexuality. This has contributed to an acute absence of information about the health of bisexual-identified men, as well as an all-too-common misconception that bisexual-identified men do not exist. Thus, issues raised nearly 20 years ago about the invisibility of bisexual men persist (Steinman, 2000). We are pleased to note that a number of papers in the Special Section are devoted to bisexual-identified men specifically.

Friedman and colleagues report on their study of Black bisexual men and disentangle whether it is bisexual identity or bisexual behavior that drives associations with health-risk factors. They ultimately determine that it is both, finding that both bisexual- and gay-identity men who have sex with women and men have significantly worse health outcomes than gay-identified men who only have sex with men.

However, they also identified important mediators of this relationship, specifically, lack of community support and sexuality non-disclosure. Friedman et al. rightly note the conundrum many bisexual men face as their choice to not disclose their sexual identity may serve to protect them from overt stigma and discrimination, yet such decisions also simultaneously limit access to social and community support from the "gay" community.

Another study of Black bisexual men, in Atlanta, by Watson and colleagues further extends this work by demonstrating that sexual orientation disclosure was associated with lower probabilities of an STI diagnosis, whereas internalized heterosexism was associated with higher odds of a positive STI diagnosis. Additionally, Ryan and colleagues considered how religiosity might function as a protective factor among their sample, with results demonstrating lower odds of STIs, including HIV. This is similar to findings on prior studies of spirituality and religiosity among Black bisexual men (Jeffries, Dodge, & Sandfort, 2008).

Feinstein and colleagues provide an overview of sexual risk and substance use behaviors among young bisexual men as compared to gay men, including analyses of how these behaviors might differ among bisexual men based on the gender of their partner. It appears that young bisexual men are less likely to use condoms with female partners, and more likely to use marijuana and alcohol with them as well. Bisexual men were also less likely than gay men to have been tested for HIV. The picture painted here demonstrates the need for more targeted interventions focused on bisexual boys and men, likely beyond the prototypical "MSM"-focused programs and interventions.

Finally, Banik and colleagues conducted a qualitative study of bisexual-identified adult men recruited from the metropolitan area of Mumbai, India. This sample is also unique in that the participants were both engaged in recent bisexual behavior and also self-identified as bisexual (or "bisexually oriented"), to distinguish the bisexual-identified men from the widespread and diverse expressions of male bisexuality in the Indian context among those who may not self-identify as bisexual. Banik et al. note that understanding how Indian bisexual men

perceive themselves, reconcile the ordinary aspects of their lives with their sexuality, and structure their relationships with sexual partners of multiple genders are critical for informing future sexual health interventions.

While all of these papers considered bisexual-identified men in some fashion, they are all focused on sexual health, particularly sexual risk. This is a reflection of the reality that the majority of research (and funding for research) on bisexual men's health has focused on sexual risk and HIV, with the predominant emphasis on those men who are behaviorally bisexual, irrespective of their self-defined sexual identity. Unfortunately, bisexual men and their health remain intelligible almost exclusively through a lens of sexual risk behavior (Dodge et al., 2012), epidemiologically fathomable solely via their supposed category of risk, i.e., as "men who have sex with men" (Dworkin, 2005)—a label which itself further reinforces bisexual invisibility, along behavioral axes, and also ignores sexual behavior with female and other-gendered partners (Young & Meyer, 2005). Bisexual men almost certainly have health needs and concerns beyond sexual health. Ideally, future work will not only continue to include men who identify as bisexual, as some of the studies seen here, but will also incorporate broader and more holistic measures of health.

Encouragingly, we are now beginning to attain resources (including a recent NIMHD-funded study, *Health Effects of Identity-Based Stressors among Men*, R21 MD012319, MPI: Bostwick/Dodge) to explore more comprehensive health concerns among bisexual men, including mental health and well-being. We hope to have the ability to expand this work in the future.

Further Considerations

We acknowledge that this Special Section is not, of course, comprehensive, and that there are areas of focus still in need of more inquiry and emphasis in future work. For instance, we lack an understanding of bisexual identities and persons later in life (though this is true of sexual and gender minority groups, in general). Wardecker and colleagues' work herein is an excellent start, but we encourage more work that considers the role of aging in the health and well-being of bisexual people. As it pertains to the life course, we also are in need of work that accounts for, and helps us to better understand, the very high rates of adverse childhood events, trauma, intimate partner violence, and victimization within bisexual populations (Walters, Chen, & Breiding, 2013; Zou & Andersen, 2015). The health effects of traumatic experiences are clear, yet the pressing question that presents itself is *why* bisexual groups specifically should be at elevated risk for victimization, particularly in childhood.

Though work presented in this Special Section demonstrates heterogeneity along axes of race, ethnicity, gender identity, age, and parenthood status, there is still much more to learn vis-à-vis those intersecting minority identities, and the unique *benefits* that may accrue from multiple positions of (supposed) marginalization. We encourage research that either deliberately oversamples persons of color and/or that focuses exclusively on racially minoritized persons e.g., entirely Latinx samples, or Native American samples, so that we have a richer understanding of people's multiple, co-occurring identities and how they operate to provide unique risk *and* protective factors.

Finally, given Dr. Bradford's deep commitment to community-based and engaged research, we had hoped to include commentaries that explicitly spoke to the relationships between community-based organizations and bisexual health research/ers, ideally from those affiliated with or working in such organizations. While we received no such submissions, we acknowledge that the work of bisexual-specific organizations such as the American Institute of Bisexuality, the Bisexual Resource Center, Bisexual Queer Alliance Chicago, and BiNet USA, among others, have been instrumental in advocating for, supporting, promoting, and publicizing bisexual health research. Given that the work of these organizations is largely unfunded (Kan, Maulbeck, & Wallace, 2018), with staff working part-time or as volunteers, we recognize many people are likely busy *doing* the work, with little to no time to offer up reflections. Improving health among bisexual individuals and communities requires dedicated time, resources, and funding that will enable the involvement of community-based organizations and practitioners in ongoing academic and research conversations.

Conclusion

This Special Section highlights the complex and compelling health issues experienced by bisexual people and communities, and makes evident (yet again) that bisexual groups exist across a diverse array of social and demographic categories. It is time to move beyond existential questions and to determine how and why bisexual populations consistently demonstrate disproportionate rates of negative health outcomes relative to their exclusively heterosexual and gay/lesbian counterparts. However, it is also time to explore the potential role of resiliency and other factors that may buffer against poor health outcomes among some bisexual individuals. Though the body of evidence related to health inequities among bisexual groups is undeniable, we caution any interpretation that would suggest that bisexuality, per se, always already confers disadvantage. Rather, we hope these findings spur additional thinking around the larger social, political, and cultural context, to say nothing of the academic and scholarly context, from which such inequities arise, and how they are—or are not—subsequently discussed, addressed, and *seen*.

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References

Alexander, R., Parker, K., & Schwetz, T. (2016). Sexual and gender minority health research at the National Institutes of Health. *LGBT Health, 3*(1), 7–10. https://doi.org/10.1089/lgbt.2015.0107.

Angelides, S. (2001). *A history of bisexuality*. Chicago, IL: University of Chicago Press.

Bartelt, E., Bowling, J., Dodge, B., & Bostwick, W. (2017). Bisexual identity in the context of parenthood: An exploratory qualitative study of self-identified bisexual parents in the United States. *Journal of Bisexuality, 17*(4), 378–399. https://doi.org/10.1080/15299716.2017.1384947.

Bisexual Chic: Anyone Goes. (1974). *New York Times* (p. 83).

Bostwick, W. B., Boyd, C. J., Hughes, T. L., & McCabe, S. E. (2010). Dimensions of sexual orientation and the prevalence of mood and anxiety disorders in the United States. *American Journal of Public Health, 100*(3), 468–475. https://doi.org/10.2105/ajph.2008.152942.

Bostwick, W., & Hequembourg, A. (2014). 'Just a little hint': Bisexual-specific microaggressions and their connection to epistemic injustices. *Culture, Health & Sexuaity, 16*(5), 488–503. https://doi.org/10.1080/13691058.2014.889754.

Brewster, M. E., & Moradi, B. (2010). Perceived experiences of anti-bisexual prejudice: Instrument development and evaluation. *Journal of Counseling Psychology, 57*(4), 451.

Browder, B. S., & Hunter, K. (2005). *On the up and up: A survival guide for women living with men on the down low*. New York, NY: Dafina Books.

Brown, A. (2017). *Five key findings about LGBT Americans*. Retrieved November 27, 2018 from http://www.pewresearch.org/fact-tank/2017/06/13/5-key-findings-about-lgbt-americans/.

Cantarella, E. (1992). *Bisexuality in the ancient world*. New Haven, CT: Yale University Press.

Carey, B. (2005). Straight, gay or lying: Bisexuality revisited. *New York Times* (p. 5). Retrieved November 16, 2018 from https://www.nytimes.com/2005/07/05/health/straight-gay-or-lying-bisexuality-revisited.html.

Chivers, M. L. (2017). The specificity of women's sexual response and its relationship with sexual orientations: A review and ten hypotheses. *Archives of Sexual Behavior, 46*(5), 1161–1179. https://doi.org/10.1007/s10508-016-0897-x.

Conron, K. J., Mimiaga, M. J., & Landers, S. J. (2010). A population-based study of sexual orientation identity and gender differences in adult health. *American Journal of Public Health, 100*(10), 1953–1960. https://doi.org/10.2105/ajph.2009.174169.

Denizet-Lewis, B. (2014). The scientific quest to prove that bisexuality exists. *New York Times Magazine*. Retrieved November 16, 2018 from https://www.nytimes.com/2014/03/23/magazine/the-scientific-quest-to-prove-bisexuality-exists.html.

Diamond, L. M. (2000). Sexual identity, attractions, and behavior among young sexual-minority women over a 2-year period. *Developmental Psychology, 36*(2), 241–250.

Diamond, L. M. (2008). Female bisexuality from adolescence to adulthood: Results from a 10-year longitudinal study. *Developmental Psychology, 44*(1), 5–14. https://doi.org/10.1037/0012-1649.44.1.5.

Diamond, L. M., Dickenson, J. A., & Blair, K. L. (2017). Stability of sexual attractions across different timescales: The roles of bisexuality and gender. *Archives of Sexual Behavior, 46*(1), 193–204. https://doi.org/10.1007/s10508-016-0860-x.

Dodge, B., Herbenick, D., Friedman, M. R., Schick, V., Fu, T. C. J., Bostwick, W., & Sandfort, T. G. (2016). Attitudes toward bisexual men and women among a nationally representative probability sample of adults in the United States. *PLoS ONE, 11*(10), e0164430. https://doi.org/10.1371/journal.pone.0164430.

Dodge, B., Jeffries, W. L., & Sandfort, T. G. M. (2008). Beyond the down low: Sexual risk, protection, and disclosure among at-risk Black men who have sex with both men and women (MSMW). *Archives of Sexual Behavior, 37*(5), 683–696. https://doi.org/10.1007/s10508-008-9356-7.

Dodge, B., Rosenberger, J. G., Schick, V., Reece, M., Herbenick, D., & Novak, D. S. (2012). Beyond "risk": Exploring sexuality among diverse typologies of bisexual men in the United States. *Journal of Bisexuality, 12*(1), 13–34. https://doi.org/10.1080/15299716.2012.645696.

Doll, L., Myers, T., Kennedy, M., & Allman, D. (1997). Bisexuality and HIV risk: Experiences in Canada and the United States. *Annual Review of Sex Research, 8,* 102–147.

Dworkin, S. L. (2005). Who is epidemiologically fathomable in the HIV/AIDS epidemic? Gender, sexuality, and intersectionality in public health. *Culture, Health & Sexuality, 7*(6), 615–623. https://doi.org/10.1080/13691050500100385.

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.

Friedman, M. R., Dodge, B., Schick, V., Herbenick, D., Hubach, R., Bowling, J., & Reece, M. (2014). From bias to bisexual health disparities: Attitudes toward bisexual men and women in the United States. *LGBT Health, 1*(4), 309–318. https://doi.org/10.1089/lgbt.2014.0005.

Fu, T. C. J., Herbenick, D., Dodge, B., Owens, C. R., Sanders, S. A., Reece, M., & Fortenberry, J. D. (2018). Relationships among sexual identity, sexual attraction, and sexual behavior: Results from a nationally representative probability sample of adults in the United States. *Archives of Sexual Behavior*. https://doi.org/10.1007/s10508-018-1319-z.

Gates, G. (2010). *Sexual minorities in the 2008 General Social Survey: Coming out and demographic characteristics*. Retrieved November 16, 2018 from https://williamsinstitute.law.ucla.edu/wp-content/uploads/Gates-Sexual-Minorities-2008-GSS-Oct-2010.pdf.

Ghabrial, M. A., & Ross, L. E. (2018). Representation and erasure of bisexual people of color: A content analysis of quantitative bisexual mental health research. *Psychology of Sexual Orientation and Gender Diversity, 5*(2), 132–142. https://doi.org/10.1037/sgd0000286.

Helms, J. L., & Waters, A. M. (2016). Attitudes toward bisexual men and women. *Journal of Bisexuality, 16*(4), 454–467. https://doi.org/10.1080/15299716.2016.1242104.

Herbenick, D., Reece, M., Schick, V., Sanders, S. A., Dodge, B., & Fortenberry, J. D. (2010). Sexual behavior in the United States: Results from a national probability sample of men and women ages 14–94. *Journal of Sexual Medicine, 7*(Suppl. 5), 255–265. https://doi.org/10.1111/j.1743-6109.2010.02012.x.

Herek, G. M. (2002). Heterosexuals attitudes toward bisexual men and women in the United States. *Journal of Sex Research, 39*(4), 264–274. https://doi.org/10.1080/00224490209552150.

Herek, G. M., Norton, A. T., Allen, T. J., & Sims, C. L. (2010). Demographic, psychological, and social characteristics of self-identified lesbian, gay, and bisexual adults in a US probability sample. *Sexuality Research & Social Policy, 7*(3), 176–200. https://doi.org/10.1007/s13178-010-0017-y.

Institute of Medicine. (2011). *The health of lesbian, gay, bisexual, and transgender people: Building a foundation for better understanding*. Washington, DC: The National Academies Press.

James, S. E., Herman, J. L., Rankin, S., Keisling, M., Mottet, L., & Anafi, M. (2016). *The report of the 2015 U.S. Transgender Survey*. Retrieved November 19, 2018 from https://www.transequality.org/sites/default/files/docs/USTS-Full-Report-FINAL.PDF.

Jeffries, W. L., Dodge, B., & Sandfort, T. G. (2008). Religion and spirituality among bisexual Black men in the USA. *Culture, Health & Sexuality, 10*(5), 463–477. https://doi.org/10.1080/13691050701877526.

Kan, L. M., Maulbeck, B. F., & Wallace, A. (2018). *2016 tracking report: Lesbian, gay, bisexual, transgender and queer grantmaking by US foundations.* Retrieved November 26, 2018 from https://www.lgbtfunders.org/wp-content/uploads/2018/04/2016_Tracking_Report.pdf.

King, J. L. (2004). *On the down low: A journey into the lives of "straight" Black men who sleep with men*. New York: Broadway Books.

Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). *Sexual behavior in the human male*. Philadelphia: W. B. Saunders Co.

Kinsey, A. C., Pomeroy, W. B., Martin, C. E., & Gebhard, P. H. (1953). *Sexual behavior in the human female*. Philadelphia: W. B. Saunders Co.

Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *The social organization of sexuality: Sexual practices in the United States*. Chicago: University of Chicago press.

Leland, J. (1995). Bisexuality–not gay, not straight: A new sexuality emerges. *Newsweek*, *126*(3), 44–50.

Lembeck, M. (Writer). (1996). Phoebe buffay-bisexuals. In *Friends*. https://www.youtube.com/watch?v=wu0fxuaa4-A.

Malebranche, D. J. (2008). Bisexually active Black men in the United States and HIV: Acknowledging more than the "down low". *Archives of Sexual Behavior, 37*(5), 810–816. https://doi.org/10.1007/s10508-008-9364-7.

McCormack, M., & Savin-Williams, R. (2018). Young men's rationales for non-exclusive gay sexualities. *Culture, Health & Sexuality, 20*(8), 929–944. https://doi.org/10.1080/13691058.2017.1398349.

McKirnan, D. J., Stokes, J. P., Doll, L., & Burzette, R. G. (1995). Bisexually active men: Social characteristics and sexual behavior. *Journal of Sex Research, 32*(1), 65–76.

Meyer, I. H., Brown, T. N., Herman, J. L., Reisner, S. L., & Bockting, W. O. (2017). Demographic characteristics and health status of transgender adults in select US regions: Behavioral Risk Factor Surveillance System, 2014. *American Journal of Public Health, 107*(4), 582–589. https://doi.org/10.2105/ajph.2016.303648.

Moritz, D., & Roberts, J. E. (2018). Self-other agreement and meta-perception accuracy across the Big Five: Examining the roles of depression and self-esteem. *Journal of Personality, 86*(2), 296–307. https://doi.org/10.1111/jopy.12313.

Movement Advancement Project. (2016). *Invisible majority: The disparities facing bisexual people and how to remedy them*. Retrieved November 27, 2018 from http://www.lgbtmap.org/policy-and-issue-analysis/invisible-majority.

Ongley, H. (2018). Janelle Monáe identifies as a pansexual 'free-ass motherfucker'. Retrieved November 16, 2018 from https://i-d.vice.com/en_us/article/evq3ne/janelle-monae-pansexual.

Rieger, G., Rosenthal, A. M., Cash, B. M., Linsenmeier, J. A., Bailey, J. M., & Savin-Williams, R. C. (2013). Male bisexual arousal: A matter of curiosity? *Biological Psychology, 94*(3), 479–489. https://doi.org/10.1016/j.biopsycho.2013.09.007.

Roberts, T. S., Horne, S. G., & Hoyt, W. T. (2015). Between a gay and a straight place: Bisexual individuals' experiences with monosexism. *Journal of Bisexuality, 15*(4), 554–569. https://doi.org/10.1080/15299716.2015.1111183.

Rosenthal, A. M., Sylva, D., Safron, A., & Bailey, J. M. (2012). The male bisexuality debate revisited: Some bisexual men have bisexual arousal patterns. *Archives of Sexual Behavior, 41*(1), 135–147. https://doi.org/10.1007/s10508-011-9881-7.

Rust, P. C. (2000). *Bisexuality in the United States: A social science reader*. New York: Columbia University Press.

Sandfort, T. G., & Dodge, B. (2008). "And then there was the down low": Introduction to Black and Latino male bisexualities. *Archives of Sexual Behavior, 37*(5), 675–682. https://doi.org/10.1007/s10508-008-9359-4.

Savin-Williams, R. (2017). *Mostly straight: Sexual fluidity among men*. Cambridge, MA: Harvard University Press.

Steinman, E. (2000). Interpreting the invisibility of male bisexuality. *Journal of Bisexuality, 1*(2–3), 15–45. https://doi.org/10.1300/J159v01n02_02.

Vrangalova, Z., & Savin-Williams, R. C. (2012). Mostly heterosexual and mostly gay/lesbian: Evidence for new sexual orientation identities. *Archives of Sexual Behaviors, 41*(1), 85–101. https://doi.org/10.1007/s10508-012-9921-y.

Walters, M. L., Chen, J., & Breiding, M. J. (2013). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 findings on victimization by sexual orientation*. Retrieved November 19, 2018 from https://www.cdc.gov/violenceprevention/pdf/nisvs_sofindings.pdf.

Young, R. M., & Meyer, I. H. (2005). The trouble with "MSM" and "WSW": Erasure of the sexual-minority person in public health discourse. *American Journal of Public Health, 95*(7), 1144–1149. https://doi.org/10.2105/AJPH.2004.046714.

Zou, C., & Andersen, J. P. (2015). Comparing the rates of early childhood victimization across sexual orientations: Heterosexual, lesbian, gay, bisexual, and mostly heterosexual. *PLoS ONE, 10*(10), e0139198–e0139198. https://doi.org/10.1371/journal.pone.0139198.