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Multiple early victimization experiences as a pathway to explain physical health disparities among sexual minority and heterosexual individuals

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ABSTRACT

Prior research shows that health disparities exist between sexual minority and heterosexual individuals. We extend the literature by testing if the higher prevalence of childhood victimization experienced by sexual minority individuals accounts for lifetime health disparities. Heterosexual (n = 422) and sexual minority (n = 681) participants were recruited on-line in North America. Respondents completed surveys about their childhood victimization experiences (i.e., maltreatment by adults and peer victimization) and lifetime physician-diagnosed physical health conditions. Results showed that sexual minority individuals experienced higher prevalence of childhood victimization and lifetime physical health problems than heterosexuals. Mediation analyses indicated that maltreatment by adults and peer bullying explained the health disparities between sexual minority individuals and heterosexuals. This study is the first to show that multiple childhood victimization experiences may be one pathway to explain lifetime physical health disparities. Intervention programs reducing the perpetration of violence against sexual minority individuals are critical to reduce health care needs related to victimization experiences.

Growing evidence highlights significant disparities in both chronic (e.g., diabetes, asthma) and acute (e.g., headaches, back pain) physical health conditions between sexual minority and heterosexual individuals (Institute of Medicine, 2011; for review see Lick et al., 2013). Reasons for these differences are not well understood. Theoretical models include sociocultural stressors (i.e., interpersonal events, institutional practices, and broader structural practices) as possible causal factors to explain health disparities (Lick et al., 2013; Meyer, 2003). Research evidence, including systematic reviews and a meta-analysis, provide evidence that sexual minorities experience a higher prevalence of interpersonal victimization experiences that are also more severe than their heterosexual peers and begin at an earlier age (Friedman et al., 2011; Rothman et al., 2011; Wilsnack et al., 2012). In this study, we extend prior theory and literature by testing if early interpersonal experiences in the form of childhood victimization (familial and peer) may be one pathway that accounts for lifetime health disparities among sexual minority and heterosexual individuals.

1. Social determinants of health

The minority stress model, a long-standing theoretical perspective, posits that sexual minorities often experience chronically high levels of stress due to their membership within a socially stigmatized group (Meyer, 2003). The chronic stress a sexual minority individual experiences stems from encounters with stigmatizing and discriminatory interpersonal events, institutional practices and broader structural policy (Lick et al., 2013; Frost, 2011). According to the minority stress model, stress arises from both distal and proximal factors. As reviewed by Frost (2011), distal stressors stem from direct forms of prejudice or discrimination directed against the minority individual. Frost (2011) goes on to explain that proximal stressors (e.g., internalized homophobia)

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arise from the internalization of marginalization of one's core identity stemming from the experience of distal stressors and social disapproval. Lick and colleagues (2013) review 19 studies (11 probability samples, 3 population based samples and 5 convenience samples) that compare over half a million (n = 552,564) heterosexual and sexual minority individuals to examine if disparities in health problems between heterosexuals and sexual minority individuals were associated with minority stress. The authors conclude that the data from these studies provide ample evidence that the negative social experiences that sexual minority individuals encounter, do qualify as social determinates of health across multiple health domains including self-reported health, chronic conditions (e.g., heart disease, asthma, hypertension, diabetes), risky health conditions such as obesity, more acute physical symptoms (e.g., gastrointestinal distress, temporary illness) and limitations to physical activity due to disability.

Stressors associated with sexual minority status are independent from, and additive to, general stressors that individuals face in daily life. It is well known that chronic stress is associated with dysregulations in core physiological processes, such as stress hormones that modulate disease risk through systems such as immune and cardiovascular function (McEwen, 1998). Moreover, individuals experiencing chronic stress are at greater risk of health problems such as heart disease (Torpy et al., 2007). Based on the evidence reviewed it may be the case that peer bullying or adverse childhood events perpetrated against the individual for their sexual orientation, suspected sexual orientation or gender non-conforming behaviors (e.g., a boy who wears a dress to school) could be considered a distal stressor. The physiological effects of chronic stress may be a central mechanism by which social determinates contribute to health disparities.

2. Victimization and health disparities

Sexual minority individuals have an increased risk for mental and physical health problems compared to their heterosexual peers (e.g., Frost et al., 2013; Remafedi et al., 1998). A number of empirical research studies demonstrate that sexual minority individuals experience more physical health problems than heterosexual individuals. For example, a national probability sample from the Netherlands (n = 129,494) reported that individuals in same-sex relationships had more acute physical symptoms (e.g., headaches, pain, respiratory and digestive problems) and chronic conditions then did their heterosexual counterparts (Sandfort et al., 2006; 2009). Data from a US national cohort (n = 91,471) indicated that lesbian and bisexual women were at higher risk of chronic health conditions (e.g., breast cancer and heart disease) then heterosexuals (Case et al., 2004). A US local probability sample (n = 27,658) demonstrated that sexual minority individuals reported poorer self-reported health and bore greater burden of disability (more severe and beginning at an earlier age) than their heterosexual peers (Conron et al., 2010). Both theoretical and empirical evidence point to interpersonal victimization as a possible mechanism producing health disparities (Lick et al., 2013; Roberts et al., 2013; Schneeberger et al., 2014). Data from a probability-based sample of US residents (n = 22, 071) showed that a greater proportion of LGB individuals reported adult-perpetrated adverse childhood experiences (e.g., physical, sexual and emotional abuse, neglect, exposure to domestic violence) than their heterosexual peers (Andersen and Blosnich, 2013). Further, research indicates that a greater proportion of LGB youth experience peer bullying when compared to their heterosexual counterparts (Berlan et al., 2010; Hunt and Jensen, 2007; Kosciw et al., 2012). D'Augelli and colleagues (2006) interviewed over 500 LGB youth and found that the majority of youth had experienced bullying of some kind, related to known or suspected sexual orientation or gender atypical behavior (80% verbal bullying, 11% physical bullying and 9% sexual victimization). In their study, physical victimization was significantly associated with reports of trauma symptoms and mental distress (D'Augelli et al., 2006) Numerous studies show that childhood victimization perpetrated by family and other adults (e.g., child sexual abuse, child physical abuse) can have long-term implications for physical health (Anda et al., 2006; Brown et al., 2009; Wegman and Stetler, 2009; Boynton-Jarrett et al., 2008). Correspondingly, being bullied by peers during childhood and adolescence has been associated with physical health conditions, both concurrently and in adulthood (Wegman and Stetler, 2009; Gini and Pozzoli, 2009; Nishina et al., 2005). In a sample of nearly 500 LGB US residents, Zou and colleagues (2013) found that 61.9% of gay and lesbian individuals and 58.2% of bisexual individuals reported verbal bullying, while nearly 30% of all LGB individuals reported physical bullying. Both verbal and physical bullying were independently associated with chronic and acute health problems (Zou et al., 2013).

3. The present study

In line with prior research, we hypothesized that: (1) Sexual minority individuals would report higher prevalence of both familial and peer victimization than heterosexuals, (2). That victimization would mediate the relationship between sexual identity and physical health, and (3). That familial and peer victimization would be additive in nature, with the experience of both negatively impacting health to a greater degree than the experience of one alone. While many prior studies have examined the impact of victimization on health among sexual minorities (for review see Lick et al., 2013), our study is the first to test a direct mediation model by recruiting a heterosexual comparison group. Building upon the minority stress model to examine mental health disparities, Hatzenbuehler (2009) demonstrated the importance of examining psychological mediators (e.g., emotion regulation, social and interpersonal interactions and cognitive patterns that denote risk for mental health problems) that may be causal links explaining disparities between sexual minority and heterosexual individuals. In our analysis, with the inclusion of a heterosexual comparison group, we were able to directly test the hypothesis that childhood victimization, as a mediator, can explain some of the disparities in physical health between heterosexual and sexual minority groups.

4. Method

4.1. Sample

We recruited 1311 participants from Amazon's Mechanical Turk (MTurk; www.mturk.com), which is a crowdsourcing internet jobsite that consists of approximately 200,000 workers that perform various tasks for payment (Ross et al., 2010). Any adult in the United States over the age of 18 is eligible to be a worker as long as they possess a social security number or an individual tax identification number. On Mturk, 'employers' post tasks that workers can decide to perform for the advertised amount of compensation. Mturk is widely used for social science research and it has been shown to provide reliable and valid replications of previously established results (Buhrmester et al., 2011). Buhrmester and colleagues (2011) conducted a study (n = 3006) to assess how Mturk participants compare to more traditional samples (university students and other types of convenience sampling). They found that while gender splits were comparable (55% female), Mturk participants were more demographically diverse (36% non-White;