Associations between individual and couple-level minority stressors and relationship
stress in queer women's interracial/interethnic couple relationships

Cindy B. Veldhuis, PhD

School of Nursing, Columbia University
c.veldhuis@columbia.edu

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Abstract

Intimate relationships provide protections against excess stress. Little research has investigated this in same-sex/gender couples, and particularly interracial/interethnic same-sex/gender couples. In a sample of $N = 215$ women in same-sex/gender couple relationships, 43% of whom were in interracial/interethnic relationships, we examined differences in general stressors and both individual- and couple-level minority stressors. Women in interracial/interethnic couple relationships reported higher levels of individual-level childhood stress, microaggressions, stress related to race/ethnicity, and couple-level expectations and stereotypes. We also examined the associations between stressors and relationship outcomes and whether these associations differed comparing women in monoracial and interracial/interethnic couple relationships. We found multiple sources of general stressors and individual- and couple-level stressors that were associated with poorer relationship outcomes but found few differences by whether couples were monoracial or interracial/interethnic. Our findings have implications for couple-level interventions and highlight the importance of taking intersectional approaches to research on same-sex couples, as well as the importance of examining multiple sources and levels of stress.

Introduction

Close, intimate relationships confer many benefits, and are protective against psychological and physical health problems and stress (Umberson & Montez, 2010). Conversely, relationship strain and dissatisfaction cause distress which can lead to unhealthy coping behaviors and poorer health (Braithwaite & Holt-Lunstad, 2017; Farrell & Simpson, 2017; Kassel, Stroud, & Paronis, 2003; Slatcher & Schoebi, 2017; Umberson & Montez, 2010). Queer women's (e.g., lesbian, bisexual, queer, transgender, nonbinary) relationships exist within a larger context of stigma, sexism, inequality, racism and bi-, trans-, homophobia—all of these (and more) affect relationships. Yet, little research has investigated stress and stressors within queer women's relationships. Far less well understood are the stressors and strains on queer women's interracial/interethnic (interracial/interethnic) compared to monoracial (MR) relationships.

Stress and relationships

Relationships are a key part of women's lives and their identities (Simon & Barrett, 2010; Whitton & Kuryluk, 2014). Stress is strongly associated with relationship stress and problems (Horwitz, White, & Howell-White, 1996; Randall & Bodenmann, 2017) which in turn are associated with distress (Garcia & Umberson, 2019), particularly for women (Garcia & Umberson, 2019; Proulx, Helms, & Buehler, 2007). However these associations are not well-understood in queer women's relationships which may be disproportionately affected by multiple sources and levels of stress due to the marginalization of both the individuals and the relationship.

In a study of health and wellbeing among same-sex compared to heterosexual couples in legally recognized relationships, men in same-sex legally recognized

relationships reported similar or significantly better health than their heterosexual counterparts and their counterparts in non-legally recognized same-sex relationships (Elwood, Irvin, Sun, & Breen, 2017). However, women in same-sex relationships reported worse health compared to their heterosexual counterparts and similar health compared to their counterparts in non-legally recognized same-sex relationships. The authors theorize that stressors, particularly minority stressors, at both individual- and couple-levels may account for the potential lower levels of protections afforded by women's same-sex relationships.

Individual level versus couple-level minority stress

Queer women face unique and chronic stressors, such as stigma and internalized bi-, trans- or homophobia related to their marginalized status (Meyer, 1995; 2003). Higher levels of minority stress increase the risks for psychological distress, unhealthy coping behaviors (Herek & Garnets, 2007; Hughes, 2011; Keyes, Hatzenbuehler, Grant, & Hasin, 2012; Lewis, Kholodkov, & Derlega, 2012), and poor health outcomes by overburdening an individual's coping resources and impairing emotion regulation (Hatzenbuehler, Phelan, & Link, 2013). The stress from being in a same-sex/gender couple is likely different from the stress of being a queer woman. At the individual-level, stigma and discrimination can lead to poor mental and physical health (Hatzenbuehler, 2009; Meyer, 2003). Minority stressors at the individual-level may proliferate or spill over to the other partner and increase relationship stress (LeBlanc, Frost, & Wight, 2015). Stigma related to one's relationship also has couple-level effects on relationship functioning and individual wellbeing above and beyond the stigma affecting the individual (Gamarel, Reisner, Laurenceau, Nemoto, & Operario, 2014; LeBlanc et al., 2015). Minority stress in same-sex/gender relationships is

associated with poorer relationship quality (Gamarel et al., 2014), lower levels of commitment (Doyle & Molix, 2015; Lehmiller & Agnew, 2007), relationship satisfaction (Lewis et al., 2012), and longevity (Lehmiller & Agnew, 2007).

Stigma and Homonegativity. Societal attitudes toward same-sex couples are improving; a recent Gallup poll (2019) found that support of same-sex relationships has doubled since Gallup first polled about this issue in 1999. However, stigma and homophobia still exist—and when internalized have deleterious effects (Frost & Meyer, 2009). Queer women who have high levels of internalized bi-, trans-, or homophobia feel less comfortable with their sexual and gender identities. This discomfort has negative implications for intimate relationships (Berg, Munthe-Kaas, & Ross, 2016; Frost & Meyer, 2009; Mohr & Daly, 2008; Otis, Rostosky, Riggle, & Hamrin, 2006) by lowering relationship satisfaction, investment (Barrantes, Eaton, Veldhuis, & Hughes, 2017), and intimacy, and by increasing relationship problems and strain (Frost & Meyer, 2009).

Disclosure. Chronic concealment of sexual identity carries high risks to both individuals and couples, and can cause significant relationship stress (Clausell & Roisman, 2009; Mohr & Daly, 2008). Couples who are not “out” have lower support and higher stress due to the secrecy of their relationship and constant vigilance about others’ perceptions (R.-J. Green, 2004; Otis et al., 2006). Concealment may cause one or both members of the couple to devalue the relationship which may reduce relationship satisfaction and investment (Lau, 2012). Conversely, disclosure of sexual identity is associated with improved relationships, social support, and psychological health (Lewis et al., 2012).

Models of stress in relationships suggest two key ways in which stressors may disproportionately affect queer women’s relationships. The first is the vulnerability-stress-

adaptation model (Karney & Bradbury, 1995; Randall & Bodenmann, 2017) which suggests that enduring vulnerabilities (such as being a sexual minority) increase the vulnerability to stress. The stress spillover model (Cooper, Tao, Totenhagen, Randall, & Holley, 2019; Falconier, Nussbeck, Bodenmann, Schneider, & Bradbury, 2014; Neff & Karney, 2009; Randall & Bodenmann, 2009; Totenhagen, Randall, Cooper, Tao, & Walsh, 2017) suggests that stressors experienced at the individual-level may spill over onto the relationship and to the other member of the couple. Thus conceivably, women in same-sex/gender couple relationships may be both more vulnerable due to their marginalized statuses as individuals and as a couple, and may experience more spillover of stressors onto the relationship due to experiencing both general and minority stressors (LeBlanc et al., 2015). Further, the effects of stressors may be bidirectional, just as external stressors affect relationships, relationship stress may compound the effects of external stressors.

The strain of stressful relationships may be disproportionately detrimental to queer women given that it may compound the effects stigma, discrimination, and lower levels of overall social support (LeBlanc & Frost, 2019). However, recent research suggests that in comparison to women who are married to men, women in same-sex marriages may evince less of an association between relationship strain and distress, possibly due to the lower gendered power differentials in same-sex relationships (Garcia & Umberson, 2019) or because external stressors may bring couples closer together (Reczek, 2015). Given the importance of stable and positive relationships to health, it is imperative for research to shed investigate whether stressors faced by queer women may strain relationships.

Taken together, these findings suggest that minority stressors have effects not just on individuals but on couples, and that these stressors affect relationship stress,

satisfaction and commitment. The current study builds on previous research by incorporating general stressors, individual-level minority stressors, and couple-level minority stressors to examine associations with relationship outcomes.

Hypothesis 1. Higher levels of general and minority (individual- and couple-level) stressors will be significantly associated with higher levels of relationship stress and lower levels of relationship satisfaction and commitment in women's same-sex/gender couple relationships.

Hypothesis 2. Conversely, given that women's same-sex/gender relationships have lower gendered power differentials and that adversity may make couples closer, higher levels of general and minority stressors may not result in higher levels of relationship stress nor affect relationship satisfaction or commitment. Thus, it is possible that there will be no association between general and minority stressors and relationship outcomes.

Interracial/interethnic couples

In the general population, almost 10% of couples are interracial. These rates are even higher among LGBT couples (rates vary but ~20% according to the Williams Institute 2010 report). Interracial couples may be 15-21% more likely to separate than monoracial couples (Brown, Williams, & Durtschi, 2018). There are multiple reasons why this might be; interracial/interethnic couples face issues common to all couples, but cultural differences and racism may add additional strain on relationships (C. C. Brown et al., 2018; Killian, 2007).

Stigma related to being in an interracial/interethnic relationship likely has discrete effects on the couple above and beyond individual-level stigma and the stigma from being

in a same-sex/gender relationship. In a study of people in LGBTQ and/or interracial relationships, participants reported high levels of marginalization of their relationships, because having at least one marginalized identity as an individual compounds the stress from being in a marginalized relationship (Rosenthal, Deosaran, Young, & Starks, 2019).

There is very little research on couples who are both same-sex/gender and who are interracial/interethnic. Rostosky and colleagues (2008) conducted interviews among 13 interracial same-sex couples (Rostosky, Riggle, Savage, Roberts, & Singletary, 2008). Couples in that study highlighted the effects of inhabiting multiple marginalized identities – and that being in both a same-sex and interracial relationship led to “multiple marginalized relationship identities” and to experiencing double minority stress. They may further feel invisible and feel as though they lack recognition for relationship. This theme of feeling invisible was echoed in Steinbugler’s (2005) study; participants reported feeling concomitantly *invisible* and *too visible* due to their multiply marginalized identities and relationship (Steinbugler, 2005). Conversely, in Jeong and Horne’s (2009) study of same-sex interracial/interethnic couples, there were very few differences comparing interracial/interethnic couples to monoracial couples—there were no differences in social support, stress, marital adjustment and feelings of equality in the relationship. ethnicity, and racism (Jeong & Horne, 2009). Interracial/interethnic couples, however, did report lower levels of internalized homophobia compared to monoracial couples.

Some of the stress in interracial/interethnic couples may be due to discrepancies in stress related to their identities (LeBlanc et al., 2015). Chan and Erby (2018) argue that the racial/ethnic minority member of an interracial/interethnic couple may feel as though she has become “othered” and that she may experience stress related to both race/ethnicity

and sexual identity (Chan & Erby, 2018). In interracial/interethnic couples, it may also be that the member of the couple who is a person of color may feel as though they have less power in the relationship, mirroring the lower amounts of power they have in society (Jeong & Horne, 2009).

In order to understand the associations between individual- and couple-level minority stressors on relationship outcomes among interracial/interethnic same-sex/gender couples, we consider two competing hypotheses:

Hypothesis 3. Given the multiple sources of oppression and marginalization experienced by women in interracial/interethnic same-sex/gender couple relationships, levels of general stressors as well as individual- and couple-level minority stressors will be higher and will be associated with higher levels of relationship stress, and lower levels of satisfaction and commitment than women in monoracial same-sex/gender relationships.

Hypothesis 4. Conversely, given that same-sex/gender couples already experience high levels of general stressors and individual- and couple-level minority stressors, there will be no differences between couples who are monoracial or interracial/interethnic in levels of individual- and couple-level minority stressors, and in the associations with relationship outcomes.

Methods

Participants were recruited for the SOQIR (Study on Queer Intimate Relationships; www.soqir.org) Study using social media (Facebook, twitter, Instagram) and web-based (google) advertising. Advertisements were aimed at women and people who identify as

women (e.g., non-binary or transfeminine individuals) who were 18 or over, lived in the New York City metropolitan area, and who were in relationships with women or those who identify as women. Interested individuals were given links to the study webpage (in case they had more questions or wanted to contact a study team member) and were also given a direct link to the survey. Interested participants first read a brief description of the study, and those who clicked through to the study were considered to have consented. The survey took approximately 45 minutes; participants were not offered compensation for their time for this portion of the study. Survey questions centered on individual-level psychological experiences (e.g., depression, emotion regulation), individual-level stressors (e.g., microaggressions, discrimination, stress), and couple-level relationship experiences (e.g., connection to family, safety, support). Demographics for both the participant and her partner were also collected. At the end of the survey, participants were given a list of local resources in case they felt distressed and wanted to get support. A total of 364 people completed the survey, 16 surveys were excluded because the survey was completed but the participant indicated that they were under 18 years of age, and 25 were excluded because either they or their partner (or both) identified as men. Those with incomplete data for their race/ethnicity and their partner's race/ethnicity were also excluded yielding an analytical sample for this study of $N = 215$.

We compared demographics of those who completed the survey to those who did not. We found no significant differences in race/ethnicity, gender identity (trans versus cisgender), or interracial/interethnic compared to monoracial. There were significant differences by sexual identity (lesbian women were more likely to complete than were bisexual+ women; 60.1% vs. 44.0%), age (older participants were more likely to complete),

education (women with higher levels of education were more likely to complete), employment status (women employed full-time were more likely to complete), relationship status (women who were married were more likely to complete than those in committed relationships and dating women).

MEASURES

Demographics

Sexual identity. Participants were asked to report on both their and their partner's sexual identity. Participants were asked "Recognizing that sexual identity is only one part of identity, how do you define your sexual identity? Would they say you are (check all that apply): Only lesbian or gay; Mostly lesbian or gay; Bisexual/Bi+, Mostly heterosexual; Only heterosexual; Pansexual; Queer; Questioning; Asexual; or Other (please specify). A parallel question was asked about their partner.

Gender identity. Participants were asked about their gender and the gender of their partner. This was assessed by asking whether each identified as: female/woman; male/man; trans woman; trans man; nonbinary, gender nonconforming, trans, or genderqueer, or other (with the option to elaborate). Participants were also asked about both their and their partners sex assigned at birth (i.e., female, male, intersex).

Race/ethnicity. Participants were asked which of the following categories best described their race/ethnicity: White; Black/African-American; Latina/Latino/Latinx or Hispanic; American Indian or Alaska Native; Asian/Pacific Islander; Middle Eastern/Arab/North African (e.g., from Iran, Morocco); Southeast Asian (e.g., Indian); Caribbean; Other (please specify). Participants could choose all that applied and were asked a parallel question about their partner.

Relationship status. Participants were asked how they described their relationship: single/dating; in a committed relationship (no legal status); in a domestic partnership, civil union, or another legal status other than marriage; married; separated or divorced; widowed; other (please describe). Participants in relationships were asked they currently lived with their partner. Participants who reported they were not in a committed relationship were asked if they were: not dating; dating but not in a relationship; dating and in at least one casual relationship; dating and in a serious relationship/considering a committed relationship; or other (please specify). For all relationship-related questions, participants who reported that they were in polyamorous relationships ($n = 8$) were asked to choose their most “serious relationship” with a woman and respond based on that relationship. Responses were categorized into four relationship status groups: married, committed and cohabiting (this group includes the 3 participants who reported they had another legal status other than marriage), committed relationship but not cohabiting, and dating.

Relationship length. Respondents were asked how long (in months) they had been in their current relationship.

Education. Respondents were asked the highest level of schooling that they had completed, and if they were currently attending school.

Employment. What best describes your current employment status? Employed or self-employed full-time, 35 hours or more per week; Employed or self-employed part-time, that is, less than 35 hours per week; Employed at two or more part-time jobs; Have a job, but not at work because of temporary illness, family leave, maternity leave or other type of

leave; Unemployed or laid off; Not working because of school; Retired; Other (please describe).

Children in the home. Participants were asked if they had children living with them, and if so if any of the children were under 18.

Outcomes

Relationship outcomes. Participants were asked about their relationship stress (“How stressful is your relationship with your spouse or partner?”), satisfaction (“How satisfied are you currently with your relationship with your spouse or partner?”), and commitment (“How committed are you to your relationship?”) on a scale from 0-10.

General stressors

Current level of overall stress. Participants were asked, “How stressful is your life **in general right now**?” and were asked to rate their stress levels on a scale of 0 (not at all stressful) to 10 (extremely stressful).

Stress in context scales. The childhood and adulthood stress in context scales were developed and are currently being tested by the University of California San Francisco Stress Measurement Network. The scales were developed to overcome limitations of extant measures of stress by taking context and chronicity of stressors into account. It shows good convergent validity with the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983). The adult scale comprises 18 questions and examples include “How often do you feel that your life is stable and predictable,” “How often do you feel emotionally unsafe,” and “How often do you feel socially isolated.” The childhood scale comprises 4 questions, including: “How often did you experience conflict in your household during childhood,” “How often did you feel physically unsafe during childhood,” and “How often did you feel

that your life was stable and predictable during childhood.” Cronbach’s alpha for the entire sample was $\alpha = .884$. The final scale scores ranged from 9-53 with a mean of 23.25.

Individual-level minority stress

For every individual-level minority stress scale, higher scores indicate higher levels of relevant minority stress.

Microaggressions. The Sexual Orientation Microaggression Scale (SOMS) consisted 26-items based on themes detailed by Nadal (2019). The themes incorporated into the microaggression scale were: heterosexist terminology, endorsement of heteronormative behaviors, assumption of universal LGBT experience, discomfort/disapproval of LGBTQ experiences, denial of societal heterosexism, assumption of abnormality, denial of individual heterosexism, and environmental macroaggressions. Seven items were added from other scales that had particular relevance to sexual minority women, such as: “When someone found out you were in a relationship with another woman, they asked if they could watch (you having sex together) or have a threesome,” “Someone asked why a “pretty girl like you” was a lesbian,” and “Someone asked why your appearance isn’t more feminine (e.g., why you don’t wear dresses or have long hair).” Each item was administered using a 5-point scale with options ranging from “not at all” to “about every day.” Responses were summed and used as a continuous measure with higher scores indicating more microaggressions. Cronbach’s alpha for the entire sample was $\alpha = .938$. The final scale scores ranged from 36-149 with a mean of 72.02.

Vigilance. Vigilance was assessed using an abbreviated version of the Heightened Vigilance Scale (D. R. Williams, Yu, Jackson, & Anderson, 1997) developed for the Chicago Community Adult Health Study. Participants were asked whether they experienced

heightened vigilance in their day to day lives. For example, participants were asked how often they “try to prepare for possible insults from other people before leaving home” or “carefully watch what you say and how you say it.” Response options were on a 0 (never) to 5 (almost every day) scale. Scores were summed and higher scores indicated higher vigilance. Cronbach’s alpha for the entire sample was $\alpha = .817$. The final scale scores ranged from 4-24 with a mean of 13.89.

Stress related to marginalized identities. The stress variable was created for this study. Participants were asked, on a 0-10 scale, how much stress they feel related to their gender/gender identity, sexual identity, and their race/ethnicity (each question was asked separately). The final scale scores ranged from 0-10 for each with a mean of 4.08 for stress related to gender/gender identity, 3.98 for stress related to sexual identity, and 2.20 for stress related to race/ethnicity.

Discrimination. Discrimination was measuring using the Everyday Discrimination Scale (Krieger, Smith, Naishadham, Hartman, & Barbeau, 2005; D. R. Williams et al., 1997). Example items include, “You are treated with less respect than other people are,” “People act as if they are afraid of you,” and “You are called names or insulted.” Response options were on a 0(never) to 5 (almost every day) scale. Responses were summed and a total discrimination score was created. Cronbach’s alpha for the entire sample was $\alpha = .884$. The final scale scores ranged from 9-53 with a mean of 23.25.

Number of discriminated against identities. In regards to the item above participants were then asked what they thought were the main reasons for the discrimination: ancestry or national origins; gender/gender identity; race; age; religion; height; weight; some other aspect of your physical appearance; sexual orientation/identity;

education or income level; or other. Participants were to choose as many as applied; this number comprised the variable “number of discriminated identities.” The final scale scores ranged from 0-6 with a mean of 1.92, and a modal response of three identities.

Couple-Level Minority Stress

The Couple-level minority stress scale was created and validated by Drs. Allen LeBlanc and David Frost (Neilands et al., 2019) and has separate subscales (detailed below). For every subscale, higher scores indicate higher levels of relevant minority stress.

Rejection. Participants were given 10 potential examples of couple-level rejection such as “Showing affection for my partner when we are in new environments/unfamiliar places” and were to indicate how much they worried about each right now on a scale of 0 (not at all) to 4 (a great deal). Cronbach’s alpha for the entire sample was $\alpha = .827$. The final scale scores ranged from 10-50 with a mean of 22.94.

Discrimination. Participants were given 10 potential examples of couple-level discrimination such as “Please indicate how often in the past year the following things have happened to you and your partner. We have been denied the right to be together in health care settings” and were to indicate how often each had occurred in the past year on a scale of 0 (never) to 4 (always). Cronbach’s alpha for the entire sample was $\alpha = .799$. The final scale scores ranged from 11-39 with a mean of 16.99.

Seeking Safety. Participants were given seven examples of seeking safety as a couple such as “We have to be cautious when traveling to less tolerant areas” and were to indicate how true each of the items were in the couple’s life right now with 0 = not at all true and 4 = completely true. Cronbach’s alpha for the entire sample was $\alpha = .857$. The final scale scores ranged from 7-35 with a mean of 26.68.

Perceived unequal relationship recognition. Participants were asked to indicate how true each of three items (e.g., It is harder for us to file our tax returns than it is for other couples) were for the couple with 0 = not at all true and 4 = completely true. Cronbach's alpha for the entire sample was $\alpha = .685$. The final scale scores ranged from 3-15 with a mean of 5.90.

Being visible as a couple. Participants were given nine statements about visibility (e.g., "We tried to hide our relationship to avoid making others feel uncomfortable) and asked to indicate how often they had done each on a scale of 0 = never and 4 = always. Cronbach's alpha for the entire sample was $\alpha = .785$. The final scale scores ranged from 9-45 with a mean of 24.29.

Managing Expectations and Stereotypes about Relationships. Participants were asked about six expectations or stereotypes people might have about same-sex couples (e.g., "People assume one of us is more like "the man" in the relationship and the other is more like "the woman" in the relationship) and how true each statement was on a scale of 0 = not at all true and 4 = completely true. Cronbach's alpha for the entire sample was $\alpha = .602$. The final scale scores ranged from 7-28 with a mean of 14.85.

Lack of Integration with Families of Origin. Participants were asked how true each of six statements about their integration with their families were (e.g., My family acknowledges that my partner and I are in a relationship with each other") on a scale of 0 = not at all true and 4 = completely true. Cronbach's alpha for the entire sample was $\alpha = .789$. The final scale scores ranged from 6-30 with a mean of 14.78.

Lack of Social Support for Couples. Participants were asked to rate how true four statements about social support for couples were (e.g., "There is no one that [piped partner

term] and I can call when we are having a rough time in our relationship) on a scale of 0 = not at all true and 4 = completely true. Cronbach's alpha for the entire sample was $\alpha = .713$. The final scale scores ranged from 4-19 with a mean of 6.95.

Analytic Plan

Descriptive statistics were used to assess proportions of sexual identity, gender identity, race/ethnicity, age, relationship status, education level, employment, and children in the home for the whole sample and stratified by whether couples were monoracial or interracial/interethnic. We used bivariate analyses to examine means and standard deviations for all individual- and couple-level variables and significant differences by relationship type (monoracial compared to interracial/interethnic). We fit linear models to the data to test associations between each general stressor and each individual- and couple level minority stressor with relationship stress, satisfaction, and commitment. We then ran interaction models with each stressor with relationship type to determine whether the associations between each stressor and relationship outcome differed by relationship type. We adjusted for the potential effects of age, education, sexual identity, gender identity, race/ethnicity, education, employment, relationship status, and relationship length.

Conducting interaction analyses has a key limitation: the inclusion of lower-order main effects in the model may decrease the probability of finding significant higher-order interaction effects, as main effects may explain some of the variance in the outcomes (Rouhani, 2014; Scott & Siltanen, 2012). To address this, alpha was increased to $p < .10$ to evaluate the interactions only; all other analyses used $p < .05$.

Results

Description of the sample

Table 1 presents descriptive statistics for participants and their partners. Most of the women in the sample identified as White (88.5%). Most participants (60%) identified as lesbian or mostly lesbian (21% and 10%), bisexual/bi+ (20.0%) or queer (14%). Most also identified as cisgender (assigned female at birth and identify as a woman; 88.8%) with smaller proportion identifying as transgender or nonbinary (11.2%).

Differences by relationship type

Table 2 reports unadjusted means and standard deviations and level of significance by relationship type (interracial/interethnic versus monoracial). There were no significant differences in relationship stress, satisfaction, or commitment. We found significant differences comparing interracial/interethnic and monoracial couples on individual-level stressors. Women in interracial/interethnic couple relationships reported significantly higher levels of childhood stress (interracial/interethnic $M = 10.36$, $SD = 3.13$; monoracial $M = 9.36$, $SD = 3.78$), microaggressions (interracial/interethnic $M = 73.92$, $SD = 19.81$; monoracial $M = 68.56$, $SD = 18.47$), and stress related to race/ethnicity (interracial/interethnic $M = 3.20$, $SD = 3.19$; monoracial $M = 0.94$, $SD = 1.85$), compared to women in monoracial couple relationships. In terms of couple-level stressors, the only difference comparing interracial/interethnic and monoracial relationships was expectations; women in interracial/interethnic relationships reported significantly higher expectations and stereotypes of their relationships ($M = 15.80$, $SD = 4.89$) compared to women in monoracial relationships ($M = 14.15$, $SD = 63.94$).

Associations between relationship outcomes and stressors

Individual-level stressors.

General. Participants who reported higher levels of current overall stress and more adult stress reported significantly higher levels of relationship stress had significantly higher levels of relationship stress and lower levels of relationship satisfaction.

Participants more adult stress also reported lower levels commitment. However, there were no significant interactions between any of the general stressors and relationship type on relationship outcomes suggesting that these associations do not differ by relationship type.

Minority stress. Participants who reported higher numbers of discriminated identities reported more relationship stress. Further, stress related to gender, sexual identity, and race/ethnicity were all significantly and positively associated with relationship stress. Stress related to race/ethnicity was negatively associated with relationship satisfaction. There was only one significant interaction between relationship type and individual minority stressors: microaggressions. Participants in interracial/interethnic relationships who reported higher numbers of microaggressions reported lower relationship commitment.

Couple-level minority stressors.

Two couple-level minority stressors were associated with relationship stress: perceived unequal treatment and lack of support. Participants who reported higher levels of each also reported significantly higher levels of relationship stress. Three couple-level minority stressors were associated with relationship commitment: safety concerns, lack of support, and lack of family integration; lower levels of each was associated with higher levels of relationship commitment. Two couple-level minority stressors were associated

with relationship satisfaction: safety concerns and lack of support. Participants who had higher levels of safety concerns and experienced greater lack of support reported lower relationship satisfaction.

There was only one significant interaction between couple-level minority stress and relationship type: interracial/interethnic couples who reported greater lack of support concerns also reported higher levels of relationship stress.

Discussion

Our findings suggest that for same-sex/gender relationships that are interracial/interethnic, many of the stresses are similar to those of monoracial couples, with a few exceptions. interracial/interethnic couples may have experienced more stress in their childhoods and as adults experience higher levels of microaggression, more stress related to race/ethnicity, and experience higher levels of couple-level expectations and stereotypes of their relationship.

It seems particularly important to note the ways in which the couples did not differ. It is not known how this compares to heterosexual couples, however at least among SMW, it may be possible that families are more accepting of interracial/interethnic couples. Interracial/interethnic couples did not experience more rejection, discrimination, safety concerns, unequal treatment, visibility, or support nor did they report less connection to their families than did monoracial couples. Indeed, there is some evidence that relationship satisfaction and longevity among interracial couples has been improving over time (Toosi, Babbitt, Ambady, & Sommers, 2012). It is possibly that the null findings for many variables in this study reflect this general changing trend in acceptance. This lack of differences may

also reflect higher levels of acceptance of interracial/interethnic couples within the LGBTQ+ community and among the families and friends of LGBTQ+ people as compared to the broader society and families and friends of different sex/gender interracial/interethnic couples.

However, it is also possible that for women in same-sex/gender couples, the stresses of being in an interracial/interethnic couple differ little compared to monoracial same-sex/gender couples. This may be because, as noted in the introduction, the overall levels of stress on same-sex/gender couples is quite high. These null findings may also support previous research suggesting that LGBTQ+ relationships are resilient despite the high levels of stress they face (Gamarel et al., 2018). Importantly, we found no differences in relationship satisfaction, stress, or commitment by whether the couple was monoracial or interracial/interethnic.

Counter to the idea that acceptance may be improving, recent research suggests that stressors have increased since 2016 for LGBTQ+ people (C. Brown & Keller, 2018; Drabble, Veldhuis, Wootton, Riggle, & Hughes, 2018; Gonzalez, Ramirez, & Galupo, 2018; Veldhuis, Drabble, Riggle, Wootton, & Hughes, 2018a), and this likely has effects on same-sex/gender couples. The current cultural context may create additional stress for interracial/interethnic couples given the rise in racism, xenophobia, and ethnocentrism and that the current presidential administration supports and engages in racist, sexist, xenophobic, and bi-, trans-, and homophobic policies, rhetoric, and actions (Veldhuis, Drabble, Riggle, Wootton, & Hughes, 2018).

Our findings suggest that for same-sex/gender relationships that are interracial/interethnic, the stress from racism, homophobia, and sexism are all associated

with higher relationship stress. Stress from race/ethnicity is also associated with lower relationship satisfaction. This contrasts with Rostosky's 2008 findings — couples in that study reported more stress related to being in a same-sex relationship than being in an interracial relationship (Rostosky et al., 2008).

One potential reason for this may be that the racial/ethnic member of the couple may experience higher levels of discrimination or stigma due to being a racial/ethnic minority and a sexual or gender minority than the White member of the couple who may just have one marginalized identity (Babbitt, 2011). The member of the couple who has experienced less discrimination may be less able to empathize and offer support (Donnelly, Robinson, & Umberson, 2018) given their higher level of privilege, and ostensibly their lower levels of felt/actual discrimination. These differences may have effects on relationships. Indeed, our findings suggest that experiencing stress related to race/ethnicity is associated with higher levels of relationship stress and lower levels of relationship satisfaction, and further that having higher numbers of discriminated against identities is associated with higher levels of relationship stress. Interracial/interethnic LGBT couples may face double minority stress—and for the partner of color, this is on top of the individual-level sources of oppression she may experience from having multiple marginalized identities (Bowleg, 2008; Crenshaw, 1991).

Because these relationships are influenced by multiple forms of oppression, our findings highlight that research among queer women should be informed by an intersectional framework in order to understand the potentially compounding effects of stressors. Intersectionality accounts for the possible cumulative effects of multiple intersecting forms of oppression such as racism, sexism, and homophobia in shaping an

individual's experience (Crenshaw, 1991; Else-Quest & Hyde, 2016; Ferguson, Carr, & Snitman, 2014; Lincoln, 2015; Parent, DeBlaere, & Moradi, 2013) Examining sexual identity or racial/ethnic differences to the exclusion of potential effects of multiple marginalized statuses can lead to a limited understanding of health risks and protections (Ferguson et al., 2014; Lincoln, 2015; Szymanski & Gupta, 2009). In the current study, the intersectionality framework helps to uncover the complexities and within-group heterogeneities (M. A. Green, Evans, & Subramanian, 2017) in queer women's relationships— as well as the potential effects of multiple and intersecting sources of stressors.

Indeed, one of the key contributions of this paper is the examination of multiple sources of stress — including not just individual- and couple-level stressors, but also general stressors and minority stressors. Little research has examined the unique associations of general and minority stressors with the health and wellbeing of LGBTQ individuals. A recent study tested minority and general stressors on substance use outcomes (Krueger, Fish, & Upchurch, 2020). For both lesbian and bisexual women, stressful life events — but not discrimination — mediated the associations between sexual identity and substance use outcomes. This suggests a need for more research that considers multiple sources of stress, and the potentially compounding effect of multiple sources of stress.

Limitations

This is one of the first quantitative studies on women's same-sex/gender interracial/interethnic relationships. Despite this study's strengths and contributions to the literature, there are several limitations that should be considered in evaluating the

generalizability of the findings. First, although the researchers made significant attempts at recruiting a diverse sample, more than half of the sample was White and participants were largely highly educated. Second, although this was a study aimed at women in relationships with women, and we tried to be explicitly inclusive of trans and nonbinary individuals, the proportion of transgender and nonbinary individuals in this study is relatively low and was insufficient for comparisons to same-sex couples. Future research efforts must incorporate methods to improve participation among queer people of color and transgender and nonbinary individuals to increase the representativeness of samples and to improve our understanding of the heterogeneity of queer people's relationships. Third, the survey was fairly long and participants were not compensated for completion, thus those who completed the survey were different from those who did not. Fourth, this study did not include comparison groups of men in same-sex/gender relationships, nor individuals in mixed-sex/gender relationships. Future studies could include a broader sample to permit comparisons.

One of the biggest limitations of this study was that reports on stress and relationships only take into account one member of the couple's experiences. Among heterosexual couples, ample research (see Randall & Bondenmann 2017 for a review) demonstrates that each partner's experiences of stress has effects on the other member of the couple and on the relationship. Stress and distress from one member of the couple may "spill over" to the other member of the couple thereby increasing their own stress and distress (Falconier et al., 2014; Garcia & Umberson, 2019; Neff & Karney, 2009) and possibly increasing relationship stress. Thus, dyadic data is needed to better account for the complexities of the effects of stress on relationships.

Fifth, this study relied on a convenience sample which has some limitations (Salway et al., 2019). However, there is data to suggest that for minority and marginalized groups, data from non-probability samples are important to our understanding of population-specific factors that influence wellbeing (Henderson, Blosnich, Herman, & Meyer, 2019; Salway et al., 2019). That is, nationally representative samples, for example, do not include measures specific to sexual and gender minorities and thus provide a limited understanding of the predictors of wellbeing. SGM participants may also feel less comfortable disclosing their identities in studies not focused on SGM wellbeing. We did not ask participants' countries of origin and thus intercultural couples (Holzapfel, Randall, Tao, & Iida, 2018) who may be members of the same racial/ethnic group but may experience significant cultural differences, may be categorized as monoracial couples.

Conclusions

Our findings provide mixed support for the limited research on the associations between stress and minority stressors on relationship stress, satisfaction, and commitment in women's same-sex/gender couple relationships. Specific individual-level stressors like current overall stress, adult stress, and stress related to gender/gender identity, sexual identity, race/ethnicity and number of discriminated identities — as well as couple-level stressors like unequal treatment of the relationship, lack of support, safety concerns, and family integration may increase stress in relationships and decrease satisfaction and commitment. However, that multiple other sources of stress were not associated with relationship outcomes may suggest resilience in women's same-sex/gender couple relationships. We also found few differences between monoracial and

interracial/interethnic couples in the associations between stressors and relationship outcomes.

Stress may not just increase problems within relationships, it may also make it harder for members of couples to respond positively and constructively to the stress and also to their partner (Neff & Karney, 2017). Previous research suggests that communication is one of the key protective factors in couples. Communication is also key to reducing stress among interracial/interethnic couples. In a study of young intercultural couples (Holzapfel et al., 2018), open communication about culture was associated with higher relationship satisfaction. The ways couples express their stress is one of the top predictors of marital outcomes (Rogge, Bradbury, Hahlweg, Engl, & Thurmaier, 2006). Couples can reduce the effects of stress through dyadic coping (communicating and receiving support; Bodenmann 2005) which is associated with greater relational wellbeing. Some couples may face challenges in communication possibly due to difficulties with emotional expression or excess stress. This can minimize the other's experiences or be perceived as unsupportive. Clinicians working with couples experiencing stress should help couples build skills in order to support each other and improve communication in order to provide buffers against stress (Lavner & Bradbury, 2017).

Table 1. Descriptives by whether couples are monoracial or interracial/ interethnic.

	All <i>N</i> = 215		Monoracial <i>n</i> = 122		Interracial/ interethnic <i>n</i> = 93		
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>p</i>
Sexual identity							
Lesbian	129	60.0%	72	59.0%	57	61.3%	.059
Bisexual	43	20.0%	27	22.1%	16	17.2%	
Pansexual	11	5.1%	2	1.6%	9	9.7%	
Queer	30	14.0%	20	16.4%	10	10.8%	
Questioning	1	0.5%	1	0.8%	0	0%	
Asexual	1	0.5%	0	0.0%	1	0.5%	
Gender identity							
Cisgender	191	88.8%	109	89.3%	82	88.2%	.787
Transgender/nonbinary	24	11.2%	13	10.7%	11	11.8%	
Race/ethnicity							
White	144	67.0%	108	88.5%	36	38.7%	.000
Black	15	7.0%	5	4.1%	10	10.8%	
Latinx	28	13.0%	7	5.7%	21	22.6%	
AIAN	3	1.4%	0	0.0%	3	3.2%	
API	8	3.7%	2	1.6%	6	6.5%	
Arab	4	1.9%	0	0.0%	4	4.3%	
Bi/Multiracial	13	6.0%	0	0.0%	13	14.0%	
Age (<i>M, SD</i>)	27.58	7.96	29.12	9.12	25.52	5.52	.001
Relationship status							
Married	31	14.6%	24	19.8%	7	7.7%	.018
Committed cohabiting	66	31.1%	40	33.1%	26	28.6%	
Committed noncohabiting	98	46.2%	46	38.0%	52	57.1%	
Dating	17	8.0%	11	9.1%	6	6.6%	
Relationship length (<i>M, SD</i>; in months)	34.59	67.86	41.39	87.46	26.16	26.72	.075
Education							
HS or less	15	7.0%	6	4.9%	9	9.7%	.275
College or technical school	124	57.7%	69	56.6%	55	57.7%	
Graduate school	76	35.3%	47	38.5%	47	31.2%	
Employment							
Employed full-time	114	53.0%	69	56.6%	45	48.4%	.473
Employed part-time	49	22.8%	25	20.5%	16	25.8%	
Not working	52	24.2%	28	23.0%	24	25.8%	
Children							
Children in the home	14	6.5%	6	4.9%	8	8.6%	.278
Children under 18	13	92.9%	6	100.0%	7	87.5%	.369

Table 2. Means and standard deviations for individual- and couple-level variables by relationship type.

	Monoracial <i>n</i> = 113		Interracial/ interethnic <i>n</i> = 83		
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>p</i>
Relationship outcomes					
Satisfaction	8.10	2.09	8.52	1.59	.102
Commitment	8.78	2.0	9.09	1.60	.225
Stress	3.53	2.69	3.53	2.50	.994
General stressors					
Current level of overall stress	6.21	2.05	6.35	2.21	.625
Adult stress	42.67	7.29	44.56	8.96	.100
Childhood stress	9.36	3.78	10.36	3.13	.023
Individual-level minority stressors					
Microaggressions	68.53	18.32	73.93	19.82	0.040
Vigilance	14.16	5.78	14.18	5.23	0.975
Stress related to gender/gender identity	4.29	2.77	3.79	2.54	0.199
Stress related to sexual identity	3.87	2.57	4.17	2.84	0.451
Stress related to race/ethnicity	0.94	1.85	3.20	3.19	0.000
Discrimination	22.36	8.68	23.93	9.1	0.199
Number of discriminated identities	2.67	1.48	3.01	1.49	0.099
Couple-level minority stressors					
Rejection	22.13	7.25	24.12	8.02	0.062
Discrimination	16.83	5.73	17.22	5.29	0.613
Safety concerns	24.34	7.21	25.35	6.89	0.310
Perceived unequal treatment	5.71	2.87	6.22	2.81	0.207
Being visible	23.95	7.06	24.70	7.56	0.480
Expectations and stereotypes	14.15	3.94	15.80	4.59	0.005
Lack of support	6.88	3.20	7.00	3.11	0.808
Lack of family integration	13.96	6.83	15.81	7.09	0.067

For all minority stress variables, higher scores equals higher levels of relevant stressors. Bolded values are significant at $p < .05$

Table 3. Linear models of individual, couple, and relationship factors and interactions of each with relationship type on relationship satisfaction, commitment, and stress.

	Stress			Commitment			Satisfaction		
	<i>F</i>	<i>df</i>	<i>p</i>	<i>F</i>	<i>df</i>	<i>p</i>	<i>F</i>	<i>df</i>	<i>p</i>
General stressors									
Current level of overall stress	8.429	1	.004	2.629	1	.106	10.954	1	.001
Adult stress	24.296	1	.000	7.406	1	.007	30.746	1	.000
Childhood stress	.134	1	.715	1.070	1	.302	.314	1	.576
Interactions									
Couple race by current level of overall stress	.116	1	.734	1.852	1	.175	1.167	1	.281
Couple race by adult stress	.186	1	.667	1.057	1	.305	2.136	1	.145
Couple race by childhood stress	.113	1	.737	1.085	1	.299	1.187	1	.277
Individual level minority stress									
Microaggressions	.727	1	.395	.565	1	.453	.241	1	.624
Vigilance	1.640	1	.202	.349	1	.555	.141	1	.708
Stress related to gender/gender identity	6.400	1	.012	1.153	1	.220	.354	1	.552
Stress related to sexual identity	6.354	1	.013	.799	1	.373	.081	1	.776
Stress related to race/ethnicity	6.317	1	.013	.900	1	.344	3.797	1	.053
Discrimination	.795	1	.374	.564	1	.454	.064	1	.801
Number of discriminated identities	5.840	1	.017	.414	1	.520	.706	1	.402
<i>Interactions</i>									
Couple race by discrimination	.008	1	.931	2.046	1	.154	.075	1	.785
Couple race by number of discriminated identities	.375	1	.541	2.332	1	.128	.940	1	.333
Couple race by microaggressions	.818	1	.367	2.845	1	.093	.000	1	1.00
Couple race by vigilance	.004	1	.952	.927	1	.337	1.279	1	.259
Couple race by stress related to gender/gender identity	.979	1	.324	.418	1	.519	2.307	1	.130
Couple race by stress related to sexual identity	.004	1	.950	1.075	1	.301	.332	1	.565
Couple race by stress related to race/ethnicity	.068	1	.794	1.028	1	.312	.029	1	.865

Couple level minority stress

Rejection	.894	1	.346	.860	1	.355	.528	1	.468
Discrimination	2.163	1	.143	.239	1	.626	.033	1	.857
Safety concerns	.037	1	.847	5.360	1	.022	4.236	1	.041
Perceived unequal treatment	6.168	1	.014	.110	1	.741	1.605	1	.207
Being visible	.434	1	.511	.957	1	.329	.005	1	.944
Expectations and stereotypes	1.633	1	.203	.587	1	.445	.429	1	.513
Lack of support	7.431	1	.007	4.484	1	.036	8.139	1	.005
Lack of family integration	.083	1	.774	7.744	1	.006	2.287	1	.132

Interactions

Couple race by rejection	.659	1	.418	.067	1	.795	.029	1	.866
Couple race by discrimination	2.260	1	.134	.084	1	.772	.336	1	.563
Couple race by safety	.326	1	.568	1.264	1	.262	1.071	1	.302
Couple race by unequal treatment	.336	1	.563	.183	1	.669	.584	1	.446
Couple race by being visible	.036	1	.850	1.599	1	.208	.629	1	.429
Couple race by expectations and stereotypes	.552	1	.459	.195	1	.660	.807	1	.370
Couple race by lack of support	3.731	1	.055	.613	1	.435	1.998	1	.159
Couple race by lack of family integration	.316	1	.575	1.883	1	.172	.033	1	.856

Analyses adjusted for respondent sexual identity, gender identity, race/ethnicity, age, education, and employment, the couple's relationship status, and relationship length. Bolded values are significant at $p < .05$ for main effects and $p < .10$ for interaction effects.

References

- Babbitt, L. G. (2011). An Intersectional Approach to Black/White Interracial Interactions: The Roles of Gender and Sexual Orientation. *Sex Roles*, 68(11-12), 791–802.
<http://doi.org/10.1007/s11199-011-0104-4>
- Barrantes, R. J., Eaton, A. A., Veldhuis, C. B., & Hughes, T. L. (2017). The role of minority stressors in lesbian relationship commitment and persistence over time. *Psychology of Sexual Orientation and Gender Diversity*, 4(2), 205–217.
<http://doi.org/10.1037/sgd0000221>
- Berg, R. C., Munthe-Kaas, H. M., & Ross, M. W. (2016). Internalized homonegativity: A systematic mapping review of empirical research. *Journal of Homosexuality*, 63(4), 541–558. <http://doi.org/10.1080/00918369.2015.1083788>
- Bowleg, L. (2008). When Black + lesbian + woman ≠ black lesbian woman: The methodological challenges of qualitative and quantitative intersectionality research. *Sex Roles*, 59(5-6), 312–325. <http://doi.org/10.1007/s11199-008-9400-z>
- Brown, C. C., Williams, Z., & Durtschi, J. A. (2018). Trajectories of interracial heterosexual couples: A longitudinal analysis of relationship quality and separation. *Journal of Marital and Family Therapy*, jmft.12363–18. <http://doi.org/10.1111/jmft.12363>
- Chan, C. D., & Erby, A. N. (2018). A critical analysis and applied intersectionality framework with intercultural queer couples. *Journal of Homosexuality*, 65(9), 1249–1274.
<http://doi.org/10.1080/00918369.2017.1411691>
- Clausell, E., & Roisman, G. I. (2009). Outness, Big Five personality traits, and same-sex relationship quality. *Journal of Social and Personal Relationships*, 26(2-3), 211–226.
<http://doi.org/10.1177/0265407509106711>

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress.

Journal of Health and Social Behavior, 24(4), 385–396.

<http://doi.org/10.2307/2136404?refreqid=search-gateway:daf129934a1a4a35fc4297f6b8917c40>

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, 43, 1241–1299.

Donnelly, R., Robinson, B. A., & Umberson, D. (2018). Can spouses buffer the impact of discrimination on depressive symptoms?: An examination of same-sex and different-sex marriages. *Society and Mental Health*, 73(4), 215686931880015–19.

<http://doi.org/10.1177/2156869318800157>

Else-Quest, N. M., & Hyde, J. S. (2016). Intersectionality in quantitative psychological research: I. Theoretical and epistemological issues. *Psychology of Women Quarterly*, 40(2), 155–170. <http://doi.org/10.1177/0361684316629797>

Elwood, W. N., Irvin, V. L., Sun, Q., & Breen, N. (2017). Measuring the influence of legally recognized partnerships on the health and well-being of same-sex couples: Utility of the California Health Interview Survey. *LGBT Health*, lgbt.2015.0085–8.

<http://doi.org/10.1089/lgbt.2015.0085>

Ferguson, A. D., Carr, G., & Snitman, A. (2014). Intersections of race-ethnicity, gender, and sexual minority communities. In M. L. Miville & A. D. Ferguson (Eds.), *Handbook of Race-Ethnicity and Gender in Psychology* (pp. 45–63). New York, NY: Springer New York.

http://doi.org/10.1007/978-1-4614-8860-6_3

Frost, D. M., & Meyer, I. H. (2009). Internalized homophobia and relationship quality among lesbians, gay men, and bisexuals. *Journal of Counseling Psychology*, 56(1), 97–109.

- Gallup. (2019). *U.S. support for gay marriage stable, at 63%* (pp. 1–9).
- Gamarel, K. E., Reisner, S. L., Laurenceau, J.-P., Nemoto, T., & Operario, D. (2014). Gender minority stress, mental health, and relationship quality: A dyadic investigation of transgender women and their cisgender male partners. *Journal of Family Psychology*, 28(4), 437–447. <http://doi.org/10.1037/a0037171>
- Gamarel, K. E., Sevelius, J. M., Reisner, S. L., Coats, C. S., Nemoto, T., & Operario, D. (2018). Commitment, interpersonal stigma, and mental health in romantic relationships between transgender women and cisgender male partners. *Journal of Social and Personal Relationships*, 38(2), 026540751878576–22. <http://doi.org/10.1177/0265407518785768>
- Garcia, M. A., & Umberson, D. (2019). Marital strain and psychological distress in same-sex and different-sex couples. *Journal of Marriage and Family*, 44(1), 102–16. <http://doi.org/10.1111/jomf.12582>
- Green, M. A., Evans, C. R., & Subramanian, S. V. (2017). Can intersectionality theory enrich population health research? *Social Science & Medicine*, 178, 214–216. <http://doi.org/10.1016/j.socscimed.2017.02.029>
- Green, R.-J. (2004). Risk and resilience in lesbian and gay couples: Comment on Solomon, Rothblum, and Balsam (2004). *Journal of Family Psychology*, 18(2), 290–292. <http://doi.org/10.1037/0893-3200.18.2.290>
- Hatzenbuehler, M. L. (2009). How does sexual minority stigma “get under the skin?” A psychological mediation framework. *Psychol Bull*, 135(5), 707–730. <http://doi.org/10.1037/a0016441>

Hatzenbuehler, M. L., Phelan, J. C., & Link, B. G. (2013). Stigma as a fundamental cause of population health inequalities. *American Journal of Public Health, 103*(5), 813–821.

<http://doi.org/10.2105/AJPH.2012.301069>

Herek, G. M., & Garnets, L. D. (2007). Sexual orientation and mental health. *Annual Review of Clinical Psychology, 3*(1), 353–375.

<http://doi.org/10.1146/annurev.clinpsy.3.022806.091510>

Holzapfel, J., Randall, A. K., Tao, C., & Iida, M. (2018). Intercultural couples' internal stress, relationship satisfaction, and dyadic coping. *Interpersona: an International Journal on Personal Relationships, 12*(2), 145–163. <http://doi.org/10.5964/ijpr.v12i2.302>

Hughes, T. L. (2011). Alcohol use and alcohol-related problems among sexual minority women. *Alcoholism Treatment Quarterly, 29*(4), 403–435.

<http://doi.org/10.1080/07347324.2011.608336>

Jeong, J. Y., & Horne, S. G. (2009). Relationship characteristics of women in interracial same-sex relationships. *Journal of Homosexuality, 56*(4), 443–456.

<http://doi.org/10.1080/00918360902821445>

Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, method, and research. *Psychol Bull, 118*(1), 3–34.

<http://doi.org/10.1037/0033-2909.118.1.3>

Keyes, K. M., Hatzenbuehler, M. L., Grant, B. F., & Hasin, D. S. (2012). Stress and alcohol: Epidemiologic evidence. *Alcohol Research Current Reviews, 34*(4), 391–400.

Krieger, N., Smith, K., Naishadham, D., Hartman, C., & Barbeau, E. M. (2005). Experiences of discrimination: Validity and reliability of a self-report measure for population health

research on racism and health. *Social Science & Medicine*, 61(7), 1576–1596.

<http://doi.org/10.1016/j.socscimed.2005.03.006>

Krueger, E. A., Fish, J. N., & Upchurch, D. M. (2020). Sexual Orientation Disparities in Substance Use: Investigating Social Stress Mechanisms in a National Sample. *American Journal of Preventive Medicine*, 58(1), 59–68.

<http://doi.org/10.1016/j.amepre.2019.08.034>

Lau, C. Q. (2012). The stability of same-sex cohabitation, different-sex cohabitation, and marriage. *Journal of Marriage and Family*, 74(5), 973–988.

<http://doi.org/10.1111/j.1741-3737.2012.01000.x>

Lavner, J. A., & Bradbury, T. N. (2017). ScienceDirect Protecting relationships from stress.

Current Opinion in Psychology, 13, 11–14. <http://doi.org/10.1016/j.copsyc.2016.03.003>

LeBlanc, A. J., & Frost, D. M. (2019). Couple-level minority stress and mental health among people in same-sex relationships: Extending minority stress theory. *Society and Mental Health*, 1–15. <http://doi.org/10.1177/2156869319884724>

LeBlanc, A. J., Frost, D. M., & Wight, R. G. (2015). Minority stress and stress proliferation among same-sex and other marginalized couples. *Journal of Marriage and Family*, 77(1), 40–59. <http://doi.org/10.1111/jomf.12160>

Lehmiller, J. J., & Agnew, C. R. (2007). Perceived marginalization and the prediction of romantic relationship stability. *Journal of Marriage and Family*, 69, 1036–1049.

<http://doi.org/10.1111/j.1741-3737.2007.00429.x/full>

Lewis, R. J., Kholodkov, T., & Derlega, V. J. (2012). Still stressful after all these years: A review of lesbians' and bisexual women's minority stress. *Journal of Lesbian Studies*,

16(1), 30–44. <http://doi.org/10.1080/10894160.2011.557641>

- Lincoln, K. D. (2015). Intersectionality: An approach to the study of gender, marriage, and health in context. In *Gender and Couple Relationships* (Vol. 6, pp. 223–230). Cham: Springer International Publishing. http://doi.org/10.1007/978-3-319-21635-5_14
- Meyer, I. H. (1995). Minority stress and mental health in gay men. *Journal of Health and Social Behavior*, 36(1), 38–56.
- Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychol Bull*, 129(5), 674–697. <http://doi.org/http://dx.doi.org/10.1037/0033-2909.129.5.674>
- Mohr, J. J., & Daly, C. A. (2008). Sexual minority stress and changes in relationship quality in same-sex couples. *Journal of Social and Personal Relationships*, 25(6), 989–1007. <http://doi.org/10.1177/0265407508100311>
- Nadal, K. L. (2019). Measuring LGBTQ microaggressions: The Sexual Orientation Microaggressions Scale (SOMS) and the Gender Identity Microaggressions Scale (GIMS). *Journal of Homosexuality*, 66(10), 1404–1414. <http://doi.org/10.1080/00918369.2018.1542206>
- Neff, L. A., & Karney, B. R. (2009). Stress and reactivity to daily relationship experiences: How stress hinders adaptive processes in marriage. *Journal of Personality and Social Psychology*, 97(3), 435–450. <http://doi.org/10.1037/a0015663>
- Neff, L. A., & Karney, B. R. (2017). Acknowledging the elephant in the room: How stressful environmental contexts shape relationship dynamics. *Current Opinion in Psychology*, 13, 107–110. <http://doi.org/10.1016/j.copsyc.2016.05.013>

- Neilands, T. B., LeBlanc, A. J., Frost, D. M., Bowen, K., Sullivan, P. S., Hoff, C. C., & Chang, J. (2019). Measuring a New Stress Domain: Validation of the Couple-Level Minority Stress Scale. *Archives of Sexual Behavior*, 1–17. <http://doi.org/10.1007/s10508-019-01487-y>
- Otis, M. D., Rostosky, S. S., Riggle, E. D. B., & Hamrin, R. (2006). Stress and relationship quality in same-sex couples. *Journal of Social and Personal Relationships*, 23(1), 81–99. <http://doi.org/10.1177/0265407506060179>
- Parent, M. C., DeBlaere, C., & Moradi, B. (2013). Approaches to research on intersectionality: Perspectives on gender, LGBT, and racial/ethnic identities. *Sex Roles*, 68(11-12), 639–645. <http://doi.org/10.1007/s11199-013-0283-2>
- Randall, A. K., & Bodenmann, G. (2017). Stress and its associations with relationship satisfaction. *Current Opinion in Psychology*, 13, 96–106. <http://doi.org/10.1016/j.copsyc.2016.05.010>
- Reczek, C. (2015). Parental disapproval and gay and lesbian relationship quality. *Journal of Family Issues*, 1–24. <http://doi.org/10.1177/0192513X14566638>
- Rogge, R. D., Bradbury, T. N., Hahlweg, K., Engl, J., & Thurmaier, F. (2006). Predicting marital distress and dissolution: Refining the two-factor hypothesis. *Journal of Family Psychology*, 20(1), 156–159. <http://doi.org/10.1037/0893-3200.20.1.156>
- Rosenthal, L., Deosaran, A., Young, D. L., & Starks, T. J. (2019). Relationship stigma and well-being among adults in interracial and same-sex relationships. *Journal of Social and Personal Relationships*, 42, 026540751882278–21. <http://doi.org/10.1177/0265407518822785>
- Rostosky, S. S., Riggle, E. D. B., Savage, T. A., Roberts, S. D., & Singletary, G. (2008). Interracial same-sex couples' perceptions of stress and coping: An exploratory study.

Journal of GLBT Family Studies, 4(3), 277–299.

<http://doi.org/10.1080/15504280802177458>

Rouhani, S. (2014). Intersectionality-informed quantitative research: A primer. *American Journal of Public Health*.

Salway, T. J., Morgan, J., Ferlatte, O., Hawkins, B., Lachowsky, N. J., & Gilbert, M. (2019). A systematic review of characteristics of nonprobability community venue samples of sexual minority individuals and associated methods for assessing selection bias. *LGBT Health*, 16(1), 241–251. <http://doi.org/10.1089/lgbt.2018.0241>

Scott, N., & Siltanen, J. (2012). *Gender and intersectionality – a quantitative toolkit for analyzing complex inequalities*. Employment and Social Development Canada (pp. 1–31).

Simon, R. W., & Barrett, A. E. (2010). Nonmarital romantic relationships and mental health in early adulthood: Does the association differ for women and men? *Journal of Health and Social Behavior*, 51(2), 168–182. <http://doi.org/10.1177/0022146510372343>

Steinbugler, A. C. (2005). Visibility as privilege and danger: Heterosexual and same-sex interracial intimacy in the 21st century. *Sexualities*, 8(4), 425–443. <http://doi.org/10.1177/1363460705056618>

Szymanski, D. M., & Gupta, A. (2009). Examining the relationship between multiple internalized oppressions and African American lesbian, gay, bisexual, and questioning persons' self-esteem and psychological distress. *Journal of Counseling Psychology*, 56(1), 110–118. <http://doi.org/10.1037/a0013317>

Toosi, N. R., Babbitt, L. G., Ambady, N., & Sommers, S. R. (2012). Dyadic interracial interactions: A meta-analysis. *Psychol Bull*, 138(1), 1–27. <http://doi.org/10.1037/a0025767>

- Umberson, D., & Montez, J. K. (2010). Social relationships and health: A flashpoint for health policy. *Journal of Health and Social Behavior*, 51(1 Suppl), S54–S66.
<http://doi.org/10.1177/0022146510383501>
- Veldhuis, C. B., Drabble, L., Riggle, E. D. B., Wootton, A. R., & Hughes, T. L. (2018). “We won’t go back into the closet now without one hell of a fight”: Effects of the 2016 presidential election on sexual minority women’s and gender minorities’ stigma-related concerns. *Sexuality Research and Social Policy*, 15(1), 12–24. <http://doi.org/10.1007/s13178-017-0305-x>
- Whitton, S. W., & Kuryluk, A. D. (2014). Associations between relationship quality and depressive symptoms in same-sex couples. *Journal of Family Psychology*, 28(4), 571–576. <http://doi.org/10.1037/fam0000011>
- Williams, D. R., Yu, Y., Jackson, J. S., & Anderson, N. B. (1997). Racial differences in physical and mental health socio-economic status, stress and discrimination. *Journal of Health Psychology*, 2(3), 335–351. <http://doi.org/10.1177/135910539700200305>