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Research Article

# Who Says I Do: The Changing Context of Marriage and Health and Quality of Life for LGBT Older Adults

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## Abstract

**Purpose of the Study:** Until recently, lesbian, gay, bisexual, and transgender (LGBT) adults were excluded from full participation in civil marriage. The purpose of this study is to examine how legal marriage and relationship status are associated with health-promoting and at-risk factors, health, and quality of life of LGBT adults aged 50 and older.
**Design and Methods:** We utilized weighted survey data from Aging with Pride: National Health, Aging, and Sexuality/Gender Study (NHAS) participants who resided in states with legalized same-sex marriage in 2014 (*N* = 1,821). Multinomial logistic regression was conducted to examine differences by relationship status (legally married, unmarried partnered, single) in economic and social resources; LGBT contextual and identity factors; health; and quality of life.
**Results:** We found 24% were legally married, and 26% unmarried partnered; one-half were single. Those legally married reported better quality of life and more economic and social resources than unmarried partnered; physical health indicators were similar between legally married and unmarried partnered. Those single reported poorer health and fewer resources than legally married and unmarried partnered. Among women, being legally married was associated with more LGBT microaggressions.
**Implications:** LGBT older adults, and practitioners serving them, should become educated about how legal same-sex marriage interfaces with the context of LGBT older adults' lives, and policies and protections related to age and sexual and gender identity. Longitudinal research is needed to understand factors contributing to decisions to marry, including short- and long-term economic, social, and health outcomes associated with legal marriage among LGBT older adults.

**Keywords:** Same-sex marriage, Sexual identity, Gender identity, LGBT, Aging with Pride

The U.S. Supreme Court in *Obergefell v. Hodges*, June 2015, ruled same-sex couples have the constitutional right to marry, marking one of the most profound changes to social policy in recent history. Lesbian, gay, bisexual, and transgender (LGBT) older adults have experienced a long history of struggle for civil rights, including legal marriage, sparked by the Stonewall riots in 1969. Ensuing decades were marked by contentious state-level rulings both for and against the right to same-sex marriage (Freedom to Marry, 2016) including, in 1996, the passage of the Defense of Marriage Act (DOMA), which defined marriage in federal law as the union between one man and one woman, allowing states to not recognize same-sex marriages performed in other states and excluding same-sex couples from receiving federal marriage benefits (Congress.gov, 1996).

In the court of public opinion, however, acceptance of LGBT people and same-sex marriage increased more rapidly (McCarthy, 2015). More than 30 years after the first same-sex couples set legal proceedings for marriage in motion, in 2004 *Goodridge v. Department of Public Health* in Massachusetts led to the first legal state-sanctioned same-sex marriage in the United States; by this time nearly three quarters of states had enacted bans on same-sex marriage. However, in 2013, the Supreme Court reversed portions of DOMA, extending federal recognition to those in legal state-sanctioned same-sex marriages. By the time the Supreme Court ruled in 2015 that states could no longer ban same-sex marriage, 75% of the states (36) sanctioned same-sex marriage. Many have characterized this rapid shift in attitudes and support of same-sex marriage as one of the most dramatic in history.

The benefits associated with marriage are reflected in decades of research documenting that married individuals in the general population report more economic resources (Brown, Bulanda, & Lee, 2012; Lin & Brown, 2012), better overall health (Fuller, 2010; Lee & Payne, 2010; Manzoli, Villari, Pirone, & Boccia, 2007; Pienta, Hayward, & Jenkins, 2000), higher quality of life (QOL), including happiness (Lee & Bulanda, 2005; Wienke & Hill, 2008) and longer life (Lee & Payne, 2010) as well as more social and community resources (Brown et al., 2012) compared to those who are cohabiting, dating, or single. Although marriage is associated with better security of resources and health among older adults in general, there is a dearth of knowledge about how marriage may influence the lives, health, and well-being of LGBT older adults. Relationship status and related factors are likely influenced by legal, cultural, and political contexts, especially historical marginalization, previous social exclusion from civil marriage, and recent changes in social policies.

Because most same-sex couples have not had the option of civil marriage until recently, their reasons for becoming married or remaining unmarried may vary greatly and differ from heterosexual couples in the general population. Like the general population, LGBT adults benefit from being partnered. Among sexual minority older adults, being partnered or married was found to be protective for physical and mental health (Williams & Fredriksen-Goldsen, 2014) and associated with lower levels of stigma and loneliness (Kim & Fredriksen-Goldsen, 2016). Also, as in the general population, limited evidence suggests that being married is associated with benefits beyond merely being partnered. Among lesbian, gay, and bisexual adults, for example, same-sex marriages have been associated with benefits, including higher levels of happiness and lower levels of psychological distress, compared to those who are dating or single, even prior to the federal legalization of civil marriage (Riggle, Rostosky, & Horne, 2010; Wienke & Hill, 2008). Partnered gay adult men have reported fewer depressive symptoms than those not partnered, and having a same-sex legal spouse was more protective than being

domestic partners (Wight, LeBlanc, de Vries, & Detels, 2012).

The goals of this study are to understand who, among older same-sex couples, opts to legally marry and who does not; what is the association of relationship status (legally married, unmarried partnered, single) with socioeconomic and social resources, LGBT contextual and identity factors, health, and QOL among LGBT older adults; and whether there are similarities and differences between women and men in factors associated with relationship status. This research has important implications for practitioners, policymakers, and communities to better understand the relative benefits and constraints associated with legal marriage in later life in this population.

## Conceptual Framework

Both health-promoting and at-risk factors explored along with relationship status in this study are derived from the Health Equity Promotion Model (HEPM; Fredriksen-Goldsen et al., 2014), which highlights potential mechanisms associated with health and QOL of LGBT populations. The HEPM posits that intersections between social positions (e.g., sexual identity, sex, and race/ethnicity), and individual- and structural-level contexts shape access to health-promoting and at-risk factors (e.g., socioeconomic, LGBT contextual and identity factors, and social resources and risks), which in turn contribute to overall physical and mental health across the lifespan. The HEPM also incorporates the life course and considers the timing of individuals' lives: Today's LGBT older adults have faced enormous stigma and did not have access to civil marriage earlier in life, experiences that are bound to inform their perceptions and decisions later in life, including those related to marriage.

The study employs gendered and life-course lenses in order to explore the differences that exist within groups of LGBT older adults according to diversity in experiences and social contexts (Calasanti & Slevin, 2001; Dannefer & Settersten, 2010). A gendered lens of aging examines power relations and inequalities shaped and reinforced by social processes and structures that influence how people act and perceive themselves as men and women (Calasanti & Slevin, 2001). A life-course lens posits that the dynamic process of aging is influenced by cumulative life experiences within structural and cultural contexts (Dannefer & Settersten, 2010). Life-course analyses, embedded within an equity perspective, consider the consequences of earlier life transitions, such as the timing of marriage, on later-life trajectories of adult development (Elder, 1994; Fredriksen-Goldsen & Muraco, 2010). Although marriage rates in the United States are decreasing (Schoen, 2016) and the average age at marriage for heterosexuals is increasing (U.S. Census Bureau, 2013), current cohorts of LGBT older adults were unable to civilly marry a same-sex partner until just over a decade ago and not until 2013 and 2014 in most states,

even if they have been in a long-term relationship. Thus, in some respects, LGBT older adults are "off time" in that they may not experience the transition to marriage until mid or late life (Elder, 1994), which may have subsequent effects on the aging process.

## Social Positions

Relationship status and its correlates may be influenced by an individual's other social positions, such as gender, sex, race/ethnicity, and socioeconomic status. From studies of the general population, we know the health benefits of marriage are larger for African Americans and Latinos than for Whites (Pienta et al., 2000). Also, single older women outnumber single men and experience the poorest overall health (Liu & Umberson, 2008) and highest rates of disability (Lin & Brown, 2012) and depression (McDonough, Walters, & Strohschein, 2003). A community-based study found that LGBT older adults living with a partner or spouse were more likely to be younger, female, and of higher socioeconomic status (Williams & Fredriksen-Goldsen, 2014).

## Socioeconomic Resources

Economic resources shape health-promoting and at-risk factors and may influence and be influenced by relationship status. Compared to those who are married, unmarried Baby Boomers in the general population have lower educational attainment and household income (Lin & Brown, 2012). Additionally, single older adults with limited economic resources are less likely to become partnered in later life (Brown et al., 2012). Moreover, there are gender differences in economic resources by relationship status. In the general population, single older women are more likely to experience lower socioeconomic resources than married women and married or single men (Lin & Brown, 2012). Female same-sex couples are more likely to live in poverty than heterosexual couples and male same-sex couples (U.S. Census Bureau, 2014).

## LGBT Contextual and Identity Factors

The HEPM takes into account life events related to sexual or gender identity. For example, a common life event of LGBT individuals is identity disclosure (or coming out), which is not a single event, but rather a continuous process of identity management. Furthermore, experiences of LGBT microaggressions are also common, that is, biases encountered in everyday life. Being married may voluntarily and involuntarily indicate one's sexual or gender identity to others, likely resulting in less control over one's degree of outness and visibility as a LGBT person. Marriage may thus lead to greater risk of being a target of LGBT bias.

## Social Resources and Risks

Relationship status may interact with social network structure and support because having a partner can bolster social and family network size, and create opportunities for contact, socialization, and assistance. Married adults in the general population have larger social networks compared to single and cohabiting individuals (Brown et al., 2012). Social resources may also be gendered, such that lesbians' close networks of support include partners, children, friends, and ex-partners as a buffer from both sexism and heterosexism, and as a result of women's socialization "to be better at and care more about relationships" (Weinstock, 2004); gay men may also maintain close relationships with ex-partners, though to a lesser extent than lesbians (Nardi, 1999). In gay and lesbian couples, those with longer relationships have larger social networks, including more same-sex couples (Fokkema & Kuyper, 2009). LGBT older adults living alone, on the other hand, report lower levels of social support and greater loneliness compared to those living with a spouse or partner (Kim & Fredriksen-Goldsen, 2016).

It is important to recognize that the progression in marriage policy needs to be considered in research of same-sex couples; the legalization of civil marriage among same-sex couples was not a single event, but rather an incremental process that needs to be studied as such. Many states legalized same-sex marriage prior to the Supreme Court's ruling in 2015, and in fact, federal-level policy change occurred only after the majority of states had changed state-level policies, which has been defined as the critical moment in which the U.S. Supreme Court was willing to recognize federal marriage for same-sex couples. Thus, in this article, we assess LGBT older adults' relationship status in 32 states (plus the District of Columbia) that allowed same-sex civil marriage with access to federal benefits as of November 1, 2014, to analyze outcomes that may be related to the incremental nature of change in same-sex marriage policies as well as to assess the eventual impact of national same-sex marriage recognition at differing time points. We examine the demographic characteristics of LGBT adults aged 50 and older who are married, unmarried partnered, and single, and analyze how health-promoting and at-risk factors and outcomes are associated with relationship status by gender. We hypothesize that married participants will have greater socioeconomic and social resources, fewer LGBT contextual and identity risks, and better health and QOL compared to those unmarried partnered, and that those single will have the fewest resources and face the greatest risks. Furthermore, we expect women and men, as they differ in their social positions, to show different patterns in relationship status, resources, and risks, and the correlates independently contributing to relationship status.

## Design and Methods

We conducted cross-sectional analysis using 2014 data from Aging with Pride: National Health, Aging, and Sexuality/Gender Study (NHAS), a national longitudinal study regarding health and well-being among adults aged 50 and older who self-identified as lesbian, gay, bisexual, or transgender,

or engaged in a sexual or romantic relationship with someone of the same sex or gender. Participants completed a paper or online survey and were compensated $20 for their time. For this analysis, we used a subsample of participants (*N* = 1,821) living in the 32 states, plus the District of Columbia, with legal same-sex marriage and access to federal benefits by November 1, 2014 (the date of survey distribution) and who met the following criteria: (a) identified as gay, lesbian, or bisexual; (b) identified their sex as male or female; and (c) if partnered, were in a same-sex couple.

## Measures

*Relationship status*: "What is your current relationship status?", with responses: *partnered, married, or single*. If partnered or married, they were asked, "What is the current legal status of your relationship?" with answer options *married, legally recognized*; *married, not legally recognized*; *partnered, legally recognized (such as domestic partnership or civil union)*; and *partnered, not legally recognized*. Based on this information, relationship status was categorized as single, legally married, or partnered unmarried (including those in marriages not legally recognized and those in legally recognized non-marriage partnerships).

*Demographic characteristics* included age in years, gender (*women* or *men*), sexual identity (*gay/lesbian* or *bisexual*), race/ethnicity (*non-Hispanic White* or *other race/ethnicity*), and length of relationship in years for those who were in a same-sex couple.

*Socioeconomic resources* included level of education (*high school graduate or less* = 0; *more than high school* = 1); household income (*less than 200% of federal poverty level [FPL]* = 0; *at or greater than 200% of FPL* = 1); total value of household assets (*less than $10,000* = 0; *$10,000 or greater* = 1); home ownership (*not a homeowner* = 0; *homeowner* = 1); possession of private health insurance (*no insurance or public insurance only* = 0; *private insurance* = 1); employment status (*unemployed* = 0; *employed* = 1); and retirement status (*not retired* = 0; *retired* = 1).

*LGBT contextual and identity factors* were assessed with two indicators. Outness (one's level of visibility as an LGBT person) was assessed with a single item "Please indicate your level of visibility with respect to being LGBT," which was rated on a scale of 1 (*never told anyone about your sexual orientation or gender identity*) to 10 (*told everyone you know about your sexual orientation or gender identity*). Guided by previous literature (Sue et al., 2007; Woodford, Chonody, Kulick, Brennan, & Renn, 2015), LGBT microaggressions (subtle comments or actions directed toward LGBT individuals which are intentionally or unintentionally offensive) was assessed with eight items (α = .85), for example, "People use derogatory terms to refer to LGBT individuals in your presence" (*never* = 0, *almost every day* = 5).

*Social resources and risks* included having children (*no living children* = 0, *at least one living child* = 1); living arrangement (*live alone* = 0, *live with at least one other* = 1); availability of social support assessed by the abbreviated four-item scale (Gjesfjeld, Greeno, & Kim, 2008) of MOS-Social Support Scale (Sherbourne & Stewart, 1991; e.g., "Someone to help with daily chores if you were sick"; *never* = 0, *very often* = 4; α = .88).

*Physical health* included self-rated general health (*poor* = 1, *excellent* = 5) and the presence or absence of disability (e.g., limited activities or need for special equipment due to health problems; *absent* = 0, *present* = 1).

*QOL* was assessed using the World Health Organization Quality of Life-BREF (WHOQOL-BREF), a 26-item questionnaire that provides four subscales: physical QOL (e.g., "Do you have enough energy for everyday life?"; α = .87); psychological QOL (e.g., "How much do you enjoy life?"; α = .85); social QOL (e.g., "How satisfied are you with your personal relationships?"; α = .78); and environmental QOL (e.g., "How satisfied are you with the conditions of the place where you live?"; α = .84; Bonomi, Patrick, Bushnell, & Martin, 2000). Each item was rated on a 5-point Likert scale with a summary score ranging from 0 to 100 computed for each subscale using the recommended formula (World Health Organization, 2004).

## Data Analysis

Statistical analysis was performed using Stata (Version 14.1). In order to reduce sampling bias and increase the generalizability of the findings, we applied survey weights to statistical analyses. Survey weights were computed utilizing three external probability samples' data as benchmarks following two-step postsurvey adjustment, as has been applied to other types of non-probability samples (Lee, 2006; Lee & Valliant, 2009). In the first step, the Aging with Pride: NHAS sample was combined with the National Health Interview Survey (NHIS) sample ascertaining sexual orientation by sexual identity, and we computed the probability of being selected from the NHIS versus the Aging with Pride: NHAS sample by using a logistic regression model with age, sex, sexual orientation, Hispanic ethnicity, race, education, region, and home ownership as covariates. In the second step, we further calibrated the weights for those in same-sex partnerships, another indicator of sexual orientation. The population totals by age, race/ethnicity, gender, education, marital status, and region were estimated from the NHIS, the American Community Survey (ACS), and the Health and Retirement Study (HRS). See Fredriksen-Goldsen and Kim (2017) for detailed information regarding the postsurvey adjustment procedures.

To examine the demographic profiles of each relationship status, estimated means and proportions for variables of interest were computed and compared. Next, to examine whether the associations between relationship status and individual and structural factors remained consistent after controlling for demographic characteristics, we conducted a series of multinomial logistic regression analyses

predicting relationship status (reference category = single), controlling for age, race/ethnicity, and sexual identity. These analyses were separated by gender to examine patterns between women and men.

## Results

Demographic characteristics by relationship status are displayed in Table 1. Weighted proportions indicate that 23.91% of the sample was legally married, 26.29% unmarried partnered, and 49.80% single. A significantly higher proportion of men than women were single. Married and unmarried partnered participants were, on average, significantly younger than those who were single, and more likely to identify as gay or lesbian rather than bisexual.

Those married were more likely to identify their race/ethnicity as non-Hispanic White than unmarried partnered or single. The average duration of married participants' relationships was significantly longer (on average, about 23 years) than those unmarried (about 16 years).

As shown in Table 2, weighted proportions by relationship status and gender reveal that among women, 30% were legally married, 29% unmarried partnered, and 41% single. Among men, 19% were legally married, 25% unmarried partnered, and 56% single. Legally married and unmarried partnered women were, on average, younger than single women; there were no significant age differences by relationship status for men. Legally married men and women were more likely to identify their race/ethnicity as non-Hispanic White and to have longer partnership

**Table 1.** Demographic, Socioeconomic, Psychosocial, and Health Characteristics by Relationship Status

|  | Legally married | Unmarried partnered | Single |
|---|---|---|---|
| Unweighted *n* | 375 | 428 | 1,018 |
| Weighted proportion | .24 | .26 | .50 |
|  | Mean (*SE*) or % | Mean (*SE*) or % | Mean (*SE*) or % |
| Demographic characteristics |  |  |  |
| Age | 61.82 (0.61)[b] | 62.38 (0.63)[c] | 63.98 (0.45) |
| Gender: women | 52.65[b] | 44.77[c] | 34.44 |
| Sexual identity: gay/lesbian | 91.60[b] | 89.64[c] | 76.94 |
| Race/ethnicity: non-Hispanic White | 91.45[a,b] | 77.63 | 79.54 |
| Length of relationship (years) | 23.20 (8.68)[a] | 16.38 (11.45) |  |
| Socioeconomic resources |  |  |  |
| Education > High school | 85.92[a,b] | 66.76 | 63.89 |
| Household income > 200% FPL | 91.00[a,b] | 74.11[c] | 60.61 |
| Household assets ≥ $10,000 | 95.98[a,b] | 82.21[c] | 62.63 |
| Own home | 90.84[a,b] | 66.81[c] | 48.58 |
| Private health insurance | 86.05[a,b] | 64.09[c] | 52.35 |
| Employed | 63.56[b] | 53.42[c] | 33.71 |
| Retired | 28.20[b] | 26.53[c] | 37.38 |
| LGBT contextual and identity factors |  |  |  |
| Microaggressions | 1.21 (0.06) | 1.12 (0.96) | 1.12 (1.02) |
| Outness (1–10 scale) | 9.36 (0.07)[a,b] | 8.36 (1.17)[c] | 7.83 (0.16) |
| Social resources and risks |  |  |  |
| Have children | 40.84[a,b] | 26.21 | 25.25 |
| Live with others | 94.90[a,b] | 82.84[c] | 19.13 |
| Social support | 3.55 (0.06)[a,b] | 3.29 (0.08)[c] | 2.03 (0.06) |
| Death of partner or spouse (ever) | 11.86[a,b] | 24.14[c] | 35.36 |
| Receiving informal care | 22.65[a] | 33.02[c] | 17.73 |
| Health/QOL |  |  |  |
| General health rating | 3.63 (0.07)[a,b] | 3.36 (0.09)[c] | 3.09 (0.06) |
| Disability | 40.64[b] | 40.55[c] | 59.16 |
| Physical QOL | 75.33 (1.40)[b] | 71.23 (1.87)[c] | 65.67 (1.18) |
| Psychological QOL | 71.98 (1.06)[b] | 69.64 (1.47)[c] | 61.95 (1.20) |
| Social QOL | 71.02 (1.41)[a,b] | 64.93 (1.70)[c] | 50.24 (1.39) |
| Environmental QOL | 81.77 (1.06)[a,b] | 76.14 (1.34)[c] | 70.68 (0.99) |

*Note:* FPL = federal poverty level; LGBT = lesbian, gay, bisexual, and transgender; QOL = quality of life. All estimates are weighted.
[a]Significant difference (*p* < .05) between legally married and unmarried partnered. [b]Significant difference between legally married and single. [c]Significant difference between unmarried partnered and single.

**Table 2.** Demographic, Socioeconomic, Psychosocial, and Health Characteristics by Relationship Status and Gender

| | Women | | | Men | | |
|---|---|---|---|---|---|---|
| | Legally married | Unmarried partnered | Single | Legally married | Unmarried partnered | Single |
| Unweighted *n* | 187 | 186 | 353 | 188 | 242 | 665 |
| Weighted proportion of gender | .30 | .29 | .41 | .19 | .25 | .56 |
| | Mean (*SE*) or % | Mean (*SE*) or % | Mean (*SE*) or % | Mean (*SE*) or % | Mean (*SE*) or % | Mean (*SE*) or % |
| **Demographic characteristics** | | | | | | |
| Age | 61.13 (0.78)[b] | 61.37 (0.87)[c] | 64.01 (0.65) | 62.58 (0.97) | 63.20 (0.89) | 63.97 (0.59) |
| Sexual identity: gay/lesbian | 84.04[b] | 87.31[c] | 69.03 | 100[b] | 91.53 | 81.09 |
| Race/ethnicity: non-Hispanic White | 90.89[b] | 83.91 | 75.38 | 92.09[a] | 72.53 | 81.72 |
| Relationship length (years) | 22.47 (12.10)[a] | 14.79 (14.76) | — | 24.02 (12.77)[a] | 17.66 (16.35) | — |
| **Socioeconomic resources** | | | | | | |
| Education > High school | 90.64[b] | 79.36 | 68.89 | 80.67[a,b] | 56.54 | 61.27 |
| Household income > 200% FPL | 90.67[a,b] | 73.22 | 59.84 | 91.37[a,b] | 74.83[c] | 61.00 |
| Household assets ≥ $10,000 | 94.84[b] | 90.37[c] | 68.88 | 97.26[a,b] | 75.68[c] | 59.37 |
| Own home | 94.85[a,b] | 75.92[c] | 50.62 | 86.37[a,b] | 59.40 | 47.51 |
| Private health insurance | 91.88[a,b] | 71.01 | 56.68 | 79.56[a,b] | 58.48 | 50.07 |
| Employed | 62.97[b] | 62.97[c] | 35.07 | 64.23[a,b] | 45.42 | 33.00 |
| Retired | 27.82 | 23.64[c] | 36.49 | 28.62 | 28.87 | 37.85 |
| **LGBT contextual and identity factors** | | | | | | |
| Microaggressions | 1.25 (0.08)[b] | 1.14 (0.13) | 0.99 (0.07) | 1.16 (0.08) | 1.11 (0.11) | 1.18 (0.06) |
| Outness (1–10 scale) | 9.50 (0.09)[a,b] | 8.59 (0.20) | 8.13 (0.20) | 9.21 (0.11)[a,b] | 8.17 (0.25) | 7.68 (0.21) |
| **Social resources and risks** | | | | | | |
| Have children | 54.68[a,b] | 31.88 | 37.31 | 25.55 | 21.46 | 19.04 |
| Live with others | 94.21[b] | 87.21[c] | 22.57 | 95.67[a,b] | 79.27[c] | 17.34 |
| Social support | 3.68 (0.06)[a,b] | 3.36 (0.10)[c] | 2.11 (0.07) | 3.40 (0.08)[b] | 3.23 (0.13)[c] | 1.99 (0.08) |
| Death of partner or spouse (ever) | 8.47[b] | 18.22 | 21.11 | 15.63[a,b] | 28.96[c] | 42.77 |
| Receiving informal care | 23.30 | 31.91 | 21.02 | 21.91 | 33.95[c] | 16.00 |
| **Health/QOL** | | | | | | |
| General health rating | 3.64 (0.10)[b] | 3.45 (0.14)[c] | 2.88 (0.09) | 3.62 (0.10)[a,b] | 3.29 (0.11) | 3.20 (0.08) |
| Disability | 47.25[b] | 36.49[c] | 69.65 | 33.33[b] | 43.94 | 53.73 |
| Physical QOL | 73.77 (2.31)[b] | 73.26 (2.84)[c] | 62.26 (1.79) | 77.05 (1.39)[a,b] | 69.58 (2.45) | 67.45 (1.50) |
| Psychological QOL | 71.64 (1.42)[b] | 70.55 (1.67)[c] | 62.22 (2.05) | 72.37 (1.58)[b] | 68.89 (2.29)[c] | 61.81 (1.48) |
| Social QOL | 72.85 (1.87)[a,b] | 63.39 (2.49)[c] | 49.50 (2.17) | 69.05 (2.06)[b] | 66.18 (2.29)[c] | 50.62 (1.77) |
| Environmental QOL | 81.12 (1.39)[b] | 76.65 (1.89)[c] | 71.29 (1.51) | 82.51 (1.61)[a,b] | 75.72 (1.89)[c] | 70.35 (1.28) |

*Note:* FPL = federal poverty level; LGBT = lesbian, gay, bisexual, and transgender; QOL = quality of life. All estimates are weighted.

[a]Significant difference (*p* < .05) between legally married and unmarried partnered. [b]Significant difference between legally married and single. [c]Significant difference between unmarried partnered and single.

durations than unmarried partnered. They also evidenced the most socioeconomic resources across a variety of indicators, especially among legally married men, with advantages compared with both unmarried partnered and single men in education, income, assets, home ownership, health insurance, and employment status. Legally married women had those same advantages compared with single women and showed greater economic resources compared to unmarried partnered women in income, home ownership, and health insurance.

Legally married women and men were more out compared with unmarried partnered and single men and women. However, legally married women experienced more LGBT microaggressions compared with single women; among men, there were no differences in microaggressions. Legally married men and women generally showed the highest levels of social resources. Among women, those who were legally married were more likely to have children and higher levels of social support compared with both unmarried partnered and single women; legally married women compared to single women were more likely to live with others and less likely to have ever experienced the death of a partner. Among men, the likelihood of having children did not differ by relationship status; men who were legally married were more likely to live with others and less likely to have ever experienced the death of a partner or spouse compared with both unmarried partnered and single men. Both legally married and unmarried partnered men had higher levels of social support compared with single men, but they did not differ from each other in social support. Unmarried partnered men were the most likely to be receiving informal care.

Health and QOL did not differ greatly between those legally married and unmarried partnered, but was lowest for those single. Among women, those who were legally married and unmarried partnered had better general health, lower rates of disability, and better QOL across all domains compared with those who were single; married women only had greater social QOL than those unmarried partnered. Legally married men also fared better than single men on all indicators of health and QOL; married men showed advantages over unmarried partnered men in general health and physical and environmental QOL. Unmarried partnered men showed similar health but better psychological, social, and environmental QOL than single men.

Results of the multinomial logistic regressions predicting participants' relative risk of being married or unmarried partnered, controlling for demographic characteristics (age, sexual identity, and race/ethnicity), are shown in Table 3. The reference category for these models is single; thus, estimates indicate the likelihood of being legally married or unmarried partnered relative to being single. Relative risk ratios smaller than one indicate greater likelihood of being single and ratios larger than one indicate greater likelihood of being married or unmarried partnered. In order

to examine differences between legally married and unmarried partnered, we also assessed differences with legally married as reference category. Differences by relationship status remained similar after adjusting for demographic characteristics, with a few notable exceptions:

After adjusting for demographic characteristics, legally married men and women showed advantages over single men and women across nearly all indicators of economic, health, and social resources, with the exception that legally married women report more LGBT microaggressions. Legally married women, compared with unmarried partnered women, showed greater household income, home ownership, and private health insurance, showed greater outness, were more likely to have children, had more social support, and had higher social and environmental QOL. Legally married men, compared with unmarried partnered men, showed greater household assets and home ownership, greater outness, were more likely to live with others, and had higher physical and environmental QOL.

## Gender Differences Within Relationship Status (Adjusted for Demographic Characteristics)

After adjusting for demographic characteristics, we compared women to men of the same relationship status. Among legally married LGBT older adults, women were significantly more likely than men to be homeowners (adjusted odds ratio [AOR] = 3.16, $p$ = .03), to have private health insurance (AOR = 2.91, $p$ = .03), and to have children (AOR = 3.32, $p$ = .001). Married women also had significantly higher levels of social support than married men ($B$ = 0.30, $p$ = .007). Among unmarried partnered LGBT older adults, the only significant gender difference was in education; unmarried partnered women were more likely than unmarried partnered men to have more than a high school education (AOR = 2.92, $p$ = .04). Among single LGBT older adults, women were more likely than men to have household assets of $10,000 or more (AOR = 1.89, $p$ = .02). Single women fared worse than single men on indicators of physical health including general health ($B$ = −0.29, $p$ = .02), disability (AOR = 1.96, $p$ = .003), and lower physical QOL ($B$ = −4.78, $p$ = .04). Single women were more out than single men ($B$ = 0.71, $p$ = .01), but experienced fewer LGBT microaggressions ($B$ = −0.21, $p$ = .03). Finally, single women were more likely than single men to have children (AOR = 2.46, $p$ < .001), and less likely to have ever experienced the death of a partner or spouse (AOR = 0.33, $p$ < .001).

## Discussion

LGBT people have maintained committed relationships throughout history, yet civil marriage for same-sex couples has only recently (2015) been legalized in the United States. The present study provides the broadest view to date of how the availability of legal marriage in the United States

**Table 3.** Multinomial Logistic Regressions Predicting Relationship Status, Adjusted for Demographic Characteristics

| | Full sample | | | | Women | | | | Men | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Legally married | | Unmarried partnered | | Legally married | | Unmarried partnered | | Legally married | | Unmarried partnered | |
| | RRR | SE | RRR | SE | RRR | SE | RRR | SE | RRR | SE | RRR | SE |
| Socioeconomic resources | | | | | | | | | | | | |
| Education > High school | 3.04**ᵃ | 1.14 | 1.19 | 0.31 | 4.89* | 3.13 | 1.96 | 0.86 | 2.23 | 1.06 | 0.98 | 0.31 |
| Household income > 200% FPL | 6.19***ᵃ | 2.22 | 2.06** | 0.52 | 6.62**ᵃ | 3.64 | 1.94 | 0.71 | 6.29*** | 2.76 | 2.54** | 0.83 |
| Household assets ≥ $10,000 | 14.30***ᵃ | 7.57 | 3.43*** | 0.97 | 7.67** | 5.61 | 4.35** | 2.23 | 24.84****ᵃ | 14.10 | 2.95** | 0.97 |
| Own home | 10.08***ᵃ | 2.74 | 2.42*** | 0.52 | 18.02***ᵃ | 6.75 | 3.26** | 1.13 | 6.93***ᵃ | 2.22 | 2.20** | 0.59 |
| Private health insurance | 5.06***ᵃ | 1.39 | 1.69* | 0.37 | 8.29***ᵃ | 3.15 | 1.87 | 0.68 | 3.42*** | 1.20 | 1.62 | 0.45 |
| Employed | 3.10*** | 0.68 | 2.22*** | 0.50 | 2.74** | 0.92 | 2.80** | 0.94 | 3.54*** | 0.98 | 1.91* | 0.58 |
| Retired | 0.86 | 0.2 | 0.67 | 0.16 | 1.05 | 0.39 | 0.73 | 0.25 | 0.75 | 0.23 | 0.64 | 0.21 |
| LGBT contextual and identity factors | | | | | | | | | | | | |
| Microaggressions | 1.12 | 0.13 | 0.96 | 0.14 | 1.49* | 0.25 | 1.25 | 0.27 | 0.95 | 0.16 | 0.86 | 0.17 |
| Outness (1–10 scale) | 1.67***ᵃ | 0.12 | 1.10* | 0.05 | 1.89***ᵃ | 0.28 | 1.06 | 0.07 | 1.51***ᵃ | 0.10 | 1.10 | 0.06 |
| Social resources and risks | | | | | | | | | | | | |
| Have children | 2.05**ᵃ | 0.43 | 1.05 | 0.24 | 2.30**ᵃ | 0.67 | 0.88 | 0.28 | 1.45 | 0.48 | 1.17 | 0.4 |
| Live with others | 76.05***ᵃ | 32.08 | 20.50*** | 4.62 | 56.81*** | 32.98 | 24.36*** | 8.54 | 104.59****ᵃ | 66.66 | 19.45*** | 5.58 |
| Social support | 6.07***ᵃ | 1.25 | 3.79*** | 0.67 | 11.94***ᵃ | 3.97 | 4.70*** | 1.23 | 4.03*** | 0.91 | 3.44*** | 0.80 |
| Death of partner or spouse (ever) | 0.27***ᵃ | 0.07 | 0.59* | 0.14 | 0.38* | 0.18 | 0.98 | 0.38 | 0.27*** | 0.09 | 0.51* | 0.14 |
| Receiving informal care | 1.56 | 0.36 | 2.41*** | 0.58 | 1.36 | 0.48 | 1.99 | 0.77 | 1.61 | 0.48 | 2.66** | 0.83 |
| Health/QOL | | | | | | | | | | | | |
| General health | 1.61*** | 0.15 | 1.30** | 0.13 | 1.89*** | 0.26 | 1.61** | 0.25 | 1.45** | 0.18 | 1.14 | 0.14 |
| Disability | 0.50*** | 0.10 | 0.47*** | 0.09 | 0.43* | 0.12 | 0.28*** | 0.08 | 0.45** | 0.12 | 0.65 | 0.17 |
| Physical QOL | 1.03*** | 0.01 | 1.02* | 0.01 | 1.03** | 0.01 | 1.03* | 0.01 | 1.03***ᵃ | 0.01 | 1.01 | 0.01 |
| Psychological QOL | 1.04*** | 0.01 | 1.03*** | 0.01 | 1.04*** | 0.01 | 1.03*** | 0.01 | 1.04*** | 0.01 | 1.02* | 0.01 |
| Social QOL | 1.05***ᵃ | 0.01 | 1.03*** | 0.01 | 1.07***ᵃ | 0.01 | 1.04*** | 0.01 | 1.04*** | 0.01 | 1.03*** | 0.01 |
| Environmental QOL | 1.05***ᵃ | 0.01 | 1.03*** | 0.01 | 1.05***ᵃ | 0.01 | 1.02* | 0.01 | 1.06***ᵃ | 0.01 | 1.03** | 0.01 |

*Note:* FPL = federal poverty level; LGBT = lesbian, gay, bisexual, and transgender; RRR = relative risk ratio; SE = linearized standard error; QOL = quality of life. Reference category is single. Estimates are weighted and adjusted for age, race/ethnicity, and sexual identity.

ᵃSignificant difference between legally married and unmarried partnered when legally married is the reference category.

is associated with health and well-being among LGBT older adults, with important implications for the potential effects of national same-sex marriage legalization. This study reveals substantial differences in LGBT older adults' resources and risks by relationship status. Across a wide range of socioeconomic, social, and health resources, those who were legally married were consistently advantaged relative to those who were unmarried partnered—suggesting that legal marriage is likely beneficial and also that legal marriage is being accessed more heavily by advantaged individuals. In the process of identifying the positive aspects of legal same-sex marriage, from an equity perspective, it is also critical to recognize that single LGBT older adults are the most disadvantaged group, with perhaps fewer resources available to reach their full health potential.

Although same-sex marriage has been hailed as one of the most significant changes in recent social policy, only about half of LGBT older adults in same-sex relationships opted to legally marry, accounting for only one quarter of the LGBT older adults in this study. The reasons for marrying, or not marrying, are complex and may reflect many different considerations and circumstances of individual couples. Many of these LGBT adults came of age when same-sex behavior was criminalized and pathologized, and some may be fearful to legally marry as it requires creating a public record of a same-sex relationship. Others may feel ambivalent about marriage because it has been defined by some as a heteronormative institution (Egan & Sherrill, 2005) from which LGBT people were historically excluded. Prior to federal recognition of marriage, some same-sex couples created, by legal necessity, documents to ensure health-related decision making, estate planning, and financial asset management, so some may feel that further legal protections bestowed by marriage are not essential (Porche & Purvin, 2008). However, federal protections such as Social Security spousal and bereavement benefits, spousal impoverishment protections, and spousal veterans' benefits can only be attained through civil marriage. Furthermore, federal protections that may be of even more immediate benefit to single and less advantaged LGBT adults, such as antidiscrimination laws in employment, housing, and public accommodations, are still lacking. Policymakers and practitioners cannot assume that same-sex marriage will appeal to all LGBT older adults or that they will benefit from the legal provisions tied to marriage. It is also important that policymakers and practitioners understand the economic value and consequences of marriage and how it may affect financial security before and after retirement.

Across multiple domains, we observed substantial advantages among LGBT older adults who were legally married. Compared with those who were partnered but remained unmarried, legally married LGBT older adults showed greater socioeconomic resources, were more out about their sexual and gender identities, had greater social resources, and enjoyed greater social and environmental QOL. Those who chose to marry were most likely well resourced before marriage since the average length of relationship was 23 years.

Although LGBT older adults who opted to legally marry were consistently advantaged in socioeconomic and social resources, it was notable that they did not show better health or physical and psychological QOL compared to those unmarried partnered. Prior studies in the general population of heterosexual couples show married couples fare better in health than those living together but unmarried (Fuller, 2010); however, given the historical context of marriage for same-sex couples, the association between legal marriage and health may not be as strong. Instead, unmarried LGBT couples may draw some of the benefits of married couples, because being unmarried has historically been a result of exclusion from civil marriage rather than lack of commitment, stability, or support in their relationships. This may explain some of the similarities between married and partnered unmarried individuals on several health and QOL indicators.

Single LGBT older adults were disadvantaged, compared to those who were legally married and unmarried partnered, across socioeconomic, social resources, as well as all health indicators and QOL, which is consistent with previous findings (Wight, Leblanc, & Lee Badgett, 2013; Williams & Fredriksen-Goldsen, 2014). Single adults are at greater risk of social isolation as they age, given their enhanced vulnerability with fewer economic resources and social connections and less access to support, as observed in the general population (Coyle & Dugan, 2012). Health care and social service practitioners may benefit from trainings that incorporate the historical context of LGBT older adults' lives, illustrating possible sources of, and solutions to, social isolation such as creating opportunities for social engagement and relationship building that are welcoming to individuals of any relationship status.

In our study, single people were also more likely to be racial and ethnic minorities, echoing previous studies of LGBT older adults (Williams & Fredriksen-Goldsen, 2014). Racial/ethnic minority men in particular were less likely to be married, suggesting that they may lack family and community support for formalizing their relationships. Living in an environment where immediate support is available is protective for health of older adults in the general population (Ha, Kahng, & Choi, 2015) and among LGBT older adults (Fredriksen-Goldsen, Kim, Shiu, Goldsen, & Emlet, 2015). Furthermore, evidence of mutual causality has emerged in longitudinal studies of the general older adult population, suggesting that social resources positively influence health and, reciprocally, individuals with better health have more opportunities to form social connections (Garbarski, 2010). Single older adults may not have access to either of these beneficial pathways to health. This gap and inequities by relationship status may become even greater in LGBT communities now that marriage for same-sex couples can provide access to more benefits. It is critical that we undertake efforts to identify at-risk single LGBT

older adults in order to provide assistance and resources for health and well-being.

Our study found several notable gender-specific patterns of characteristics associated with relationship status. Consistent with previous findings of sexual and gender minority older adults (Fredriksen-Goldsen, Kim, Barkan, Muraco, & Hoy-Ellis, 2013; Wallace, Cochran, Durazo, & Ford, 2011; Williams & Fredriksen-Goldsen, 2014), although inconsistent with the experience of heterosexual older adults, sexual minority older women are more likely to be married or partnered than men. In addition, these married women are particularly robust when considering socioeconomic resources. This may, in part, be because they realized early in life that they needed to provide their own financial support without reliance on others (Fredriksen-Goldsen, 2016). Another possibility is that, consistent with prior findings, women in our study have larger, more diverse, and closer relationship ties (Antonucci, Akiyama, & Lansford, 1998), a finding that is consistent with socialization patterns of women to be relationship oriented (Weinstock, 2004). Interestingly, however, we found that although married women have many advantages, they experienced more microaggressions compared to those single, yet this was not the case among men. The level of social resources is particularly high among married women, who may be more likely to be exposed to diverse people with differing views on same-sex relationships (Erosheva, Kim, Emlet, & Fredriksen-Goldsen, 2016). Such visibility as a socially connected individual in a married couple may put women at risk of encountering bias. However, despite higher levels of social resources, single women, in particular, were at greater risk, compared to single men, across multiple indicators of health, including poor general health, disability, and physical QOL. Some degree of single women's health differences in this sample may be understood through a gendered life-course lens: In later life, single women may feel that they lack a clear social role at a point in their adult trajectories when they expected to be coupled, especially given women's gender socialization toward being relationship oriented (Weinstock, 2004). Thus, single women may have lower social status vis-à-vis those who are married or coupled (Ron, 2009), which may affect their health outcomes.

Sexual minority older men, on the other hand, showed substantial limits in some types of social resources. The social vulnerability of sexual minority older men is a critical concern; in California, for example, among adults aged 50–70, half of gay and bisexual men live alone compared to only 13% of heterosexual men, 20% of heterosexual women, and 28% of lesbians and bisexual women (Wallace et al., 2011). The single men in our study were significantly more likely to have experienced the death of a partner than married and unmarried partnered men and single women, perhaps due to the profound impact of the HIV/AIDS pandemic in the 1980s and 1990s. Interestingly, there were no observed differences between unmarried partnered men and single men in regards to general health, disability, or physical QOL, which may indicate that only the healthiest men are marrying or that unmarried male partnerships do not afford the same health benefits as female partnerships and marital relationships, perhaps complicated due to HIV.

Interestingly, gender-related same-sex marriage trends are also occurring on an international level. Before the 21st century, no countries permitted same-sex marriage; in 2000, the Netherlands became the first country to legalize same-sex marriage and at least 22 other countries have followed suit including the most recent addition of Colombia in 2016 (Pew Research Center, 2015). Some researchers have also observed international trends in the gender of same-sex couples choosing to marry, depending on the social policies by country. In countries where marriage has a low value and is less tied to other social rights (e.g., legal decision making, adoption, parenting, etc.), same-sex marriage initially tends to be male dominated. However, in many European countries, for example, as policies have over time incentivized same-sex marriage (e.g., provided access to benefits), it has become increasingly female-dominated or gender equal. These findings suggest that as countries' policies and incentives around same-sex marriage change, the trends in marriage will likely change as well (Bernstein, Naples, & Harvey, 2015).

To the best of our knowledge, this is the first empirical study to explore the characteristics of LGBT older adults who are becoming legally married in later life. This study takes an important step toward a better understanding of how relationship status relates to the health and QOL of LGBT older adults. However, there are several limitations to consider. First, we used cross-sectional data, which limits our ability to draw conclusions about causal associations. Additionally, although we used survey weights to reduce the influence of sampling bias, findings cannot be interpreted as estimates of population prevalence. Relatedly, because this study was conducted prior to national legalization of same-sex marriage, our findings may be influenced by some of the demographic and political differences between states that did and did not independently legalize same-sex marriage. Future research will likely benefit from examining time point, as well as geographic, differences in factors associated with relationship status and legal marriage. Future research is also needed regarding the intersection of same-sex marriage and gender identity; transgender individuals in same-sex relationships and those who are single may have different associations between relationship status and economic and social resources, health, and QOL compared to lesbian, gay and bisexual individuals who are not transgender.

An equity perspective incorporating a life-course lens raises important new questions about the associations between relationship status; legal marriage; and aging, health, and well-being in these communities. Of particular relevance for LGBT older adults is the fact that they can now legally marry, but much later in the life course than

most couples. Marriage, although it provides some benefits, can also result in the loss of some monetary benefits especially for older adults; for example, those receiving Supplemental Security Income (SSI), Medicaid, and housing and other subsidies may lose benefits through marriage if it results in an increase in joint household income. In the general population, perhaps as a result, there has been a dramatic increase in the number of older adults who choose to cohabit rather than remarry (Brown et al., 2012), while cohabitation versus legal marriage is a relatively new choice for LGBT individuals. Education is needed in these communities, and for practitioners who serve them, in order to weigh costs and benefits of marriage as they apply to the circumstances of each individual couple. It will also be important to examine how relationship status, and who chooses to marry, change over time in order to understand the long-term implications of the policy change. Currently same-sex marriage is being accessed by economically resourced LGBT older adults; practitioners should be aware of this inequity and policymakers should address this through future policy development and political advocacy. This study was conducted at a time when the majority of states allowed marriage of same-sex couples and federal benefits were available in those states, however, it was not yet federally recognized. Thus, in future research, it will be informative to examine how rates and correlates of legal marriage have changed following the federal right to same-sex marriage.

Legal marriage also has important ramifications on the dissolution of these relationships. Ending a legal marriage requires a legal dissolution, which may have a significant impact on social relationships and the structure of social networks in these communities. Ex-partners have played a central role in the lives of LGBT older adults, often occupying caregiving roles when needed. Because legal dissolution of marriage can be adversarial in nature, there is a risk that this will disrupt the continuity of relationships over time for LGBT older adults, and the roles that ex-partners occupy in later life. This will be a critical topic for future research.

Longitudinal data are needed to examine how the relationship statuses of LGBT older adults change across the life span, and how they are influenced by other interpersonal relationships as well as the broader sociocultural context of social policy regarding marriage. This will also allow for investigation of how socioeconomic and social resources and risks interact with relationship status and aging, health, and well-being over time. Specifically, due to the age of the older adults in this study, longitudinal data are needed to assess how relationship status and health interact over time as some health issues may predate the most recent relationship status; the influence of relationship duration must also be considered.

As rates of marriage continue to decline in the general population (Schoen, 2016), yet increase among LGBT older adults, future research is needed to provide a more nuanced understanding of the short- and long-term implications of

those in committed relationships, both married or unmarried, and those who are single. Only through careful attention to the range of relationship statuses and their implications will we be prepared to address the aging needs of our increasingly diverse older adult population.

## Funding

## References

Antonucci, T. C., Akiyama, H., & Lansford, J. E. (1998). Negative effects of close social relations. *Family Relations*, **47**, 379–384. doi:10.2307/585268

Bernstein, M., Naples, N. A., & Harvey, B. (2015). The meaning of marriage to same-sex families: Formal partnership, parenthood, gender, and the welfare state in international perspective. *Social Politics: International Studies in Gender, State, & Society*, **23**, 3–39. doi:10.1093/sp/jxv002

Bonomi, A. E., Patrick, D. L., Bushnell, D. M., & Martin, M. (2000). Validation of the United States' version of the World Health Organization Quality of Life (WHOQOL) instrument. *Journal of Clinical Epidemiology*, **53**, 1–12. doi:10.1016/S0895-4356(99)00123-7

Brown, S. L., Bulanda, J. R., & Lee, G. R. (2012). Transitions into and out of cohabitation in later life. *Journal of Marriage and Family*, **74**, 774–793. doi:10.1111/j.1741-3737.2012.00994.x

Calasanti, T. M., & Slevin, K. F. (2001). *Gender, social inequalities, and aging*. Walnut Creek, CA: Alta Mira Press.

Congress.gov. (1996). H.R.3396 – Defense of Marriage Act 104th Congress (1995–1996). Retrieved from https://www.congress.gov/bill/104th-congress/house-bill/3396

Coyle, C. E., & Dugan, E. (2012). Social isolation, loneliness and health among older adults. *Journal of Aging and Health*, **24**, 1346–1363. doi:10.1177/0898264312460275

Dannefer, D., & Settersten, R. A. (2010). The study of the life course: Implications for social gerontology. In D. Dannefer and C. Phillipson (Eds.), *The Sage handbook of social gerontology* (pp. 3–15). Los Angeles, CA: Sage Press.

Egan, P. J., & Sherrill, K. (2005). Marriage and the shifting priorities of a new generation of lesbians and gays. *Political Science and Politics*, **38**, 229–232. doi:10.1017/s1049096505056350

Elder, G. H. (1994). Time, human agency, and social change perspectives on the life-course. *Social Psychology Quarterly*, **57**, 4–15.

Erosheva, E. A., Kim, H. J., Emlet, C., & Fredriksen-Goldsen, K. I. (2016). Social networks of lesbian, gay, bisexual, and transgender older adults. *Research on Aging*, **38**, 98–123. doi:10.1177/0164027515581859

Fokkema, T., & Kuyper, L. (2009). The relation between social embeddedness and loneliness among older lesbian, gay, and bisexual adults in the Netherlands. *Archives of Sexual Behavior*, **38**, 264–275. doi:10.1007/s10508-007-9252-6

Fredriksen-Goldsen, K. I. (2016). The future of LGBT+ aging: A blueprint for action in services, policies and research. *Generations*, **40**, 6–13.

Fredriksen-Goldsen, K. I., and Kim, H.-J. (2017). The science of conducting research with LGBT older adults—An introduction to Aging with Pride: National Health, Aging, and Sexuality/Gender Study. *The Gerontologist*, 57, S1-S14. doi:10.1093/geront/gnw212.

Fredriksen-Goldsen, K. I., Kim, H. J., Barkan, S. E., Muraco, A., & Hoy-Ellis, C. P. (2013). Health disparities among lesbian, gay, and bisexual older adults: Results from a population-based study. *American Journal of Public Health*, **103**, 1802–1809. doi:10.2105/AJPH.2012.301110

Fredriksen-Goldsen, K. I., Kim, H. J., Shiu, C., Goldsen, J., & Emlet, C. A. (2015). Successful aging among LGBT older adults: Physical and mental health-related quality of life by age group. *The Gerontologist*, **55**, 154–168. doi:10.1093/geront/gnu081

Fredriksen-Goldsen, K. I., & Muraco, A. (2010). Aging and sexual orientation: A 25-year review of the literature. *Research on Aging*, **32**, 372–413. doi:10.1177/0164027509360355

Fredriksen-Goldsen, K. I., Simoni, J. M., Kim, H. J., Lehavot, K., Walters, K. L., Yang, J.,…Muraco, A. (2014). The Health Equity Promotion Model: Reconceptualization of lesbian, gay, bisexual, and transgender (LGBT) health disparities. *The American Journal of Orthopsychiatry*, **84**, 653–663. doi:10.1037/ort0000030

Freedom to Marry. (2016). Winning the freedom to marry nationwide: The inside story of a transformative campaign. Retrieved from http://www.freedomtomarry.org/pages/how-it-happened#section-4

Fuller, T. D. (2010). Relationship status, health, and health behavior: An examination of cohabiters and commuters. *Sociological Perspectives*, **53**, 221–246. doi:10.1525/sop.2010.53.2.221

Garbarski, D. (2010). Perceived social position and health: Is there a reciprocal relationship? *Social Science & Medicine*, **70**, 692–699. doi:10.1016/j.socscimed.2009.11.007

Gjesfjeld, C., Greeno, C., & Kim, K. (2008). A confirmatory factor analysis of an abbreviated social support instrument: The MOS-SSS. *Research on Social Work Practice*, **18**, 231–237. doi:10.1177/1049731507309830

Ha, J. H., Kahng, S. K., & Choi, N. (2015). Reciprocal effects between health and social support in older adults' relationships with their children and friends. *Research on Aging*. Advance online publication. doi:10.1177/0164027515611182

Kim, H. J., & Fredriksen-Goldsen, K. I. (2016). Living arrangement and loneliness among lesbian, gay, and bisexual older adults. *The Gerontologist*, **56**, 548–558. doi:10.1093/geront/gnu083

Lee, S. (2006). Propensity score adjustment as a weighting scheme for volunteer panel web surveys. *Journal of Official Statistics*, **22**, 329–349.

Lee, G. R., & Bulanda, J. R. (2005). Change and consistency in the relation of marital status to personal happiness. *Marriage & Family Review*, **38**, 69–84. doi:10.1300/j002v38n01_06

Lee, G. R., & Payne, K. K. (2010). Changing marriage patterns since 1970: What's going on, and why? *Journal of Comparative Family Studies*, **41**, 537–555.

Lee, S., & Valliant, R. (2009). Estimation for volunteer panel web surveys using propensity score adjustment and calibration adjustment. *Sociological Methods & Research*, **37**, 319–343. doi:10.1177/0049124108329643

Lin, I. F., & Brown, S. L. (2012). Unmarried boomers confront old age: A national portrait. *The Gerontologist*, **52**, 153–165. doi:10.1093/geront/gnr141

Liu, H., & Umberson, D. J. (2008). The times they are a changin': Marital status and health differentials from 1972 to 2003. *Journal of Health and Social Behavior*, **49**, 239–253. doi:10.1177/002214650804900301

Manzoli, L., Villari, P., Pirone, G. M., & Boccia, A. (2007). Marital status and mortality in the elderly: A systematic review and meta-analysis. *Social Science & Medicine*, **64**, 77–94. doi:10.1016/j.socscimed.2006.08.031

McCarthy, J. (2015). Record-high 60% of Americans support same-sex marriage. Retrieved from http://www.gallup.com/poll/183272/record-high-americans-support-sex-marriage.aspx

McDonough, P., Walters, V., & Strohschein, L. (2003). Chronic stress and social patterning on women's health in Canada. *Social Science & Medicine*, **54**, 767–782. doi:10.1016/s0277-9536(01)00108-3

Nardi, P. M. (1999). *Gay men's friendships: Invincible communities*. Chicago: University of Chicago Press.

Pew Research Center. (2015, June). Gay marriage around the world. Retrieved from http://www.pewforum.org/2015/06/26/gay-marriage-around-the-world-2013/

Pienta, A. M., Hayward, M. D., & Jenkins, K. R. (2000). Health consequences of marriage for the retirement years. *Journal of Family Issues*, **21**, 559–586. doi:10.1177/019251300021005003

Porche, M. V., & Purvin, D. M. (2008). "Never in our lifetime": Legal marriage for same-sex couples in long-term relationships. *Family Relations*, **57**, 144–159. doi:10.1111/j.1741-3729.2008.00490.x

Riggle, E. D., Rostosky, S. S., & Horne, S. G. (2010). Psychological distress, well-being, and legal recognition in same-sex couple relationships. *Journal of Family Psychology*, **24**, 82–86. doi:10.1037/a0017942

Ron, P. (2009). Seeking help from health and welfare services among elderly single women. *Journal of Women & Aging*, **21**, 279–292. doi:10.1080/08952840903284602

Schoen, R. (2016). The continuing retreat of marriage: Figures from marital status life tables for United States females, 2000–2005 and 2005–2010. In R. Schoen (Ed.), *Dynamic demographic analysis* (pp. 203–215). Cham, Switzerland: Springer International Publishing.

Sherbourne, C. D., & Stewart, A. L. (1991). The MOS social support survey. *Social Science & Medicine*, **32**, 705–714. doi:10.1016/0277-9536(91)90150-b

Sue, D. W., Capodilupo, C. M., Torino, G. C., Bucceri, J. M., Holder, A. M., Nadal, K. L., & Esquilin, M. (2007). Racial microaggressions in everyday life: Implications for clinical practice. *The American Psychologist*, **62**, 271–286. doi:10.1037/0003-066X.62.4.271

U.S. Census Bureau. (2013). Table MS2. Marital status of the population 15 years and over by sex, race, and Hispanic origin 1950-present. Retrieved from http://www.census.gov/hhes/families/data/marital.html

U.S. Census Bureau. (2014). Table 1. Household characteristics of opposite-sex and same-sex couple households: ACS 2014. Retrieved from http://www.census.gov/hhes/samesex/

Wallace, S. P., Cochran, S. D., Durazo, E. M., & Ford, C. L. (2011). The health of aging lesbian, gay and bisexual adults in California. *Policy Brief UCLA Center for Health Policy Research*, March (PB2011-2), 1–8.

Weinstock, J. S. (2004). Lesbian flexibility: Friend and/or family connections among lesbian ex-lovers. *Journal of Lesbian Studies*, **8**, 193–238. doi:10.1300/J155v08n03_30

Wienke, C., & Hill, G. J. (2008). Does the "marriage benefit" extend to partners in gay and lesbian relationships? Evidence from a random sample of sexually active adults. *Journal of Family Issues*, **30**, 259–289. doi:10.1177/0192513x08324382

Wight, R. G., LeBlanc, A. J., de Vries, B., & Detels, R. (2012). Stress and mental health among midlife and older gay-identified men. *American Journal of Public Health*, **102**, 503–510. doi:10.2105/AJPH.2011.300384

Wight, R. G., Leblanc, A. J., & Lee Badgett, M. V. (2013). Same-sex legal marriage and psychological well-being: Findings from the California Health Interview Survey. *American Journal of Public Health*, **103**, 339–346. doi:10.2105/AJPH.2012.301113

Williams, M. E., & Fredriksen-Goldsen, K. I. (2014). Same-sex partnerships and the health of older adults. *Journal of Community Psychology*, **42**, 558–570. doi:10.1002/jcop.21637

Woodford, M. R., Chonody, J. M., Kulick, A., Brennan, D. J., & Renn, K. (2015). The LGBQ microaggressions on campus scale: A scale development and validation study. *Journal of Homosexuality*, **62**, 1660–1687. doi:10.1080/00918369.2015.1078205

World Health Organization. (2004). The World Health Organization Quality of Life (WHOQOL) – BREF. Retrieved from http://www.who.int/substance_abuse/research_tools/en/english_whoqol.pdf