Same-sex marriage and mental health: The role of marital quality Lesbian, gay, and bisexual adults are at elevated risk for mental health problems compared to heterosexual adults (Institute of Medicine 2011). More than fifty years of research on heterosexual populations shows that married people have fewer mental health problems than the unmarried, in part because marriage is protective for mental health, providing both direct (e.g. greater socioeconomic resources) and indirect benefits (e.g. social support that acts as a buffer against daily stressors; Umberson, Thomeer, and Williams 2013). While research on the protective effect of same-sex marriage for mental health is still in its infancy, the available evidence demonstrates that same-sex couples in legally recognized relationships, like marriage, report better mental health than those in long-term relationships that are not legally recognized (Wight, LeBlanc, and Badgett 2013), suggesting that marriage is beneficial for mental health in sexual minority populations.

Although marriage may be beneficial for mental health, mental health outcomes are highly dependent on marital quality for different-sex marriages: lower marital quality reduces any mental health benefit (Proulx, Helms, and Buehler 2007) and can negatively alter the pathways through which marriage confers mental health benefits (Williams, Frech, and Carlson 2010). Thus, it is important to consider multiple dimensions of marital quality to understand how marriage affects mental health (Fincham and Bradbury 1987). However, research on the role of marital quality on mental health for same-sex marriages is limited, especially in regard to comparisons between same- and different-sex couples.

Low-quality same-sex relationships might be directly linked to worse mental health, but most research focuses on the indirect association between relationship quality and mental health through minority stress (e.g. Cao et al. 2017). Because same-sex couples face minority stressors and minority stressors are consistently associated with lower-quality relationships (e.g. Otis, Rostosky, Riggle, and Hamrin, 2006), spouses in same-sex marriages could be susceptible to poor mental health indirectly through low-quality unions. However, same-sex cohabiting and married different-sex couples report similar levels of relationship quality (Kurdek 2004), and, unlike different-sex couples, some evidence suggests that the relationship quality of same-sex couples is less likely to decline over time (Kurdek 2008), indicating the possible resilience of same-sex couples in the face of minority stressors. Using dyadic data from 295 same-sex married couples (171 women with women couples; 124 men with men couples) and 165 different-sex and different-sex couples and how multiple dimensions of marital quality compare for same-sex and different-sex couples and how these dimensions were independently associated with depressive symptoms.

Method

We used dyadic data from a 2015 survey of 378 midlife couples: 115 heterosexual couples, 106 gay couples, and 157 lesbian couples. Each couple was recruited using Massachusetts's vital records and snowball sampling to ensure that same- and different-sex couples were comparable on relationship duration, age, and place of residence. All couples had to be legally married for at least 3 years, but couples did not have to currently live in Massachusetts to be included in the final sample. Each spouse completed a 45 minute on-line survey independently of each other.

Descriptive statistics indicate that, in the final sample, participants were between ages 35 and 65 (average age was 48) and were together on average 15 years. Relationship duration did not differ between same-sex (M = 14.74) and different-sex couples (M = 15.89, F = 3.39, p = .07). Most participants were college graduates (80%) and White (86%); less than half were

currently living with children in the household (42%). Compared to different-sex couples, samesex couples were significantly more likely to be college graduates (84% versus 73%, $\chi^2 = 12.82$, p < .001), less likely to involve a person of color (12% versus 18%, $\chi^2 = 5.28$, p = .02), and less likely to have children in the household (29% versus 71%, $\chi^2 = 115.98$, p < .001). There were no significant differences between same- and different-sex couples on levels of depressive symptoms (M = 16.88 versus M = 17.47, F = 1.98, p = .16).

Measures

Marital quality was measured to assess the following multiple positive and negative dimensions: marital well-being, marital support, marital strain, marital conflict, argument frequency, and argument stress. Both spouses independently reported each dimension of marital quality. Marital well-being was measured as the mean of four items ($\alpha = .92$) on a scale from 1 (not at all) to 6 (completely): 1) "I have a warm and comfortable relationship with my spouse;" 2) "I feel I can confide in my spouse about virtually anything;" 3) How rewarding is your relationship with your spouse?" 4) "In general, how satisfied are you with your relationship?" Marital support was measured as the mean of two items asking, on a scale from 1 (not at all) to 5 (a great deal): "In general, how much: 1) Does your spouse make you feel loved and cared for? 2) Is your spouse willing to listen when you need to talk about your worries or problems?" Marital strain was measured as the mean of two items asking, on a scale from 1 (not at all) to 5 (a great deal), "In general, how much:" 1) Is your spouse critical of you or what you do?" 2) "Does your spouse make too many demands on you?" Marital conflict was measured by four items ($\alpha =$.74), on a scale from 1 (never) to 5 (always), in response to "How frequently does your spouse use each of the following styles to deal with arguments or disagreements with you?" 1) "Explode and get out of control." 2) "Reach a limit and refuse to talk any further." 3) "Throw insults and digs." 4) "Withdraw, act distant or not interested." Argument frequency was measured by one item asking, "About how often do you and your spouse argue with each other?" ranging from 1 (very rarely) to 5 (very often). Argument stress was measured by one item asking, "When you and your spouse argue, how stressful is this for you?" ranging from 1 (not at all) to 5 (extremely).

Depressive symptoms were measured with the Center for Epidemiologic Studies Depression Scale Revised (CESD-R) 11-item scale. Respondents were asked how often, during the past week, they experienced certain feelings or behaviors, coded from 1 (rarely or none of the time) to 4 (most of the time). Example questions included "I felt lonely" and "I did not feel like eating; my appetite was poor." Positive affect or behaviors (e.g. "I was happy") were reverse coded so higher values indicated greater depressive symptoms ($\alpha = .85$).

Control variables included relationship duration (a continuous measure of total years married or living together), whether the respondent was a college graduate, whether the respondent was a racial or ethnic minority, and whether there were children in the household (all dichotomized where 1 = yes).

Preliminary Analysis and Results

Descriptive differences in marital quality. Same-sex couples reported significantly higher marital well-being (M = 5.18) and marital support (M = 4.38) than different-sex couples (M = 4.89 F = 15.64 p < 0.001 and M = 4.12 F = 19.10 p < 0.001, respectively). Couple differences in negative dimensions of marital quality—marital strain, marital conflict, and argument stress and frequency—were relatively similar to those of positive marital quality. Marital strain was significantly higher for different-sex couples (M = 2.12) than same-sex couples (M = 1.91, F = 9.89, p = 0.002). Couples reported similar marital conflict. Different-sex couples reported

significantly more arguments (M = 2.52) than same-sex couples (M = 2.28, F = 10.40, p < 0.001) but did not differ on stress surrounding their arguments.

Mixed-effects Multilevel Models. For the full sample, respondents who reported better marital well-being had fewer depressive symptoms (see Table 1). Greater respondent and spousal marital support were also associated with fewer respondent depressive symptoms. Respondents who reported greater marital strain, more frequent arguments, and greater stress surrounding these arguments had more depressive symptoms. When spouses reported more marital strain, respondents also had more depressive symptoms, but spouses' reports of arguments and stress surrounding these arguments did not affect respondent depressive symptoms. Lastly, reporting any marital conflict by either the respondent or his/her partner was associated with more respondent depressive symptoms. Notably, none of these associations varied by couple type, suggesting that associations between marital quality and depressive symptoms are similar across same- and different-sex couples.

Preliminary Conclusions

We found evidence that same-sex couples broadly reported higher-quality marriages than their different-sex counterparts. Despite these differences, each dimension of marital quality was similarly associated with depressive symptoms across same- and different-sex couples. Specifically, higher-quality marriages were associated with fewer depressive symptoms whereas lower-quality marriages were associated with more depressive symptoms. Broadly, these findings suggest that marital quality is important for mental health, regardless of whether the marriage is with a same- or different-sex partner. These results are consistent with studies on different-sex couples (e.g. Proulx, et al. 2007) and we extend these findings to same-sex marriages. Prior to PAA, we will examine how an indicator of minority stress, perceived discrimination, is associated with marital quality.

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	Model 1:	Model 2:	Model 3:	Model 4:	Model 5:	Model 6:
	Marital	Marital	Marital	Marital	Argument	Argument
	well-being	support	strain	conflict	frequency	stress
	b (se)	b (se)	b (se)	b (se)	b (se)	b (se)
Actor and partner effects ¹						
Actor marital quality	-2.05*	-1.77*	1.25*	1.78*	1.99*	1.31*
	(0.38)	(0.40)	(0.38)	(0.42)	(0.43)	(0.36)
Partner marital quality	0.46	-0.29	0.99*	0.90*	-0.16	0.45
	(0.38)	(0.40)	(0.38)	(0.42)	(0.43)	(0.36)
Same-sex couple	6.11*	5.46*	-1.56	0.09	0.75	-0.25
	(2.32)	(2.53)	(1.28)	(1.42)	(1.36)	(2.14)
Same-sex couple X	-0.14	-0.54	0.77	0.19	-0.95	0.22
Actor marital quality	(0.47)	(0.51)	(0.46)	(0.51)	(0.51)	(0.43)
Same-sex couple X	-1.06*	-0.69	0.02	-0.35	0.62	-0.28
Partner marital quality	(0.47)	(0.51)	(0.46)	(0.51)	(0.51)	(0.43)
Control variables						
Relationship duration	-0.03	-0.02	-0.03	-0.03	-0.03	-0.02
	(0.02)	(0.02)	(0.02)	(0.03)	(0.03)	(0.03)
College graduate	-1.31*	-1.22*	-1.46*	-1.22*	-1.45*	-1.62*
	(0.45)	(0.46)	(0.46)	(0.47)	(0.47)	(0.47)
Nonwhite	0.06	0.17	-0.18	0.26	0.44	0.36
	(0.52)	(0.53)	(0.53)	(0.53)	(0.54)	(0.54)
Children in household	-0.24	-0.06	-0.14	0.01	0.01	0.38
	(0.42)	(0.43)	(0.43)	(0.44)	(0.46)	(0.46)
Intercept	26.72*	27.15*	14.41*	12.88*	14.26*	12.50*
	(1.86)	(1.95)	(1.24)	(1.34)	(1.31)	(1.86)

Table 1. Mixed-effects multilevel regression models predicting marital quality

Note. ¹Marital quality refers to the dimension listed for each Model.