



© 2021 American Psychological Association ISSN: 2160-4096

2023, Vol. 12, No. 2, 92–102 https://doi.org/10.1037/cfp0000191

### **BRIEF REPORT**

# Relationship Support and Strain Among Sexual Minority Women: Changes Across Cohorts From 1995 to 2013

Carlie J. Sloan<sup>1</sup>, Britney M. Wardecker<sup>2, 3</sup>, Jacqueline Mogle<sup>3, 4</sup>, and David M. Almeida<sup>1, 3</sup>

<sup>1</sup> Department of Human Development and Family Studies, The Pennsylvania State University

<sup>2</sup> College of Nursing, The Pennsylvania State University

<sup>3</sup> Center for Healthy Aging, The Pennsylvania State University

Sexual minority women are granted more rights at present than ever before. However, it is unclear how the relationships of sexual minority women have changed compared to previous decades. Additionally, a large body of work has focused on women's same-sex (e.g., lesbian) relationships without accounting for the unique experiences of bisexual women in their relationships. The present study utilizes two national samples of heterosexual, lesbian, and bisexual women to address these gaps, one cohort from 1995 and a second from 2013. We performed analyses of variance (ANOVAs) to examine the effects of sexual orientation, cohort, and their interaction on relationship support and strain. On average, relationships exhibited higher quality in 2013 than in 1995. When considered together, lesbian and bisexual women exhibited higher relationship support than heterosexual women in 1995, but not 2013. Importantly, examining lesbian and bisexual women as separate groups revealed that bisexual women's relationships were on average characterized by lower support and higher strain than lesbian women. Simple effects indicated that bisexual women in 2013 were at the highest risk for diminished relationship quality, while lesbian and heterosexual women's relationships were either stable or improved in this more recent cohort. Implications for clinical practice as well as future research on sexual minority women is discussed.

Keywords: sexual minority women, lesbian, bisexual, relationship quality, cohort study

The study of sexual minority women's intimate relationships (e.g., those who identify as lesbian or bisexual) has become increasingly common in recent decades (Kimberly & Williams, 2017; Patterson et al., 2015; Patterson et al., 2014; Peplau & Fingerhut, 2007). Some of this growing

interest is likely reflective of the recent strides in the United States toward equality for sexual minorities, such as the federal legalization of same-sex marriage (Matsick et al., 2020). Researchers have investigated relationship characteristics that may coincide with women's

This article was published Online First August 19, 2021. Carlie J. Sloan https://orcid.org/0000-0003-2897-8468

Jacqueline Mogle https://orcid.org/0000-0002-6082-228X

David M. Almeida https://orcid.org/0000-0002-5233-8148

The MIDUS project has been funded by the John D. and Catherine T. MacArthur Foundation Research Network, as well as National Institute on Aging grants P01-AG020166 and U19-AG051426.

The project described was supported by the National Center for Advancing Translational Sciences, Grant TL1 TR002016

and Grant UL1 TR002014. The content is solely the responsibility of the authors and does not necessarily represent the official views of the National Institutes of Health.

The authors have no conflicts of interest to declare.

Correspondence concerning this article should be addressed to Carlie J. Sloan, Department of Human Development and Family Studies, The Pennsylvania State University, 031 Health and Human Development Building, University Park, PA 16802, United States. Email: cjs543@psu.edu

<sup>&</sup>lt;sup>4</sup> Edna Bennett Pierce Prevention Research Center, The Pennsylvania State University

sexual orientation (e.g., division of labor, sexual satisfaction, communication) and have noted the ways in which these characteristics relate to relationship quality and satisfaction. In particular, research has consistently found that, on average, women partnered with women are happier and more satisfied in their intimate relationships than women partnered with men (Garcia & Umberson, 2019; Holway et al., 2018; Kurdek, 2007). Women partnered with women have historically been assumed to identify as lesbian. However, bisexual women commonly partner with women as well as men, and research on their intimate relationships as distinct from lesbian or heterosexual women's intimate relationships has been scant. Bisexual identity is more common among younger generations of women than older ones (Herbenick et al., 2010), with 11.5% of Generation Z adults identifying as bisexual versus just 0.3% of Baby Boomers (born 1946–1964; Jones, 2021), which may indicate a generational shift in sexual preferences and/or more recognition of bisexuality as a valid sexual orientation. In this study, we examine the relationship quality of women within the context of their sexual orientation and historical period.

# Historic Contexts of Sexual Minority Women's Relationships

Although recent decades have been marked by increased social acceptance toward sexual minorities, it is unclear how the quality of lesbian and bisexual women's intimate relationships have evolved over time. For instance, older generations of sexual minority women came of age at a time when same-sex relationships were more socially and legally stigmatized, contributing to sexual minority people's poorer well-being (reviewed in Fredriksen-Goldsen & Muraco, 2010). More frequent or intense experiences with sexual minority-related stressors (e.g., internalized homophobia, identity concealment, rejection from others) in older cohorts could have spilled over to create strain in their romantic relationships (Cao et al., 2017; Rostosky & Riggle, 2017a). Moreover, some research suggests that the degree of "outness" as individuals and couples, contributes to relationship quality, with those who are more publicly visible having improved relationship quality (reviewed in Rostosky & Riggle, 2017b). Because older

lesbian and bisexual women likely experienced more stigma toward their romantic relationships than their younger counterparts, outness might be more common and afforded for younger women compared to older women. Therefore, we may expect that relationship quality would be higher for lesbian and bisexual women coming of age more recently compared to those in prior decades. Alternatively, discrimination may, to an extent, be associated with improved perceptions of relationship quality as it promotes resilience, commitment, and the seeking and provision of support between partners (Frost, 2011; Sullivan et al., 2017; Taylor et al., 2000), especially in younger samples (Sullivan et al., 2017). Empirical analyses in the present study will aid in understanding relationship quality for sexual minority women as a function of historic period and across groups of sexual minority women.

# Sexual Minority Women's Relationship Outcomes: Within-Group Distinctions

The vast majority of research on sexual minority women's intimate relationships has focused on "same-sex" (assumed to be lesbian) couple configurations. Much of this work has demonstrated that women partnered with women experience better relationship outcomes, such as higher relationship quality, lower relationship strain, and increased sexual satisfaction compared to heterosexual women (Garcia et al., 2014; Garcia & Umberson, 2019; Perales & Baxter, 2018). For instance, women in same-sex relationships tend to be more egalitarian in their division of household labor such as chores and childcare compared to heterosexual couples (Goldberg et al., 2012; Kurdek, 2007; Tornello, Kruczkowski, et al., 2015), and more equal division of labor has been associated with better relationship quality for these women (Kurdek, 2007; Tornello, Kruczkowski, et al., 2015; Tornello, Sonnenberg, et al., 2015). Additionally, women in same-sex partnerships tend to report higher levels of emotional intimacy than heterosexual couples, as a result of perceiving shared activities, values, and willingness to discuss commitment to one another (Rostosky & Riggle, 2017a). Taken together, an existing body of work suggests that women in same-sex partnerships exhibit higher relationship quality compared to heterosexual couples (Garcia & Umberson, 2019; Peplau & Fingerhut, 2007; Perales & Baxter, 2018), yet much remains unknown about whether this trend of higher relationship quality extends to other women who identify as sexual minorities, such as bisexual women. The present study sheds light on the quality of bisexual women's intimate relationships compared to lesbian and heterosexual women's intimate relationships.

Although research on same-sex couples' intimate relationships has contributed greatly to the broader field of relationship research, the vast majority of adult sexual minority women in the United States identify as bisexual. In recent surveys, identifying as bisexual was over three times more common than identifying as lesbian among women (Herbenick et al., 2010; Jones, 2021), with 4.3% of all women identifying themselves as bisexual (Jones, 2021), yet much less is known about their relationship outcomes. Bisexual women are often categorized in social research as "lesbian" if they are partnered with women or "heterosexual" if they are partnered with men (see, e.g., Carr, 2011). Given these classifications of bisexual women as lesbian or heterosexual, it is difficult to disentangle research findings that are unique to bisexual women. Indeed, only about one-quarter of research studies have considered bisexual women as a unique and distinct category separate from lesbian women (Carr, 2011). The practice of categorizing bisexual women as lesbian or heterosexual limits our understanding of the extent to which, for example, results about "lesbian" women (and couples) are really unique to lesbian women, given that many bisexual women may have been classified as lesbian women if they were partnered with a woman. Our research adds to a growing body of literature that separates bisexual women from lesbian and heterosexual women to fully understand their relationship strengths and risk factors.

Only more recently have researchers begun to consider the structure and experiences of bisexual people's relationships (Bowling et al., 2018; Perales & Baxter, 2018); however, few studies have identified unique risk and protective factors with regard to these relationships. Perales and Baxter (2018) examined relationship quality across two international adult samples (Australian and U.K.) and found that bisexual individuals exhibited lower relationship quality than their lesbian, gay, and heterosexual counterparts. Some studies have begun to examine the underlying reasons for why a bisexual identity may pose unique challenges to romantic relationships.

In a qualitative study, Li et al. (2013) found that bisexual women may have difficulty seeking and maintaining romantic connections due to rejection from both the lesbian and heterosexual communities, and frequent invalidation of their identity as fake or temporary. These results suggest that bisexual women may be at unique risk for perceiving poorer quality relationships, regardless of partner gender. Other literature suggests differential risk to bisexual women's relationship quality based on partner gender. For instance, Morandini et al. (2018) found that bisexual women's higher relationship strain could be accounted for by a lower degree of outness, less connectedness with the lesbian, gay, and bisexual communities, as well as increased social isolation and depressive symptoms, especially in bisexual women partnered with men. Additional work suggests that men seeking female partners may perceive bisexual women as untrustworthy and that these relationships may be characterized by more jealousy and suspicion (Armstrong & Reissing, 2014), suggesting the potential for bisexual women to feel diminished support and increased strain from male partners. On the other hand, for bisexual women partnered with women, experiences of binegativity (also called biphobia, or prejudiced attitudes and beliefs about bisexual individuals) from the lesbian community appear to contribute to their own internalized binegativity (Arriaga & Parent, 2019), which could also spillover into a romantic relationship. Additionally, bisexual women partnered with women may experience more identity uncertainty, whereas those partnered with men may experience higher levels of depression (Dyar et al., 2014). Taken together, this evidence suggests that bisexual women may experience unique stressors in their romantic relationships (e.g., rejection and internalized binegativity) due to their sexual orientation, whether partnered with men or women, but that the specific risk pathways that lead to poor relationship quality may differ. Given that bisexual people appear to experience significant relationship strain, as well as the generational increases in numbers of people who identify as bisexual, further study of this group's intimate partnerships is warranted.

#### The Present Study

The present study uses data from a national sample of self-identified lesbian, bisexual, and

heterosexual women who participated in the Midlife in the United States (MIDUS) study to examine women's perceptions of their partner's support and strain at two timepoints: one cohort from the mid-1990s and a second cohort from 2013. Previous work has established unique strengths in sexual minority women's relationships, especially for women who partner with women. However, there is a dearth of research on bisexual women's relationships, and the present study adds to a growing body of work on romantic relationships by incorporating and isolating the experiences of bisexual women. Based on prior research, we hypothesized that sexual minority women would exhibit perceived partner support and lower strain compared to heterosexual women. However, when examined as separate groups (lesbian and bisexual), we predicted that bisexual women would report lower perceived support and higher perceived strain from partners than lesbian women. In terms of a cohort effect, previous research led us to competing hypotheses: On one hand, sexual minority women in a more recent cohort may experience more partner support and less strain due to a higher degree of outness and less social stigma around sexual minority relationships; on the other hand, some evidence suggests that experiences of discrimination may provide opportunities for couples to grow stronger, meaning we would expect higher perceptions of support and lower strain in the more historic 1995 cohort. Therefore, our analyses of cohort effects were largely exploratory.

#### Method

### **Participants**

Participants in the present study were drawn from two separate cohorts of MIDUS, a national study of adults between the ages of 24 and 75 years (Brim et al., 2004). The MIDUS project was designed to investigate factors associated with age-related differences in health across the adult life span. The first MIDUS cohort consisted of 7,108 adults who participated in a survey on health, well-being, and relationships, among other health-related factors, from 1995 to 1996. The second MIDUS cohort consisted of 3,577 adults who in 2013 completed the same set of

survey questions as those individuals in the 1995 cohort. Participants from either cohort were included in the present study if they were married or cohabiting, identified as female, and provided data on their sexual orientation. These criteria were met by a final sample of 2,949 women: 2,143 of these women were from the 1995 cohort  $(M_{\text{age}} = 46.07 \text{ years}, SD_{\text{age}} = 12.45 \text{ years})$  and 806 of these women were from the 2013 cohort  $(M_{\text{age}} = 49.97 \text{ years}, SD_{\text{age}} = 13.50 \text{ years}). \text{ In}$ the 1995 cohort, 2,105 women identified as heterosexual, 23 identified as lesbian, and 15 identified as bisexual. Information about the sex of women's partners was not collected for this cohort. These women described their race as White (93.0%), Black and/or African American (3.6%), Hispanic/Latino (2.3%), Multiracial (0.8%), Asian or Pacific Islander (0.8%), Native American (0.3%), or Other (1.5%). In the 2013 cohort, 781 women identified as heterosexual, 16 identified as lesbian, and 9 identified as bisexual. Of bisexual respondents, seven were partnered with men and two with women. Women described their race as White (85.5%), Black and/or African American (5.0%), Hispanic/ Latino (5.5%), Asian (1.1%), Native American or Alaska Native Aleutian Islander/Eskimo (2.1%), or Other (6.3%).

#### **Procedure**

Data were collected from participants via a phone inventory and subsequent self-administered questionnaire. The phone inventory was used to gather demographic information, such as education and marital and cohabitation statuses. The self-administered questionnaire consisted of a battery of items about respondents' health, well-being, and relationships, including sexual orientation and partner support and strain. Additional information about MIDUS is provided in other summaries (Brim et al., 2019; Radler, 2014; Ryff et al., 2019) as well as at www .midus.wisc.edu. For our primary analyses, we lesbian and bisexual women combined from both cohorts into one "sexual minority" group (n = 63) to retain statistical power and examine general trends in women's sexual orientation and relationship perceptions. We then followed up with exploratory analyses that separated lesbian and bisexual women into distinct groups.

#### Measures

#### Sexual Orientation

Sexual orientation was assessed with one item: "How would you describe your sexual orientation? Would you say you are heterosexual (sexually attracted only to the opposite sex), homosexual (sexually attracted only to your own sex), or bisexual (sexually attracted to both men and women)?." Women's sexual orientation was coded as (a) heterosexual (n = 2,886), (b) lesbian (n = 39), and (c) bisexual (n = 24).

#### Partner Support and Strain

Partner support and strain were assessed using the Partner/Spouse Affectual Solidarity scale, revised from a study by Schuster et al. (1990). This revised scale was validated using MIDUS data from the 1995 cohort (see Grzywacz & Marks, 1999). Partner support was assessed with six items, such as "How much does your spouse or partner really care about you?" and "How much can you open up to him or her if you need to talk about your worries?." Response options ranged from 1 (a lot) to 4 (not at all). Items were reverse coded such that higher scores indicate higher levels of support and lower scores indicate lower levels of support. The scale exhibited good reliability ( $\alpha = .90$ ).

Partner strain was assessed with six items, such as "How often does your spouse or partner make too many demands on you?" and "How often does he or she get on your nerves?." Response options ranged from 1 (often) to 4 (never) and these responses were reverse coded such that higher scores indicate more strain and lower scores indicate less strain. The scale exhibited good reliability ( $\alpha = .87$ )

# **Analytic Strategy**

Analyses were conducted using R Version 3.5.1. First, in primary analyses, we conducted two 2-way analyses of variance (ANOVAs) to assess whether partner support and strain differed between heterosexual and sexual minority (lesbian and bisexual) women at two timepoints (1995 vs. 2013). Effect sizes for main effects and overall interaction effects are expressed in terms of partial  $\eta^2$ , in which effect sizes of .01 are

considered small, .06 medium, and .14 large (Cognition and Brain Sciences Unit, Medical Research Council, 2020). Significant interaction terms were then probed using Fisher's least significant difference test, which is appropriate in cases where two groups are compared, and results are presented in terms of mean differences with corresponding t values and Cohen's d values, of which .20 is considered small, .50 medium, and .80 large. Second, we examined whether lesbian and bisexual women differed from each other with regard to partner support and strain by conducting a second set of ANO-VAs for these outcomes, where bisexual and lesbian women were categorized as separate groups.

#### Results

Descriptive statistics for partner support and strain by sexual orientation and cohort are presented in Table 1. On average, women reported a moderate to high degree of support (M=3.56, SD=0.58) and relatively lower strain (M=2.23, SD=0.65). Partner support was slightly higher, on average, for women in 2013 compared to women in 1995,  $t_{(1, 548)}=1.98$ , p=.048, Cohen's d=0.09. Partner strain was lower, on average, for women in 2013 compared to women in 1995,  $t_{(1, 440)}=4.87$ , p<.001, Cohen's d=0.20.

**Table 1**Descriptive Statistics for Women's Relationships Across Cohorts and Sexual Identity

	Cohort 1		Cohort 2	
Sample	Support	Strain	Support	Strain
Heterosex	ual women			
N	2,105	2,105	781	780
M	3.54	2.26	3.59	2.13
SD	0.59	0.65	0.54	0.65
Lesbian w	vomen			
N	23	23	16	16
M	3.80	2.15	3.71	2.03
SD	0.49	0.60	0.47	0.46
Bisexual	women			
N	15	15	9	9
M	3.67	2.36	3.03	2.65
SD	0.46	0.73	0.79	0.65

Note.  $r_{\text{(Support, Strain)}}$  for Cohort 1 = -.70 (p < .05);  $r_{\text{(Support, Strain)}}$  for Cohort 2 = -.66 (p < .05); total  $N_{\text{Cohort } 2} = 2.143$ ; total  $N_{\text{Cohort } 2} = 806$ .

# Primary Analyses: Heterosexual and Sexual Minority Women's Partner Support and Strain

In primary analyses, we examined whether partner support and strain differed between heterosexual and sexual minority women at both timepoints. Results are presented in Table 2. Partner support did not differ (at p < .05) by cohort or sexual orientation. However, the interaction between cohort and sexual orientation significantly predicted partner support (F =1.66, p = .026, partial  $\eta^2 = .002$ . When probed, the interaction revealed that heterosexual women in 2013 reported higher partner support than heterosexual women in 1995, Mean Difference = 0.05, 95% CI [0.01, 0.10],  $t_{(2, 948)} = 2.21$ , p = .028, Cohen's d = .08; see Figure 1. The corresponding cohort difference between perceived support of sexual minority women in 1995 and 2013 was not statistically significant, Mean Difference = -0.28, 95% CI [-0.58, 0.01],  $t_{(2, 948)} = 1.90, p = .058, Cohen's d = .07.$ Additionally, sexual minority women in 1995 reported higher partner support than heterosexual women in the same cohort, providing support for our hypothesis, Mean Difference = 0.21,95% $CI[0.02, 0.39], t_{(2, 948)} = 2.18, p = .029, Cohen's$ d = .08, while the difference in perception of support between sexual minority and heterosexual women in the 2013 cohort was no longer statistically significant, Mean Difference = 0.13, 95% CI [-0.36, 0.10],  $t_{(2, 948)} = 1.10$ , p = .270, Cohen's d = .04.

Partner strain did not differ by sexual orientation (p = .689) and the interaction effect between sexual orientation and cohort was not significant (p = .359); however, women in 2013 perceived lower partner strain than women in 1995

 $(F = 23.80, p < .001, partial <math>\eta^2 = .008$ ; see Figure 2), which provides some support for hypotheses suggesting improved relationships in newer cohorts.

# Within-Group Examination of Sexual Minority Women

We further examined differences between lesbian and bisexual women with regard to their perceived partner support and strain at each timepoint. Results are shown in Table 3. There was a main effect of cohort on partner support such that sexual minority women in 2013 reported lower support than those in 1995 (F = 4.31, p = .042, partial  $\eta^2 = .073$ ). Additionally, there was a main effect of orientation, such that lesbian women reported higher support than bisexual women in both 1995 and 2013 (F = 6.30, p = .015, partial  $\eta^2 = .096$ ), consistent with our hypotheses. Finally, there was a trend-level interaction effect between orientation and cohort (F = 3.84, p =.055, partial  $\eta^2 = .061$ ). When probed, significant simple effects emerged. Namely, bisexual women in the 2013 cohort reported lower support than bisexual women in 1995, Mean Difference = -0.64,95% CI [-1.09,-0.19],  $t_{(62)}=2.87,p=$ .005, Cohen's d = .73. This cohort effect was not observed for lesbian women between 1995 and 2013, Mean Difference = -0.09, 95% CI [-0.43, 0.26],  $t_{(62)} = 0.52$ , p = .955, Cohen's d = .13. Additionally, bisexual women in the 2013 cohort reported lower partner support than lesbian women in the same cohort, Mean Difference = 0.68, 95%CI [0.24, 1.12],  $t_{(62)} = 3.10$ , p = .003, Cohen's d = .79, as well as lower support than lesbian women in the 1995 cohort, Mean Difference = 0.77, 95% CI [0.35, 1.19],  $t_{(62)} = 3.71$ , p = .003, Cohen's d = .94, consistent with our hypotheses.

 Table 2

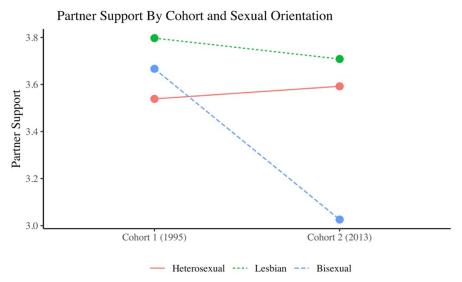
 Between-Group ANOVAs of Orientation and Cohort on Partner Support and Strain

	Partner	support	Partner strain	
Factor	F value	p value	F value	p value
Cohort (1995 vs. 2013)	3.66	.056	23.80	<.001
Orientation (LB vs. heterosexual)	1.02	.313	0.15	.698
Cohort × Orientation	4.97 <sup>a,b</sup>	.026	$0.84^{a}$	.359

*Note.* ANOVAs = analyses of variance.

<sup>&</sup>lt;sup>a</sup> Indicates significant difference between heterosexual women in Cohort 1 and heterosexual women in Cohort 2. <sup>b</sup> Indicates a difference between sexual minority women in Cohort 1 and heterosexual women in Cohort 1; LB = lesbian and bisexual; total N for support model = 2,949; total N for strain model = 2,949.

**Figure 1**Partner Support Was Higher for Heterosexual Women in Cohort 1 Than Cohort 2, but Lower for Sexual Minority Women

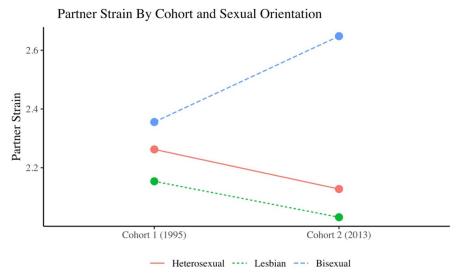


*Note.* Bisexual women at Cohort 2 had significantly lower support than those in Cohort 1 (p = .028). See the online article for the color version of this figure.

There were not differences between the support perceived by bisexual women in 1995 and lesbian women in 2013, *Mean Difference* = 0.04, 95% CI  $[-0.34, 0.42], t_{(62)} = .22, p = .827$ , Cohen's d = .06,

or 1995, Mean Difference = 0.13, 95% CI [-0.22, 0.48],  $t_{(62)}$  = .74, p = .461, Cohen's d = .12. In general, bisexual women in 2013 reported consistently lower partner support than lesbian

**Figure 2**Partner Strain Was Lower for Heterosexual and Lesbian Women in Cohort 1 Than Cohort 2, but Higher for Bisexual Women



Note. See the online article for the color version of this figure.

**Table 3**Within-Group ANOVAs of Orientation and Cohort on Partner Support and Strain

	Partner support		Partner strain	
Factor	F value	p value	F value	p value
Cohort	4.31	.042	0.02	.899
Orientation (lesbian or bisexual)	6.30 3.84 <sup>a,b,c</sup>	.015	5.25	.026
Cohort × Orientation	3.84	.055	1.63	.207

Note. ANOVAs = analyses of variance.

women in either cohort, while lesbian women exhibited higher support and lower strain than both bisexual and heterosexual women (see Figures 1 and 2).

In terms of perceived partner strain, there was a main effect of orientation such that bisexual women reported higher partner strain compared to lesbian women, across timepoints (F = 5.25, p = .026, partial  $\eta^2 = .082$ ). There was no main effect of cohort (p = .899), or interaction effect between orientation and cohort on partner strain (p = .207).

#### Discussion

This study contributes to a novel and growing body of work that examines sexual minority women's romantic partnerships. Utilizing two cohorts of women from 1995 and 2013, we examined partner support and strain across those who identified as heterosexual, lesbian, and bisexual. In general, women in the 2013 cohort exhibited higher levels of support and lower levels of strain than those in the 1995 cohort. Probing these effects revealed that they were driven by heterosexual women, while sexual minority women in 2013 perceived lower partner support than those in 1995. We further probed these effects by conducting a second set of analyses in which lesbian and bisexual women were separated into distinct groups. This revealed important nuances for the relationships of sexual minority women.

When examining lesbian and bisexual women separately, it became clear that for lesbian women, both partner support and strain remained similar between 1995 and 2013, while bisexual women reported consistently lower partner support and higher partner strain than lesbian

women. Thus, the effect that partner support was lower in the more recent cohort of sexual minority women appears to be driven by bisexual women, who in 2013 reported lower support than both bisexual and lesbian women in 1995. These results reveal that while perceived partner support for heterosexual and lesbian women either remained as high or higher in 2013, bisexual women perceived less partner support in 2013 compared to those in 1995. These findings converge with a large body of literature suggesting that women who identify as lesbian may experience better relationship health than women who identify as either heterosexual or bisexual (Garcia & Umberson, 2019; Perales & Baxter, 2018; Rostosky & Riggle, 2017b) and that bisexual women, including those partnered with women, may be at risk for poorer quality partnerships (Arriaga & Parent, 2019; Li et al., 2013). The diminished partner support and elevated strain reported by bisexual women in this study could be explained through a variety of reasons, such as prejudice from both the queer and heterosexual communities, stigma around bisexuality as temporary, perceptions of bisexual women as untrustworthy, and a lower degree of outness (Armstrong & Reissing, 2014; Li et al., 2013; Morandini et al., 2018).

# Strengths, Limitations, and Future Directions

The results of this study must be interpreted in light of its limitations. First, although performing cross-sectional analyses across cohorts is informative, a longitudinal study of relationship quality among sexual minority adults would be the ideal way to understand whether changes in relationship quality over time are indeed a function of sexual orientation. Additionally, national

<sup>&</sup>lt;sup>a</sup> Indicates significant difference between bisexual women in Cohort 1 and bisexual women in Cohort 2. <sup>b</sup> Indicates a difference between bisexual women in Cohort 2 and lesbian women in Cohort 2. <sup>c</sup> Indicates a difference between bisexual women in Cohort 2 and lesbian women in Cohort 1; total *N* for both models = 63.

sampling as conducted in the MIDUS study leads to a comparatively small group of sexual minority adults relative to heterosexual adults (i.e., small cell sizes). Therefore, a larger study that oversamples sexual minority individuals would have more statistical power to detect smaller effect sizes than could be detected in the present sample, and would also increase our confidence about the generalizability of these findings to other samples. However, we would note that other studies have utilized this sample and other similar-sized samples in order to make meaningful contributions to research on sexual minority health and well-being (Bowling et al., 2018; Wardecker et al., 2019, 2021). An additional consideration for future studies would be to assess sexual orientation in multiple ways, such as by sexual identity, attractions, and behaviors, as well as information about partner gender. Single-item measures of sexual orientation may not reflect the complexity of this construct, and indeed research shows that using multiple items, especially sexual attraction, may lead to higher quality data, at least in younger samples (Saewyc et al., 2004). Finally, including a larger number of sexual minority adults would enable researchers to examine whether these trends in partner support and strain across time hold true for sexual minority men.

## **Implications and Applications**

Several aspects of how sexual minority relationships are studied are implicated by these results. The differences we observed between lesbian and bisexual women's perceived support and strain emphasize the need to consider lesbian and bisexual women separately in research. This is consistent with best practices laid out by Carr (2011) and reflects the general trend of younger women being more likely to identify as bisexual (Herbenick et al., 2010). Additionally, the comparison of sexual minority to heterosexual women revealed that the overall group averages in partner support and strain were driven by the heterosexual majority, which clouded lesbian and bisexual women's relationship outcomes. Partner support was higher, on average, for women in 2013 than those in 1995, and strain was lower. However, bisexual women exhibited the opposite trend, with those in 2013 reporting lower partner support and higher strain than those in 1995. Lesbian women's relationship quality appeared stable and high across timepoints. This result bolsters the need for researchers to measure sexual orientation as a key factor in future studies of relationship quality, including in studies that focus solely on same-sex or different-sex partnerships, as bisexual individuals could be miscategorized into one of those two groups. Additionally, studies of relationships should consider oversampling sexual minorities in order to have adequate statistical power to accurately examine subgroup differences in relationship quality.

Our results also present implications for clinical and prevention efforts. This study contributes to a body of literature that places bisexual women's relationships at higher risk for strain and lack of support from partners. Bisexual women perceived consistently lower partner support and higher strain than lesbian women when considering their intimate partnerships. Additionally, bisexual women's changes in trends in these relationship aspects over time seem to be going in the opposite direction of other groups of women, as evidenced by our results that the 2013 cohort of bisexual women exhibited lower support and higher strain than the 1995 cohort of bisexual women. The mechanisms underlying this pattern of low relationship quality in bisexual women should be examined in future studies.

Furthermore, these findings suggest that prevention scientists who wish to improve relationship quality should pay close attention to those who identify as bisexual, rather than lumping them into categories based on their partner's gender (e.g., assuming women in same-sex partnerships are lesbian, and women in different-sex partnerships are heterosexual). Similarly, clinicians working with couples and families should consider sexual orientation separately from current partnering, as identifying as bisexual may convey additional risk that is not captured by the current partnership. Overall, we emphasize that bisexual identity is separate from heterosexual and lesbian identities and should be studied and examined in its own right.

# **Conclusions**

This multicohort study revealed important nuances in how historical context frames women's perceived relationship quality. While lesbian women seem to experience high relationship quality comparable to or better than that of heterosexual women, bisexual women exhibited both lower partner support and higher strain than lesbian women. Notably, both of these findings for bisexual women went against the general

trends in which relationship quality was higher for the more recent cohort compared to the one from the 1990s. These contrasting findings suggest that special attention should be paid to bisexual relationships in future research and relationship interventions, and provide further evidence for sexual orientation as an important context for romantic relationships that should be acknowledged in research and practice.

#### References

- Armstrong, H. L., & Reissing, E. D. (2014). Attitudes toward casual sex, dating, and committed relationships with bisexual partners. *Journal of Bisexuality*, *14*(2), 236–264. https://doi.org/10.1080/15299716.2014.902784
- Arriaga, A. S., & Parent, M. C. (2019). Partners and prejudice: Bisexual partner gender and experiences of binegativity from heterosexual, lesbian, and gay people. *Psychology of Sexual Orientation and Gender Diversity*, 6(3), 382–391. https://doi.org/10 .1037/sgd0000337
- Bowling, J., Dodge, B., & Bartelt, E. (2018). Diversity and commonalities in relationship experiences among self-identified bisexual parents in the United States. *Sexual and Relationship Therapy*, 33(1–2), 169–189. https://doi.org/10.1080/14681994.2017.1419565
- Brim, O. G., Baltes, P. B., Bumpass, L. L., Cleary, P. D., Featherman, D. L., Hazzard, W. R., Kessler, R. C., Lachman, M. E., Markus, H. R., Marmot, M. G., Rossi, A. S., Ryff, C. D., & Shweder, R. A. (2019). *Midlife in the United States (MIDUS 1)*, 1995–1996. Inter-university Consortium for Political and Social Research [distributor]. https://doi.org/10.3886/ICPSR02760.v18
- Brim, O. G., Ryff, C. D., & Kessler, R. C. (2004). The MIDUS national survey: An overview. In O. G. Brim, C. D. Ryff & R. C. Kessler (Eds.), *How healthy are we?: A national study of well-being at midlife* (pp. 1–36). University of Chicago Press. http://midus.wisc.edu/howhealthyarewe/Chapter01.pdf
- Cao, H., Zhou, N., Fine, M., Liang, Y., Li, J., & Mills-Koonce, W. R. (2017). Sexual minority stress and same-sex relationship well-being: A meta-analysis of research prior to the U.S. nationwide legalization of same-sex marriage. *Journal of Marriage and Family*, 79(5), 1258–1277. https://doi.org/10.1111/jomf.12415
- Carr, C. L. (2011). Women's bisexuality as a category in social research, revisited. *Journal of Bisexuality*, 11(4), 550–559. https://doi.org/10.1080/15299716 .2011.620868
- Cognition and Brain Sciences Unit, Medical Research Council. (2020). Rules of thumb on magnitudes of

- effect sizes. https://imaging.mrc-cbu.cam.ac.uk/sta tswiki/FAQ/effectSize
- Dyar, C., Feinstein, B. A., & London, B. (2014). Dimensions of sexual identity and minority stress among bisexual women: The role of partner gender. *Psychology of Sexual Orientation and Gender Diversity*, 1(4), 441–451. https://doi.org/10.1037/sgd0000063
- Fredriksen-Goldsen, K. I., & Muraco, A. (2010, May). Aging and sexual orientation: A 25-year review of the literature. *Research on Aging*, 32(3), 372–413. https://doi.org/10.1177/0164027509360355
- Frost, D. M. (2011). Stigma and intimacy in same-sex relationships: A narrative approach. *Journal of Family Psychology*, 25(1), 1–10. https://doi.org/ 10.1037/a0022374
- Garcia, J. R., Lloyd, E. A., Wallen, K., & Fisher, H. E. (2014). Variation in orgasm occurrence by sexual orientation in a sample of U.S. singles. *Journal of Sexual Medicine*, 11(11), 2645–2652. https://doi.org/10.1111/jsm.12669
- Garcia, M. A., & Umberson, D. (2019). Marital strain and psychological distress in same-sex and differentsex couples. *Journal of Marriage and Family*, 81(5), 1253–1268. https://doi.org/10.1111/jomf.12582
- Goldberg, A. E., Smith, J. Z., & Perry-Jenkins, M. (2012). The division of labor in lesbian, gay, and heterosexual new adoptive parents. *Journal of Marriage and Family*, 74(4), 812–828. https://doi.org/10.1111/j.1741-3737.2012.00992.x
- Grzywacz, J. G., & Marks, N. F. (1999). Family solidarity and health behaviors: Evidence from the National Survey of Midlife Development in the United States. *Journal of Family Issues*, 20(2), 243–268. https://doi.org/10.1177/019251399020002004
- Herbenick, D., Reece, M., Schick, V., Sanders, S. A., Dodge, B., & Fortenberry, J. D. (2010). Sexual behavior in the United States: Results from a national probability sample of men and women ages 14–94. *Journal of Sexual Medicine*, 7(Suppl. 5), 255–265. https://doi.org/10.1111/j.1743-6109.2010.02012.x
- Holway, G. V., Umberson, D., & Donnelly, R. (2018). Health and health behavior concordance between spouses in same-sex and different-sex marriages. *Social Currents*, 5(4), 319–327. https://doi.org/10.1177/2329496517734570
- Jones, J. M. (2021, February 24). LGBT identification rises to 5.6% in latest U.S. estimate. https://news.ga llup.com/poll/329708/lgbt-identification-rises-latestestimate.aspx
- Kimberly, C., & Williams, A. (2017). Decade review of research on lesbian romantic relationship satisfaction. *Journal of LGBT Issues in Counseling*, 11(2), 119–135. https://doi.org/10.1080/15538605 .2017.1310009
- Kurdek, L. A. (2007). The allocation of household labor by partners in gay and lesbian couples. *Jour-nal of Family Issues*, 28(1), 132–148. https://doi.org/10.1177/0192513X06292019

- Li, T., Dobinson, C., Scheim, A. I., & Ross, L. E. (2013). Unique issues bisexual people face in intimate relationships: A descriptive exploration of lived experience. *Journal of Gay & Lesbian Mental Health*, 17(1), 21–39. https://doi.org/10.1080/ 19359705.2012.723607
- Matsick, J. L., Wardecker, B. M., & Oswald, F. (2020). Treat sexual stigma to heal health disparities: Improving sexual minorities' health outcomes. *Policy Insights from the Behavioral and Brain Sciences*, 7(2), 205–213. https://doi.org/10.1177/2372732220942250
- Morandini, J. S., Pinkus, R. T., & Dar-Nimrod, A. (2018). Does partner gender influence relationship quality among non-monosexual women? *Sexual and Relationship Therapy*, 33(1–2), 146–165. https://doi.org/10.1080/14681994.2017.1419568
- Patterson, C. J., Blanchfield, B. V., Tornello, S. L., & Riskind, R. G. (2015). Lesbian, gay, bisexual, and transgender relationships and family lives. In H. J. Makadon, K. H. Mayer, & J. Potter (Ed.), *The fenway guide to lesbian, gay, bisexual, and transgender health* (pp. 105–132). American College of Physicians.
- Patterson, C. J., Riskind, R. G., & Tornello, S. L. (2014). Sexual orientation, marriage, and parenthood. In J. W. Angela Abela (Ed.), Contemporary issues in family studies: Global perspectives on partnerships, parenting and support in a changing world (pp. 189–202). Wiley-Blackwell.
- Peplau, L. A., & Fingerhut, A. W. (2007). The close relationships of lesbians and gay men. *Annual Review of Psychology*, 58, 405–424. https://doi.org/10.1146/annurev.psych.58.110405.085701
- Perales, F., & Baxter, J. (2018). Sexual identity and relationship quality in Australia and the United Kingdom. *Family Relations*, 67(1), 55–69. https://doi.org/10.1111/fare.12293
- Radler, B. T. (2014). The Midlife in the United States (MIDUS) series: A national longitudinal study of health and well-being. *Open Health Data*, 2(1), Article e3. https://doi.org/10.5334/ohd.ai
- Rostosky, S., & Riggle, E. D. B. (2017a). Same-sex relationships and minority stress. *Current Opinion* in *Psychology*, 13, 29–38. https://doi.org/10.1016/j .copsyc.2016.04.011
- Rostosky, S. S., & Riggle, E. D. B. (2017b). Same-sex couple relationship strengths: A review and synthesis of the empirical literature (2000–2016). *Psychology of Sexual Orientation and Gender Diversity*, 4(1), 1–13. https://doi.org/10.1037/sgd0000216
- Ryff, C., Almeida, D., Ayanian, J., Binkley, N., Carr, D. S., Coe, C., Davidson, R., Grzywacz, J., Karlamangla, A., Krueger, R., Lachman, M., Love, G., Mailick, M., Mroczek, D., Radler, B., Seeman, T., Sloan, R., Thomas, D., Weinstein, M., & Williams, D. (2019). Midlife in the United States (MIDUS 3), 2013–2014.

- Inter-university Consortium for Political and Social Research [distributor]. https://doi.org/10.3886/ICPSR 36346.v7
- Saewyc, E. M., Bauer, G. R., Skay, C. L., Bearinger, L. H., Resnick, M. D., Reis, E., & Murphy, A. (2004). Measuring sexual orientation in adolescent health surveys: Evaluation of eight school-based surveys. *The Journal of Adolescent Health*, 35(4), 345.e1–345.e15. https://doi.org/10.1016/j.jadohea lth.2004.06.002
- Schuster, T. L., Kessler, R. C., & Aseltine, R. H. (1990). Supportive interactions, negative interactions, and depressive mood. *American Journal of Community Psychology*, 18, 423–438. https://doi.org/10.1007/BF00938116
- Sullivan, T. J., Feinstein, B. A., Marshall, A. D., & Mustanski, B. (2017). Trauma exposure, discrimination, and romantic relationship functioning: A longitudinal investigation among LGB young adults. *Psychology of Sexual Orientation and Gen*der Diversity, 4(4), 481–490. https://doi.org/10 .1037/sgd0000249
- Taylor, S. E., Klein, L. C., Lewis, B. P., Gruenewald, T. L., Gurung, R. A. R., & Updegraff, J. A. (2000). Biobehavioral responses to stress in females: Tendand-befriend, not fight-or-flight. *Psychological Review*, 107(3), 411–429. https://doi.org/10.1037/ 0033-295X.107.3.411
- Tornello, S. L., Kruczkowski, S. M., & Patterson, C. J. (2015). Division of labor and relationship quality among male same-sex couples who became fathers via surrogacy. *Journal of GLBT Family Studies*, 11(4), 375–394. https://doi.org/10.1080/1550428X.2015.1018471
- Tornello, S. L., Sonnenberg, B. N., & Patterson, C. J. (2015). Division of labor among gay fathers: Associations with parent, couple, and child adjustment. *Psychology of Sexual Orientation and Gender Diversity*, 2(4), 365–375. https://doi.org/10.1037/sgd0000109
- Wardecker, B. M., Graham-Engeland, J. E., & Almeida, D. M. (2021). Perceived discrimination predicts elevated biological markers of inflammation among sexual minority adults. *Journal of Behavioral Medicine*, 44(1), 53–65. https://doi.org/10.1007/ s10865-020-00180-z
- Wardecker, B. M., Matsick, J. L., Graham-Engeland, J. E., & Almeida, D. M. (2019). Life satisfaction across adulthood in bisexual men and women: Findings from the Midlife in the United States (MIDUS) study. Archives of Sexual Behavior, 48(1), 291–303. https://doi.org/10.1007/s10508-018-1151-5

Received October 30, 2020
Revision received March 15, 2021
Accepted June 11, 2021