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The Qualities of Same-Sex and Different-Sex Couples in Young Adulthood

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Abstract

Objective: Recognition of sexual minorities in social science research is growing and this study contributes to knowledge on this population by comparing the qualities of same-sex and different-sex relationships among young adults.

Background: The findings of studies on this topic cannot be generalized to young adults because they are limited to coresidential unions and based on convenience samples. This study extends prior research by examining multiple relationship qualities among a nationally-representative sample of males and females in “dating” and cohabiting relationships.

Method: The authors compare young adults in same-sex and different-sex relationships with respect to relationship quality (commitment, satisfaction, and emotional intimacy) and sexual behavior (sexual frequency and sexual exclusivity). Drawing on the fourth wave of data from the National Longitudinal Study of Adolescent to Adult Health (<http://www.cpc.unc.edu/projects/addhealth>), they use multiple regression to compare: male respondents with different-sex partners, male respondents with same-sex partners, female respondents with different-sex partners, and female respondents with same-sex partners.

Results: Consistent with previous research, the authors find that respondents in same-sex relationships experience similar levels of commitment, satisfaction, and emotional intimacy as their counterparts in different-sex relationships. They also corroborate the finding that male respondents in same-sex relationships are less likely than other groups of respondents to indicate their relationship is sexually exclusive.

Conclusion: This study provides an empirical basis for understanding the relationships of sexual minority young adults.

Keywords

dating; cohabitation; gender; LGBTQ; quantitative methodology

The romantic and sexual relationships of Americans have fundamentally changed in recent decades (Sassler, 2010). The median age at first marriage in the United States has reached historic high points of 29.5 for men and 27.4 for women (U.S. Bureau of the Census, 2017), resulting in an expanded period of singlehood to form and dissolve romantic partnerships. The U.S. has also reached its all-time peak in terms of the percent of individuals who are currently cohabiting or have ever cohabited with a different-sex partner. For instance, almost three-quarters (73%) of women ages 25–29 have spent some time cohabiting (Manning & Stykes, 2015). In addition, the average number of sexual partners that men and women accumulate in early adulthood and their tendency to practice serial cohabitation has grown considerably (Hemez, 2017; Lichter, Turner, & Sassler, 2010), again reflecting delays in marriage. Limitations in survey and census data make it difficult to track changes in the prevalence of relationships between partners of the same biological sex (or gender identity), but parallel measures of sexual orientation in data sets such as the Census and the General Social Survey indicate that the percent of same-sex couples in the population has increased substantially over recent decades (Black, Gates, Sanders, & Taylor, 2000; Lofquist, Lugailia, O’Connell, & Feliz, 2012).

Young adults have more options for sexual and romantic involvement than ever before, including type of relationship (e.g., cohabitation) and sex of partner. They not only face fewer social barriers to residing with a romantic partner, but they also have greater freedom to publicly acknowledge same-sex relationships (Powell, Bolzendahl, Geist, & Steelman, 2010). In spite of the growing variety of relationships that punctuate the transition to adulthood, population-based studies (i.e., studies that are representative of a specified population) examining the qualities of sexual and romantic relationships in young adulthood continue to focus on different-sex coresidential relationships (i.e., heterosexual marital or cohabiting unions). One compelling rationale for broadening the spectrum of relationships to include same-sex couples is that they provide an important counterfactual: how relationships operate in the absence of biological sex difference between partners (Carpenter & Gates, 2008).

To provide a conceptual framework for examining the qualities of contemporary relationships, we draw from two perspectives tailored to explain the unique experiences of same-sex couples: the minority stress perspective and the gender-as-relational perspective. These perspectives explicitly address two key ways in which same-sex couples are distinct from different-sex couples: they face social stigmatization and they combine individuals of the same sex (Diamond, 2013). Data from the National Longitudinal Study of Adolescent to Adult Health (Add Health) offer an opportunity to compare same-sex and different-sex relationships with respect to commitment, satisfaction, emotional intimacy, sexual frequency, and sexual exclusivity. As in prior waves, Add Health’s fourth wave (2007–2008) obtained detailed information on the most recent romantic and/or sexual relationship of its respondents. We exclude marital relationships because marriage for same-sex couples was legal in only one state (Massachusetts) at the time of the fourth wave. We classify respondents in our sample of nonmarital relationships as “cohabiting” if they have ever lived with their most recent partner and “dating” if they have not. Most of these respondents were their late twenties or early thirties (i.e., young adulthood) at the time of interview. We move

beyond prior work not only by considering same-sex and dating relationships, but also by comparing relationships across a rich roster of objective and subjective qualities.

Background

Studies concerning the qualities of romantic and sexual relationships have long used the term relationship “quality” loosely to include a range of outcomes, typically satisfaction and commitment (e.g. Levinger, 1979; Rusbult, 1980; Scanzoni, Polonko, Teachman, & Thompson, 1989; Sprecher, 1998). These studies often use some variant of the social exchange perspective (e.g., interdependence, investment, and commitment perspectives) to explain variation in relationship quality. Measures of satisfaction and commitment are thought to capture the rewards and costs from a relationship. However, commitment to a relationship (i.e., the desire to continue a relationship) is conceptually distinct from satisfaction because it is additionally based on alternatives (e.g., being single or partnered with someone else) and investments (Rusbult, 1980; Waite & Lillard, 1991). Another general indicator of quality is the level of emotional intimacy, defined as feelings and expressions of acceptance, warmth, caring, and love (Prager, 2000). Even though most romantic relationships in adulthood involve sexual activity, research often ignores the sexual basis to relationships, though consideration of how sexuality is embedded in relationships has increased in recent decades (Christopher & Sprecher, 2000; Diamond, 2013; Diamond, 2015). Physical intimacy may be particularly salient in young adulthood, especially for individuals in nonmarital relationships. Studies suggest that the importance of sex is greater in the earlier phases of romantic involvement (Hazan & Zeifman, 1994).

Studies on the quality of same-sex relationships, in particular, similarly rely on social exchange perspectives (e.g., Kurdek, 1995; Kurdek, 2000), but also draw from perspectives that emphasize minority stress (e.g., Otis, Rostosky, Riggle, & Hamrin, 2006; Rostosky, Riggle, Gray, & Hatton, 2007). Sexual minorities form and maintain relationships in a radically different institutional context than their heterosexual counterparts (Rith & Diamond, 2013) and this may influence the nature and course of their relationships. The minority stress perspective, as it relates to sexual minorities, posits that gays, lesbians, and bisexuals experience a higher prevalence of negative mental and physical outcomes than do heterosexuals as a consequence of their stigmatized status in society (Frost & Meyer, 2009; Meyer, 2003). Several recent studies have extended this perspective to address stressors that stem from the marginalization of same-sex relationships and parallel individual-level stressors, specifically, expectations of rejection, discrimination, internalized homophobia, and concealment (e.g., Graham & Barnow, 2013; LeBlanc, Frost, & Wight, 2015). Two recent meta-analytic reviews on stigma and relationship quality found evidence of small but significant associations between minority stress and relationship quality (Cao, Zhou, Fine, Liang, Li, & Mills-Koonce, 2017; Doyle & Molix, 2015). This body of research prefigures our first hypothesis: Hypothesis 1a: Same-sex couples will experience, on average, slightly lower levels of relationship quality than different-sex couples.

A new perspective, “gender-as-relational,” suggests that gender and sexuality “play out differently” in same-sex and different-sex relationships (Umberson, Thomeer, & Lodge, 2015, p. 544). A recent qualitative study interviewing both partners in long-term couples, for

example, found that women partnered with women reported greater attentiveness and responsiveness to each other's emotional needs than women partnered with men. In contrast, men partnered with men reported more effort respecting boundaries and creating emotional space than men partnered with women (Umberson et al., 2015). These differences largely reflected the fact that same-sex partners were more concordant than different-sex partners in their views on emotional intimacy and autonomy. As Umberson and colleagues (2015, p. 553) noted, "The desire to minimize boundaries between partners may be more stressful for women in different-sex relationships than for women in same-sex relationships because of greater partner resistance and discordance in a different-sex context." We formulate a competing hypothesis based on the assumption that same-sex partners devote greater emotion work to minimizing or maintaining boundaries than their counterparts: Hypothesis 1b: Same-sex couples will have higher quality relationships than different-sex couples.

Comparisons of Different-Sex and Same-Sex Relationship Qualities

Several quantitative studies have compared the qualities of same-sex and different sex-relationships (e.g., Blumstein & Schwartz, 1983; Kurdek, 2004; Kurdek, 2006) and/or the qualities of male and female relationships (e.g., Fingerhut & Maisel, 2010; Kurdek, 1989; Todosijevic, Rothblum, & Solomon, 2005). Appendix A (available in the online supplement) lists studies that include indicators of relationship quality (e.g., relationship satisfaction or commitment). It provides important details on published studies that included one or both of these types of comparisons using data from a U.S. sample and displayed statistics for the groups they compared (e.g., mean levels). Details include the recruitment methods of these studies, the number of men and women in their samples, and the indicators of relationship quality that they considered. None of the studies used data from Add Health.

The comparisons highlighted in Appendix A date back to the *American Couples* study, a path-breaking study begun in 1975 by Philip Blumstein and Pepper Schwartz. Blumstein and Schwartz (1983) surveyed thousands of individuals recruited through newspapers, magazines, and television. Importantly, their survey data have enabled some rich comparisons between large samples of men and women with same-sex cohabiting partners, different-sex cohabiting partners, and different-sex married partners. Blumstein and Schwartz (1983) found no systematic differences between same-sex and different-sex relationships with respect to reports of satisfaction, commitment, and other dimensions of relationship quality. Studies based on more recent samples have corroborated their findings (e.g., Fingerhut & Maisel, 2010; Rosenfeld, 2014; Todosijevic et al., 2005). However, some studies found greater relationship quality for women in same-sex relationships than for men in these relationships (e.g., Kurdek, 1989; Mohr & Fassinger, 2006; Peplau, Cochran, & Mays, 1997).

Comparisons of same-sex and different-sex couples often focus on sexual behavior. Blumstein and Schwartz (1983) reported that same-sex couples comprised of women had sex less frequently than different-sex couples and same-sex couples involving men. This finding has also been documented in other studies (Blair & Pukall, 2014; Solomon, Rothblum, & Balsam, 2005). Blumstein and Schwartz (1983) also found that same-sex couples with men were less likely to be sexually exclusive than same-sex couples with

women and different-sex couples. Other studies have corroborated this finding as well (Kurdek, 1988; Solomon et al., 2005). Evidence from Wave 3 of Add Health suggests that young adults overwhelmingly value sexual exclusivity in relationships, regardless of their sexual identity (Meier, Hull & Ortyl, 2009). Still, the norms surrounding sexual exclusivity appear to differ according to the sex composition of relationships (Christopher & Sprecher, 2000; Peplau & Spaulding, 2000; Rutter & Schwartz, 1996; van Eeden-Moorefield, Martell, Williams, & Preston, 2011). Same-sex male couples are more likely than other types of couples to have agreements about the acceptability of sexual non-exclusivity (Adam, 2006; Blumstein & Schwartz, 1983; Weeks, Heaphy, & Donovan, 2001). Also, gay men are more likely than lesbian women to reside in cities with extensive networks and locales comprised of gays, providing them greater opportunity to meet alternative partners (Gates & Ost, 2004; Schwartz & Graf, 2010). Although sexual exclusivity is often viewed as an indicator of a high quality relationship, this may not be the case for gay men.

Few of the studies shown in Appendix A rely on population-based studies (with exceptions being Rosenfeld, 2014; Solomon et al., 2005; Todosijevec et al, 2005). Taken together, the results of population-based studies suggest no significant differences in how different couple types rate the quality of their relationships (Rosenfeld, 2014; Todosijevec et al, 2005). However, consistent with convenience based studies, women in same-sex civil unions reported having sex less frequently than did women in different-sex marriages, and men in same-sex civil unions were less likely to indicate they were sexually exclusive than men in different-sex marriages (Solomon et al., 2005). Thus, this body of research is not consistent with a minority stress nor a gender-as-relational perspective.

Many of the studies listed in Appendix A recruited individuals or partners from relationships that were coresidential and/or committed. Recruitment samples such as these are problematic to the extent they overrepresent sexual minorities who are more comfortable with their sexual orientation (Christopher & Sprecher, 2000). Some of these studies did not distinguish the biological sex of the respondent or couple and thus conflated gender and gendered relational contexts (Umberson et al., 2015). They did not take into account the possibility, for instance, that women partnered with women may have experienced their relationships differently than women partnered with men. Finally, many of these studies focused only on a single indicator of relationship quality (e.g., relationship satisfaction). In a study of marginalized relationships (e.g., same-sex, interracial, and age-gap relationships), Lehmiller and Agnew (2006) found evidence that marginalization had both positive (greater commitment) and negative (reduced investments) implications for relationship quality.

Current Investigation

Data from the fourth wave of Add Health permits an examination of relationship qualities for a sample of young adults in 2007–2008. We move beyond prior studies comparing the relationship qualities of same-sex and different-sex couples by using data collected from a nationally representative sample. We identify these two couple types on the basis of respondent's own sex (marked by the interviewer) and the sex of their most recent partner (marked by the respondent). Respondents who identified as bisexual or some other label could potentially be classified as having a same-sex or different-sex relationship.

Unlike many prior studies focused on same-sex couples, we include dating relationships, in addition to cohabiting relationships. Our consideration of both objective and subjective qualities is also unique. As in prior studies, we treat relationship quality as a “set of conceptually distinct but empirically correlated dimensions” (Amato, Booth, Johnson & Rogers, 2007, p. 41). Although Add Health does not contain a comprehensive set of dimensions of relationship quality, it does include items that capture routinely used subjective constructs: commitment, satisfaction, and emotional intimacy (Amato et al., 2007; Bradbury, Fincham, & Beach, 2000; Moore et al., 2007; Prager, 2000; Stanley, 2007). With respect to objective measures, we rely on two common behavioral measures of physical intimacy: sexual frequency and sexual exclusivity (DeMaris, 2013; Sprecher & Cate, 2004; Previti & Amato, 2004; Waite & Joyner, 2001). These subjective and objective indicators are, to varying degrees, associated with relationship stability and psychological well-being (DeMaris, 2013; Kamp Dush, Taylor, & Kroeger, 2008; Le, Dove, Agnew, Korn, & Mutso, 2010; Waite & Joyner, 2001; Yabiku & Gager, 2009).

We test two competing hypotheses for these relationships. The minority stress perspective suggests that same-sex relationships will be lower in quality than different-sex relationships due to stressors specific to same-sex couples. In contrast, the gender-as-relational perspective suggests that same-sex relationships will be higher in quality, reflecting greater concordance in partners’ views on emotional intimacy and autonomy. This perspective and prior studies suggest that sexual frequency and exclusivity have different meanings for men and women. We contrast four groups of respondents with respect to their self-reported subjective and objective relationship qualities: male respondents with different-sex partners, male respondents with same-sex partners, female respondents with different-sex partners, and female respondents with same-sex partners. For the sake of comparison, we additionally contrast respondents with different-sex versus same-sex partners.

We estimate separate regression models for each of the five relationship qualities, beginning with the set of subjective qualities. The type of model we estimate depends on whether the values of the dependent variable are continuous versus categorical. We rely on ordinary least squares regression for models estimating commitment, satisfaction, emotional intimacy, and sexual frequency and use logistic regression for models of sexual exclusivity. These models include key variables that are related to various relationship qualities. Most importantly, we distinguish relationships based on coresidence following research that finds higher relationship quality, more frequent sexual activity, and greater sexual exclusivity in cohabiting relationships than in dating relationships (Brown & Bulanda, 2008; Giordano, Manning, Longmore, & Flanigan, 2011; Shaw, Rhoades, Allen, Stanley, & Markman, 2013; Waite & Joyner, 2001).

The models also include variables that differentiate same-sex and different-sex relationships. Individuals in same-sex cohabiting relationships are more likely than their counterparts in different-sex cohabiting relationships to be older and college-educated, but less likely to be residing with a child (Gates, 2009). They are also more similar to their partners with respect to age, race/ethnicity, and educational attainment (Jepsen & Jepsen, 2002; Schwartz & Graf, 2009). Our analyses not only include measures of race and age heterogamy, but also key sociodemographic indicators tied to relationship quality in prior studies of young adults:

race/ethnicity, age, education, prior sexual partnerships, number of children, and duration (Brown & Bulanda, 2008; Giordano et al., 2011).

Data and Sample

The National Longitudinal Study of Adolescent to Adult Health (hereafter Add Health) is a longitudinal school-based study (Harris et al., 2009). To select the schools in its sample, Add Health used a database provided by Quality Education Data for its primary sampling frame. Using rosters from each school, Add Health selected a nationally representative (core) sample of 12,105 adolescents in grades seven to twelve to participate in the first in-home interview. Add Health additionally oversampled several groups, including black adolescents from well-educated families, Chinese, Cuban, and Puerto Rican adolescents. The first in-home interview was conducted between April and December of 1995. The response rate for the in-home sample was 79%. In 2007 and 2008, the project conducted a fourth wave of in-home interviews for 15,701 of the original 20,745 respondents (with a retention rate of over 75%). By the time of the fourth in-home interview, most respondents were between the ages of 25 and 32.

Add Health used state-of-the-art survey methods to identify the romantic and sexual relationships of respondents and collected detailed information on them: audio computer-assisted self-interviews (ACASI) and partner rosters. Respondents were asked to provide basic demographic information on all their romantic/sexual partners since 2001, including their sex, age, and race/ethnicity; however, Add Health asked questions about relationship qualities only with reference to a focal partner. We provide the specific wording of questions on these qualities, including their response categories, in Appendix B (available in the online supplement). For respondents who reported multiple romantic/sexual partners, Add Health designated the current partner as the focal partner. For respondents with more than one current partner, Add Health administered a set of rules for choosing the focal partner. For instance, married partners were chosen over cohabiting partners and cohabiting partners were chosen over romantic/sexual partners.

Of the 14,797 respondents with variables to adjust for design effects (e.g., weights), 14,783 had a biological sex that was the same as in the first interview. Of these respondents, 14,330 respondents reported having had a romantic and/or sexual relationship since 2001. Twenty-four of these respondents failed to provide information enabling us to classify the relationship, specifically, information on whether the relationship was current and the sex of their partner. We then excluded 6,461 respondents whose most recent relationship eventuated in marriage. As prior studies concerning the qualities of same-sex relationships examined ongoing relationships, we further restricted the sample to respondents who were “currently” in a romantic and/or sexual relationship at the time of the fourth wave. This decreased the sample from 7,854 to 5,413 respondents. Once we excluded respondents with missing information on variables of interest (i.e., qualities of the relationship), the sample included 5,052 respondents. In this final sample, 95 male respondents and 98 female respondents had a same-sex partner.

Measures

Dependent Variables: Subjective Relationship Qualities

As stated earlier, Add Health includes items that capture commitment, satisfaction, and emotional intimacy. These Likert-style items differ in terms of the number and content of response options, as illustrated in Appendix B. *Commitment* is a common indicator of quality and important given its association with relationship-maintenance processes (Rusbult & Buunk, 1993; Stanley, 2007). We draw on two items available in Add Health that align best with Stanley and Rhoades commitment certainty (Owen et al., 2014): “How committed are you to your relationship with {initials}?” and “How likely is it that your relationship with {initials} will be permanent?” The correlation for the index based on these two items is .845 for our analytic sample.

Satisfaction is widely used to assess relationship quality and most commonly includes both global and specific features of relationships (Fincham & Bradbury, 1987). Consistent with Funk and Rogge (2007)’s scale, we include measures of happiness and satisfaction with the relationship. Specifically, we construct a scale based on four items ($\alpha = .803$): “We enjoy even ordinary day-to-day things together,” “I am satisfied with the way we handle our problems and disagreements,” “I am satisfied with our sex life,” and “How happy are you in your relationship?”

Emotional intimacy measures emotional closeness, intimate interactions, and positive affect (Prager, 2000; Moore et al., 2007). To measure emotional intimacy, we include the following four items on the scale ($\alpha = .779$): “How close do you feel to {initials}?” “My partner expresses love and affection to me,” “How much do you love {initials}?” and “My partner listens to me when I need someone to talk to.”

The response categories for items that comprise each of the three measures of subjective relationship qualities differ. For instance, commitment is measured using a four-point Likert item and a five-point Likert item. We rescaled each item above using a simple proportional rescaling technique so that the values range from 0 to 1. Consider the example of an item that ranges from 1 (*strongly agree*) to 5 (*strongly disagree*). First, we subtracted 1 from the value so that it ranges from 0 to 4. Then, we divided the value by 4 (the maximum value). We also reverse-coded items so that higher values indicate higher quality. The three subjective relationship quality measures take the numeric average of the items that comprise them so that they also range from 0 to 1. This rescaling technique assumes that measures with different numbers of response categories are equivalent but produce correlations between items that approximate those based on more complicated transformations (Colman, Norris, & Preston, 1997). The alphas that we report above are based on the rescaled measures.

Dependent Variables: Objective Relationship Qualities

Monthly sexual frequency was constructed from questions that asked respondents to report the average frequency of sexual activity (“vaginal intercourse, oral sex, anal sex, or other types of sexual activity”) per week, month, or year with the focal partner. We transformed this information into monthly frequency (if reported in days or years) and took the logarithm

to reduce skew in the models. (Due to some extraordinarily high values, frequency was top coded 30 prior to this last transformation.) *Exclusivity* was created from two items concerning both the respondent's and partner's involvement with other sexual partners. Precisely, respondents were asked if their partner "had any other sexual partners" since the relationship began, and if they themselves had any other sexual partners during the course of the relationship. Relationships with neither partner having a concurrent relationship were coded 1 (i.e., exclusive) and those with either partner having another relationship were coded 0.

Independent Variables

As stated earlier, we distinguish in our descriptive analyses and models two groups based on the sex composition of the relationships: respondents with different-sex versus same-sex relationships. We also contrast four groups based on the sex of respondent and sex composition of the relationship: male respondents with different-sex partners, male respondents with same-sex partners, female respondents with different-sex partners, and female respondents with same-sex partners. In estimating the models for each outcome, same-sex relationships serve as the reference category in the first set of contrasts and female respondents with same-sex partners are the reference category in the second set. For the models that include the first set of contrasts we also include an indicator for the sex of respondent.

We distinguish in both sets of models whether respondents were in a cohabiting versus dating relationship at the time of interview. Relationships were defined as cohabiting if respondents reported having "ever lived with" their romantic/sexual partner for one month or longer. If not, they were defined as dating. The models also include several control variables. Race of respondent (self-reported during the Wave 1 interview) was recoded to a series of dummy variables (non-Hispanic black, Hispanic, and non-Hispanic Asian), with non-Hispanic white acting as the reference group. Education at the time of wave four was also recoded as dummy variables (less than a high school degree, some college, a bachelor's degree or higher), with high school degree or equivalent acting as the reference group. Relationship history variables were based on the fourth wave and include marital history (whether respondent was previously married), number of individuals in the household that respondent classified as a "son/daughter," and logged number of other sexual partners in the lifetime. We also used information respondents supplied on partners to develop measures of whether they were a different race than respondent (using the categories above) and the age difference between partners (absolute value). Our measure of relationship duration corresponds to the period of the entire relationship (i.e., from the time of first date or sexual encounter).

Following Cheng and Powell (2015), we created an indicator variable flagging respondents with inconsistent reports on sexual orientation for inclusion in our models as a robustness check. Previous studies have suggested that some respondents inadvertently select the wrong sex when answering questions about their partner (Black et al., 2000). We identified a subset of respondents who were consistent in their reports of sexual orientation based on responses to items in another ACASI section of the questionnaire that preceded the section in which

they enumerated romantic and sexual relationships. Respondents in same-sex relationships were defined as consistent if they indicated they had ever had at least one same-sex sex partner and were not “100% heterosexual (straight).” Respondents in different-sex relationships were defined as consistent if they reported they were 100% straight and had no same-sex sex partners in their lifetime. The results for our key focal variables (e.g., sex composition of relationship) in models that include this indicator are similar to those presented in the tables (results not shown).

Results

Table 1 presents means and proportions (in addition to standard errors) for the variables used in our analyses of respondents in current nonmarital relationships. It shows statistics for same-sex and different-sex relationships before and after stratifying the analyses by the sex of respondent. As in previous studies, respondents in different-sex and same-sex relationships (columns 1 and 2, respectively) exhibited high levels of commitment, satisfaction, and emotional intimacy; their values on each measure were closer to the maximum value (1) than the minimum value (0). Average monthly frequency of sex was also high, with respondents in different-sex couples indicating that they had sex about 12 times per month and those in same-sex couples indicating that they did so about 10 times per month. At the bivariate level, respondents with same-sex partners did not differ significantly ($p < .05$) from those with different-sex partners in terms of subjective indicators of relationship quality. They also did not differ significantly from their counterparts in their reports of monthly sexual frequency. As we discuss below, our failure to detect significance for these outcomes was less a reflection of statistical power and more an indicator of the modest differences between these groups. Whereas the majority of respondents in same-sex and different-sex relationships indicated that both partners were sexually exclusive, different-sex couples were significantly ($p < .05$) more likely to do so (i.e., 69% versus 58%).

We found similar patterns disaggregating these statistics by biological sex (columns 3 to 6), with the exception of sexual exclusivity. Whereas over two-thirds of respondents in same-sex female and different-sex couples indicated their relationship was exclusive, fewer than half of male respondents with male partners did so. Patterns of exclusivity are thus obscured when the sex of respondent is not distinguished. It should be noted that estimates of exclusivity for male and female couples were imprecise because of their sample sizes. As evidence of this, the 95% confidence interval for the estimate of exclusivity (calculated using the proportions and standard errors from Table 1) was 32% to 56% for male couples (e.g., $0.32 = 0.44 - [1.96 * 0.06]$) and 59% to 83% for female couples; the margins of error for both these groups exceeded twenty percentage points. Despite this lack of precision, these two intervals did not overlap, indicating that the difference in exclusivity between male and female couples was statistically significant. What we cannot conclude is whether a minority or majority of same-sex male couples were exclusive, given the fact the confidence interval for this group included 50%.

Comparisons across the different sets of columns for the control variables similarly suggest that simple contrasts between same-sex and different-sex couples distort differences between

same-sex male and female couples. For instance, male respondents in same-sex relationships were much more likely to have a college degree than their counterparts in different-sex relationships (i.e., 49% versus 27%). In contrast, female respondents in same-sex relationships did not differ significantly from their counterparts in different-sex relationships with respect to educational attainment. These results for educational attainment are consistent with prior work based on Add Health (Mollborn & Everett, 2015). Differences such as these underscore the need to control for demographic variables in comparisons of same-sex and different-sex relationships.

Subjective Relationship Qualities

Table 2 shows coefficients and standard errors from the models predicting the subjective relationship qualities. As suggested earlier, we estimated two sets of models for each quality and both sets include the control variables described earlier. The first set of models (top panel) distinguished respondents using a single indicator of whether their relationship is same-sex versus different-sex. The second set of models (lower panel) distinguished respondents by their own sex and the sex composition of their relationships, yielding four different groups. These models used female respondents with female partners as the omitted reference group. This second set of models allowed us to not only differentiate male and female respondents who have same-sex relationships, but also contrast female respondents in same-sex relationships with male and female respondents in different-sex relationships. Given the fact that the coefficients for the control variables did not differ markedly across the two sets of models, we display only those for the second set of models.

Hypothesis 1a predicted that same-sex couples would have higher quality relationships, whereas Hypothesis 1b predicted that same-sex couples would have lower quality relationships. The results in the top panel (columns 1, 3, and 5) reveal no significant differences between respondents with same-sex and different-sex partners in levels of subjective relationship qualities. Results from the second panel indicate that male respondents with same-sex partners had similar levels for the subjective relationship quality variables (commitment, satisfaction, and emotional intimacy) as female respondents with same-sex partners. Similarly, male and female respondents in different-sex relationships had similar levels of subjective relationship quality as the reference group. This finding does not align with either of the competing hypotheses.

The relatively small coefficients suggest that failure to detect statistical significance was not due to small sample sizes but small effect sizes. To offer an example of the magnitude of the differences, female respondents with a different-sex partner had levels of commitment that were 0.031 higher than female respondents with a same-sex partner, whereas male respondents with a different-sex partner had levels of commitment that were 0.031 lower. The 95% confidence interval for this last estimate (calculated using the coefficient and standard error) was -0.113 to 0.051 (e.g., $-0.113 = -0.031 - [1.96 \times 0.042]$). For the sample as a whole, the lower quartile value for commitment was 0.542 and the upper quartile value was 1, an interquartile range of 0.458. In light of this variation, the bounds for confidence intervals capturing differences in levels of commitment between same-sex and different-sex couples were narrow.

Consistent with findings in prior studies (e.g., Waite & Joyner, 2001), respondents who were cohabiting had significantly higher levels of commitment, satisfaction, and emotional intimacy than respondents who were dating. These results suggest that cohabiting relationships continue to be distinct from dating relationships in their relationship qualities, in spite of dramatic changes that render cohabitation a moving target (Smock, 2000). Levels for all three subjective qualities were significantly lower for respondents who are black (versus white) and significantly higher for respondents with a prior marriage. Levels for these qualities significantly increased with duration but decreased significantly with age and the number of other sex partners. A comparison of the magnitude of the coefficients for the various categorical variables reveals that the effects of the key focal variables (e.g., sex composition of relationship) were relatively small.

Objective Relationship Qualities

Columns 1 and 3 of Table 3 present results for sexual frequency and exclusivity, respectively. Results from the top panel of this table demonstrate that different-sex couples reported having sex more frequently than same-sex couples and were more likely to indicate their relationship was sexually exclusive; both of these differences were significant ($p < .05$). Turning to the second panel of results, both male and female respondents in different-sex relationships reported having sex more frequently than female respondents in same-sex relationships; however, male respondents in same-sex relationships failed to differ significantly from their female counterparts with respect to sexual frequency. Levels of sexual frequency were significantly higher for respondents who were cohabiting or previously married; they were also significantly greater with increases in the number of other partners, the age difference between partners, and the number of children in the household. Levels of sexual frequency decreased significantly as the age of the respondent increased. Prior studies have similarly documented a decline in sexual frequency with age, even among young adult couples (i.e., Call, Sprecher, & Schwartz, 1995).

Considering the magnitude of effects, female and male respondents with a different-sex partner had sex over two more times per month (e.g., $2.23 = \exp[0.800]$) than female respondents with a same-sex partner. Male respondents with a same-sex partner had sex almost two more times per month (e.g., $1.89 = \exp[0.638]$) than female respondents with a same-sex partner. The finding that male and female respondents with a same-sex partner failed to differ significantly in terms of their sexual frequency partly reflects the large standard error for the coefficient.

Male respondents in same-sex relationships were significantly less likely than female respondents in these relationships to indicate their relationship was exclusive; male and female respondents in different-sex relationships failed to differ significantly from female respondents in same-sex relationships with respect to sexual exclusivity. Male respondents in same-sex relationships had less than half the odds of exclusivity as female respondents in these relationships (i.e., $0.368 = \exp[-1]$). These differences between respondents in different-sex and female respondents in same-sex couples failed to reach statistical significance largely because they were small in magnitude. In models that switched the reference group to male respondents in same-sex relationships (not shown), male and female

respondents in different-sex relationships were significantly more likely to have an exclusive relationship.

As indicated earlier, the results in Table 3 also reveal highly significant differences between respondents in cohabiting and dating relationships, with cohabitators having greater sexual exclusivity in comparison to the daters. Black and Hispanic respondents reported significantly lower levels of exclusivity than white respondents. Cohabitators had almost twice the odds as daters of being exclusive (i.e., $1.974 = \exp[.680]$). Exclusivity also decreased with the duration of the relationship and the number of previous sex partners.

Discussion

Most prior studies comparing the qualities of same-sex and different-sex relationships used convenience samples and limited their scope to coresidential relationships. Furthermore, these studies were limited with respect to the range of qualities that they considered. Importantly, Add Health collected information on respondents' sexual/romantic partners, allowing them to list both same-sex and different-sex partners. For the most recent partner, Add Health also collected information on both subjective and objective qualities, using conventional items (e.g., commitment) and unusual measures (e.g., sexual exclusivity). We excluded married respondents from our analyses, as very few respondents with same-sex partners were married to their partners.

We drew from two perspectives that suggested competing hypotheses with respect to how same-sex couples would fare in terms of quality relative to different-sex couples. The minority stress perspective predicted that women and men in same-sex relationships would have lower relationship quality than their counterparts in different-sex relationships due to their exposure to couple-level minority stressors. In contrast, the gender-as-relational perspective predicted that partners in same-sex relationships would have higher relationship quality as a consequence of greater concordance in views on emotional intimacy and autonomy. Before and after controlling for a rich set of variables, male and female respondents in same-sex relationships failed to differ from their counterparts in different-sex relationships in their levels of commitment, satisfaction, and emotional intimacy.

In contrast, the multivariate analyses of sexual frequency and sexual exclusivity revealed some significant differences in the sexual behavior of male and female respondents in same-sex relationships. Male respondents in same-sex relationships were less likely than female respondents in these relationships and respondents in different-sex relationships to indicate their relationship was sexually exclusive. Female respondents in same-sex relationships indicated they had sex less frequently than male and female respondents in different-sex relationships, but they failed to differ from male respondents in same-sex relationships with respect to sexual activity. In prior studies based on convenience samples, male and female couples were found to exhibit these same distinct patterns of sexual behavior.

One caveat is that scholars have expressed conceptual and methodological concerns with the measure of sexual frequency used in this study and prior studies (Blair & Pukall, 2014; Rothblum, 2000). As Diamond (2105) points out, many prior studies failed to specify what

counted as sex when asking about sexual frequency. As indicated in the discussion of our dependent variables, Add Health provided some examples of sexual activity (i.e., vaginal, anal, and oral sex); however, it did not offer examples of non-genital activities that are physically arousing and presumably more frequent among same-sex female couples. Blair and Pukall (2014) argue that the frequency of sexual activity may not necessarily capture the quality of sexual encounters, particularly for female couples. These scholars asked men and women in same-sex and different-sex relationships to report the length of their last and typical sexual encounter, in addition to the frequency of sex. Notably, they found that women with same-sex partners reported significantly longer durations for sexual encounters than men with same-sex partners and respondents with different-sex partners.

Although our sample sizes of male and female couples are larger than in many previous studies (Appendix A), the precision of estimates for these groups was limited. To determine whether we had adequate statistical power given our sample sizes, we conducted power analyses using proc power in SAS for the continuous outcomes and powerlog in Stata for the dichotomous outcome. The analyses for the continuous variables suggested we had adequate power to detect even the most miniscule of effects. The analyses for sexual exclusivity revealed that we had adequate power to detect differences between male and female couples that were twelve percentage points or greater. Our observed gap between these couple types was twenty-seven percentage points. Of course, post-hoc (or retrospective) power analyses are the subject of debate (Hoenig & Heisey, 2001).

Consistent with prior studies, our results suggest that same-sex and different-sex couples are similar in their levels of relationship quality. This finding is intriguing in light of the fact that same-sex couples form and maintain their relationships in a broader context that stigmatizes sexual minorities and their relationships. As suggested by the gender-as-relational perspective, some men and women in different-sex relationships experience stress from having discordant views on emotional intimacy and autonomy. Scholars have offered additional explanations for why same-sex couples fare just as well as different-sex couples. In their review of the empirical literature on this topic, Rostosky and Riggle (2017) suggest that same-sex couples develop strengths and resiliencies as a consequence of stigmatization. They also found evidence in six different qualitative studies that same-sex couples viewed individual differences as a source of relationship strength (e.g., Riggle, Rothblum, Rostosky, Clark, & Balsam, 2016). Our findings challenge the deficit perspective of same-sex relationships and suggest that sexual minorities may reap the same benefits (or face the same challenges) in the relational realm as sexual majorities.

Alternatively, the patterns found in this study could partly reflect the selection of same-sex couples in ongoing dating and cohabiting relationships. Differences in the qualities of different couple types have long been considered a reflection of unmeasured factors that select individuals into different types of relationships (Paik, 2010). Dating and cohabitation on the part of same-sex couples, however, are not just a reflection of personal choice but also the illegality of same-sex marriage. When the fourth wave of the Add Health was fielded (2007–2008), same-sex couples could legally marry in Massachusetts but not in other states. This has implications for the composition of same-sex couples in this study's sample, as the most committed, satisfied, and intimate same-sex couples were not able to select themselves

into marriage. It is also worth noting that respondents with same-sex partners were more likely than their counterparts with different-sex partners to dissolve their most recent relationships prior to the fourth wave (results not shown). These selection issues have also plagued other studies comparing same-sex and different-sex relationships and merit further attention in future research.

The distinctive findings for same-sex male relationships (i.e., the lower likelihood of sexual exclusivity) and same-sex female couples (i.e., the lower frequency of sex) signal gender differences in acceptability and preferences for different sexual behaviors and practices. For men and women in different-sex relationships, sexual non-exclusivity is negatively associated with levels of emotional satisfaction (Waite & Joyner, 2001) and tends to serve as a precursor to dissolution (e.g., DeMaris, 2013). A recent study of different-sex couples from Wave 4 of Add Health found that women's and men's reports of partner's non-exclusivity (but not their own) were associated with relationship instability (Frisco, Wenger, & Kreager, 2017). Further attention to the links between gender, sexual exclusivity, and relationship functioning for all couples are warranted.

In spite of having less exclusive relationships, men in same-sex relationships enjoy similar levels of commitment, satisfaction, and emotional intimacy as the other groups of respondents. This is evidence of their greater acceptance of nonmonogamy. These findings are also consistent with a recent study that finds no association between the type of agreement (i.e., "open," "discrepant," and "monogamous") and most indicators of relationship quality among same-sex male couples (Parsons, Starks, Gamarel, & Grov, 2012). They underscore the need for future studies to identify factors associated with men's and women's reports on the quality of same-sex and different-sex relationships (Rith & Diamond, 2013), an endeavor that requires much larger sample sizes.

Our study offers a portrait of the qualities of young adult relationships prior to the legalization of marriage to same-sex couples in all states on June 26, 2015. As information on these relationships was collected in 2007 and 2008, our findings are not applicable to the period following this shift in the social climate surrounding same-sex couples. Our focus on a narrow age group of young adults means that our findings cannot be generalized to other birth cohorts or periods of the life course. Although we draw from a minority stress perspective, we were not able to measure this mechanism because Add Health included only one item on minority stress ("treated with less respect or courtesy"). Future work would benefit from surveys that obtain larger numbers of sexual minorities.

Research drawing on experiences of respondents from a wider age range is needed along with studies focusing on relationship experiences in the new legal climate. Add Health is now conducting a Wave 5 follow-up (i.e., 2016–2018), enabling a comparison of same-sex and different-sex couples in the period following the legalization of marriage to same-sex couples. Future studies would also benefit from couple-level data; our analyses are based reports of one partner from the relationship. A multifaceted assessment of relationships would also be informative, as our work treats each quality separately; a more nuanced portrait would consider how the qualities operate together (e.g. commitment and exclusivity). However, this study breaks new ground in some important respects (i.e., the use

of population-based data, inclusion of dating relationships, and consideration of a broad array of relationship outcomes) and provides an empirical basis on which to further assess the quality of same-sex relationships.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1.
Descriptive Statistics for Relationship Qualities by Sex Composition of Relationship and Respondent Sex: Current Nonmarital Relationships
(N = 5,052)

Variable	Men & Women		Men		Women	
	Different-Sex (DS)	Same-Sex (SS)	Different-Sex (DS)	Same-Sex (SS)	Different-Sex (DS)	Same-Sex (SS)
Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)
<i>Relationship Qualities</i>						
Commitment (0 to 1)	.73 (.01)	.74 (.03)	.69 (.01)	.73 (.04)	.78 (.01)	.75 (.04)
Satisfaction (0 to 1)	.81 (.00)	.80 (.02)	.79 (.01)	.81 (.02)	.82 (.01)	.80 (.03)
Emotional intimacy (0 to 1)	.80 (.00)	.82 (.02)	.78 (.01)	.80 (.03)	.81 (.01)	.83 (.03)
Monthly sex frequency	12.01 (0.22)	10.12 (0.93)	12.30 (0.28)	11.09 (1.21)	11.67 (0.29)	9.15 (1.53)
Both partners exclusive	.69 (.01)	.58 [*] (.04)	.67 (.01)	.44 ^{**} (.06)	.70 (.01)	.71 (.06)
<i>Control Variables</i>						
Cohabiting relationship	.55 (.01)	.62 [*] (.05)	.53 (.02)	.60 (.07)	.57 (.02)	.65 [*] (.07)
Duration of relationship	38.45 (0.96)	30.77 (2.72)	35.42 (1.13)	30.63 (4.39)	41.83 (1.29)	30.91 (3.89)
Non-Hispanic white or other	.63 (.03)	.67 (.05)	.66 (.03)	.62 (.07)	.60 (.04)	.72 (.05)
Non-Hispanic black	.20 (.02)	.14 (.03)	.18 (.02)	.10 (.04)	.22 (.03)	.18 (.04)
Hispanic	.12 (.02)	.15 (.03)	.12 (.02)	.22 (.06)	.13 (.02)	.07 (.03)
Non-Hispanic Asian	.03 (.01)	.01 (.01)	.03 (.01)	.02 (.01)	.03 (.01)	.01 (.01)

Variable	Men & Women		Men		Women	
	Different-Sex (DS)	Same-Sex (SS)	Different-Sex (DS)	Same-Sex (SS)	Different-Sex (DS)	Same-Sex (SS)
Variable	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)	Mean (SE)
Age at interview	28.07 (0.13)	28.27 (0.20)	28.19 (0.14)	28.69 (0.23)	27.93 (0.13)	27.85 (0.26)
Less than high school	.10 (.01)	.05 (.02)	.12 (.01)	.03 [*] (.02)	.09 (.01)	.06 (.03)
High school degree	.26 (.01)	.20 (.04)	.28 (.02)	.12 [*] (.05)	.24 (.02)	.29 (.07)
Some college	.34 (.01)	.39 (.05)	.33 (.01)	.36 (.07)	.35 (.02)	.42 (.07)
Bachelors degree	.30 (.02)	.36 (.05)	.27 (.02)	.49 [*] (.08)	.32 (.02)	.23 (.06)
Prior marriage	.14 (.01)	.03 ^{***} (.02)	.12 (.01)	.00 ^{***} (.00)	.16 (.01)	.06 [*] (.03)
No. of other sex partners	13.82 (0.35)	18.13 [*] (1.62)	16.63 (0.45)	22.33 [*] (2.09)	10.69 (0.38)	13.95 (2.55)
Partner race difference	.21 (.01)	.34 [*] (.05)	.20 (.02)	.39 [*] (.07)	.22 (.01)	.29 (.07)
Partner age difference	3.80 (0.09)	4.42 (0.40)	3.57 (0.10)	4.24 (0.55)	4.06 (0.13)	4.60 (0.56)
No. of children in household	0.60 (0.03)	0.06 ^{***} (0.02)	0.37 (0.02)	0.01 ^{***} (0.00)	0.86 (0.05)	0.11 ^{***} (0.05)
<i>Data Quality Flags</i>						
Consistent sex orientation	.83 (.01)	.93 [*] (.03)	.93 (.01)	.96 (.03)	.73 (.01)	.90 [*] (.05)
Multiple current partners	.08 (.01)	.08 (.03)	.10 (.01)	.11 (.04)	.05 (.01)	.04 (.03)
N of cases	4,859	193	2,361	95	2,498	98

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Note: Means and standard deviations adjust for design effects. Standard deviations in parentheses.

*
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***
 $p < .05$;
 $p < .01$;
 $p < .001$ (two-tailed tests between respondents with different-sex and same-sex partners)

Table 2.
Coefficients from Models of Subjective Relationship Qualities: Current Nonmarital Relationships (N = 5,052)

Variable	Commitment		Satisfaction		Emotional Intimacy	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
<i>Sex Composition</i>						
Different-sex relationship (v. same-sex)	0.00	0.03	0.01	0.02	-0.04	0.02
<i>Respondent Sex and Sex Composition (v. Female Respondents in SS Relationships)</i>						
Female respondents in DS relationships	0.03	0.04	0.03	0.03	-0.01	0.03
Male respondents in SS relationships	0.00	0.06	0.02	0.04	-0.02	0.04
Male respondents in DS relationships	-0.03	0.04	0.00	0.03	-0.03	0.03
<i>Type of Relationship</i>						
Cohabiting (v. dating)	0.20	***	0.01	0.04	***	0.01
<i>Control Variables</i>						
Duration of relationship	0.00	*	0.00	0.00	0.00	*
Non-Hispanic black (v. non-Hispanic white)	-0.09	***	0.01	-0.05	***	0.01
Hispanic (v. non-Hispanic white)	-0.02		0.02	-0.02	0.01	-0.02
Non-Hispanic Asian (v. non-Hispanic white)	-0.01		0.03	-0.02	0.02	0.00
Age at interview	-0.01	*	0.00	-0.01	*	0.00
Less than high school (v. high school degree)	-0.03		0.02	-0.01	0.01	0.01
Some college (v. high school degree)	0.01		0.01	0.00	0.01	0.01
Bachelors degree (v. high school degree)	0.02	#	0.01	0.02	*	0.01
Prior marriage	0.04	**	0.01	0.03	**	0.01
No. of other sex partners (logged)	-0.02	***	0.00	-0.01	***	0.00
Partner race difference	-0.01		0.01	-0.01	0.01	-0.01
Partner age difference	0.00		0.00	0.00	0.00	0.00
No. of children in household	0.00		0.01	-0.01	0.00	-0.01
R-Square	18.5%		5.2%		9.3%	

Note: Coefficients, SEs, and *p*-values are from two different sets of OLS models that adjust for design effects. For the first set (Panel 1) of models, only the estimate for the sex composition variable is shown; this set includes an indicator for female.

The intercept for the second set of models (Panel 2) is not shown.

(s) test paired-t (two-tailed) 100% > d

***

;10% > d

**

;50% > d

*

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Table 3
Coefficients from Models of Objective Relationship Qualities: Current Nonmarital Relationships (N = 5,052)

Variable	Logged Sex Frequency (OLS Regression)		Sexual Exclusivity (Logistic Regression)	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
<i>Sex Composition</i>				
Different-sex relationship (v. same-sex)	0.51	*	0.21	**
<i>Respondent Sex and Sex Composition (v. Female Respondents in SS Relationships)</i>				
Female respondents in DS relationships	0.80	*	0.37	0.31
Male respondents in SS relationships	0.64		0.44	*
Male respondents in DS relationships	0.86	*	0.35	0.32
<i>Type of Relationship</i>				
Cohabiting (v. dating)	0.60	***	0.09	0.10
<i>Control Variables</i>				
Duration of relationship	0.00		0.00	***
Non-Hispanic black (v. non-Hispanic white)	-0.13		0.08	***
Hispanic (v. non-Hispanic white)	-0.09		0.10	*
Non-Hispanic Asian (v. non-Hispanic white)	0.18		0.14	0.36
Age at interview	-0.10	***	0.02	0.02
Less than high school (v. high school degree)	0.14		0.13	0.18
Some college (v. high school degree)	0.03		0.11	0.11
Bachelors degree (v. high school degree)	-0.05		0.13	0.15
Prior marriage	0.27	**	0.09	0.14
No. of other sex partners (logged)	0.16	***	0.04	***
Partner race difference	0.07		0.08	0.14
Partner age difference	0.02	**	0.01	0.01
No. of children in household	0.08	*	0.04	0.06
F Statistic or R-Square	9.5%		13.2	

Note: Coefficients, SEs, and *p*-values are from two different sets of OLS models adjusting for design effects. For the first set (Panel 1) of models, only the estimate for the sex composition variable is shown; this set includes an indicator for female.

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The intercept for the second set of models (Panel 2) is not shown.

p < .001 (two-tailed tests)
***
p < .01;
**
p < .05;
*