

Predictors of Parenting Intentions Among Childless Lesbian, Gay, and Heterosexual Adults

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Disparities in the intention to parent have been found for lesbian and gay individuals compared with heterosexual individuals, but little is known about what social contexts predict these differences. Qualities of family relationships, friendships, and romantic relationships may all play a role, but these have not been studied as a function of sexual orientation. Using a large national sample of adults in the United States, this study explored intentions for parenthood, ideal family size, and predictors of parenting intentions as a function of gender and sexual orientation. Results showed that fewer lesbian and gay than heterosexual individuals intended to become parents. In addition, among those who intended parenthood, lesbian and gay individuals reported smaller intended family sizes than did their heterosexual peers. Sociocultural and demographic variables predicted parenting intentions similarly among all participants, regardless of sexual orientation. However, dissimilarities in the levels of these predictors explained some of the disparity in parenting intentions between lesbian/gay and heterosexual participants. Much remains to be learned about the role of sexual orientation in family formation processes.

Keywords: family formation, sexual orientation, lesbian/gay, family size

Few decisions in life are more consequential than the ones people make about parenthood. Whether or not to have children, how many children to have, and in what circumstances to have them, are decisions that have important ramifications throughout the remainder of a person's life (Nomaguchi & Milkie, 2003; Turnbull, Graham, & Taket, 2017; Umberson, Pudrovska, & Reczek, 2010). In fact, by the time they are 45 years of age, almost 90% of women in the United States have become mothers (Gato, Santos, & Fontaine, 2017; Livingston, 2018). Although decisions about parenthood have been studied extensively (Hagewen & Morgan, 2005; Kopper & Smith, 2001; Langdridge, Sheeran, & Connolly, 2005; Turnbull et al., 2017), relatively little is known about the role of sexual orientation in this area (Gato et al., 2017). Research has shown that lesbian and gay adults are less likely than others to intend to become parents, but little is yet known about social influences in this regard (Baiooco & Laghi, 2013; Riskind &

Patterson, 2010; Riskind, Patterson, & Nosek, 2013). In this study, we use data from a large national sample to examine parenting intentions and to explore possible predictors of parenting intentions among lesbian, gay, and heterosexual adults.

Social influences may have a significant impact on decisions about family formation. For example, social support—defined as the availability of individuals within personal social networks who can provide comfort, love, and encouragement (Cobb, 1976; Sarason, Levine, Basham, & Sarason, 1983)—may play an important role in decisions about parenthood. Normative social influence, which occurs when social influences lead individuals to conform to expected behavior to be liked and accepted by others (Cialdini, Kallgren, & Reno, 1991; Deutsch & Gerard, 1955), may also affect decisions about parenthood. In the context of decisions about parenthood among heterosexual people, these issues have been examined.

Aspects of social contexts have been found to be significant correlates of parenting intentions among heterosexual individuals. Those who feel close to parents and other family members, who are involved in long-term romantic partnerships, and who have supportive social networks are more likely than others to report intending to become parents (Langdridge et al., 2005; Starrels & Holm, 2000). The process of becoming a parent may also be normatively influenced by friends. For example, Balbo and Barban (2014) found that when friends within an individual's social network became pregnant, the individual was more likely to become pregnant or have a child within a short time. Heterosexual women and men report social and normative pressures to have children (Ashburn-Nardo, 2017; DeJean, McGeorge, & Carlson, 2012), and childless adults may even be stigmatized (Mueller & Yoder, 1997). Thus, social contextual factors seem to have an important role in family formation for heterosexual people.

Many investigators have explored other motivations for seeking or avoiding parenthood among heterosexual populations (Bennett & Jamieson, 1999; DeJean et al., 2012; Langdridge et al., 2005;

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Mueller & Yoder, 1999; Starrels & Holm, 2000). Demographic characteristics such as age and race/ethnicity are associated with fertility intentions; other things being equal, younger and non-White individuals are more likely than others to report that they intend to become parents (Williams, Abma, & Piccinino, 1999). Those who describe themselves as more religious are also more likely to report the intention to become parents (Hayford & Morgan, 2008). Whether these variables also predict parenting intentions to the same degree among lesbian and gay individuals is not yet known.

Childbearing outside of heterosexual marriage has long been socially stigmatized (McCutcheon & Morrison, 2015; Tankard & Paluck, 2017). Consistent with this, nonheterosexual adults are less likely than others to have or intend to have children (e.g., Baiocco & Laghi, 2013; Gates, Badgett, Macomber, & Chambers, 2007; Riskind & Patterson, 2010). Working with data from a nationally representative sample, Riskind and Patterson (2010) studied childless adults in the United States, and reported that 54% of gay men as compared with 75% of heterosexual men expressed desire to become fathers; among women, 37% of lesbian women as compared with 68% of heterosexual women expressed desire to become mothers. However, only 30% of gay men and 33% of lesbian women intended as well as desired to become parents. Thus, lesbian and gay adults were less likely than their heterosexual peers to express desire or intent to have children. These disparities may be attributable to discrimination, financial issues, and/or to medical and legal barriers (Berkowitz & Marsiglio, 2007; DeMino, Appleby, & Fisk, 2007; Downing, Richardson, Kinkler, & Goldberg, 2009; Gato et al., 2017; Goldberg, Downing, & Sauck, 2007; Goldberg, Downing, & Moyer, 2012). For instance, Goldberg and colleagues (2012) studied gay men's decision making about adoption and found that many described constraints imposed by financial issues.

A few studies have explored the correlates of lesbian and gay individuals' desire and intention for parenthood. Riskind and her colleagues (Riskind et al., 2013) reported that younger lesbian and gay adults living in social climates that were favorable to sexual minority people were more likely to express interest in becoming parents than were older lesbian or gay adults or those living in less favorable social climates. In another study, lesbian and gay adults in an Italian sample were less likely than their heterosexual peers to expect social support for the idea that they could become parents (Baiocco & Laghi, 2013). Costa and Bidell (2016) found that 65% of childless lesbian and gay adults in Portugal reported wanting to become parents, and 56% reported the intention to become parents; those who were younger, less religious, and more involved in lesbian and gay communities were more likely to intend to have children. Much less is known, however, about the role of other aspects of the social context, such as the qualities of personal relationships with parents, romantic partners, or friends in decision-making about parenthood for lesbian and gay individuals.

Many social contexts vary as a function of sexual orientation, and these differences may help to explain disparities in parenting intentions. For instance, lesbian and gay adults have been found to have less harmonious relationships with their parents than do heterosexual individuals (Patterson, Tate, Sumontha, & Xu, 2018). In addition, lesbian and gay individuals report more loneliness than do their heterosexual peers (Johnson & Amella, 2013; Mereish & Poteat, 2015). The qualities of family relationships, friendships, and romantic

relationships may help to explain disparities in parenting intentions among sexual minority versus heterosexual individuals.

Once individuals and couples decide to seek parenthood, additional questions can emerge. One such question concerns how many children to have. Demographic characteristics are known to be associated with decisions about family size among heterosexual populations; for instance, more religious individuals report wanting more children (Hayford & Morgan, 2008). Research has also suggested that heterosexual individuals are socially stigmatized for having families that are smaller or larger than the norm (Mueller & Yoder, 1999). There is, however, little information about social factors that may be associated with decisions about how many children to have among lesbian or gay adults.

Thus, lesbian and gay adults are less likely than their heterosexual peers to intend parenthood (Patterson & Riskind, 2010; Riskind & Patterson, 2010). Among heterosexual adults, social support and normative social influences are strongly related to parenting intentions (Balbo & Barban, 2014; Bennett & Jamieson, 1999; DeJean et al., 2012; Langdrige et al., 2005; Mueller & Yoder, 1999; Starrels & Holm, 2000), but little is known about the role of these factors for lesbian and gay individuals. Lesbian and gay people also face significant barriers to parenthood such as discrimination, social norms surrounding family formation, and financial costs of fertility treatments (Gato et al., 2017; Goldberg et al., 2012; Tankard & Paluck, 2017). However, little is known about the ways in which contextual predictors of parenting intentions, such as the qualities of family relationships, friendships, and romantic relationships may shape decision making processes among lesbian and gay individuals.

The present study was designed to address this gap and to yield new information about parenting intentions among sexual minority adults in the United States. Using data from a large national survey, the study explored parenthood intentions, ideal family size, and sociocontextual predictors of parenting intentions as a function of gender and sexual orientation.

This study set out to answer four specific questions: (1) Are lesbian and gay adults in the United States more or less likely than their heterosexual peers to express the intention to become parents? (2) Among those intending to become parents, does intended family size vary as a function of sexual orientation and gender? (3) Are demographic and sociocontextual factors predictive of parenting intentions, and, if so, is the nature or strength of these predictions affected by sexual orientation? (4) How well do demographic and sociocontextual factors explain differences in parenting intentions as a function of sexual orientation?

We expected that childless lesbian and gay adults would be less likely than their heterosexual peers to report parenting intentions (Riskind & Patterson, 2010). We also expected that lesbian and gay individuals intending to parent would report smaller intended family sizes (i.e., that they would intend to have fewer children). We anticipated that younger, more religious, better educated, and non-White participants would be more likely to report the intention to become parents (Gato et al., 2017; Hayford & Morgan, 2008; Riskind & Patterson, 2010; Riskind & Tornello, 2017). We also predicted that participants who reported more positive relationships with parents, more close friends, and whose romantic relationships were seen as likely to last would be more likely to report parenting intentions (Gato et al., 2017; Riskind & Patterson, 2010; Riskind & Tornello, 2017). We also expected sociocontextual and

demographic predictors to mediate the effect of sexual orientation on parenting intentions.

Method

Participants

Data were drawn from Wave IV of The National Longitudinal Study of Adolescent to Adult Health. This study, known as Add Health, started as a school-based survey of adolescent health in Grades 7–12 during 1994 and 1995 (Wave I). In 2008 and 2009, under subcontract to the University of North Carolina at Chapel Hill, RTI International collected Wave IV data. At this time, respondents from Wave I were living in all 50 states. Interviewers communicated with 92.5% of the participants in Wave I and conducted interviews with 80.3% of eligible sample participants in Wave IV (Harris et al., 2009). Researchers used computer-assisted personal interview (CAPI) and computer-assisted self-interview (CASI) methods for data collection. Participants responded to less sensitive questions using the CAPI method and utilized the CASI technique for more sensitive questions (Harris et al., 2009). In total, the Wave IV dataset included 15,701 participants. Only Wave IV data were used in these analyses because this was the only data collection that included questions about parenting intentions. This study was submitted to and approved by the Social and Behavioral Sciences Institutional Review Board (IRB) at the University of Virginia.

For the current study, data from childless lesbian, gay, or heterosexual individuals were of primary interest. Data from participants who already had children and/or from those who described themselves as any sexual orientation other than heterosexual or gay/lesbian were dropped from analyses. After these exclusions, the remaining sample incorporated data from 7,600 people.

Participant ages ranged from 24.42 to 34.67 years ($M = 28.71$, $SD = 1.76$). Following Maksimović and colleagues (2008), education was recoded into three levels, 1 = *high school education and lower*, 2 = *more than high school, but less than a 4-year degree*, 3 = *4-year degree or higher*. Education ranged from levels 1 to 3 ($M = 2.28$, $SD = .74$). The racial categories of participants included: White ($n = 4,939$, 65.00%), African American ($n = 1,534$, 20.20%), people of Hispanic Origin ($n = 1,139$, 15.00%), Asian descent ($n = 695$, 9.10%), Other ($n = 598$, 7.90%), and Native American ($n = 240$, 3.20%). These percentages exceed 100%, because interviewers allowed participants to select multiple racial and ethnic groups. The sample included 3,523 women (46.40%) and 4,077 men (53.60%).

With regard to sexual orientation, participants responded to the Wave IV question “Please choose the description that best fits how you think about yourself,” with answers including: “100% heterosexual (straight),” “mostly heterosexual (straight), but somewhat attracted to the same sex,” “bisexual (equally attracted to males and females),” “mostly homosexual (gay), but somewhat attracted to the opposite sex,” “100% Homosexual (gay),” and “not sexually attracted to males or females.”

Sexual orientation was coded into two categories: “heterosexual,” which included the “mostly heterosexual” and “100% heterosexual” responses and “lesbian and gay,” which included the mostly homosexual and 100% homosexual sexuality descriptions (Needham & Austin, 2010; Patterson et al., 2018). A distinction between mostly

heterosexual and 100% heterosexual individuals has been well-documented (e.g., Vrangalova & Savin-Williams, 2012), so analyses were conducted both with separate mostly heterosexual and 100% heterosexual groups, and with only one combined group (i.e., mostly heterosexual plus 100% heterosexual considered as a single group). Analyses utilizing the combined and separate groups yielded very similar results. For ease of presentation, we describe only the findings of analyses utilizing the combined group (of 100% heterosexual with mostly heterosexual individuals) here. Thus, the heterosexual group contained 7,302 participants (3,409 women, 3,893 men, 96.10%) and the lesbian and gay group contained 298 participants (114 lesbian women, 184 gay men, 3.90%).

Materials

Demographic variables. Demographic variables included race, age, education, and religiosity. Race was coded into three categories: “White” ($n = 4,145$, 54.5%), “non-White single race” ($n = 2,529$, 33.3%), and “multiracial” ($n = 926$, 12.2%). Coding of age and education were described above. Religiosity was assessed using three questions: (1) “How important (if at all) is your religious faith to you?” with responses ranging from 1 = *not important* to 4 = *more important than anything else*, (2) “How often do you pray privately, that is, when you’re alone in places other than a church, synagogue, temple, mosque, or religious assembly?” with responses ranging from 0 = *never* to 7 = *more than once a day*, and (3) “How often do you turn to your religious or spiritual beliefs for help when you have personal problems, or problems at school or work?” with responses ranging from 0 = *never* to 4 = *very often*. To adjust for varied scaling, the standardized values of responses to each item were summed to create a composite score. Scores ranged from -4.36 to 4.30 , with higher scores indicating greater religiosity. The Cronbach’s α for this scale was 0.90.

Parenting variables. Parenting intentions were assessed using the variable, “How many children, in total, do you intend to have (including adoption, foster care, etc.)?” Those who did not intend to become parents received a zero, and those who reported intending to become parents scored a 1. *Number of intended children* was also assessed using answers to the same question; the raw numbers of children mentioned by each participant were recorded here. In this case, however, only data for those who intended to become parents were included. Higher scores revealed that participants expected to have more children.

Social context. We studied three aspects of participants’ social contexts—parental closeness, romantic relationship permanence, and number of close friends; assessment of each is described below.

Parental relationship quality was assessed using questions about frequency of communication, quality of contact, and parental closeness (Patterson et al., 2018). These questions were asked separately for mothers and for fathers. When participants responded for both parents, the mean of the two scores was used here. Following Needham and Austin (2010), when only one response was available (i.e., for mother but not father or for father but not mother), the existing response was used. The scale ranged from 3–15 with an $\alpha = .75$.

Each participant had been given the opportunity to name a romantic partner, and responses to certain questions were obtained

from these partners. In this case, *romantic relationship permanence* was based on romantic partners' responses to the question, "How likely is your relationship with (the participant) permanent?" Possible answers included, 1 = *almost certain*, 2 = *a good chance*, 3 = *a 50-50 chance*, 4 = *some chance, but probably not*, or 5 = *almost no chance*. Answers were reverse coded so that higher numbers represented greater chances of relationship permanence. Those who were single were recoded to "no chance at all due to participant being single" and included as the lowest level of relationship permanence.

Number of close friends was assessed based on participants' answers to the question, "How many close friends do you have? (Close friends include people whom you feel at ease with, can talk to about private matters, and can call on for help.)" This item ranged from, 1 = *none* to 5 = *10 or more friends*. Higher scores indicated more close friends.

Plan of Analysis

All statistical procedures were conducted in IBM SPSS Statistics 25. First, analyses of parenting intentions were conducted using chi-square and analysis of variance (ANOVA) methods. Next, predictor variables were analyzed using the same statistical methods (see Table 1). Because of small cell sizes, race/ethnicity was examined using White versus non-White single race and multiracial categories, and no racial differences were found across groups $\chi^2(6) = 11.61, p = .071$. An analysis of covariance (ANCOVA) assessed differences in the number of children desired by those who intended to become parents as a function of gender and sexual orientation, controlling for predictor variables (see Figure 1). A stepwise linear regression examining the effect of covariates was also conducted for differences in the number of desired children, but because of the lack of variability in the number of intended children these results were not shown. Next, a forward conditional stepwise logistic regression was conducted predicting parenting intentions from standardized predictor variables (see Table 2). All predictors were entered into the model, and the forward conditional stepwise logistic regression tested for moderation effects of sexual orientation and gender. To test for group differences, a generalized linear model (GLM) was conducted using variables within the final model of the logistic re-

gression analyses (see Figure 1). Differences among groups were assessed using Fisher's least significant difference (LSD) tests.

Using the information obtained in earlier analyses, the PROCESS Macro in SPSS was utilized to determine how gender and sexual orientation were associated with parenting intentions through demographic and social context variables (Hayes, 2017). Given the results from preliminary and logistic regression analyses (see Tables 1 and 2), separate mediation analyses were conducted for men and women (see Table 3). Race was included as a covariate. Monte Carlo bootstrapping of 5,000 iterations was conducted to obtain confidence intervals.

Results

We present the results in four sections. In the first two sections, we present findings for parenting intentions and (for those who intended to become parents) the number of intended children, as a function of sexual orientation and gender. Next, we report results relevant to predictors of parenting intentions. Finally, we present results of mediation analyses examining associations between sexual orientation and parenting intentions, separately for women and men.

Parenting Intentions as a Function of Gender and Sexual Orientation

As expected, lesbian and gay participants were less likely than heterosexual participants to report the intention to become parents. Only 55.7% of lesbian and gay participants, but 86.6% of heterosexual participants intended to become parents, $\chi^2(1) = 217.79, p < .001$. The effect size was between small and medium, $\phi = -.17, p < .001$. There was no effect of participants' gender in this regard.

Ideal Family Size as a Function of Gender and Sexual Orientation

When examining only those who intended to have children, lesbian and gay participants reported that they planned to have fewer children ($M = 2.01, SE = .10$) than did heterosexual participants ($M = 2.47, SE = .02, F(1, 6482) = 19.24, p < .001$).

Table 1
Demographic and Social Context Variables as a Function of Gender and Sexual Orientation

Variables	Male		Female		F_{Gender}	$F_{\text{Sexuality}}$	F_{Interact}	LSD post hoc differences
	Hetero	Gay	Hetero	Lesbian				
<i>n</i>	3,893	184	3,409	114				
Demographics								
Age (in years)	28.83 (.03)	28.92 (.13)	28.59 (.03)	28.46 (.16)	10.78***	.04	1.04	M > F
Education ^a	2.15 (.01)	2.28 (.05)	2.44 (.01)	2.07 (.07)	.88	7.51**	31.60***	HF > All others GM > L, HM
Religiosity	-.41 (.04)	-.50 (.20)	.51 (.05)	-.42 (.25)	9.08**	9.50**	6.42*	HF > All others
Social contexts								
Relationship permanence	2.71 (.03)	1.92 (.16)	3.09 (.04)	2.83 (.20)	25.21***	16.96***	4.04*	G < All others HF > HM
Parental relationship quality	12.32 (.04)	11.84 (.18)	12.49 (.04)	11.86 (.22)	.46	14.58***	.25	H > LG
Number of close friends ^b	3.33 (.02)	3.42 (.07)	3.26 (.02)	3.04 (.11)	14.01***	1.16	6.17*	L < All others HF < HM, G

Note. LSD = least significant difference; H = heterosexual; LG = lesbian/gay; M = male; F = female. Values in parentheses represent count and standard errors. Information about racial makeup of the sample is found in text.

^a Education coded as 1 = *low*, 2 = *medium*, 3 = *high*. ^b Number of close friends coded as 1 = *none*, 3 = 3 to 5 friends, 5 = 10 or more friends.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

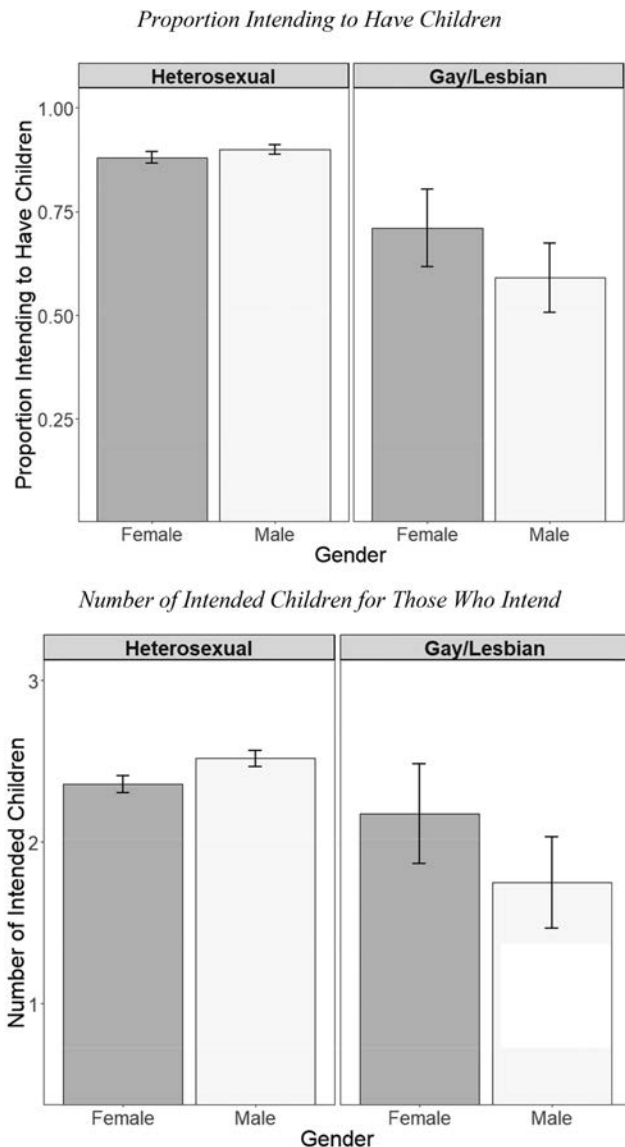


Figure 1. Parenting Intentions and number of children as a function of sexual orientation, after accounting for predictors. The upper panel shows results for parenting intentions. The bottom panel shows results for the number of intended children. Error Bars are 95% confidence intervals.

The effect size was small, $\eta_p^2 \leq .01$. Again, there was no effect of gender.

After controlling for demographic and social contextual variables, the effects of sexual orientation and gender on ideal family size remained significant (see Figure 1). There was a main effect of sexuality on ideal family size, such that heterosexual individuals intended to have more children than did lesbian and gay individuals, $F(1, 5227) = 19.75, p < .001$. There was no effect of gender. There was, however, an interaction of sexuality and gender on family size, $F(1, 5227) = 7.47, p = .006$. Heterosexual men ($M = 2.52, SE = .03$) intended to have more children than did heterosexual women ($M = 2.36, SE = .03$), gay men ($M = 1.75, SE = .14$), or lesbian women ($M = 2.18, SE = .16$), $p < .001, p < .001$,

$p = .030$, respectively. Heterosexual women intended to have more children than gay men, $p < .001$, but did not differ in this regard from lesbian women. Finally, gay men intended to have fewer children than did lesbian women, $p = .044$. These effect sizes were small, $\eta_p^2 \leq .01$.

Predictors of Parenting Intentions

Logistic regression analyses revealed that many predictors of parenting intentions had significant effects (see Table 2). The final model had a Nagelkerke $R^2 = .13$ and a log likelihood = 4,447.10. This model included all demographic and social contextual variables and an interaction term of gender and sexual orientation. Omnibus testing of model coefficients found that both the final step and overall model were significant, $\chi^2(1) = 6.90, p = .009$ and $\chi^2(11) = 447.69, p < .001$, respectively.

Lesbian/gay individuals and women were less likely than others to report parenting intentions, odds ratio (OR) = .23, $p < .001$ and $OR = .37, p = .003$, respectively. However, these effects were qualified by a significant interaction, $OR = 2.17, p < .001$ (see Figure 1). Heterosexual men (proportion = .90, $SE = .01$) intended to parent more than heterosexual women (proportion = .88, $SE = .01$), lesbian women (proportion = .71, $SE = .05$), and gay men (proportion = .59, $SE = .04$), $p = .007, p < .001$, and $p < .001$, respectively. Heterosexual women were more likely than lesbian and gay individuals to intend parenthood, $p < .001$ for both. This interaction effect had a small to medium effect size, as determined using OR (Chen, Cohen, & Chen, 2010).

Demographic and contextual variables were associated with parenting intentions. Younger ages, more education, and non-White or multiracial identities were all associated with greater likelihood of parenting intentions, $OR = .85, p < .001, OR = 1.39, p < .001, OR = 1.62, p < .001, OR = 1.34, p = .020$. Greater religiosity was associated with a greater likelihood of parenting intentions, $OR = 1.39, p < .001$. More favorable parental relationships, more close friends, and higher expectations of relationship permanence were also associated with greater likelihood of parenting intentions, $OR = 1.21, p < .001, OR = 1.09, p = .028$, and $OR = 1.38, p < .001$, respectively. All of these effects were small.

Mediation Analyses

Female model. Mediation analysis examining associations between sexual orientation and parenting intentions for women revealed that 3 of the 6 predictor variables had significant mediation effects (see Table 3). Parent relationship quality, religiosity, and education all had significant indirect effects. The model explained 25% of the disparity between lesbian and heterosexual women in parenting intentions (see Figure 2).

Lesbian women reported less favorable relationships with parents, lower religiosity, and less education than did heterosexual women (see Table 1 and Figure 2), and lower scores on all of these variables were associated with a lower likelihood of parenting intentions (see Table 2 and Figure 2). Mediation analyses showed that parental relationship quality significantly explained 4%, religiosity explained 9%, and education explained 10% of the total effect of sexual orientation on parenting intentions, $p = .047, p = .003$, and $p < .001$, respectively. Other variables were nonsignificant. Overall, the model explained one fourth of the difference in parenting intentions as a function of sexual orientation.

Table 2
Binary Logistic Regression Model Predicting Parenting Intentions From Predictor Variables

Predictor	1	2	3
Demographics			
Sexual orientation: Gay/lesbian	−1.61*** (.14)	−1.54*** (.14)	−1.46*** (.15)
Gender: Female (ref. male)	−.12 (.07)	−.16* (.08)	−1.00** (.33)
Education	.33*** (.04)	.28*** (.04)	.29*** (.04)
Age	−.17*** (.04)	−.17*** (.04)	−.17*** (.04)
Race: Single race non-White (ref. White)	.32*** (.10)	.47*** (.10)	.48*** (.10)
Race: Multiracial (ref. White)	.19 (.13)	.30* (.13)	.30* (.13)
Religiosity	.37*** (.04)	.33*** (.04)	.13*** (.03)
Social contexts			
Parental relationship quality	—	.19*** (.04)	.19*** (.04)
Relationship permanence	—	.32*** (.04)	.32*** (.04)
Number of close friends	—	.09* (.04)	.09* (.04)
Interaction effects			
Sexual Orientation × Gender	—	—	.78*** (.30)
Nagelkerke R ²	.10	.13	.13
Step χ^2	333.84***	106.96***	6.90**
Model χ^2	333.84***	440.80***	447.69***

Note. Values shown are unstandardized B values with their respective standard errors. All continuous variables within the model were standardized. No other interaction effects were found as a function of sexual orientation or gender.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Male model. Mediation analysis examining associations between sexual orientation and parenting intentions for men revealed that 3 of the 6 predictor variables had significant indirect effects (see Table 3). These variables included: perceived relationship permanence, parent relationship quality, and education. The overall model explained 7% of the disparity between gay and heterosexual men in parenting intentions (see Figure 2).

Gay men had lower expected relationship permanence and less parental closeness than did heterosexual men (see Table 1 and Figure 2), and lower scores on these variables were associated with lower likelihood of reporting parenting intentions (see Table 2 and Figure 2). Mediation analyses revealed that perceived relationship permanence significantly explained 7% of total effect of sexual orientation on parenting intentions, $p < .001$. Parental closeness significantly explained 2% of the effect of sexual orientation on parenting intentions, $p = .048$. On the other hand, gay men reported higher levels of education than did heterosexual men (see Table 1 and Figure 2), and higher levels of education were asso-

ciated with greater parenting intentions (see Table 2 and Figure 2). Education was found to have a suppressor effect, suppressing approximately 3% of the total effect on parenting intentions for gay men, $p = .021$. Thus, the positive effect of education was suppressed by the other variables in the model. Other variables in the model were not significant explaining approximately 1% of the total effect when combined. After taking the suppressing effect of education into account, percent of the total effect of sexual orientation on parenting intentions dropped from 10 to 7% of the total effect.

Discussion

This study examined parenthood intentions and ideal family size as a function of gender and sexual orientation. As expected, lesbian and gay individuals were less likely than their heterosexual peers to intend parenthood. These results were consistent with past findings (Baiocco & Laghi, 2013; Costa & Bidell, 2016; Riskind &

Table 3
Indirect Effects of Predictors on Parenting Intentions for Women and Men

Model paths for indirect effects	Female		Male	
	Effect	95% CI	Effect	95% CI
Overall indirect effects	−.36	[−.52, −.21]	−.13	[−.25, −.02]
Demographics				
L/G → Education → Parenting Intentions	−.15***	[−.25, −.07]	.06*	[.02, .12]
L/G → Age → Parenting Intentions	.02	[−.02, .07]	−.01	[−.04, .01]
L/G → Religiosity → Parenting Intentions	−.12**	[−.22, −.05]	−.03	[−.08, .02]
Social contexts				
L/G → Parental Relationship Quality → Parenting Intentions	−.05*	[−.10, −.01]	−.03*	[−.08, −.003]
L/G → Relationship Permanence → Parenting Intentions	−.03	[−.11, .02]	−.13***	[−.21, −.07]
L/G → Number of Close Friends → Parenting Intentions	−.02	[−.06, .004]	.01	[−.01, .04]

Note. CI = confidence interval; L/G = lesbian/gay. Values shown are effects using standardized variables with their respective confidence intervals. All continuous variables within the model were standardized. Race was included as a covariate, but could not be used as a mediator due to it being a categorical variable.

* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

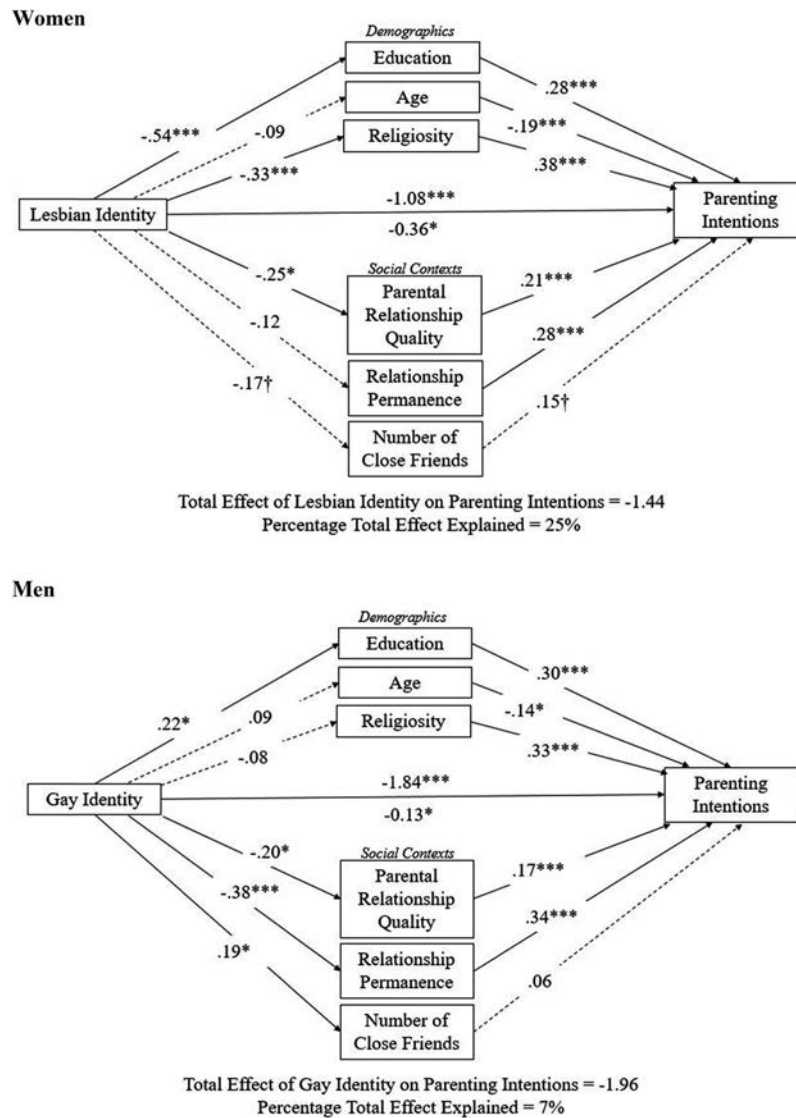


Figure 2. Visualization of mediation analyses. Numbers within lines and above lines represent direct effects. The number under the line extending from Gay/Lesbian Identity to Parenting Intentions represents the total indirect effect. Race was included as a covariate, but is not shown in the figure. * $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$, † $p \leq .10$.

Patterson, 2010; Riskind et al., 2013). In addition, among those who planned to become parents, we found that lesbian and gay individuals intended to have fewer children. These disparities may stem from that fact that lesbian and gay individuals face barriers to parenthood such as discrimination, social norms surrounding family formation, and fertility treatment costs that are different than those encountered by heterosexual individuals (Gato et al., 2017; Goldberg et al., 2012; Tankard & Paluck, 2017). Moreover, the methods utilized by lesbian and gay individuals to become parents often differ from those used by heterosexual individuals (Gato et al., 2017; Riskind et al., 2013). That lesbian and gay adults often need to pursue pathways to parenthood that require considerable time, effort, and money may be an important factor in our results for parenting intentions and family size (Downing et al., 2009; Gato et al., 2017; Goldberg et al., 2012, 2007;).

We also found that social and demographic factors were associated with parenting intentions, regardless of sexual orientation. Having more favorable relationships with parents, having more close friends, and having greater expectations for relationship permanence were all associated with greater likelihood of parenting intentions, and this did not differ as a function of sexual orientation. The same was true for demographic variables such as education, which had been positively associated with parenting intentions. Thus, the nature of underlying predictors of parenting intentions was similar across sexual orientation.

We also found that differences in social and environmental contexts helped to explain disparities in parenting intentions as a function of sexual orientation. Parent relationship quality and romantic relationship permanence helped to explain disparities between gay and heterosexual men. Even then, only a small

fraction of the disparity was explained. Factors such as higher costs to achieve parenthood, discrimination in the process of having children, and lack of normative social pressure to have children may be relevant in this regard (Allen & Demo, 1995; Goldberg et al., 2012; Patterson & Riskind, 2010). These and related factors should be explored in future research.

Social and demographic factors also explained some of the difference in parenting intentions between lesbian and heterosexual women. For instance, the mediation findings suggested that, if relationships with their parents could be strengthened, more lesbian women might seek to have children. Keeping in mind, however, that these findings were correlational in nature, future research should explore such possibilities further. The role of religiosity was also especially notable; in this sample, more religious women were more likely to intend to become parents. In contrast, research in Portugal found religiosity to be associated with lower parenting intentions among nonheterosexual individuals (Costa & Bidell, 2016). In the United States, more religious individuals may be more inclined to pursue conventional aims of all kinds (Stavrova, Fetchenhauer, & Schlösser, 2013); religiosity may be a proxy for an array of normative social influences (Ashburn-Nardo, 2017; DeJean et al., 2012; Mueller & Yoder, 1997). This possibility could also be examined in future research.

This study was characterized by some limitations. The study was cross-sectional in nature and, for this reason, the findings cannot sustain causal inferences. Because of small cell sizes, we were not able to study parenting intentions of bisexual individuals. In addition, some concepts, such as relationship permanence and parenting intentions, were assessed in relatively limited ways, using single-item measures. Moreover, data were collected in 2008 and 2009, and there is no way to know whether findings would be the same had the data been collected more recently. The social and legal climate surrounding same-sex relationships has been changing (Tankard & Paluck, 2017), and this may affect parenting intentions among lesbian and gay adults.

Despite its limitations, this study also had many strengths. Data were drawn from a large national sample. The sample was diverse across several dimensions, including age, gender, race/ethnicity, and other characteristics. In addition, scales used here, including parent relationship quality and religiosity, showed high reliability. We were also able to sample several social contexts and demographics. The results both confirmed results of past research and extended them based on data from a novel sample (Riskind & Patterson, 2010; Riskind et al., 2013). This study also revealed the significant role of contextual factors, and showed how these might affect parenting intentions.

This work has significant implications for future research on family formation. Demographic characteristics and social ties explained some of the differences in parenting intentions as a function of sexual orientation, but disparities as a function of sexual orientation remained, especially for gay men. In addition, effect sizes ranged from small to medium. This suggested that disparities may also stem from factors other than those studied here. The role of variables such as stigma and social norms should be examined in future research.

Choices about parenthood are important life decisions. As the current findings revealed, lesbian and gay individuals were less likely than heterosexual adults to report the intention to become parents. Demographic characteristics and qualities of social ties were associated with parenting intentions, and the effects were

similar for gay, lesbian, and heterosexual adults. This similarity suggested that mechanisms involved in the formation of parenting intentions are more similar than they are different across sexual orientation. However, even after accounting for these factors, lesbian and gay individuals were still less likely than heterosexual people to report parenting intentions, and a considerable amount of the disparity went unexplained. Much remains to be learned about how discrimination, social norms, and related concepts may affect parenting intentions among lesbian and gay adults.

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