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Timing of First Sexual Experience with a Same-Sex Partner: A Life Course Approach

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Abstract

Theories of sexual identity development recognize the initiation of sexual experience with same-sex partners (SESSP) to be a significant event in the coming-out process, yet the research literature lacks a population-based description of its timing and variation across population subgroups. Using data from the 2011–2017 National Survey of Family Growth and guided by the life course paradigm, we explored the timing and correlates of first SESSP among individuals (1425 women; 545 men) who identified as lesbian (n = 307), gay (n = 285), or bisexual (n = 1378) (LGB). Descriptive findings revealed that the median age at first SESSP was about 19 years for lesbian women and gay men and one to two years later for bisexual women and men. Notably, initiation of SESSP occurred over a wide age range, particularly among bisexual men. Multivariable results indicated that the probability of first SESSP did not vary by demographic characteristics or family background among men. Among women, nativity status, family stability, and independent living were associated with probability of first SESSP. Coital experience predicted timing among both women and men. Tests for statistical interactions suggested that age at first SESSP was contingent on mother's education (women), sexual identity (men), family stability (men), and birth cohort (women and men). Our findings highlight the complicated nature of LGB sexual experiences, and we end with a call for greater effort to ensure that LGB individuals are represented in national surveys designed to provide data on sexual and reproductive health.

Keywords Sexual initiation · Sexual identity · Lesbian/gay/bisexual · National Survey of Family Growth

Introduction

Sexual identity development is the process through which individuals come to recognize their sexual attractions and integrate these attractions into their understanding of who they are (Worthington et al., 2008). This process may be particularly challenging for individuals with same-sex attractions (Mohr & Kendra, 2011), and a substantial literature has developed to describe how individuals who self-identify as lesbian, gay, or bisexual (LGB) come to do so (e.g., Bregman et al., 2013; Cass, 1984; Diamond, 2007; Eliason, 1996; Floyd & Stein, 2002; Troiden, 1989). Although models of

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² Department of Sociology, University of Tampa, Tampa, FL, USA this process differ (Eliason & Schope, 2007), most consider first sexual experience with a same-sex partner (SESSP) an important component. Even so, the literature lacks a consistent and generalizable picture of SESSP initiation, a notable shortcoming given that most research on sexual identity development relies on data from non-representative samples.

This study takes advantage of recent nationally representative data to better understand the initiation of SESSP among LGB-identified individuals. Our aim is to provide a representative benchmark against which non-populationbased samples can be evaluated and we accomplish this by (1) describing the occurrence of first SESSP by sexual identity and gender and (2) assessing variation in the timing of first SESSP across birth cohorts and by individual characteristics. We draw on Elder's life course paradigm (Elder, 1975, 1994) to frame coming out as a life course transition for LGB individuals and first SESSP as a marker in that transition. Below, we describe some key precepts of this paradigm and present hypotheses based on it. First, however, we clarify our use of the term "sexual experience."

Defining Sexual Experience for LGB Individuals

Social ambiguity around the behavioral criteria for having "had sex" is well documented (Carpenter, 2001; Peterson & Muehlenhard, 2007; Sanders & Reinisch, 1999), and recent research suggests that this ambiguity is more pronounced for LGB-identified individuals than for their heterosexual counterparts, for whom coitus (i.e., vaginal-penile intercourse) is the gold standard. A majority of gay and bisexual men in two different studies agreed that two different activities, anal-penile intercourse and oral-genital stimulation, constituted "having sex" (Hill et al., 2010; Sewell et al., 2017). Lesbian and bisexual women appear to define sex more broadly. Two recent studies found that no single experience between two female partners was endorsed as "having sex" by a clear majority (Schick et al., 2016; Sewell et al., 2017), and another study found that lesbian women construed sex to include a wider range of genital-stimulating behaviors than heterosexual women (Horwitz & Spicer, 2013). Accordingly, our gender-specific operational definitions of sex with a same-sex partner include oral or anal sex for men and oral sex or other sexual experiences for women.

A Life Course Perspective on LGB Sexual Initiation

Time and Timing Within the Life Course

The life course paradigm provides a theoretical orientation toward the study of human lives that incorporates time, context, and process, explicitly recognizing the multiple forces that influence development over the life span (Elder, 1994). Within this paradigm, time operates at two levels: individual and sociohistorical (Elder et al., 2003). Because individual lifetimes are embedded in sociohistorical time, they must be understood to reflect historically specific cultural and institutional influences (Elder, 1975, 1994; Elder et al., 2003). Individuals also move through their lives as members of social groups (e.g., families) which serve to channel and constrain behavior by clarifying appropriate or expected social pathways and the potential consequences of deviating from them (Elder, 1994). Within this paradigm, the life course is a set of intersecting social pathways (i.e., trajectories) characterized by domain-specific (e.g., work, family) status transitions and experiences that unfold over the life span and within a specific sociohistorical context (Alwin, 2012).

These status transitions are organized by the social meanings attached to age and the attendant expectations

about the timing and sequencing of events and transitions. In short, age serves as the metronome that marks what Elder (1994, p. 6) referred to as "the timing of lives." Even so, the life course is neither rigid nor invariable; as Shanahan (2000, p. 617) observed, "[w]ithin the framework of a highly predictable life course, individuals are able to improvise considerably in the planning of their lives." The latitude to improvise increased substantially over the last quarter of the twentieth century and intimate relationships became more variable as a result (Tillman et al., 2019). This, in turn, provided room for the development of an LGB life course.

Considered through a life course lens, the coming-out process may be framed as the starting point of the LGB life course, a transition that starts with the recognition of samesex attraction and entails claiming an LGB identity and disclosing it to others. This framing understands coming out as a socially patterned and historically contingent process that entails changes in status and identity. For LGB-identified individuals, first SESSP represents a marker in this process, similar to the role of first coitus for straight youth in the transition to adulthood. In the next section, we discuss how and why the timing of first SESSP may have changed in response to the changing social context of LGB lives.

Changing Social Context

The conceptualization of the life course as historically contingent raises the possibility of variation across birth cohorts in the nature of life course trajectories and the timing of transitions. Elder (1994) observed that cohort differences may emerge during periods of rapid social change, a characterization that certainly applies to the social and legal context for same-sex relationships. Consider, for example, the stark contrast between the 1986 Supreme Court's decision (Bowers v. Hardwick) upholding state laws criminalizing sexual engagement with a same-sex partner and its 2015 decision (Obergefell v. Hodges) establishing the legality of same-sex marriages nationwide. In addition to this reversal on the high court, evidence from public opinion polling points to growing public support for same-sex relationships in the population generally (Twenge et al., 2016) and across birth cohorts (Anderson & Fetner, 2008).

These changes suggest a lessening of the sexual stigma long embedded in social institutions (Herek, 2015). One consequence of sexual stigma is that individuals are left to navigate the process of recognizing and acknowledging samesex attraction without well-established sexual scripts (Simon & Gagnon, 1986), perhaps delaying initiation of SESSP. Decreasing stigma, reinforced by the increasing visibility of LGB lives, the proliferation of LGB advocacy groups and the increased availability, via the Internet, of information and support may have led to a decrease across cohorts in age at coming out (Eliason & Schope, 2007; Floyd & Bakeman, 2006; Grov et al., 2006; Russell & Fish, 2016). Lending credence to the possibility of cohort differences in first SESSP timing are two recent studies reporting significant increases across birth cohorts in the proportion of women with SESSP (England et al., 2016; Mishel et al., 2020).

Sources of Heterogeneity in Event Timing

The nature of the life course is influenced by individuals' access to resources and opportunities, leading to variability in the timing and sequencing of transition markers across social status groups (Elder & Shanahan, 2006; Elder et al., 2003). Family background is particularly important in this regard, and research into the coming-out process provides insight into some aspects of family background that might influence the timing of first SESSP. An early investigation reported that the coming-out process was more protracted for young gay men from families characterized by what the investigators termed "traditional values" around marriage, childbearing, and the importance of religion (Newman & Muzzonigro, 1993). Consistent with this, more recent research has found that LGB-identified adults whose parents have strong religious ties perceive less acceptance from parents (Vander-Waal et al., 2017) and the parents of LGB-identified offspring report struggling to reconcile their religious beliefs with their child's sexual identity (Freedman, 2008; Rosenkrantz et al., 2020).

Parents' educational attainment also may be associated with the timing and nature of the coming-out process. Developmentally, parental education is associated with openness (Sutin et al., 2017) and self-control (Ward, 2013), both of which may enhance an individuals' ability to claim an LGB identity in a heteronormative culture. Moreover, insofar as educational attainment is associated with more tolerant attitudes toward same-sex relationships (Loftus, 2001; Pampel, 2016), well-educated parents may express more accepting attitudes toward same-sex relationships. At the same time, if better-educated parents are more likely than their lesseducated peers to emphasize the opportunity cost of sexual relationships or supervise their children more closely (Holway, 2015; Waldron et al., 2015), their offspring may delay the initiation of SESSP.

Race/ethnicity and nativity also may be associated with the timing of first SESSP. The findings of sexual attitudes and behaviors suggest that sexual scripts vary by race (Laumann et al., 1994), and many studies of emerging adults have documented race/ethnic differences in sexual experience with different-sex partners (e.g., Brewster & Tillman, 2008; Holway, 2015; Holway & Hernandez, 2018; Zimmer-Gembeck & Helfand, 2008). Although these studies consistently describe a pattern of earlier sexual engagement among black and Hispanic youth relative to their white counterparts, homophobia in communities of color suggests the potential for quite a different pattern with respect to first SESSP (Washington, 2001). Findings from prior research on the association between age at first SESSP and race/ethnicity and nativity are mixed, with some studies (Parks et al., 2004) but not others (Floyd & Bakeman, 2006; Grov et al., 2006; Martos et al., 2015; Rosario et al., 2004) reporting differences.

Life experiences also may influence the timing of SESSP initiation. For example, a disproportionate share of samesex attracted adolescents live apart from their families of origin, many in shelters or on the streets (Durso & Gates, 2012; Keuroghlian et al., 2014). These youth report higher rates of sexual activity and sexual experiences at earlier ages than those living with friends or extended family members (Keuroghlian et al., 2014). While independent living may accelerate the initiation of SESSP, sexual experience with different-sex partners may slow the exploration of same-sex relationships and delay the timing of first SESSP. Multiple studies report that many LGB-identified individuals have engaged in coitus (e.g., Diamond, 2000; Goldberg & Halpern, 2017). For some, sexual engagement with different-sex partners, particularly coitus, was important in confirming same-sex attraction (Diamond, 2005; Savin-Williams, 1998).

Finally, sexual identity itself may be associated with the initiation of SESSP. It may be easier for individuals who identify as bisexual than for their gay or lesbian peers to find sexual and emotional gratification in relationships with different-sex partners. Thus, bisexual individuals may progress more slowly to first SESSP than those who identify as lesbian or gay.

Method

Participants

We use data from the continuously fielded 2011–2017 National Survey of Family Growth (NSFG), which gathered information on various aspects of fertility, family formation, and sexual and reproductive health. Respondents were selected into a multistage area probability sample designed to be representative of individuals aged 15–44 and residing in civilian households in all 50 states and the District of Columbia. Interviews were conducted in-person by trained female interviewers; questions about sexual identity, SESSP, and other sensitive topics were administered using audiocomputer-assisted self-interviewing (ACASI). Respondents signed consent forms after receiving oral and written information about the survey, and minors participated only with the signed consent of a parent/guardian (https://www.cdc. gov/nchs/nsfg/about_nsfg.htm).

The 2011–2017 NSFG included information from 16,191 females and 13,320 males. Our sample was limited to LGBidentified respondents, excluding 14,656 female and 12,702 male respondents. Further, because respondents who are behaviorally and affectively heterosexual are more likely than other respondents to misunderstand sexual identity terminology (e.g., Miller & Ryan, 2011), we checked for congruence between respondents' reported sexual identity and their responses to a Likert-type question on sexual attraction. We dropped an additional 36 males who reported a homosexual or gay identity but sexual attraction only to females and 48 females who reported a homosexual or lesbian identity but sexual attraction only to males. We also dropped 59 female and 36 male respondents who either did not answer questions on age at first SESSP or who reported first SESSP prior to 10 years of age, the age at which most children are developing a nascent sexual awareness but have not yet reached puberty (Herdt & McClintock, 2000). Respondents missing data on nativity status, whether they lived alone before age 18, and childhood religious affiliation also were dropped (3 females; 1 male), yielding a working sample comprised of 1425 female and 545 male respondents who identified as lesbian, gay, or bisexual and who reported at least some same-sex attraction.

Measures

The questions used to determine whether a respondent had experienced first SESSP and, if so, at what age, were genderspecific. Female respondents were asked "Have you ever performed oral sex on another female?" and "Has another female ever performed oral sex on you?" Respondents who did not report oral sex with another female were then asked "Have you ever had any sexual experience of any kind with another female?" Respondents who had answered yes to at least one of these questions were asked "Thinking back to the first time you ever had oral sex or another kind of sexual experience with a *female* partner, how old were you?" Questions for male respondents began with "Have you ever performed oral sex on another male, that is, stimulated his penis with your mouth?" and "Has another male ever performed oral sex on you, that is, stimulated your penis with his mouth?" They were then asked "Has another male ever put his penis in your anus or butt (anal sex)?" and "Have you ever put your penis in another male's anus or butt (insertive anal sex)?" Respondents who had answered yes to at least one of these questions were asked, "Thinking back to the first time you ever had oral or anal sex with a male partner, how old were you?" A total of 1128 women and 422 men had experienced first SESSP prior to the interview; 297 women and 123 men had not.

To model the timing of first SESSP using information from all respondents, we used hazard models. We used a

discrete-time approach in which the unit of analysis is year of age and respondents are represented by one observation for each year between age 10 and either age at first SESSP or age at interview, whichever occurs first. Each observation, referred to as a "person-year," includes year of age and a binary indicator that is coded zero if the respondent had not yet experienced first SESSP and one if that year of age is when first SESSP (or the interview) occurred. Together, this information yields the hazard rate, the probability that first SESSP occurred during a specific year of age conditional on it having not occurred at an earlier age. The person-year file for women comprised 14,909 observations; the file for men totaled 5433 observations.

Covariates

Age, the time metric in the models, was measured in years from ages 10 to 45. Sexual identity was coded 1 if the respondent identified as bisexual and 0 otherwise. Birth cohort was measured as a set of seven dummies, with one 6-year cohort for those born from 1967 to 1972 and six 5-year cohorts for persons born between 1973 and 2002. Measures of family background include binary indicators of childhood religious affiliation (any = 1, none or don't remember = 0) and a stable family structure (lived with two birth or adoptive parents through age 14 = 1, 0 otherwise), as well as a set of dummies representing mother's highest educational degree (did not complete high school; high school degree or equivalent; fouryear college or more, and a category for respondents without a mother or mother figure). Self-identified race/ethnicity was measured as a set of dummies that differentiated four groups (non-Hispanic whites, non-Hispanic blacks, Hispanics of any race, and those identifying as either some other race/ethnicity or as multiple races/ethnicities). Nativity status was coded 1 for respondents born outside the USA and 0 for US natives. Independent living was coded 1 for respondents who reported living apart from family members for other than educational or other salutary reasons and 0 otherwise. Coital experience was a time-varying indicator, coded zero at ages prior to first coitus and one thereafter.

Analysis

Descriptive analyses proceeded in two steps. First, we estimated gender-specific, design-adjusted means or proportions, as appropriate, for each predictor, overall and by sexual identity. We then estimated the cumulative proportion who experienced first SESSP at each year of age, by gender and sexual identity and graphed the results, following Singer and Willett (2003). For the multivariable analysis, we estimated two sets of gender-specific models: baseline models that assessed the net association of the covariates with the age-specific rate of first SESSP and models with product terms to evaluate whether the timing of first SESSP varied across the covariate values. Because the age-specific rate of first SESSP was represented by a binary indicator, we used logistic regression with robust standard errors to estimate the multivariable models.

Because each respondent contributed multiple observations (i.e., person-years) to the analysis, we assessed the sensitivity of our results to bias from within-subject dependence. Comparison of our baseline results with results from random intercept and population-averaged models indicated no problems from within-subject dependence. We also evaluated the sensitivity of the results to violating the assumption of noninformative censoring following Allison (2014, pp. 16–17); results provided reassurance that right censoring of individuals who did not report SESSP is not a concern. Data files were built and analyses conducted using Stata, version 15. Stata's *svy* commands were used to adjust for the complex sampling strategy used by the NSFG; all estimates are generalizable to the national population of household residents who identify as LGB and were aged 15–44 years between 2011 and 2017.

Results

Descriptive Statistics

Table 1 presents the descriptive statistics by gender and by sexual identity within genders. Overall, the distribution of the sample across categories of the covariates was similar by gender and sexual identity, with a few notable differences. Although roughly equal shares of men self-identified as gay (52%) and bisexual (48%), considerably more women identified as bisexual than lesbian (78% vs 22%). Women were over a year younger, on average, than men (26.5 years vs nearly 28 years), and respondents who identified as bisexual were younger, on average, than those who identified as lesbian or gay. More women than men identified as non-Hispanic black (13% vs 8%); more men than women identified as Hispanic (24% vs 18%); and more men reported a birthplace outside the USA (12% vs 6%).

Descriptive results also pointed to differences in sexual experience by gender and sexual identity. Equal shares of lesbian women and gay men reported SESSP (92%) and larger shares of both reported SESSP than did their bisexual peers (73% and 64%, respectively). More women than men reported coital experience (79% and 55%, respectively) and, within each gender, more bisexual individuals did so. Mean age at first SESSP was almost 19 years among lesbian women and gay men; among bisexual women and men, mean age at first SESSP was closer to 20 and 18 years, respectively. Mean age at first coitus was younger than mean age at first SESSP for all four groups, although the amount of time between the two experiences was larger for those who identify as bisexual.

A more nuanced picture of the timing of first SESSP is provided by the estimates of cumulative proportion reaching each year of age without having experienced first SESSP, which are presented graphically in Fig. 1. The estimates indicate that lesbian women and gay men experienced first SESSP at younger ages than their bisexual peers. The median age at first SESSP (represented by the 50th percentile) was 19 for gay men and lesbian women, 20 for bisexual women, and 21 for bisexual men; 21 also was the age by which 75% of both lesbian women and gay men had experienced first SESSP. By age 26, 75% of bisexual women had experienced first SESSP; the share of bisexual men with SESSP did not reach 75% until age 30.

Multivariable Analysis

Table 2 presents estimates from the gender-specific baseline models. The odds ratio for age among women suggests that each additional year of age was associated with an average 8% increase in the conditional probability of SESSP; among men, the increase was 10% per year of age. Sexual identity also matters. On average, the age-specific rate of SESSP was 56% lower among bisexual women compared to lesbian women and 58% lower among bisexual men relative to gay men.

F-statistics provide a test of overall association for categorical predictors with multiple values, such as birth cohort. The nonzero *F*-statistics for women and men indicate a significant association between birth cohort and the age-specific rate of SESSP initiation. Among women, the odds ratios generally increased across subsequent birth cohorts, suggesting that the age-specific rate of SESSP was higher among more recent cohorts. In contrast, the odds ratios for men were stable across cohorts.

Results in Table 2 also suggest surprisingly little variation by social status indicators, particularly for men. Among women, nativity and family stability were associated with the age-specific rate of SESSP. Women born outside the USA had an age-specific rate that was nearly 40% lower than the rate for native-born women, and those who reached adolescence in a household with both birth and adoptive parents had a rate nearly 20% lower than those who did not.

Life experiences were associated with SESSP timing. Among women, living independently before age 18 was associated with a 30% higher age-specific rate of SESSP; the odds ratio for men was similar but fell short of statistical significance. Coital experience, measured as a time-varying covariate, was associated with the age-specific rate of first SESSP for both women and men. Compared to their peers who had not experienced coitus, individuals who had coital experience had a subsequently greater rate of first SESSP. Among women, coital experience was associated with a Table 1Descriptive statisticsby sex and sexual identity:US household residents, ages15–44, 2011–2017^a

	Women			Men		
	Lesbian	Bisexual	Total	Gay	Bisexual	Total
Covariates						
Sexual identity						
Lesbian or gay			0.22			0.52
Bisexual			0.78			0.48
Mean age	28.4	26.0	26.5	29.2	26.2	27.7
(Linearized standard error)	(0.58)	(0.37)	(0.31)	(0.96)	(0.72)	(0.65)
Birth cohort						
1967–1972	0.06	0.05	0.05	0.12	0.07	0.10
1973–1977	0.11	0.09	0.09	0.10	0.08	0.09
1978–1982	0.15	0.11	0.12	0.15	0.14	0.14
1983–1987	0.22	0.17	0.18	0.15	0.11	0.13
1988–1992	0.23	0.23	0.23	0.28	0.22	0.25
1993–1997	0.18	0.24	0.23	0.16	0.25	0.20
1998–2002	0.05	0.11	0.10	0.03	0.13	0.08
Race/ethnicity						
Non-Hispanic white	0.55	0.58	0.57	0.55	0.61	0.58
Non-Hispanic black	0.17	0.12	0.13	0.09	0.06	0.08
Hispanic, any race	0.18	0.18	0.18	0.25	0.22	0.24
Multiple or other	0.09	0.12	0.12	0.10	0.11	0.10
Born outside the USA	0.07	0.06	0.06	0.11	0.13	0.12
Mother's education						
No high school degree	0.22	0.17	0.18	0.15	0.18	0.16
High school degree	0.59	0.57	0.57	0.59	0.48	0.53
College degree or more	0.19	0.23	0.22	0.26	0.33	0.30
No mother figure	0.01	0.02	0.02	0.00	0.02	0.01
Childhood religious affiliation	0.82	0.81	0.81	0.86	0.88	0.87
Two-parent family	0.50	0.43	0.45	0.55	0.52	0.54
Lived on own before 18	0.24	0.27	0.26	0.20	0.22	0.21
Sexual experience						
Proportion reporting						
Coitus	0.55	0.86	0.79	0.39	0.72	0.55
Same-sex partner sex	0.92	0.73	0.77	0.92	0.64	0.78
Neither	0.05	0.10	0.09	0.08	0.18	0.13
Mean age at						
First coitus ^b	17.2	15.9	16.0	17.8	16.8	17.2
(Linearized standard error)	(0.23)	(0.11)	(0.10)	(0.44)	(0.24)	(0.23)
First same-sex experience ^b	18.9	19.7	19.5	18.6	18.4	18.5
(Linearized standard error)	(0.32)	(0.45)	(0.34)	(0.51)	(0.51)	(0.37)
N	307	1118	1425	285	260	545
Person-years	3012	11,897	14,909	2667	2766	5433

^aWeighted to represent national population and values are proportions except where noted. ^bEstimated only for those who reported the experience

threefold increase in the age-specific rate of SESSP; among men, the age-specific rate was 81% higher.

To evaluate our hypothesis that the association of age with the rate of first SESSP differs by social location, we re-estimated the models in Table 2 with product terms representing the statistical interaction of each time-stable covariate with age and assessed the improvement in model fit using design-weighted F-statistics. These statistics, with accompanying degrees of freedom and p values, are shown in Table 3. Results for females suggest that timing of first SESSP was conditional on birth cohort and mother's educational attainment; for males, timing was conditional on birth cohort,









Fig. 1 Kaplan–Meier survival curves showing age at first SESSP by sexual identity. **a** Women, **b** men

sexual identity, and growing up in a home with both parents. To facilitate interpretation of the statistically meaningful interactions, we estimated and graphed the predicted probabilities for each covariate at five-year intervals from ages 15 through 45. Results are presented in Figs. 2 through 4.

Figure 2 illustrates the interaction between age and birth cohort for women (upper panel) and men (lower panel). Among LGB women and men, results revealed a shift across birth cohorts to increasingly younger ages at first SESSP. Looking first at the results for women, the age-specific probability of SESSP was low for members of the 1967-1972 and 1973-1977 birth cohorts, and it increased only modestly to a high of about 20% at age 45. Among later cohorts, the agespecific probability of first SESSP rose at an increasing pace over successive cohorts; this increase accelerated so quickly that, among the two youngest cohorts, the probability of first SESSP approached 100% between the ages of 30 and 45. Turning to the results for men, the age-specific probability of first SESSP was low for those born into the 1967-1972 and 1973–1977 birth cohorts, rising from about 10% at age 20 to under 30% at age 45. The age-specific probabilities rose at an increasingly faster pace over successive cohorts, as they did among women, but among men this acceleration occurred earlier, including not only members of the two most recent cohorts but also men born between 1988 and 1992.

Figure 3 shows the statistically significant interactions for men. The upper panel illustrates the dependence of age at first SESSP on sexual identity. Among gay men, the agespecific predicted probability of first SESSP increased almost monotonically between ages 15 and 40; when the increase began to slow, between ages 40 and 45, about 90% of gay men were estimated to have engaged in same-sex anal or oral sex. Although the age-specific predicted probability of first SESSP also increased for bisexual men, comparatively, the increase was quite modest, rising from about 5% at age 10 to just 12% at age 45. The lower panel shows the dependence of age at first SESSP on family stability in childhood. Up until age 25, the probability of first SESSP was about the same among men, regardless of whether they did or did not live with both birth/adoptive parents in childhood. Thereafter, men who lived with both parents had increasingly higher age-specific probabilities of first SESSP relative to men who did not.

Figure 4 illustrates the interaction between age and mother's educational attainment, which was statistically significant only for women. During the teen years, the age-specific probability of SESSP was similar across all four categories of maternal education, reaching about 10% by age 20. By age 25, the patterns had diverged. The age-specific probabilities increased more rapidly for women whose mothers were college-educated and for women who reported reaching age 18 without a maternal figure in their lives, rising from about 16% at age 25 to 71% and 65%, respectively, at age 45. Among women whose mothers did not complete high school, probabilities over the same ages increased from 12 to 41%; among women whose mothers had a high school diploma or GRE, predicted probabilities rose from 10% at age 25 to 29% at age 45.

Discussion

Although scholars' understanding of the health, family lives, and social circumstances of LGB-identified persons has improved markedly over the past several decades, researchers studying LGB lives have had access to large, populationbased datasets only recently. The study of sexual identity development and socio-emotional well-being of same-sex attracted youth has benefited from the availability of nationally representative data (Russell et al., 2001; Savin-Williams & Ream, 2007; Savin-Williams et al., 2012) as has research on their sexual experiences (England et al., 2016; Goldberg & Halpern, 2017; Mishel et al., 2020). The current study adds to both these areas of research by describing the timing **Table 2** Results from discrete-
time logistic regression
models of the hazard of first
same-sex sexual experience,
US household residents aged
15–44, 2011–2017^a

	Women			Men		
	OR	SE	F ^b	OR	SE	F ^c
Age ^d	1.08***	0.01		1.10***	0.02	
Sexual identity						
Lesbian/gay (ref)						
Bisexual	0.44***	0.05		0.42***	0.06	
Birth cohort			13.85***			3.80**
1967-1972 (ref)						
1973–1977	1.53	0.41		1.03	0.34	
1978–1982	4.70***	1.11		2.18**	0.61	
1983–1987	3.80***	1.05		2.45**	0.71	
1988–1992	6.87***	1.74		2.56**	0.70	
1993–1997	8.27***	2.33		2.09*	0.74	
1998-2002	9.13***	2.89		2.33*	0.99	
Race/ethnicity			1.32			0.13
Non-Hispanic black	0.98	0.12		1.07	0.21	
Hispanic, any race	0.95	0.11		0.95	0.13	
Multiple or other	0.66	0.14		1.03	0.23	
Non-Hispanic white (ref)						
Foreign-born	0.63*	0.13		0.93	0.22	
Mother's education			0.46			1.80
Less than high school (ref)						
High school	0.93	0.11		1.17	0.25	
College or more	1.05	0.14		1.11	0.25	
No mother figure	1.03	0.42		0.38	0.20	
Childhood religious affiliation	1.34	0.21		0.83	0.15	
Two-parent family	0.82*	0.08		0.83	0.11	
Lived on own before 18	1.30*	0.15		1.26	0.22	
Coital experience ^d	3.08***	0.40		1.81**	0.38	
Constant	0.00***	0.00		0.01***	0.01	
Model F	19.96			7.44		
df	(19, 143)			(19, 118)		
Ν	1425			545		
Person-years	14,909			5433		

OR odds ratio, SE linearized standard error, ref reference category, F test statistic for multiple-category predictor, df degrees of freedom

p < .05, **p < .01, ***p < .001

^aAll estimates adjusted for sampling design. ^bdf=k-1, 161. ^cdf=k-1, 136. ^dTime-varying covariate

	Women	Women			Men		
	\overline{F}	df	p	F	df	р	
Sexual identity	2.42	(1, 161)	.122	17.25	(1, 136)	<.001	
Birth cohort	8.70	(6, 161)	<.001	6.05	(6, 136)	<.001	
Race/ethnicity	1.07	(3, 161)	.365	0.19	(3, 136)	.905	
Foreign-born	0.00	(1, 161)	.983	0.42	(1, 136)	.516	
Mother's education	5.12	(3, 161)	.002	2.40	(3, 136)	.071	
Religious background	0.84	(1, 161)	.361	0.91	(1, 136)	.342	
Lived apart from family	2.47	(1, 161)	.118	2.08	(1, 136)	.151	
Two-parent family	1.04	(1, 161)	.309	4.42	(1, 136)	.037	

Table 3F-tests for statisticalinteractions between age andtime-constant covariates, bygender

Panel A Women







Fig. 2 Predicted probability of first SESSP by age and birth cohort. **a** Women, **b** men

of first SESSP among women and men who identify as LGB using recent data from a nationally representative sample. The life course paradigm, which considers the timing of socially meaningful events to be both historically contingent and socially patterned, provided the conceptual scaffolding for this investigation.

Using the language of the life course paradigm, the results of our discrete-time hazard models indicated that the transition to SESSP is age-graded. More succinctly, the probability of experiencing first SESSP increased with age. This finding may seem unremarkable; after all, the development of sexual relationships is a normal and expected part of emerging adulthood (Tolman & McClelland, 2011). At the same time, sexual relationships with a same-sex partner have been long viewed as neither normal nor expected and until quite recently, same-sex relationships were largely hidden (Herek et al., 2007).

The recency of this change was apparent in our results. Motivated by both the life course paradigm's attention to social change and the growing public acceptance of same-sex relationships and LGB individuals that has characterized the









Fig. 3 Predicted probability of first SESSP for men by age and specified covariates. **a** Sexual identity, **b** family stability



Fig. 4 Predicted probability of first SESSP for women by age and maternal education

past two decades (Twenge et al., 2016), we explored variation across birth cohorts in the association of age with first SESSP. We found that age was not a particularly powerful predictor of first SESSP for women and men who reached adulthood in the 1980s and 1990s. In contrast, for those who reached these ages in the early decades of the twenty-first century, the initiation of sexual relationships with same-sex partners was a strongly age-graded process. Notably, these findings are consistent with speculations that LGB persons are coming out at increasingly younger ages (Eliason & Schope, 2007; Floyd & Bakeman, 2006; Grov et al., 2006; Russell & Fish, 2016), although we cannot confirm these claims with the data at hand.

That age mattered more for sexual initiation among younger LGB individuals than it did for an earlier generation may suggest movement toward the normalization of same-sex relationships. Our use of this term is not intended to imply societal acceptance of same-sex sexuality; rather, it refers to the development of an age-specific pattern of sexual initiation that is congruent with both physical maturation and social norms that deem adolescence and young adulthood as the appropriate life course stage for first exploring intimate relationships (Tillman et al., 2019; Tolman & McClelland, 2011). Why then did age matter so little for the initiation of SESSP among earlier generations of same-sex attracted individuals? It may be that many same-sex attracted individuals who came of age prior to the twenty-first century had limited exposure to homoerotic sexual scripts that would have helped them understand and act on their physical and emotional feelings (Simon & Gagnon, 1986). For these individuals, first SESSP may have been left largely to circumstance. In contrast, more recent generations likely have benefitted from the growing visibility of lesbian, gay, and bisexual persons in the mass media, sports, politics, and in day-to-day life that has characterized the years since Ellen DeGeneres came out publicly in 1997 (Armstrong et al., 2020). These changes, along with online support groups, dating apps, and other internet-based resources, have made it easier to learn about sexuality and find sexual partners (Tillman et al., 2019).

Our findings also pointed to differences in sexual experience by sexual identity. Not surprisingly, higher percentages of bisexual-identified women and men (86% and 72%, respectively) than lesbian-identified women and gay-identified men (55% and 39%, respectively) reported sexual intercourse with different-sex partners. Highlighting the complicated nature of LGB sexual experience, prior coital experience was associated with higher rates of SESSP initiation at subsequent ages among women and men. This finding appears to align with qualitative research reporting that, for some women and men, sexual engagement with a different-sex partner was important in confirming same-sex attraction (Diamond, 2005; Savin-Williams, 1998), although we hesitate to push this interpretation too far in the absence of more direct evidence.

Further, it seems likely that the effect on the timing of first SESSP of experience with different-sex partners may vary by sexual identity. Bisexual-identified individuals initiated SESSP at later ages, on average, than their lesbian- and gay-identified counterparts, and in the multivariable models, their age-specific rates of first SESSP were over 50% lower. It may be that bisexual individuals recognize their same-sex attraction at a later age, on average, than those who identify as lesbian or gay; a recent study found that gay men (but not lesbian women) recognized their same-sex attraction at a considerably younger age than their bisexual peers (Katz-Wise et al., 2017). Another potential explanation for the later transition to first SESSP among individuals who identify as bisexual is that they may find fulfillment with different-sex partners, leaving them less compelled than those who identify as lesbian or gay to explore their same-sex attractions. It also bears noting that, despite greater acceptance of same-sex sexuality generally (Twenge et al., 2016), bisexuality continues to be stigmatized, with individuals who identify as bisexual experiencing prejudice and discrimination from gay men and lesbian women as well as heterosexual individuals (Anselmi et al., 2015; Cox et al., 2013; Hertlein et al., 2016; Israel, 2018).

Although the life course paradigm emphasizes social location as a source of heterogeneity in event timing, our results regarding the association of social location with SESSP timing are not straightforward. Mother's educational attainment played no role in SESSP timing for men, although it does significantly condition the effect of age on women's SESSP initiation. Family stability mattered, although its role was different for men than for women. Women who reached adolescence in a home with both parents had a lower conditional probability of first SESSP at every age relative to those who did not, while men who grew up in a two-parent family had a higher conditional probability of initiating SESSP only after age 25. Growing up in a religiously affiliated family had no association with SESSP timing for either gender, nor did race/ethnicity, although we did find that immigrant women had a lower conditional probability of first SESSP.

Because our analyses are based on data from a potentially select sample—individuals willing to identify as LGB in a survey not specifically targeted to the LGB population—we cannot discount the possibility that the overall lack of social heterogeneity is specific to this dataset. Further, that more aspects of social location mattered for women than men may have reflected gender differences in the measures of first SESSP. Recall that in the models for men, first SESSP refers to first oral or anal sex; in those for women, first SESSP refers to first oral sex or "any sexual experience of any kind." Had the definition of sexual engagement in the men's questionnaire been as ambiguous as that for women, social factors may have had greater predictive power in the models for men. Although other researchers have observed that women's sexuality is more strongly associated with social factors than is men's (Baumeister, 2000; Diamond, 2005, 2007), it is conceivable that the gender differences we observed are a product, at least in part, of these questionnaire differences.

Despite these limitations, the NSFG has afforded a more detailed look at the initiation of SESSP than prior studies of this important event in the LGB life course. Moving forward, surveys designed to provide data on sexual and reproductive health and family-building must, at the least, include oversamples of the LGB population and develop more comparable measures of sexual experiences for women and men if we are to understand the role of sexual relationships in shaping health and well-being, among both those who identify as LGB and those who do not. Ideally, we also will see the collection of nationally representative longitudinal data designed to support prospective studies of sexual identity development and its ties to sexual experiences. This would allow researchers to examine the dynamic processes underlying identity formation and how these processes relate to trajectories of sexual experience as individuals move out of childhood, through adolescence, and through the various stages of adulthood.

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Data Availability Data and all documentation are available at https://www.cdc.gov/nchs/nsfg/nsfg_questionnaires.htm.

Code Availability The first author will provide Stata code upon request.

Declarations

Conflict of interest The authors declare they have no conflict of interest.

Ethical Approval This article does not contain any studies with human participants or animals performed by any of the authors. Data used are public access and fully anonymized.

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