Published in final edited form as:

Dev Psychol. 2011 November ; 47(6): 1658–1673. doi:10.1037/a0025508.

Retrospective Recall of Sexual Orientation Identity Development Among Gay, Lesbian, and Bisexual Adults

Jerel P. Calzo,

Division of Adolescent and Young Adult Medicine, Children's Hospital Boston and Department of Pediatrics, Harvard Medical School

Toni C. Antonucci,

Department of Psychology and Institute of Social Research University of Michigan

Vickie M. Mays, and

Department of Psychology and Department of Health Services, School of Public Health University of California, Los Angeles

Susan D. Cochran

Department of Epidemiology, School of Public Health University of California, Los Angeles

Abstract

Although recent attention has focused on the likelihood that contemporary sexual minority youth (i.e., gay, lesbian, bisexual [GLB]) are “coming out” at younger ages, few studies have examined if early sexual orientation identity development is also present in older GLB cohorts. We analyze retrospective data on the timing of sexual orientation milestones in a sample of sexual minorities drawn from the California Quality of Life Surveys. Latent profile analysis of 1,260 GLB adults, ages 18–84 years identified three trajectories of development: Early ($n = 951$, milestones spanning ages 12 to 20), Middle ($n = 239$, milestones spanning ages 18 to 31), and Late ($n = 70$, milestones spanning ages 32 to 43). Motivated by previous research on variability in adolescent developmental trajectories, post-hoc analyses of the Early Profile group identified two sub-groups: Child-Onset ($n = 284$, milestones spanning ages 8 to 18), and Teen-Onset ($n = 667$, milestones spanning ages 14 to 22). Nearly all patterns of development were identity-centered, with average age of self-identification as GLB preceding average age of first same-sex sexual activity. Overall, younger participants and the majority of older participants were classified to the Early Profile, suggesting that early development is common regardless of age cohort. The additional gender differences observed in the onset and pace of sexual orientation identity development warrant future research.

Keywords

Gay, Lesbian, Bisexual; Latent Profile Analysis; Gender; Sexual Orientation; Life Span, Life Course Research; Developmental Milestones

As research on sexual orientation identity development continues to grow, much attention has focused on the on the possibility that contemporary sexual minority youth (i.e., gay,

Publisher's Disclaimer: The following manuscript is the final accepted manuscript. It has not been subjected to the final copyediting, fact-checking, and proofreading required for formal publication. It is not the definitive, publisher-authenticated version. The American Psychological Association and its Council of Editors disclaim any responsibility or liabilities for errors or omissions of this manuscript version, any version derived from this manuscript by NIH, or other third parties. The published version is available at www.apa.org/pubs/journals/dev.

lesbian, bisexual [GLB]) are self-identifying as GLB and coming out at younger ages than previous generations of sexual minorities (Cianciotto & Cahill, 2003; Denizet Lewis, 2009). Both trends if true have important social, psychological, and health implications. A secular trend towards early and identity-centered development could signify greater social acceptance of sexual minorities. With greater perceived acceptance, sexual minority youth may be less likely to question or experience internal conflict regarding same-sex oriented feelings and attractions. Limited empirical evidence suggests that identity-centered patterns of development are associated with less internalized homophobia and less-risky sexual behavior than sex-centered patterns (in which sexual experience precedes self-identification; Dubé, 2000; Schindhelm & Hospers, 2004). However, development and disclosure of GLB identities in childhood or adolescence may increase lifetime exposure to discrimination and victimization, particularly from peers in school (Kosciw, Greytak, Diaz, & Bartkiewicz, 2010). Such experiences may lead to sub-optimal developmental outcomes, including decrements in school performance, self-esteem, and physical and mental health (Bontempo & D'Augelli, 2002; Toomey, Ryan, Diaz, Card, & Russell, 2010).

A life span and life course perspective on these issues is often lacking because most studies on sexual orientation identity development focus on adolescent and young adult samples (e.g., Floyd & Stein, 2002; Rosario, Schrimshaw, Hunter, & Braun, 2006; Savin-Williams & Diamond, 2000). It is therefore not clear if early development actually represents a recent cohort effect. By definition, samples restricted to GLB adolescents and young adults consist of individuals who develop sexual minority identities early and come out at a young age. The current study explores variability in recalled sexual orientation identity development in a large, age-diverse (18-84 years) sample of sexual minorities drawn from the California Quality of Life Surveys (Cal-QOLs, Cochran & Mays, 2007), thus providing valuable information about early sexual orientation identity development among both older and younger GLB cohorts.

Variability in the Timing and Sequence of Sexual Orientation Milestones

Previous research on the development of sexual minority identities has commonly drawn from stage-sequential models, which propose that various milestones precede or follow from self-identification as GLB (Cass, 1996; Rotheram-Borus & Langabeer, 2001; Sophie, 1985; Troiden, 1989). Although the stage-sequential models vary in their terminology and theoretical orientations, most models share the same general linear sequence of milestones (Cohen & Savin-Williams, 1996; Savin-Williams, 1995). Sexual minority identity development is thought to begin with an awareness of attraction to members of the same sex, typically in adolescence. Given the stigma associated with homosexuality, a period of confusion and sexual experimentation may ensue. Sexual experiences with same-sex partners are expected to precipitate the third milestone—self-identifying as GLB. The final milestone—coming out (i.e., disclosure of same-sex attraction, behavior, or sexual minority identity)—typically follows personal self-identification.

The concordance between early stage-sequential models and actual identity development is somewhat questionable. Emerging evidence indicates that some aspects of sexual orientation may be less stable than others (Diamond, 2008; Kinnish, Strassberg, & Turner, 2005), and that there is considerable variability in the timing and sequence in which sexual orientation milestones are experienced (Friedman, Marshall, Stall, Cheong, & Wright, 2008; Savin-Williams, 1998). For example, Floyd and Stein (2002) used cluster analysis to examine underlying developmental patterns in adolescents and young adults. They identified five patterns of development—one pattern in which milestones occurred early and participants came out in adolescence; two patterns in which attraction and self-identification occurred early (but with differences in levels of same-sex sexual experience and coming out status);

and two patterns characterized by experiencing milestones in adulthood (but differing according to level of GLB community involvement). Floyd and Stein's findings indicate that there may be considerable heterogeneity in the timing and sequence of milestones, with some evidence of very early developmental trajectories.

Researchers have also noted deviations from the theorized models, particularly for women and bisexuals. Savin-Williams and Diamond (2000) detected two patterns in their study of gender differences in sexual orientation identity development—a sex-centered group which primarily consisted of male youth (51% of the males, as opposed to 20% of the females), and an identity-centered group (80% of the females and 49% of the males). Beyond gender differences in the sequence of milestones, girls also reported experiencing attraction, sexual contact, and self-identification one to two years later than did boys. Other research has found that sexual minority females may be more likely to adopt bisexual identities, vacillate between identity labels, and experience both same- and other-sex (i.e., heterosexual) relationships (Diamond, 2007). The onset and sequence of milestones may also differ for bisexual individuals given the inherent complexities in understanding and integrating attractions to both same- and other-sex partners (Diamond, 2008; Rust, 2000). Indeed, experiencing other-sex attractions could delay the self-recognition of sexual minority identities because such attractions could be interpreted as evidence of a heterosexual identity. However, the increasing visibility of bisexuality as a stable identity label may increase the likelihood that contemporary bisexual youth identify as bisexual at younger ages (Rust, 2000).

Life Span and Life Course Perspectives on Sexual Orientation Identity Development

Life span and life course perspectives can further inform understanding of the variability in the timing and sequence of sexual orientation identity development. From a life span perspective, the sequence of sexual orientation identity development may depend on maturation effects and the developmental stage in which identity development takes place (e.g., adolescence, adulthood, middle adulthood; Fuller-Iglesias, Smith, & Antonucci, 2010). To date, research on the development of sexuality has largely focused on the experiences of heterosexual adolescents. In this population, the emergence of sexual feelings and other-sex attractions generally occurs in late childhood or early adolescence, followed by the onset of dating and partnered sexual activities in middle to late adolescence (Diamond & Savin-Williams, 2009).

As a basic developmental milestone, the emergence of general sexual feelings and desire is unlikely to differ among sexual minority and heterosexual youth. Limited research also indicates that self-identified GLB youth may begin same-sex sexual activity around the same time that their heterosexual peers are engaging in other-sex sexual activity (ages 14 to 18 for females, and ages 13-15 for boys; Herdt & Boxer, 1993; Rosario et al., 1996; Diamond, 1998). However, multiple factors can contribute to delays in other milestones for sexual minorities. For example, some sexual minority youth delay same-sex sexual activities and coming out until after they have entered college (Evans & D'Augelli, 1996; Sanlo, 2004). Such a trajectory of development could represent a conscious decision to delay sexual exploration and coming out until one is better able to avoid parental and peer rejection, the greater availability of sexual and relationship partners, and/or the emergence of novel same-sex attractions in young adulthood. It is also possible that delaying same-sex (and other-sex) sexual behavior until college results from maturation effects, given that expectations to attend college are associated with later onset of sexual behavior and romantic relationships in general (Halpern, Joyner, Udry, & Suchindran, 2000), and that approximately 40% of US adolescents overall are virgins at the end of high school (Centers

for Disease Control and Prevention, 2010). The presence of these multiple factors may pattern sexual orientation identity development differently for adolescent developers in comparison to adult developers—who experience sexual minority identity development later in life and likely under different circumstances (e.g., following other-sex sexual and romantic relationship experiences).

Studies have explored how identity development may differ at various points in the life span, and whether such differences have health implications. Friedman and colleagues (2008) investigated the connections between timing of sexual milestones, early abuse and victimization, and adult health outcomes among a large sample of gay and bisexual men from the Urban Men's Health Study. The researchers identified three distinct developmental trajectories, all characterized by sex-centered identity development. All groups experienced milestones in the same order (attraction, sex, self-identification, coming out), but the groups differed in the timing of each milestone. Members of the early trajectory were younger than participants in the other trajectory groups, and reported experiencing attractions before age 10 and first disclosure prior to turning 18. Members of the middle trajectory tended to experience the milestones two to three years later than the early trajectory, and members of the late trajectory (the smallest group) experienced milestones two to 10 years later than the early trajectory (not coming out until their late 20s). Their results underscore the considerable diversity in timing of sexual orientation milestones. Further, Friedman et al. (2008) found that early development was associated with greater rates of victimization, depression, suicidality, and HIV-risk.

From a life course perspective, the onset and sequence of sexual orientation identity development may also be affected by the historical context in which development is experienced (Fuller-Iglesias, Smith, & Antonucci, 2010). Because research on sexual orientation identity development often draws from age-restricted, younger samples, few studies to date have formally integrated a life course perspective. Floyd and Bakeman's study (2006) of a large community sample of GLB adults in the southern US (ranging in age from 18-74 years old) is a notable exception. The authors assigned participants to one of four trajectory groups: younger participants who self-identified in adolescence; younger participants who self-identified in adulthood; older participants who self-identified in adolescence; and older participants who self-identified in adulthood. The authors also noted gender differences in development, and that participants who self-identified in adolescence reported earlier sexual attraction and sexual behavior than those who self-identified in adulthood. Adolescent identifiers were also more likely to display identity-centered developmental patterns. However, the authors found that more than 60% of the individuals who identified in adolescence were older participants, thus suggesting that earlier development is not a recent historical phenomenon. With regard to cohort effects, the only notable difference was that participants who came out in adolescence after 1988 (the sample's median calendar year of coming out) were more likely to disclose their identities to multiple individuals than were older participants who also came out in adolescence. These findings regarding disclosure provide evidence that social acceptance for sexual minorities may be increasing, but the results challenge the popular belief that early development is unique to contemporary youths.

While Friedman et al.'s (2008) and Floyd and Bakeman's (2006) studies broke new ground by exploring maturation and cohort effects, they highlight at least two areas of further needed work. First, Floyd & Bakeman's method of dividing groups to examine cohort effects (i.e., splitting the sample according to the median calendar year of self-identification for the sample) is not anchored in sociologically relevant birth generations (e.g., Baby Boomers, Generations X and Y; Elder & Shanahan, 2006; Strauss & Howe, 1992). GLB history timelines (such as those produced by the Transgender Aging Network, Cook-

Daniels, 2008) highlight the importance of incorporating life course perspectives into sexual orientation identity research. In the US, it is conceivable that the sexual orientation identity development of Baby Boomers (those born shortly after World War II) may have been delayed by social norms during childhood that strictly enforced traditional gender roles. By contrast, the less traditional context of Generation X individuals (those born in the 1970s) may have been more accepting of homosexuality, given the rise in GLB civil rights movements and the removal of homosexuality from the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders*. Yet, Generation X individuals also entered adolescence during the start of the HIV/AIDS epidemic; public sentiment regarding the links between the disease and homosexuality may have had detrimental effects on sexual minority identity development. Contemporary youth (i.e., Generation Y—those born in the 1980s and early 90s) are developing in a current context of unprecedented attention to promoting GLB civil rights (e.g., same-sex marriage, anti-bullying policies to protect sexual minority youth in schools). Analyzing data with these sociologically relevant cohort structures in mind is likely to contribute to a deeper understanding of how cohort membership might influence sexual orientation identity development.

Second, research on sexual orientation identity development may also benefit from the use of different sampling methods and more sophisticated pattern-centered analysis techniques. Friedman et al.'s (2008) study defined trajectory groups using latent profile analysis (LPA), which is a superior technique for investigating hidden patterns in the onset and sequencing of developmental processes (Muthén & Muthén, 2000), but the study only focused on men and excluded participants older than 40 years of age. This precludes the possibility of taking into account potential gender effects or detecting further diversity in patterns of development within older age cohorts. Finally, as with the majority of research on sexual minority populations, both studies above depended on data obtained from participants recruited via sampling methods that are confounded with participation in the gay community. It is possible that individuals who are involved in sexual minority community events may differ from other GLB persons in ways that are related to their identity development. Examining identity development among sexual minorities recruited via alternative methods, such as population-based study designs, facilitates the ability to determine the generalizability of findings derived from convenience samples. Alternative methods such as the utilization of population-based sampling are a potential path to new insights about representative developmental trajectories in sexual minority populations.

The Current Study

This study is designed to investigate patterns of development by pursuing three aims. First, we examine four key milestones (attraction, self-identification, same-sex sexual experience, and coming out) and employ LPA to explore patterns of sexual orientation identity development in an age-diverse sample of male and female sexual minorities. Based on Friedman et al.'s (2008) results using LPA methodology, we anticipate detecting at least three different trajectories of sexual orientation development characterized by development in childhood/adolescence, late adolescence/early adulthood, and adulthood. Also, consistent with previous research on youth samples, we expect that earlier developmental trajectories may be more likely to exhibit identity-centered developmental patterns.

The second aim of the study is to compare the demographic and behavioral characteristics of the different trajectory groups. Because previous research has highlighted important gender and sexual orientation differences in sexual minority identity development, we expect that females and bisexuals will exhibit later developmental patterns than males and those who identify as gay or lesbian. It is also likely that exploring heterosexual sexual and romantic behavior may contribute to delays in the onset or timing of sexual minority developmental

milestones. Controlling for age, we hypothesize that participants who engage in heterosexual sexual intercourse in adulthood, or who have been married to a other-sex partner in the past (i.e., heterosexual marriage), will be more likely to be classified into older trajectory groups. Additionally, based on research indicating that some sexual minority individuals wait to come out until their college years, and the associations between expectations to attend college and later onset of sexual behavior overall, we expect that college attendance will be linked to later developmental trajectories.

The third aim of the study is to examine age and cohort differences in sexual orientation identity development. By examining the identity development of both younger and older adults, this study will provide additional information about whether earlier development is unique to contemporary sexual minority youth. Although participants from younger generations cannot be classified into older developmental groups due to their current age, consistent with Floyd and Bakeman's (2006) findings, we expect that significant portions of participants from older generation cohorts will be represented in the earlier developmental groups.

Method

Participants & Procedure

Data were drawn from the California Quality of Life Surveys I and II (Cal-QOLs; Cochran & Mays, 2007), unique samples created by double-sampling from the population-based 2003 and 2007 California Health Interview Surveys (CHIS). The CHIS are multistage random digit dial telephone interviews of California adults, age 18 and older, selected irrespective of their sexual orientation (2003 CHIS $N=42,004$; 2007 CHIS $N=40,154$). During the course of the computer assisted telephone interview (CATI), respondents provided information about their sexual orientation identity, recent sexual history, and willingness to be re-contacted for similar health surveys in the future. From this CHIS pool, all who indicated a GLB identity or any same-sex sexual partners in the year prior to the interview (Cal-QOL I, $n = 1,193$; Cal-QOL II, $n = 1,390$) and a representative heterosexual comparison sample were deemed eligible for participation in the Cal-QOL surveys. The Cal-QOL I successfully interviewed 2,386 respondents drawn from the 2003 CHIS, and the Cal-QOL II 2,815 respondents from the 2007 CHIS. The Cal-QOLs then reassessed sexual orientation more extensively to ensure accurate classification of individuals. Because the Cal-QOLs included a more extensive assessment of same-sex sexual experiences than the CHIS, we also included for possible consideration 105 persons as potential eligibles for the study who were sampled as presumptive heterosexuals from the CHIS, but on Cal-QOL re-interview reported at least one marker of minority sexual orientation, most commonly a positive lifetime history of same-sex partners which was not measured in the CHIS. In total, 639 and 868 sexual minority participants, respectively, were successfully re-interviewed between 6 and 18 months after their participation in the CHIS.¹

For the current study, data were included from self-identified GLB individuals with substantially complete information for all four sexual orientation milestones measured in Cal-QOL ($N = 1,260$; 84% of 1,507). Most participants provided exact ages for all four milestones (82.7%, $n = 1042$), although 5.4% ($n = 68$) indicated that they experienced one or more milestones but could not provide an exact age (i.e., responding "don't remember" or "all my life"), and 12.2% ($n = 154$) were missing data on one or more milestones, but provided responses in other survey questions that sufficiently implied that they completed the milestone (e.g., a participant who had missing data for the first same-sex sexual

¹A thorough account of CHIS design and sampling can be found at <http://www.chis.ucla.edu/design.html>.

experience milestone, but in other responses indicated having had sex with members of the same sex). For those who responded “all my life” to a particular milestone variable, we substituted the minimum valid age from other participants for that milestone. For participants who could not remember when they experienced a milestone (or who did not provide a valid age but did experience a milestone), we used full-information maximum likelihood estimation techniques in Mplus to estimate a response. We did not include participants who had missing data on all four milestones ($n = 8$), or who did not currently self-identify as GLB and were missing an age for first self-identification as GLB ($n = 239$). Of the 239 who did not currently self-identify as GLB and were missing the self-identification milestone, 134 reported a lifetime history of same-sex partners but avowed a current heterosexual identity, including 78 persons who had been sampled for the Cal-QOL as presumptive heterosexuals. Analyses indicate that there were no significant differences on demographics and available milestone data between those with any imputed or substituted values ($n = 218$) and those who provided concrete ages for all four milestones ($n = 1,042$). However, chi-square analyses indicated that there were significantly fewer racial/ethnic minorities and significantly more college-educated participants in the analysis sample ($N = 1,260$, 17.1% Non-White, 62.5% with college degrees) than in the excluded (majority heterosexual) subgroup ($N = 247$, 25.1% Non-White, 44% with college degrees, p 's < .001).

The analysis sample consisted of 674 men and 586 women ($M_{age} = 49.31$, $SD = 12.25$, range: 18-84 years old). Eighty-three percent of the participants were White, 8% Hispanic, 5% Black, and 3% Asian or Pacific Islander. Due to the small numbers of racial/ethnic minorities it was not possible to conduct separate analyses for these groups. Approximately 27% of the participants self-identified as bisexual and 73% self-identified as lesbian or gay. The majority of participants (92%) currently resided in urban settings (as determined by Census guidelines). Nearly two-thirds of the participants possessed college degrees. The original Cal-QOL datasets were weighted to the California population. However, due to the selective exclusion of participants from the original sample all analyses were conducted without sample weights.

Measures

Milestones—Participants responded to four questions concerning sexual orientation identity development: (1) age of first same-sex sexual attraction; (2) age of first self-identification as lesbian, gay, bisexual, or homosexual; (3) age of first same-sex sexual experience (defined as vaginal sex, oral sex, anal sex, or any other form of sex); and (4) age of first disclosure (i.e., coming out) either regarding sexual minority identity or same-sex sexual activity. Milestone variables were examined for normality and found to be within acceptable ranges for latent variable modeling techniques (Kline, 1998). Descriptive statistics for milestone variables are presented for the overall sample and by gender in Table 1.

Cohort effects—Cohort effects were assessed in two ways. First, we considered the effects of current age as a continuous variable. Second, we examined the effect of cohort generation on latent profile membership. Drawing from US sociological and demographic literature (Cook-Daniels, 2008; Strauss & Howe, 1992), we classified participants as Generation Y (born in 1980-1990), Generation X (1965-1979), Baby Boomers (1946-1964), and the Greatest Generation (1900-1945). To avoid issues regarding multicollinearity, current age was used as a correlate in regression models to compare the different development groups, and generation status was used as a descriptive variable to further evaluate the proportion of participants within each group who may have experienced development during different historical contexts.

Adult heterosexual relationship and sexual experience—Consistent with the life-course perspective that older cohorts of sexual minorities may have been more likely to attempt or to engage in heterosexual romantic and sexual relationships prior to developing, acknowledging, or accepting their sexual minority identities, we examined three correlates that serve as proxy measures for adult heterosexual relationship and sexual experience: current or past heterosexual marital status (0 = *No*, 1 = *Yes*); engaged in any heterosexual sex since age 18 (0 = *No*, 1 = *Yes*); and engaged in heterosexual sex in the past year (0 = *No*, 1 = *Yes*).

Analysis

The first set of analyses aimed to identify developmental trajectory subgroups within the sample. Subgroups were estimated with LPA in Mplus Version 5.21 (Muthén & Muthén, Los Angeles CA, 2007) using the four milestone variables as indicators. LPA is a pattern-centered approach that uses a probabilistic grouping procedure to sort participants into groups of individuals who are similar to each other and different from those in other groups (Muthén & Muthén, 2000; Pastor, Barron, Miller, & Davis, 2007; Vermunt & Magidson, 2002). LPA assigns probability scores to participants for being in each group and a categorical class code indicating their most-likely group membership. This class code is used as an indicator of developmental profile membership. LPA provides fit indices to help evaluate the fit of different solutions to the data, including Akaike and Bayesian Information Criteria (AIC, BIC, and BIC *N*-adj.), the Lo-Mendell-Rubin (LMR) fit index, and the bootstrap likelihood ratio test (BLRT). Lower AIC, BIC, and BIC *N*-adj. values and significant LMR and BLRT values are indicative of better model fit (Henson, Reise, & Kim, 2007; Lo, Mendell, & Rubin, 2001; McLachlan & Peel, 2000; Nylund, Asparouhov, & Muthén, 2007; Yang, 2006). However, because previous research cautions against the use of goodness-of-fit indices alone to determine the appropriate number of profiles (Marsh, Lüdtke, Trautwein, & Morin, 2009; Nylund, Asparouhov, & Muthén, 2007), final decisions as to numbers of relevant profiles also considered parsimony, relevance, as well as previous theoretical and empirical literature. To examine differences between the developmental profiles, we used the final categorical class codes and multinomial logistic regression in Mplus.²

Results

Milestone Profiles

To determine the optimal solution we estimated two- to five-profile solutions, comparing the fit indices and the interpretability of the *N* and *N*-1 profile solutions. We also increased the number of random sets of starting values to 1,000, the number of iterations to 20, and the number of final-stage optimizations to 100 in order to address the potential problem of local maxima (Muthén & Muthén, 2008). Fit indices for the estimated models are displayed in Table 2. From these, we determined that the three-profile solution was optimal because of the better distribution of participants across classes, the interpretability of the solution, and acceptable fit indices. We further examined the stability of this solution by increasing the number of random starts to 5,000, the number of iterations to 100, and the number of final-stage optimizations to 500. The solution and fit indices were replicated.

²A conservative Box-Tidwell test detected potential non-linearity in the association between age and log odds of profile membership. We followed the recommendations of Menard (2002) and investigated whether adding quadratic and cubic age terms improved model fit. The quadratic and cubic age terms were not significant, nor did they improve the fit of the model, thus we ran the models with age modeled as a linear covariate.

The three patterns identified through LPA and the average ages at which participants achieved each sexual orientation milestone are illustrated in Figure 1. The three groups exhibited substantially different developmental patterns. The largest group (Early Profile, $n = 951$) displayed first attraction at an average age of 12.52 years, first self-identification at 16.63 years, first same-sex sexual experience at 17.78 years, and coming out at age 20.44. The second largest group (Middle Profile, $n = 239$) reported first attraction later in adolescence (18.38 years), experienced first self-identification and first same-sex sexual experience in their 20s (25.69 and 26.40, respectively), and came out in their early 30s (31.20 years). Finally, the smallest group (Late Profile, $n = 70$) reported attraction at an average age of 32.74, had their first same-sex sexual experiences at age 37.65, self-identified at age 40.14 (after, on average, their first same-sex sexual experience), and came out at age 43.18.

Gender and Bisexuality Differences

We hypothesized that gender and bisexuality would be associated with overall timing of milestones, with female participants and bisexuals reporting later sexual orientation milestones than male and gay/lesbian participants, respectively. As hypothesized, females comprised a greater percentage of the Middle and Late Profiles, and males comprised a greater percentage of the Early Profile (see Table 3). Consistent with the bisexuality hypothesis, within profile counts indicate that bisexuals comprised a larger percentage in the Middle and Late Profile individuals in comparison to those allocated to the Early Profile. To further examine the hypothesis that female participants experience milestones later than male participants, we conducted ANOVAs controlling for current age comparing male and female participants' average ages for each milestone within each profile (see Table 4). Within the Early Profile, female participants experienced attraction, self-identification, and first same-sex sexual experiences significantly later than did male participants. However, female participants in the Early Profile did not differ from male participants in their age of coming out. Interestingly, females in the Middle Profile reported coming out, on average, three years earlier than male participants. Females in the Late Profile reported coming out over five years earlier than did male participants. Additionally, although female participants in the Middle Profile experienced first attraction significantly later than did male participants, they did not differ from male participants on their average age of self-identification and first sexual experience. Within the Late Profile, female participants did not differ from male participants on timing of first attraction or self-identification, but experienced first same-sex sexual experience significantly later than male participants. Overall, the results provide partial support for the hypothesis that females experience milestones later than males. However, there is also evidence that among participants who come out later in life, females may come out earlier than males.³

To test the hypothesis that bisexual participants experience milestones later than gay and lesbian participants, we conducted additional ANOVAs (see Table 4) controlling for age and gender that compared age of milestones among bisexual and gay/lesbian participants within each profile. Although bisexual participants were younger overall ($M_{bisexual} = 45.33$ years, $SD = 13.53$, $M_{gay/lesbian} = 50.79$ years, $SD = 11.04$, $t(1258) = 5.46$, $p < .001$), those in the Early Profile experienced attraction, self-identification, and coming out approximately one year later than did gay and lesbian participants. Bisexual Middle Profilers reported experiencing same-sex attractions approximately two years later than gay and lesbian Middle Profilers reported. Bisexual Late Profilers did not differ on same-sex attraction, first

³Chi-square analyses indicated that female participants were more likely than male participants to report a bisexual sexual orientation ($\chi^2(1, 1260) = 111.02$, $p < .0001$). The results presented in Table 4 were virtually identical after controlling for both age and bisexual orientation.

sex, or coming out, but reported self-identifying approximately three years later than gay and lesbian Late Profilers indicated. In sum, although there were some statistically significant timing differences according to sexual orientation, the sequence of milestones appeared to be similar for bisexual and gay/lesbian participants.

Describing the Profiles

An examination of socio-demographic characteristics of profiles indicated fewer ethnic minority participants in the Late Profile compared to the Early and Middle profiles. More participants in the Middle and Late Profiles reported a current or past heterosexual marriage than did participants in the Early Profile. The Middle and Late Profiles also included a higher percentage of college graduates compared to Early Profiles. Although younger participants were restricted to classification in the Early and Middle Profiles (i.e., nearly all participants from Generation Y were classified in the Early Profile, and no Generation X and Y participants were in the Late Profile), 83% of Generation X participants, 76% of the Baby Boomers, and 60% of the Greatest Generation participants were classified as Early Profilers. Further, although Baby Boomers comprised approximately 60% of the Middle and 40% of the Late Profile groups, only 20% and 4% respectively of the total Baby Boomers were classified in the Middle and Late Profiles. Similarly, although 57% of the Late Profile consisted of Greatest Generation participants, only 16% of this cohort was categorized as Late Profilers.

Secondary Latent Profile Analysis on the Early Profile

In all, over 75% of study participants were classified as Early Profilers. To further explore this early developing subset we next restricted the sample to Early Profilers and again conducted an LPA analysis. In this sub-analysis, we tested the *a posteriori* hypothesis that there may be two or more sub-groups within the Early Profile. We estimated two- to five-profile solutions, comparing fit indices and the interpretability of the *N* and *N*-1 solutions to determine the best solution. For reasons of parsimony and size, the two-profile solution provided the best fit for the data (see Table 2).

The average ages at which individuals in the two early groups achieved each sexual orientation milestone are presented in Figure 2. The Child-Onset group (*n* = 284) experienced first attractions at age 8.10, first self-identified at age 12.37, first experienced same-sex sexual activity at age 14.94, and came out at age 17.99. Comparable figures for the Teen-Onset group (*n* = 667) are: 14.51 (attraction), 18.51 (self-identification), and 18.95 (sex), and 21.56 (coming out). Notably, the Child-Onset group experienced all four milestones during adolescence. By contrast, the Teen-Onset group experienced attraction in early adolescence, but experienced the other three milestones in late-adolescence and early adulthood.

Gender differences were also examined within these two sub-profiles. Males comprised 73% of the Child-Onset group and 55% of the Teen-Onset group. However, comparison of male and female age at each milestone within profiles and controlling for current age (see Table 4) did not reveal consistent gender differences. Specifically, within the Child-Onset profile, female participants experienced first same-sex sexual experience significantly later than males, but came out significantly earlier. Within the Teen-Onset profile, female participants experienced attraction, self-identification, and sex significantly later than males, but came out approximately one year earlier than males. Bisexual-related comparisons of the two profiles revealed that bisexual participants were more likely to be represented in the Teen-Onset as opposed to Child-Onset profile (see Table 5). Examination of sexual orientation subgroup differences in the timing of milestones within the Child- and Teen-Onset profiles (see Table 4) indicated that Teen-Onset bisexual participants experienced first same-sex

attractions approximately one year later than gay/lesbian participants, but there were no other statistically significant differences.

Comparing Profiles and Testing for Gender, Bisexuality, and Age Effects

We next investigated whether there were differences in profile membership based on age, gender, bisexuality, adult heterosexual sexual experience, or college education. Analyses focused first on comparing the three profiles from the main LPA analysis (Table 6). Participants in the Middle and Late Profiles were likely to be older than those in the Early Profile, however given the impossibility of the youngest participants being classified into the Middle or Late Profiles, we do not consider this evidence of significant age effects in timing of developmental milestones. Females compared to males had three times greater odds of being in the Middle Profile than the Early Profile (Odds Ratio (O.R.)= 3.29, 95% Confidence Interval (C.I.)= 2.34, 4.62), and the odds of females being allocated to the Late Profile were over seven times greater (O.R.= 7.61, 95% C.I.= 3.87, 14.97). Thus, although the *within*-profile comparisons suggest that females in the Middle and Late profiles come out earlier than males, *between*-profile comparisons indicate that females have a greater likelihood of being in the later trajectory groups.

Contrary to our hypotheses, bisexual sexual orientation did not predict profile membership. However, in comparison to respondents with no current or past history of heterosexual marriage, participants with current or past heterosexual marital experience had 60% greater odds of being classified in the Middle Profile rather than the Early Profile (O.R.= 1.62, 95% C.I.= 1.10, 2.41), and nearly three times greater odds for being in the Late Profile than the Early Profile (O.R.= 2.76, 95% C.I.= 1.46, 5.20). Because age was included in the model, such results indicate that the effect of past heterosexual marital experience is independent of participants' current age. Similarly, participants who reported a heterosexual sexual experience since the age of 18 versus those who did not had over two times greater odds of being in the Middle Profile versus Early Profile group (O.R.= 2.42, 95% C.I.= 1.55, 3.78). Among participants who reported receiving a college degree, the odds of being in the Middle Profile compared to the Early Profile was over two times as large as the odds for those without a college degree (O.R.= 2.10, 95% C.I.= 1.50, 2.95), providing partial support for the hypothesis that college experience is related to later onset of sexual minority milestones.

Age, gender, and other demographic and behavioral correlates also distinguish the Teen-Onset Profile from the Child-Onset Profile (Table 7). Given that the Child- and Teen-Onset groups consist of participants from all generations, we considered age a valid potential predictor of profile membership between the two subtypes. Results suggest that age is not a significant predictor of Teen-Onset vs. Child-Onset Profile membership. However, for female participants, the odds of being classified in the Teen-Onset Profile versus the Child-Onset profile were almost two times greater than the odds for males (O.R.= 1.97, 95% C.I.= 1.42, 2.73). In comparison to gay/lesbian participants, bisexual participants had nearly twice the odds of being in the Teen-Onset Profile (O.R.= 1.90, 95% C.I.= 1.11, 3.26). Finally, participants with college degrees had 65% greater odds of being in the Teen-Onset Profile compared to those without a college degree (O.R.= 1.65, 95% C.I.= 1.23, 2.21).

Discussion

This study provides a unique, retrospective examination of the life span and life course characteristics of sexual orientation identity development among a general population of sexual minority men and women living in the United States, specifically California. We found that the overwhelming majority of participants—including those from the Greatest Generation and Baby Boomers—report early development, suggesting there may be life

course consistency across cohorts. We also found evidence of maturation effects in that the two largest profiles in the study (Early and Middle) were characterized by identity-centered patterns of development. Additional results support previous research on gender and sexual orientation differences in sexual minority identity development (e.g., Savin-Williams & Diamond, 2000), however, within profile gender comparisons offer intriguing evidence regarding differences in the pace of development within each profile.

Maturation and Cohort Effects

Limited research has found that identity-centered development is associated with less internalized homophobia and less-risky sexual behavior than is sex-centered development (Dubé, 2000; Schindhelm & Hospers, 2004). Participants in the current study reported three distinct developmental trajectories--Early, Middle, and Late--which parallel those reported by Friedman et al. (2009) using a similar methodology. However, in contrast to Friedman et al. (2008)⁴ and others (Herdt & Boxer, 1993; Rosario et al., 1996; Troiden, 1989), self-identification as a sexual minority preceded same-sex sexual experience on average by at least one year for most of the participants in the present study. Among Early and Middle Profilers, the average lag between self-identification and same-sex sexual experiences in both profiles was relatively small. While some Early and Middle Profilers experienced first same-sex sexual behavior and self-identification at the same age (approximately 25% and 38%, respectively), and some reported that first same-sex sexual behavior occurred before self-identification (approximately 26% and 24%, respectively), overall, the majority of the respondents reported self-identification as GLB occurring at a younger age than first same-sex sexual experience (approximately 50% and 38%, respectively). Evidence of sex-centered development was only evident in the Late Profile group.

Our study like others found that identity-centered patterns are common (D'Augelli, 1994; D'Augelli & Hersherberger, 1993). However, our findings add further scientific weight to the generalizability of previous work in that they were derived from a large, cohort-diverse sample of sexual minority men and women -- not solely sexual minority youth -- who were drawn from a population-based sampling frame, as opposed to convenience samples of GLB community-involved or resource-seeking sexual minorities. Early conceptual models (e.g., Troiden, 1989) and lay theories of sexual orientation identity development are largely sex-centered, propagating the notion that same-sex sexual experiences serve as a way of "testing" or "confirming" same-sex attractions prior to accepting a sexual minority identity. Instead, the current results suggest that identity-centered patterns may be much more common than predicted by these previous models. Further, because the majority of respondents in our sample—even those from older cohorts—experienced the onset of sexual minority identity development at young ages, the current results support the proposition that sexual minority status develops in conjunction with general patterns of sexual identity development. As such, Western cultural mores against youth sexual behavior for all adolescents, regardless of sexual orientation, and the likely dearth of available same-sex partners in adolescence may create a context in which identifying as GLB is more likely to precede same-sex sexual experiences.

Given that previous studies of adolescent and young adult samples found multiple developmental trajectories (e.g., Floyd & Stein, 2002), we specifically investigated potential differences among individuals in the Early Profile. In doing so, we found no evidence of the anticipated distinct identity- and sex-centered adolescent patterns detected in previous

⁴To further compare the results of our LPA to Friedman et al.'s study (2008), which only focused on men, we isolated male participants ($n = 674$) and estimated a separate LPA. Again, a three-profile solution fit the data best, with early ($n = 395$), middle ($n = 240$), and late ($n = 39$) trajectories emerging. Only the late trajectory exhibited a sex-centered developmental pattern (Mean age of Attraction: 23.01, Self-ID: 33.92, Sex: 29.34, Out: 43.05).

research (Savin-Williams & Diamond, 2000). Instead our findings underscore the importance of timing, with each of the five profiles showing similar patterns of development though starting at different points in the lifespan. This has important developmental implications for health and psychosocial adjustment. For example, although Child-Onset Profilers are likely to be “on time” with their heterosexual peers when they begin exploring partnered sexual activity and romantic relationships (Diamond & Savin-Williams, 2009), it is possible that they may be at greater risk for negative sexual health outcomes (e.g., via contact with older and more sexually experienced partners; inexperience with safer-sex negotiation) than those who are developmentally on somewhat later trajectories. Furthermore, sexual minority individuals who develop GLB identities and come out earlier in adolescence may experience greater amounts of victimization in school, thereby increasing the risk of concurrent and long-term mental and physical health problems (D’Augelli, Pilkington, & Hershberger, 2002; Kosciw et al., 2010; Toomey et al., 2010).

The later trajectories, reported by 25% of the sample with Middle and Late Profiles, indicate that the timing of milestones may be further influenced by a complex combination of individual- and contextual-level factors, some of which may be connected to cohort effects. It seems reasonable to assume that the positioning of identity development in the life span likely results in a qualitatively different experience of sexual minority identity development. For example, later-onset development could represent the emergence of novel same-sex sexual attractions, the development of a deep sexual or romantic attraction to a particular same-sex individual, or the later-life acceptance and integration of a long “closeted” sexual minority identity (Diamond, 2007; Peplau, Spalding, Conley, & Veniegas, 1999). Longitudinal research is needed to elucidate the qualitative differences in identity development at different periods of the life span. Equally as useful would be attempts to disentangle the contributions of diverse maturational, individual- and contextual-level correlates of the timing and course of identity development.

Overall, we found little evidence of strong cohort effects. By basing our historical cohort variable on US sociological, historical, and GLB lifespan research, we were able to examine how particular historical contexts might shape the timing and course of development. Nevertheless, early development was the norm in this study, with 60 to 75% of participants from the Greatest Generation and Baby Boom generation allocated to the Early Profile group. Older participants in the Early Profile group were also equally likely as younger participants to be in the Child-Onset Profile as opposed to the Teen-Onset Profile. These results bolster previous research indicating that earlier development is not a recent cohort effect (Floyd & Bakeman, 2006), and provide critical evidence that most sexual minorities may traverse sexuality milestones during childhood and adolescence, as do their heterosexual peers (Diamond & Savin-Williams, 2009).

Complex Gender and Bisexuality Effects

We hypothesized that female participants would have a greater probability of being classified into later developmental profiles than males. Our results provide some support for this hypothesis in the *between*-profile comparisons. Specifically, females were more likely than males to be classified to Middle, Late, and Teen-Onset Profiles than Early and Child-Onset profiles. Such results are consistent with previous research on gender differences in same-sex sexual attraction. There are some studies that research suggest that same-sex sexual attractions may be connected more to biological factors among men (e.g., hormonal shifts around puberty), and situational factors among women (e.g., opportunities for same-sex sexual contact in early adulthood; Bailey, Dunne, & Martin, 2000; Diamond, 2007; Kitzinger & Wilkinson, 1995; Peplau et al., 1999). Within-profile gender comparisons of the Middle and Late Profiles, however, indicate that male and female participants do not differ in the average age of self-identification and first same-sex sexual experiences. Most

surprisingly, we found evidence that female participants in older profiles may come out earlier than male participants. No gender differences emerged when comparing male and female participants in the Early Profile overall, but within both the Child- and Teen-Onset Profiles, females came out earlier than males. These results are consistent with other studies finding that females do not always experience milestones later than males (Rosario, Rotheram-Borus, & Reid, 1996; Savin-Williams & Diamond, 2000). Indeed, the complexity of the gender effects in this study contributes to the growing body of research suggesting that there may be qualitative differences in the ways in which men and women proceed through and experience sexual orientation milestones (Diamond, 2007; Mustanski et al., 2002; Peplau et al., 1999). We posit that prevailing gender role norms play a pivotal role in how sexual minority identity development is experienced and expressed. For example, it is possible that lower overall levels of public antipathy towards lesbians (Herek, 2002; Kite & Whitley, 1998) may make it possible for sexual minority women to disclose their identities to others earlier than is possible for sexual minority men. Future research may profitably evaluate both how patterns of development are consistent across gender and how social and hormonal factors shape sexual orientation identity development among men and women. Estimating separate models for male and female participants and more focused attention on gender-specific mechanisms (e.g., biology, socialization, contexts) would bring much needed clarity to these important life span and life course issues.

We also hypothesized that bisexual participants would exhibit later development, possibly due in part to the complexities of understanding and integrating attractions to both same- and other-sex partners. Consistent with this hypothesis, bisexual participants were more likely to be in the Middle and Late Profiles, and bisexual sexual orientation was associated with higher odds of being classified to the Teen-Onset profile in comparison to Child-Onset profile. Further, bisexual Early Profilers experienced milestones on average one year later than gay and lesbian Early Profilers. Although the findings support previous research that bisexual identities may develop later than gay and lesbian identities (Diamond, 2008; Rust, 2000), there were no stark sexual orientation differences in the timing or sequence of milestones. The recent increase in the visibility of bisexuality as a stable identity may mean that contemporary bisexual youth are more likely to self-identify as bisexual at younger ages, rather than adopting gay/lesbian or heterosexual identity labels first (Rust, 2000). Consistent with this trend, bisexual participants in our sample were on average five years younger than gay and lesbian participants. Further research with larger samples is needed to explore these differences in the identity development of bisexual individuals.

Directions for Future Research

Studying sexual orientation milestones in the context of a large-scale epidemiologic study advances knowledge about sexual minority identity development in important ways. Notably, the sampling method employed in Cal-QOL enabled us to investigate how identity development may vary across generational cohorts – a question that is a fundamental directive within developmental psychology, but that has, to date, received limited empirical evaluation in the study of sexual orientation identity development. Because participants were double-sampled from a population-based study, the data may provide useful information about the generalizability of previous research to a more general population not recruited specifically through their involvement in clinical or social support settings, or GLB community events. However, studying sexual orientation identity development via a large-scale survey framework is also accompanied by several tradeoffs, some of which can and should be addressed in future research.

Nearly all research and theory on sexual orientation identity development has drawn from convenience samples, which are inherently restricted demographically, regionally, and temporally (Saewyc, 2011). Although the Cal-QOL was derived from the population-based

CHIS, the demographic profile of the Cal-QOL sample warrants some attention. The mean age of the Cal-QOL sample was 49 years old (consistent with the average age of adult Californians) and most sexual minority respondents were well-educated and self-identified as Non-Hispanic White—consistent, too, with other population-based surveys of lesbians, gay men, and bisexual adults in the US (Black et al., 2000; Carpenter & Gates, 2008; Chandra, Mosher, Copen, & Sionean, 2011). Previous research has demonstrated that the modal demographic characteristics observed in this study are similar to other digit-dialing survey methods in general (potential bias towards older, White participants; Simon, Mercy, & Barker, 2006) and the structure of the LGB population when identified through general population survey methods (Black et al., 2000). Yet a key concern remains whether characteristics of the sample might bias the developmental trends uncovered in this study. This is difficult to determine due to the notable dearth of comparable data from other states within the US or other countries (Saewyc, 2011). Nevertheless, it is promising that in the face of the sample characteristics some of the findings mirror those of other smaller or convenience-based samples (Diamond, 1998; Herdt & Boxer, 1993; Rosario et al., 1996; Schindhelm & Hospers, 2004). It is our hope that our study stimulates additional research utilizing population survey methods both in North America and elsewhere to examine whether the results of the current study replicate in different geographic, cultural, and temporal contexts.

The sampling criteria applied in the CHIS prevented us from examining the experiences of GLB individuals younger than age 18. Thus, although we were able to consider whether older GLB adults report early development, we were unable to investigate if contemporary GLB youth report milestones at even *younger* ages than current young adult, middle-aged, and older GLB adults. Implementing questions about sexual orientation milestones into ongoing longitudinal studies of children and adolescents can explore this important question. Due to the small number of ethnic minority participants in the present sample, we were also unable to examine ethnic group differences in profile membership, or to estimate separate profiles for each ethnic group. A growing number of studies suggest that there may be racial and ethnic differences in sexual orientation identity development, possibly due to sexual orientation-related stigma within racial and ethnic minority communities (Dubé & Savin-Williams, 1999; Rosario, Schrimshaw, & Hunter, 2006). However, previous researchers have also noted the difficulty of sampling individuals who self-identify as both racial/ethnic and sexual minorities within large-scale population-based surveys, thus indicating that population-based data may not yield the power to test for racial/ethnic minority sub-group differences in sexual orientation identity development (Heckathorn, 1997; Stueve, O'Donnel, Duran, San Doval, & Blome, 2001).

The goal of the current study was to investigate the timing of milestones among self-identified GLB adults from different generation cohorts, thus we excluded participants who did not self-identify as GLB and did not provide an age of first self-identification as GLB. While it is possible that this decision may have resulted in the exclusion of some individuals who exhibit sex-centered identity development patterns, the great majority of excluded participants were middle aged and unlikely to be transitioning quickly through development of their sexual orientation ($M_{Age} = 46$, median = 45, inter-quartile range = 17.5). Many of these individuals also self-identified as heterosexual in the course of the Cal-QOL interview, and thus never had an opportunity to provide information about the first self-identification milestone, a question that was only asked of respondents who did not self-identify as heterosexual. Nevertheless, this excluded subset may be of theoretical interest in the future. Research on the sexual orientation identities of adults who exhibit same-sex oriented attractions and/or sexual behavior, but who do not self-identify as GLB or disclose a sexual minority identity, may provide additional insight into the complexities of life span and life course effects on identity development.

Future research efforts should also be directed toward developing more efficient and rigorous methods of assessing identity development. The order in which milestones were assessed in this study may have somewhat biased participants toward reporting identity-centered developmental patterns. Randomizing the order of question presentation would have removed this potential source of bias, but might also have introduced other concerns, such as differences between respondents in comprehension of the study questions. In general, large-scale epidemiologic telephone surveys are carefully worded and sequenced to ensure high levels of respondent comprehension. Asking questions that are temporally randomized increases the cognitive load for both respondents and interviewers, which may lead to its own set of performance decrements. Greater variability in patterns of development might have also been detected with more extensive assessment of developmental milestones. Future research using methodologies more favorable to randomization of questions and in depth probing of study topics could profitably investigate the nuances of sexual minority development that lie out of reach of the current methodology.

Further, the use of retrospective report to assess milestones is clearly vulnerable to known limitations that may influence the accuracy of participants' reports (e.g., Hegarty, 2009). Given the age range of the sample, some participants had to remember developmental milestones that occurred several decades earlier. Research on the recall accuracy of sexual orientation milestone data in older adults is lacking, but limited research on recall for psychosexual developmental milestones among adolescent and young adult sexual minorities has found substantial reliability (Schrimshaw, Rosario, Meyer-Bahlburg, & Sharf-Matlick, 2006). In light of the saliency of sexual orientation milestones—particularly first same-sex sexual experience and coming out—we expect that recall, while not precise, may be less prone to memory errors (Brewin, Andrews, & Gotlib, 1993; Craik, 1999; Rivers, 2001). The bias is likely to be forward telescoping (i.e., reporting onset of events closer to the time of the interview than is true; Johnson & Schultz, 2005) suggesting that older respondents would report later milestones than younger respondents. Since even the oldest participants reported a preponderance of early patterns of sexual orientation identity development, our confidence is increased that sexual orientation milestones generally occur in childhood and adolescence and can be remembered even after many years elapsed.

Finally, additional research on the developmental trajectories of bisexuals in general, and of sexual minority females in particular would be beneficial to the field. In depth qualitative and longitudinal work has stimulated debate about whether stage-sequential models of sexual orientation identity development hold for bisexual identities or accurately describe the experiences of sexual minority women. Research focused on sexual orientation milestones in general has also been scrutinized because milestone theories were largely based on retrospective studies of adult, primarily gay-identified men, because such theories often ignore emotional aspects of sexual orientation identity development (e.g., romantic feelings and interpersonal connections), and because milestone paradigms promote the assumption that sexual orientation is a stable trait that unfolds in adolescence and is consistent thereafter (Saewyc, 2011). The cross-sectional nature of the study and its focus on only four major sexual orientation milestones did not permit the examination of fluidity, other-sex sexual milestones, or trajectories of the emotional dimensions of sexual orientation identity development. Having data on both current and past self-identified sexual orientation would clearly further enhance understanding of sexual minority identity development.

Summary and Conclusions

In sum, the present study contributes in important ways to the growing literature on sexual minority identity development. Much research of late has focused on identity development in convenience samples of adolescent and young adults. Extending this research to an older and more age diverse sample in this study revealed that the majority of older participants

also report early sexual orientation identity development. While we cannot definitely conclude that there is no secular trend toward earlier coming out, we can state that early identity development has been normative at least as far back as individuals from the Greatest Generation. Closer inspection of Early Profilers in this study did not replicate the identity- and sex-centered patterns detected in previous research, but the findings did reveal the presence of a Child-Onset developing group. This group is especially noteworthy because being younger may make them more vulnerable and hence at greater risk for victimization and physical and mental health morbidities, the most serious of which are suicide and suicide attempts (Haas et al., 2011; Mays & Cochran, 2001). Examining the health status and health correlates of early developers from different age groups across the life span can provide important insights about how to maximize positive developmental outcomes and successful aging for sexual minorities.

The findings from this study provide compelling evidence that a substantial number of older GLB adults report experiencing milestones in adolescence, thus indicating that early development may not be unique to current GLB youth cohorts. The consistency of early identity development across cohorts further suggests that sexual minority individuals proceed through sexuality-related milestones in a similar developmental trajectory as their heterosexual peers (i.e., from late childhood through late adolescence). However, it is likely that the interpretations and emotional reactions to milestones may differ substantially across cohorts (e.g., current cohorts may view the emergence of same-sex attractions in adolescence and the adoption of sexual minority identities more positively than older cohorts; see Floyd & Bakeman, 2006, there may be cohort differences in levels of disclosure). Furthermore, although the Early Profile was most common, the presence of the Middle and Late Profiles, and intriguing gender differences in the timing of milestones suggest that there is substantial individual heterogeneity in when sexual minority identities emerge. Such diversity indicates that GLB individuals may vary in levels of maturity, coping capacity, and availability of social support while traversing milestones. Given the elevated prevalence of physical and mental health problems among some sexual minorities (Cochran & Mays, 2009; Cochran, Sullivan, & Mays, 2003), it is imperative that health providers, researchers, parents, and policy-makers work together to ensure that resources are available to encourage positive identity development at all stages of the life span.

Acknowledgments

The California Quality of Life Surveys were funded by National Institutes of Health (NIH) grants from the National Institute on Drug Abuse (NIDA; DA15539, DA20826) to S. D. Cochran and the National Center for Minority Health and Health Disparities (NCMHD; MD000508) to V. M. Mays. J. P. Calzo is supported by National Research Service Award number F32HD066792 from the Eunice Kennedy Shriver National Institute of Child Health & Human Development (NICHD). The content is solely the responsibility of the authors and does not necessarily represent the official views of NIH, NIDA, NCMHD, or NICHD. The authors would like to thank Noah J. Webster for his assistance with the statistical analyses of this study and the staff at the California Health Interview Survey for their assistance.

References

- Bailey JM, Dunne MP, Martin NG. Genetic and environmental influences on sexual orientation and its correlates in an Australian twin sample. *Journal of Personality and Social Psychology*. 2000; 78:524–536. [PubMed: 10743878]
- Black D, Gates GJ, Sanders S, Taylor L. Demographics of the gay and lesbian population in the United States: Evidence from available systematic data sources. *Demography*. 2000; 37(2):139–154. [PubMed: 10836173]
- Bontempo DE, D'Augelli AR. Effects of at-school victimization and sexual orientation on lesbian, gay, or bisexual youths' health risk behavior. *Journal of Adolescent Health*. 2002; 30(5):364–374. [PubMed: 11996785]

- Brewin CR, Andrews B, Gotlib IH. Psychopathology and early experience: A reappraisal of retrospective reports. *Psychological Bulletin*. 1993; 113(1):82–98. [PubMed: 8426875]
- Carpenter C, Gates GJ. Gay and lesbian partnership: evidence from California. *Demography*. 2008; 45(3):573–90. [PubMed: 18939662]
- Cass, VC. Sexual orientation identity formation: A Western phenomenon. In: Cabaj, RP.; Stein, TS., editors. *Textbook of Homosexuality and Mental Health*. American Psychiatric Press; Washington, DC: 1996. p. 227-252.
- Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance -- United States, 2009: Surveillance Summaries, June 4, 2010. *Morbidity and Mortality Weekly Report*. 2010; 59(SS-5):1–148. [PubMed: 20075837]
- Chandra, A.; Mosher, WD.; Copen, C.; Sionean, C. National Health Statistics Reports. National Center for Health Statistics; Hyattsville, MD: 2011. Sexual behaviors, sexual attraction, and sexual identity in the United States: Data from the 2006-2008 National Survey of Family Growth; p. 1-36.
- Cianciotto, J.; Cahill, S. Education Policy: Issues Affecting Lesbian, Gay, Bisexual, and Transgender Youth. The National Gay and Lesbian Task Force Policy Institute; New York: 2003.
- Cochran SD, Mays VM. Physical health complaints among lesbians, gay men, and bisexual and homosexually experienced heterosexual individuals: results from the California Quality of Life Survey. *American Journal of Public Health*. 2007; 97(11):2048–2055. [PubMed: 17463371]
- Cochran SD, Mays VM. Burden of psychiatric morbidity among lesbian, gay, and bisexual individuals in the California Quality of Life Survey. *Journal of Abnormal Psychology*. 2009; 118(3):647–58. [PubMed: 19685960]
- Cochran SD, Sullivan JG, Mays VM. Prevalence of mental disorders, psychological distress, and mental health services use among lesbian, gay and bisexual adults in the United States. *Journal of Consulting and Clinical Psychology*. 2003; 71(1):53–61. [PubMed: 12602425]
- Cohen, KM.; Savin-Williams, RC. Developmental perspectives on coming out to self and others. In: Savin-Williams, RC.; Cohen, KM., editors. *The Lives of Lesbians, Gays, and Bisexuals: Children to Adults*. Harcourt Brace; Fort Worth, TX: 1996. p. 113-151.
- Cook-Daniels L. Living memory GLBT history timeline: current elders would have been this old when these events happened.... *Journal of GLBT Family Studies*. 2008; 4(4):485–497.
- Craik, FIM. Memory, aging, and survey measurement. In: Schwarz, N.; Park, D.; Knauper, B.; Sudman, S., editors. *Cognition, aging, and self-reports*. Psychology Press; Hove, England: 1999. p. 82-99.
- D’Augelli, AR. Identity development and sexual orientation: Toward a model of lesbian, gay, and bisexual development. In: Trickett, EJ.; Watts, R.; Birman, D., editors. *Human Diversity: Perspectives on People in Context*. Jossey-Bass; San Francisco: 1994. p. 312-333.
- D’Augelli AR, Hershberger SL. Lesbian, gay, and bisexual youth in community settings: personal challenges and mental health problems. *American Journal of Community Psychology*. 1993; 21:421–448. [PubMed: 8192119]
- D’Augelli AR, Pilkington NW, Hershberger SL. Incidence and mental health impact of sexual orientation victimization of lesbian, gay, and bisexual youths in high school. *School Psychology Quarterly*. 2002; 17(2):148–167.
- Denizet-Lewis B. Coming out in middle school. *The New York Times*. September 27, 2009 :MM36.
- Diamond LM. Development of sexual orientation among adolescent and young adult women. *Developmental Psychology*. 1998; 34:1085–1095. [PubMed: 9779753]
- Diamond LM. A dynamical systems approach to the development and expression of female same-sex sexuality. *Perspectives on Psychological Science*. 2007; 2:142–161.
- Diamond LM. Female bisexuality from adolescence to adulthood: results from a 10- year longitudinal study. *Developmental Psychology*. 2008; 44(1):5–14. [PubMed: 18194000]
- Diamond, LM.; Savin-Williams, RC. Adolescent sexuality. In: Lerner, RM.; Steinberg, L., editors. *Handbook of Adolescent Psychology*. 3rd Edition. Wiley; New York: 2009. p. 479-523.
- Dubé EM. The role of sexual behavior in the identification process of gay and bisexual males. *Journal of Sex Research*. 2000; 37:123–132.
- Dubé EM, Savin-Williams RC. Sexual identity development among ethnic sexual-minority male youths. *Developmental Psychology*. 1999; 35:1389–1398. [PubMed: 10563729]

- Elder, GH.; Shanahan, MJ. The life course and human development. In: Lerner, RM.; Damon, W., editors. *Handbook of Child Psychology*. 6th Edition. Vol. Volume 1: Theoretical Models of Human Development. John Wiley & Sons, Inc.; Hoboken, NJ: 2006. p. 665-717.
- Evans, NJ.; D'Augelli, AR. Lesbians, gay men, and bisexual people in college. In: Savin-Williams, RC.; Cohen, KM., editors. *The Lives of Lesbians, Gays, and Bisexuals: Children to Adults*. Harcourt Brace College Publishers; Orlando, FL: 1996. p. 201-226.
- Floyd FJ, Bakeman R. Coming-out across the life course: implications of age and historical context. *Archives of Sexual Behavior*. 2006; 35(3):287–296. [PubMed: 16804747]
- Floyd FJ, Stein TS. Sexual orientation identity formation among gay, lesbian, and bisexual youths: multiple patterns of milestone experiences. *Journal of Research on Adolescence*. 2002; 12(2):167–191.
- Friedman MS, Marshal MP, Stall R, Cheong JW, Wright ER. Gay-related development, early abuse and mental health outcomes among gay males. *AIDS and Behavior*. 2008; 12:891–902. [PubMed: 17990094]
- Fuller-Iglesias, H.; Antonucci, TC.; Smith, J. Theoretical perspectives on life span and life course development. In: Antonucci, TC.; Jackson, JS.; Sterns, H., editors. *Annual Review of Gerontology and Geriatrics*. Vol. Volume 29. Springer; New York: 2010.
- Halpern CT, Joyner K, Udry JR, Suchindran C. Smart teens don't have sex (or kiss much either). *Journal of Adolescent Health*. 2000; 26(3):213–225. [PubMed: 10706169]
- Hass AP, Eliason M, Mays VM, Mathy RM, Cochran SD, D'Augelli AR, Clayton PJ. Suicide and suicide risk in lesbian, gay, bisexual, and transgender populations: review and recommendations. *Journal of Homosexuality*. 2011; 58:10–51. [PubMed: 21213174]
- Heckathorn DD. Respondent-driven sampling: a new approach to the study of hidden populations. *Social Problems*. 1997; 36:416–430.
- Hegarty P. Toward an LGBT-informed paradigm for children who break gender norms: comment on Drummond et al. (2008) and Rieger et al. (2008). *Developmental Psychology*. 2009; 45(4):895–900. [PubMed: 19586166]
- Henson JM, Reise SP, Kim KH. Detecting mixtures from structural model differences using latent variable mixture modeling: A comparison of relative model fit statistics. *Structural Equation Modeling*. 2007; 14:202–226.
- Herd, G.; Boxer, AM. *Children of Horizons: How Gay and Lesbian Teens are Leading a New Way Out of the Closet*. Beacon Press; Boston: 1993.
- Herek GM. Gender gaps in public opinion about lesbian women and gay men. *Public Opinion Quarterly*. 2002; 66:40–66.
- Johnson EO, Schultz L. Forward telescoping bias in reported age of onset: an example from cigarette smoking. *International Journal of Methods in Psychiatric Research*. 2005; 14(3):119–129. [PubMed: 16389888]
- Kinnish KK, Strassberg DS, Turner CW. Sex differences in the flexibility of sexual orientation: a multidimensional retrospective assessment. *Archives of Sexual Behavior*. 2005; 34(2):173–183. [PubMed: 15803251]
- Kite, ME.; Whitley, BE. Do heterosexual women and men differ in their attitudes toward homosexuality? A conceptual and methodological analysis. In: Herek, G., editor. *Stigma and Sexual Orientation: Understanding Prejudice Against Lesbian Women, Gay Men, and Bisexuals*. Sage; Thousand Oaks, CA: 1998. p. 39-61.
- Kitzinger C, Wilkinson S. Transitions from heterosexuality to lesbianism: The discursive production of lesbian identities. *Developmental Psychology*. 1995; 31:95–104.
- Kline, RB. *Principles and Practice of Structural Equation Modeling*. Guilford; New York: 1998.
- Kosciw, JG.; Greytak, EA.; Diaz, EM.; Bartkiewicz, MJ. *The 2009 National School Climate Survey: The experiences of lesbian, gay, bisexual and transgender youth in our nation's schools*. GLSEN; New York: 2010.
- Lo Y, Mendell N, Rubin D. Testing the number of components in a normal mixture. *Biometrika*. 2001; 88:767–778.

- Marsh HW, Lüdtke O, Trautwein U, Morin AJS. Classical latent profile analysis of academic self-concept dimensions: synergy of person- and variable-centered approaches to theoretical models of self-concept. *Structural Equation Modeling*. 2009; 16(2):191–225.
- Mays VM, Cochran SD. Mental health correlates of perceived discrimination among lesbian, gay and bisexual adults in the United States. *American Journal of Public Health*. 2001; 91(11):1869–1876. [PubMed: 11684618]
- McLachlan, G.; Peel, D. *Finite mixture models*. Wiley; New York: 2000.
- Menard, Scott. *Applied logistic regression analysis*. 2nd Edition. Sage Publications; Thousand Oaks, CA: 2002.
- Mustanski BS, Chivers ML, Bailey JM. A critical review of recent biological research on human sexual orientation. *Annual Review of Sex Research*. 2002; 13:89–140.
- Muthén B, Muthén L. Integrating person-centered and variable-centered analyses: growth mixture modeling with latent trajectory classes. *Alcoholism: Clinical and Experimental Research*. 2000; 24(6):882–891.
- Muthén, L.; Muthén, B. *Mplus user's guide*. 5th ed. Muthén & Muthén; Los Angeles: 2008.
- Nylund KL, Asparouhov A, Muthén B. Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling*. 2007; 14:535–569.
- Pastor DA, Barron KE, Miller BJ, Davis SL. A latent profile analysis of college students' achievement goal orientation. *Contemporary Educational Psychology*. 2007; 32:8–47.
- Peplau LA, Spalding LR, Conley TD, Veniegas RC. The development of sexual orientation in women. *Annual Review of Sex Research*. 1999; 10:70–99.
- Rivers I. Retrospective reports of school bullying: Stability of recall and its implications for research. *British Journal of Developmental Psychology*. 2001; 19(Pt. 1):129–141.
- Rosario M, Bahlburg H. F. L. Meyer, Hunter J, Exner TM, Gwadz M, Arden KM. Psychosexual development of urban lesbian, gay, and bisexual youths. *Journal of Sex Research*. 1996; 33:113–126.
- Rosario M, Rotheram-Borus MJ, Reid H. Gay-related stress and its correlates among gay and bisexual male adolescents of predominantly Black and Hispanic background. *Journal of Community Psychology*. 1996; 24:136–159.
- Rosario M, Schrimshaw EW, Hunter J. Ethnic/Racial differences in the coming-out process of lesbian, gay, and bisexual youths: a comparison of sexual identity development over time. *Cultural Diversity and Ethnic Minority Psychology*. 2004; 10(3):215–228. [PubMed: 15311975]
- Rosario M, Schrimshaw EW, Hunter J, Braun L. Sexual identity development among lesbian, gay, and bisexual youths: Consistency and change over time. *Journal of Sex Research*. 2006; 43:46–58. [PubMed: 16817067]
- Rotheram-Borus, MJ.; Langabeer, KA. Developmental trajectories of gay, lesbian, and bisexual youths. In: D'Augelli, AR.; Patterson, CJ., editors. *Lesbian, gay, and bisexual identities and youth: Psychological perspectives*. Oxford University Press; Oxford: 2001. p. 97–128.
- Rust, PCR. *Bisexuality in the United States: A Social Science Reader*. Columbia University Press; New York: 2000.
- Saewyc EM. Research on adolescent sexual orientation: development, health disparities, stigma, and resilience. *Journal of Research on Adolescence*. 2011; 21(1):256–272.
- Sanlo R. Lesbian, gay, and bisexual college students: risk, resiliency, and retention. *Journal of College Student Retention: Research Theory and Practice*. 2004; 6(1):97–110.
- Savin-Williams, RC. Lesbian, gay male, and bisexual adolescents. In: D'Augelli, AR.; Patterson, CJ., editors. *Lesbian, Gay, and Bisexual Identities Over the Lifespan: Psychological Perspectives*. Oxford University Press; New York: 1995. p. 165–189.
- Savin-Williams, RC. “. . . And then I became gay”: Young Men's Stories. Routledge; New York: 1998.
- Savin-Williams RC, Diamond LM. Sexual identity trajectories among sexual-minority youths: Gender comparisons. *Archives of Sexual Behavior*. 2000; 29:607–627. [PubMed: 11100265]

- Schindhelm RK, Hoppers HJ. Sex with men before coming-out: Relation to sexual activity and sexual risk-taking behavior. *Archives of Sexual Behavior*. 2004; 33:585–591. [PubMed: 15483372]
- Schrimshaw EW, Rosario M, Meyer-Bahlburg HFL, Scharf-Matlick AA. Test-retest reliability of self-reported sexual behavior, sexual orientation, and psychosexual milestones among gay, lesbian, and bisexual youths. *Archives of Sexual Behavior*. 2006; 35(2):225–234. [PubMed: 16752124]
- Simon TR, Mercy JA, Barker L. Can we talk? Importance of random-digit-dial surveys for injury prevention research. *American Journal of Preventive Medicine*. 2006; 31(5):406–410. [PubMed: 17046412]
- Sophie J. A critical examination of stage theories of lesbian identity development. *Journal of Homosexuality*. 1985; 12:39–51. [PubMed: 3835201]
- Strauss, W.; Howe. *Generations: The History of America's Future, 1584 to 2069*. William Morrow and Company, Inc.; New York: 1992.
- Stueve A, O'Donnell LN, Duran R, San Doval A, Blome J. Time-space sampling in minority communities: results with young Latino men who have sex with men. *American Journal of Public Health*. 2001; 91(6):922–926. [PubMed: 11392935]
- Toomey RB, Ryan C, Diaz RM, Card NA, Russell ST. Gender-nonconforming lesbian, gay, bisexual, and transgender youth: school victimization and young adult psychosocial adjustment. *Developmental Psychology*. 2010; 46(6):1580–1589. [PubMed: 20822214]
- Troiden RR. The formation of homosexual identities. *Journal of Homosexuality*. 1989; 17:43–73. [PubMed: 2668403]
- Vermunt, JK.; Magidson, J. Latent class cluster analysis. In: Hagenaars, JA.; McCutcheon, A., editors. *Applied Latent Class Analysis*. Cambridge University Press; Cambridge, UK: 2002. p. 89-106.
- Yang C. Evaluating latent class analyses in qualitative phenotype identification. *Computational Statistics & Data Analysis*. 2006; 50:1090–1104.

Figure 1.

Results of latent profile analyses of sexual orientation milestones from gay men, lesbians, and bisexuals in the California Quality of Life Surveys I & II. Attraction: Age of first attraction to member of same sex. Self ID: Age of first self-recognition of gay, lesbian, bisexual, or non-heterosexual identity. Sex: Age of first same-sex sexual experience. Out: Age for first disclosure of gay, lesbian, bisexual, or non-heterosexual identity, same-sex attraction, or same-sex sexual experience.

Figure 2.

Results of latent profile analysis on the Early Profilers in the California Quality of Life Surveys I & II. Attraction: Age of first attraction to member of same sex. Self ID: Age of first self-recognition of gay, lesbian, bisexual, or non-heterosexual identity. Sex: Age of first same-sex sexual experience. Out: Age for first disclosure of gay, lesbian, bisexual, or non-heterosexual identity, same-sex attraction, or same-sex sexual experience. Child: Child-Onset Trajectory. Teen: Teen-Onset Trajectory.

Table 1

Demographics, Generation Status, and Descriptive Statistics of Gay Men, Lesbians, and Bisexuals in California Quality of Life Surveys I & II

Variable	Mean (SD) or Column % (n)		
	Sample (n = 1260)	Men (n = 674)	Women (n = 586)
Age	49.31 (12.25)	50.62 (12.34)	47.81(11.99)
Generation Status			
Generation Y	6.9% (87)	5.6% (38)	8.4% (49)
Generation X	14% (176)	11.7% (79)	16.6% (97)
Baby Boom	58.8% (741)	57.9% (390)	59.9% (351)
Greatest Gen.	20.3% (256)	24.8% (167)	15.2% (89)
Sexual Orientation			
Bisexual	27.0% (340)	14.7% (99)	41.1% (241)
Gay/Lesbian	73.0% (920)	85.3% (575)	58.9% (345)
Ethnicity			
Hispanic	8.2% (103)	10.1% (68)	6.0% (35)
White	82.9% (1044)	81.9% (552)	84.0% (492)
Black	4.7% (59)	3.6% (24)	6.0% (35)
Asian/Pac. I.	2.8% (35)	3.4% (23)	2.0% (12)
Native Am.	1.5% (19)	1.0% (7)	2.0% (12)
Marital Status			
Married	10.0% (126)	5.9% (40)	14.7% (86)
Cohabiting	30.6% (386)	26.9% (181)	35.0% (205)
Widowed	1.7% (22)	1.6% (11)	1.9% (11)
Divorced	10.5% (132)	7.1% (48)	14.3% (84)
Separated	2.1% (27)	1.2% (8)	3.2% (19)
No Relationship	45% (567)	57.3% (386)	30.9% (181)
College Degree	62.5% (788)	63.1% (425)	61.9% (363)
Heterosexual Sex			
Since age 18	72.9% (919)	61.7% (416)	85.8% (503)
In past year	16.0% (201)	7.9% (53)	25.3% (148)
Milestones			
Attraction	14.80 (7.54)	12.76 (6.05)	17.16 (8.36)
Self-ID	19.67 (7.70)	17.76 (6.54)	21.99 (8.34)
Sex Experience	20.55 (7.57)	18.46 (6.59)	23.02 (7.91)
Coming Out	23.88 (8.26)	22.96 (7.84)	24.93 (8.61)

Fit Indices for Latent Profile Analyses on Sexual Orientation Milestones for Gay Men, Lesbians, and Bisexuals in the California Quality of Life Surveys I & II (Final Solutions in Bold)

Table 2

Profiles	No. Free Parameters	Loglikelihood	AIC	BIC	BIC (N-adj.)	LMR/BLRT <i>p</i>	No. Classes with <i>n</i> < 5% study sample
Main Analysis (<i>N</i> = 1,260)							
2	13	-15865.97	31757.95	31824.75	31783.46	.00 .00	0
3	18	-15622.72	31281.44	31373.94	31316.77	.00 .00	0
4	23	-15499.11	31044.22	31162.41	31089.36	.08 .00	1
5	28	-15385.97	30827.94	30971.83	30882.88	.45 .00	2
Sub-Analysis on Early Profilers (<i>N</i> = 951)							
2	13	-10493.29	21012.57	21075.72	21034.43	.00 .00	0
3	18	-10380.10	20796.20	20883.63	20826.47	.03 .00	1
4	23	-10329.28	20704.55	20816.27	20743.23	.02 .00	2
5	28	-10278.86	20613.72	20749.73	20660.80	.11 .00	1

Table 3

Demographic Characteristics of the Latent Profiles of Gay Men, Lesbians, and Bisexuals in the California Quality of Life Surveys I & II

Variable	Mean (SD) or Column % (n)		
	EARLY PROFILE (n = 951)	MIDDLE PROFILE (n = 239)	LATE PROFILE (n = 70)
Age	47.66 (12.40)	52.66 (10.13)	60.34(8.29)
Age Range	18-80	28-82	42-84
Generation Status			
Generation Y	9.0% (86)	0.4% (1)	0% (0)
Generation X	15.4% (146)	12.6% (30)	0% (0)
Baby Boom	59.5% (566)	60.7% (145)	42.9% (30)
Greatest Gen.	16.1% (153)	26.4% (63)	57.1% (40)
Gender			
Male	60.7% (577)	33.5% (80)	24.3% (17)
Female	39.3% (374)	66.5% (159)	75.7% (53)
Sexual Orientation			
Bisexual	24.7% (235)	31.8% (76)	41.4% (29)
Gay/Lesbian	75.3% (716)	68.2% (163)	58.6% (41)
Ethnic Minority	17.9% (171)	16.3% (39)	8.6% (6)
Current/Past Hetero. Marriage	19.4% (184)	37.1% (89)	48.7% (34)
College Degree	58.8% (559)	74.9% (179)	71.4% (50)
Heterosexual Sex			
Since age 18	67.8% (645)	87.9% (210)	91.4% (64)
In past year	15.7% (149)	17.2% (41)	15.7% (11)

Table 4

Mean Gender and Sexual Orientation Differences on Age of Milestones for the Main Latent Profile Analysis and the Sub-Analysis in the California Quality of Life Surveys I & II

	Attraction <i>M(SE)</i>	Self-ID <i>M(SE)</i>	Sex <i>M(SE)</i>	Out <i>M(SE)</i>
Main Analysis (N = 1260)				
<u>EARLY PROFILERS</u>				
Males (<i>n</i> = 577)	11.67 (4.75)	16.12 (4.54)	17.05 (4.79)	20.76(4.68)
Females (<i>n</i> = 374)	13.84 (4.86)	17.50 (4.02)	18.77 (3.66)	20.04(4.02)
<i>F(df)</i>	43.55 (1,946)***	24.06 (1,872)***	29.70 (1,888)***	1.35 (1,930)
Bisexual (<i>n</i> = 235)	13.50 (.33)	17.29 (.34)	17.88 (.33)	21.02 (.30)
Gay/Lesbian (<i>n</i> = 716)	12.21 (.18)	16.47 (.17)	17.66 (.17)	20.29 (.17)
<i>F(df)</i>	11.03 (1, 945)**	4.48 (1, 871)*	.34 (1, 887)	4.39 (1, 929)*
<u>MIDDLE PROFILERS</u>				
Males (<i>n</i> = 80)	17.11(6.84)	25.72(6.50)	25.72(7.22)	33.81(7.77)
Females (<i>n</i> = 159)	19.46(6.34)	26.40(5.30)	27.35(5.76)	30.75(6.22)
<i>F(df)</i>	5.19 (1,234)*	0.42 (1,218)	3.07 (1,224)	5.20 (1,232)*
Bisexual (<i>n</i> = 76)	20.02 (.76)	25.41 (.75)	27.17 (.78)	32.80 (.74)
Gay/Lesbian (<i>n</i> = 163)	18.05 (.51)	26.46 (.46)	26.67 (.51)	31.27 (.50)
<i>F(df)</i>	4.48 (1, 233)*	1.38 (1, 217)	.28 (1, 223)	2.81 (1, 231)
<u>LATE PROFILERS</u>				
Males (<i>n</i> = 17)	29.12(8.61)	37.93(6.24)	33.44(13.45)	47.24(10.13)
Females (<i>n</i> = 53)	34.02(10.69)	40.95(5.70)	39.08(7.47)	41.85(5.76)
<i>F(df)</i>	1.98 (1,66)	3.63 (1,56)	5.82 (1,62)*	4.38 (1,66)*
Bisexual (<i>n</i> = 29)	34.02 (1.99)	42.28 (1.25)	37.94 (1.85)	43.84 (1.28)
Gay/Lesbian (<i>n</i> = 41)	31.99 (1.63)	38.94 (.95)	37.53 (1.50)	42.69 (1.08)
<i>F(df)</i>	1.39 (1, 65)	4.36 (1, 55)*	.03 (1, 61)	.45 (1, 65)
Sub-Analysis on Early Profilers (n = 951)				
<u>CHILD-ONSET</u>				
Males (<i>n</i> = 207)	7.58(3.34)	11.89(3.76)	14.32(4.48)	18.23(4.36)
Female (<i>n</i> = 77)	8.29(3.51)	12.29(3.52)	15.68(2.86)	16.37(2.99)
<i>F(df)</i>	1.28 (1,281)	0.47 (1,256)	3.97 (1,263)*	8.20 (1,272)**
Bisexual (<i>n</i> = 48)	8.06 (.52)	12.64 (.70)	13.93 (.70)	17.41 (.63)
Gay/Lesbian (<i>n</i> = 236)	7.72 (.22)	11.90 (.25)	14.80 (.28)	17.79 (.27)
<i>F(df)</i>	.34 (1, 280)	.93 (1, 255)	1.30 (1, 262)	.30 (1, 271)

	Attraction <i>M(SE)</i>	Self-ID <i>M(SE)</i>	Sex <i>M(SE)</i>	Out <i>M(SE)</i>
<u>TEEN-ONSET</u>				
Males (<i>n</i> = 370)	13.96(3.79)	18.37(3.09)	18.57(4.26)	22.14(4.26)
Female (<i>n</i> = 297)	15.29(4.06)	18.90(2.82)	19.55(3.42)	20.97(3.70)
<i>F(df)</i>	16.05 (1,662) ***	6.48 (1,613) *	8.30 (1,622) **	6.43 (1,655) *
Bisexual (<i>n</i> = 187)	15.13 (.30)	18.45 (.25)	19.01 (.33)	22.05 (.30)
Gay/Lesbian (<i>n</i> = 480)	14.33 (.18)	18.65 (.14)	18.99 (.18)	21.45 (.18)
<i>F(df)</i>	4.82 (1, 661) *	.44 (1, 612)	.00 (1, 621)	2.81 (1, 654)

* *Note.* $p < .05$,

** $p < .01$,

*** $p < .001$.

Analyses of gender differences control for age. Analyses for sexual orientation differences control for age and gender.

Table 5

Demographic Characteristics of the Child- and Teen-Onset Profiles from the Sub-Analysis on the California Quality of Life Surveys I & II

	Mean (SD) or Column % (n)	
	CHILD-ONSET (n = 284)	TEEN-ONSET (n = 667)
Age	47.19 (13.08)	47.86 (12.10)
Age Range	18-80	18-79
Generation Status		
Generation Y	11.3% (32)	8.1% (54)
Generation X	13.4% (38)	16.2% (108)
Baby Boom	58.5% (166)	60.0% (400)
Greatest Gen.	16.9% (48)	15.7% (105)
Gender		
Male	72.9% (207)	55.5% (370)
Female	27.1 (77)	44.5% (297)
Sexual Orientation		
Bisexual	16.9% (48)	28.0% (187)
Gay/Lesbian	83.1% (236)	72.0% (480)
Ethnic Minority	22.8% (65)	15.8% (106)
Current/Past Hetero. Marriage	15.6% (44)	20.9% (140)
College Degree	51.1% (145)	62.1% (414)
Heterosexual Sex		
Since age 18	59.9% (170)	71.2% (475)
In past year	12.0% (34)	17.2% (115)

Table 6

Multinomial Logistic Regression Results Predicting Membership to the Middle and Late Profiles in the California Quality of Life Surveys I & II

	Middle				Late			
	<i>b</i>	<i>SE</i>	<i>O.R.</i>	(95% <i>CI</i>)	<i>b</i>	<i>SE</i>	<i>O.R.</i>	(95% <i>CI</i>)
Age	0.05***	.01	1.05	(1.03-1.06)	0.13***	.02	1.14	(1.11-1.18)
Gender (0=Male, 1=Female)	1.19***	.17	3.29	(2.34-4.62)	2.03***	.35	7.61	(3.87-14.97)
Bisexual (0=No, 1=Y)	0.01	.23	1.01	(0.64-1.58)	0.41	.38	1.50	(0.72-3.14)
Ethnicity (0=White, 1=Non-White)	0.41	.22	1.51	(0.99-2.30)	0.08	.51	1.08	(0.40-2.91)
Current/Past Heterosexual Marriage (0=No, 1=Y)	0.48*	.20	1.62	(1.10-2.41)	1.02**	.32	2.76	(1.46-5.20)
College Degree (0=No, 1=Y)	0.74***	.17	2.10	(1.50-2.95)	0.52	.32	1.68	(0.91-3.12)
Heterosexual Sex Since Age 18 (0=No, 1=Y)	0.88***	.23	2.42	(1.55-3.78)	0.84	.47	2.32	(0.92-5.83)
Heterosexual Sex in Past Year (0=No, 1=Y)	-0.21	.28	0.81	(0.47-1.41)	-0.40	.48	0.67	(0.26-1.70)

* *Note.* $p < .05$,

** $p < .01$,

*** $p < .001$.

Early Profile is the Reference Group. $N=1,260$.

Table 7

Binomial Logistic Regression Results Predicting Membership to the Teen-Onset Profile in the California Quality of Life Surveys I & II

	Teen-Onset			
	<i>b</i>	<i>SE</i>	<i>O.R.</i>	(95% <i>CI</i>)
Age	0.01	.01	1.01	(0.99-1.02)
Gender (0=Male, 1=Female)	0.68***	.17	1.97	(1.42-2.73)
Bisexual (0=No, 1=Y)	0.64*	.28	1.90	(1.11-3.26)
Ethnicity (0=White, 1=Non-White)	-0.37	.19	0.69	(0.47-1.00)
Current/Past Heterosexual Marriage (0=No, 1=Y)	0.09	.24	1.09	(0.68-1.74)
College Degree (0=No, 1=Y)	0.50**	.15	1.65	(1.23-2.21)
Heterosexual Sex Since Age 18 (0=No, 1=Y)	0.20	.17	1.22	(0.88-1.69)
Heterosexual Sex in Past Year (0=No, 1=Y)	-0.31	.32	0.74	(0.39-1.38)

* *Note.* $p < .05$,

** $p < .01$,

*** $p < .001$.

Child-Onset Profile is the Reference Group. $n=951$.