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Sexual Identity Development among Gay, Lesbian, and Bisexual Youths: Consistency and Change Over Time

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Abstract

A longitudinal report of 156 gay, lesbian, and bisexual youths examined changes in sexual identity over time. Fifty-seven percent of the youths remained consistently self-identified as gay/lesbian, 18% transitioned from bisexual to gay/lesbian, and 15% consistently identified as bisexual over time. Although youths who consistently identified as gay/lesbian did not differ from other youths on time since experiencing sexual developmental milestones, they reported current sexual orientation and sexual behaviors that were more same-sex centered and they scored higher on aspects of the identity integration process (e.g., more certain, comfortable, and accepting of their same-sex sexuality, more involved in gay-related social activities, more possessing of positive attitudes toward homosexuality, and more comfortable with others knowing about their sexuality) than youths who transitioned to a gay/lesbian identity and youths who consistently identified as bisexual. Contrary to the hypothesis that females are more sexually fluid than males, female youths were less likely to change identities than male youths. The finding that youths who transitioned to a gay/lesbian identity differed from consistently gay/lesbian youths suggests that identity integration continues after the adoption of a gay/lesbian sexual identity.

Keywords

Coming-out process; sexual identity; sexual orientation; sexual behavior; internalized homophobia; gay; lesbian; bisexual; adolescents; longitudinal; gender differences

The development of a gay, lesbian, or bisexual (GLB) sexual identity is a complex and often difficult process. Unlike members of other minority groups (e.g., ethnic and racial minorities), most GLB individuals are not raised in a community of similar others from whom they learn about their identity and who reinforce and support that identity. Rather, GLB individuals are often raised in communities that are either ignorant of or openly hostile toward homosexuality. Because sexual identity development is a process for which GLB

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individuals have been unprepared and which is contextually unsupported and stigmatized, it would seem that the process would be characterized by inconsistency or incongruence among its affective, cognitive, and behavioral components, such that behavior may not always coincide with affect and/or identity.

However, psychological theory has long maintained that individuals seek to achieve congruence among affect, cognitions, and behaviors because incongruity generates psychological tension (e.g., Devos & Banaji, 2003; Eagly & Chaiken, 1993, 1998; Festinger, 1957; Fiske & Taylor, 1991; Harmon-Jones & Mills, 1999). Thus, same-sex oriented affect and behavior may lead individuals to adopt an identity consistent with such sentiments and behavior (e.g. as gay or lesbian). Similarly, identification as gay or lesbian may lead individuals to engage in sexual behaviors consistent with that identity. Indeed, the incongruence among gay identity and heterosexual behavior has been used to explain the eventual transition from heterosexual to homosexual behavior, so as to eliminate dissonance between identity and behavior (Higgins, 2002). In this report, we examine consistency and change in GLB sexual identity, as well as the congruence between changes in identity and other aspects of sexuality (e.g., behavior, affect, and attitudes).

Sexual identity development for GLB individuals, also known as the “coming-out process,” has received considerable attention, resulting in numerous theoretical models (e.g., Cass, 1979; Chapman & Brannock, 1987; Fassinger & Miller, 1996; Minton & McDonald, 1984; Morris, 1997; Rosario, Hunter, Maguen, Gwadz, & Smith, 2001; Troiden, 1989; see Eliason, 1996 for review). These theoretical models, taken together, describe a process of identity formation and integration as individuals strive for congruence among their sexual orientation (i.e., sexual attractions, thoughts, and fantasies), sexual behavior, and sexual identity. Identity formation consists of becoming aware of one’s unfolding sexual orientation, beginning to question whether one may be GLB, and exploring that emerging GLB identity by becoming involved in gay-related social activities and/or sexual activities (Cass, 1979; Chapman & Brannock, 1987; Morris, 1997; Troiden, 1989). Identity integration involves incorporating and consolidating a GLB identity. This is evident by the individual coming to accept a GLB identity, resolving internalized homophobia by transforming negative attitudes into positive attitudes, feeling comfortable with the idea that others may know about the unfolding identity, and disclosing that identity to others (Morris, 1997; Rosario et al., 2001). Identity formation and integration are involved in a reciprocal process. They share some common components, such as gay-related social activities, that serve as both a facilitator and outcome of identity development over time.

Research on Identity Formation and Integration

Research on the sexual identity development of GLB individuals has focused primarily on the age of various developmental milestones associated with identity formation (D’Augelli & Hershberger, 1993; Diamond, 1998; Dubé, 2000; Dubé & Savin-Williams, 1999; Floyd & Stein, 2002; Maguen, Floyd, Bakeman, & Armistead, 2002; McDonald, 1982; Rosario et al., 1996; Rust, 1993; Savin-Williams, 1998; Savin-Williams & Diamond, 2000; Troiden, 1989; Whitam, Daskalos, Sobolewski, & Pedilla, 1998). Although the studies generally support an overall linear trend from sexual attractions to sexual activity to self-identification as GLB at the group level, they also highlight considerable variability at the individual level. However, the studies are limited because they utilize retrospective reports that may bias results, given the tendency of people both to craft narratives consistent with their current condition and to minimize past fluctuations or changes (Henry, Moffitt, Caspi, Langley, & Silva, 1994; Ross, 1989). Thus, the retrospective design may overestimate the linear nature or consistency of the data. Developmental researchers have argued that GLB sexual identity development should be studied longitudinally and prospectively (Boxer & Cohler, 1989; D’Augelli, 1994).

Only two longitudinal and prospective studies have examined changes in sexual identity over time, both of which were conducted among young women (Diamond, 2000; 2003; Sophie, 1986). Although no comparable studies exist on the sexual identity development of males, three longitudinal studies of young men have examined changes in sexual attractions (Dickson, Paul, & Herbison, 2003; Stokes, Damon, & McKirnan, 1997; Stokes, McKirnan, & Burzette, 1993). Taken together, the studies have found considerable consistency, as well as change, in sexual self-identification and attractions over time. For example, among 80 female youths (65% college students, and over sampled for youths who did not self-identify as lesbian, bisexual, or straight), Diamond (2000; 2003) found that 70% were consistent in their self-identification as lesbian, bisexual or unlabeled after two years and 50% were consistent after five years. An additional 15% transitioned to a lesbian or bisexual identity after two years, as did 14% after five years. Few youths transitioned from a lesbian, bisexual, or unlabeled identity to a straight identity. Among 216 behaviorally bisexual men (ages 18 – 30 years), Stokes and colleagues (1997) found that over the course of one year, 49% reported no changes in sexual orientation, 34% became more homosexually oriented, and 17% more heterosexually oriented. Clearly, the consistency and change documented by these various research studies must now be understood.

Prospective changes in GLB sexual identity would be expected to be influenced by aspects of earlier sexual identity formation, such as time since the occurrence of sexual developmental milestones. Sexual identity formation takes time because many GLB youths may go through a period of sexual questioning, experimentation, and conflict before assuming and consistently self-identifying as GLB. Thus, we hypothesize that youths for whom more time has passed since reaching various sexual developmental milestones are more likely to report a sexual identity that is consistently GLB than youths who reached the milestones more recently. The one study examining this hypothesis (Diamond, 2003) may have had too little statistical power to detect differences in the age of sexual developmental milestones between female youths maintaining an identity as lesbian or bisexual and those youths who changed to a straight or unlabeled identity.

Changes in GLB sexual identity also would be expected to correlate with other aspects of sexuality more broadly, specifically, sexual orientation and sexual behavior. Given congruence theory, we hypothesize that youths with a consistent gay/lesbian identity would have a sexual orientation that is more same-sex centered and would be more likely to report same-sex behaviors but less likely to report other-sex behaviors than youths who, for example, recently transitioned from a bisexual identity to a gay/lesbian identity. Indeed, Diamond (2003) found that female youths who were consistent in their lesbian or bisexual identity reported more same-sex sexual attractions than peers who transitioned from a lesbian or bisexual identity to a heterosexual or unlabeled identity. Similarly, sexual behavior (e.g., number of female sexual partners) differed between those with a consistent sexual identity and those who relinquished their lesbian/bisexual identity. Unfortunately, no comparisons were made between the consistently lesbian and bisexual youths. Regardless, research among adults has not found a high level of congruity among aspects of sexuality (Laumann, Gagnon, Michael, & Michaels, 1994). Perhaps external constraints retard or impede congruence, such as living in potentially hostile communities (e.g., rural settings) as compared with more supportive communities (e.g., urban environments).

Finally, we hypothesize that changes in sexual identity would be expected to influence aspects of identity integration, given the need for congruence discussed above. Although research has not examined this hypothesis longitudinally, cross-sectional research has found that differences in sexual identity were associated with differences in aspects of identity integration. In an earlier report on our sample, we found that youths who self-identified as gay/lesbian, as compared with bisexual, were involved in more gay-related social activities,

endorsed more positive attitudes toward homosexuality, were more comfortable with other individuals knowing about their same-sex sexuality, and disclosed their sexual identity to more individuals (Rosario et al., 2001). However, this past report neither examined changes in sexual identity nor investigated the longitudinal relations between changes in sexual identity and aspects of identity integration.

Gender

The individual variability in the age of sexual developmental milestones mentioned earlier has lead researchers to critique linear models of development particularly for women (e.g., Diamond, 1998; Horowitz & Newcomb, 2001; Kitzinger & Wilkinson, 1995; McDonald, 1982; Rust, 1993; Savin-Williams, 1998; see Schneider, 2001 for review). Theorists have suggested that women are more likely than men to self-identify as bisexual and that women are more “fluid” or “plastic” in their sexual identity than men (e.g., Baumeister, 2000; Kitzinger & Wilkinson, 1995; Peplau, 2003; Rust, 1993), although others dispute these claims because they consider the research inconclusive (Barber, 2000). The available evidence is mixed. Several studies have found that more female youths identified as bisexual than did male youths (e.g., Dempsey, Hiller, & Harrison, 2001; Savin-Williams & Diamond, 2000). However, a large national study found that female youths were no more likely than male peers to identify as bisexual (Narring, Stronski Huwiler, & Michaud, 2003). In addition, studies have found some gender differences in the average age and order of various sexual developmental milestones (e.g., D’Augelli & Hershberger, 1993; Rosario et al., 1996; Savin-Williams & Diamond, 2000), but not in all instances (Floyd & Stein, 2002; Maguen et al., 2002). Despite these findings, the potential role of gender on changes in sexual identity remains unexamined because the studies examining longitudinal changes in sexual identity development have been based on single-sex samples (e.g., Diamond, 2000; Stokes et al., 1997).

The Current Report

In this report, we examine consistency and change in sexual identity over time among GLB youths. Further, we examine how GLB youths who remain consistent in their sexual identity differ from those youths who have changed their sexual identity with respect to sexual identity formation (i.e., sexual developmental milestones, sexual orientation, and sexual behavior) and identity integration (i.e., comfort and acceptance of GLB identity, involvement in gay social activities, positive attitudes toward homosexuality, comfort with others knowing about their sexuality, and self-disclosure of identity to others). We hypothesize that youths who are consistent over time in a gay/lesbian identity will have been aware of their same-sex sexual orientation for a longer period of time than youths who have changed sexual identities. We hypothesize that consistently identified gay/lesbian youths have a current sexual orientation that is more same-sex centered, report a higher prevalence of sexual behavior with the same sex but a lower prevalence of sexual behavior with the other sex, and evidence higher levels of identity integration than youths who have changed sexual identities or consistently identified as bisexual. Differences also are hypothesized between consistently bisexual youths and those who have changed identities. The inequalities are such that we hypothesize that youths who have transitioned from a bisexual to a gay/lesbian identity are more likely than consistently bisexual youths to have a current sexual orientation that is more same-sex centered, report a higher prevalence of sexual behavior with the same sex but a lower prevalence of sexual behavior with the other sex, and evidence higher levels of identity integration. In addition, we examine potential gender differences in consistency and change in sexual identity, given the hypothesis in the literature that female youths are more fluid in their sexual identity than male peers.

Method

Participants

Male and female youths, ages 14 to 21 years, were recruited from organizations that serve GLB youths in New York City, including three gay-focused community-based organizations (CBOs) and two GLB college student organizations from public colleges. Most youths (85%) were recruited from the three CBOs and 15% from the college organizations. Youths were recruited from October 1993 through June 1994, with follow-up interviews conducted through August 1995.

Of the 164 participants interviewed at baseline, eight were excluded because five were ineligible, two provided duplicate data, and one provided invalid data. The final sample consisted of 156 youths (51% male) with a mean age of 18.3 years ($SD = 1.65$). The youths were of Latino (37%), Black (35%), White (22%), Asian and other ethnic backgrounds (7%). Thirty-four percent of the youths reported that they had a parent who received welfare, food stamps, or medicaid (defined here as “low” socioeconomic status, SES). Age, gender, ethnicity, and SES were not significantly associated with one another. However, as expected, recruitment sites did differ by youths’ age, $F(3, 152) = 9.8, p < .0001$, indicating that the youths from the college organizations were significantly older than the youths from each of the three CBOs. An association also was found between ethnicity and recruitment site, $\chi^2(9, N = 156) = 29.1, p < .001$.

Procedure

Voluntary and signed informed consent was provided by all youths. For those youths under age 18, parental consent was waived by the Commissioner of Mental Health for New York State. An adult at each CBO served *in loco parentis* to safeguard the rights of each minor-aged research participant. This study was approved by the university’s Institutional Review Board and the recruitment sites.

Youths were administered a questionnaire by an interviewer at baseline and subsequent assessments 6 and 12 months later. Interviewers were college-educated individuals of the same sex as the youth. Interviewers were trained and received weekly supervision. Youths received \$30 at each interview.

Only five youths were lost to both follow-up assessments. The sample retention rates were 92% (143/156) for the 6-month assessment and 90% (140/156) for the 12-month assessment, with 85% of youths interviewed at all three time periods.

Measures of Sexual Identity and Identity Formation

Assessment of sexual identity, sexual developmental milestones, sexual orientation, and sexual behaviors were assessed using the Sexual Risk Behavior Assessment - Youth (SERBAS-Y) for GLB youths (Meyer-Bahlburg, Ehrhardt, Exner, & Gruen, 1994). Extensive descriptive and psychometric information regarding the SERBAS-Y is available elsewhere (Rosario et al., 1996; Schrimshaw, Rosario, Meyer-Bahlburg, & Scharf-Matlick, in press). Each component of the SERBAS-Y used in this report is discussed in detail below.

Sexual Identity—A single item from the SERBAS-Y assessed sexual identity at every assessment period by asking youths, “When you think about sex, do you think of yourself as lesbian/gay, bisexual, or straight?” Youths rejecting such identities were coded as “other” and asked to elaborate. Items also assessed whether youths had ever thought they were really gay/lesbian or bisexual, prior to the baseline assessment.

Psychosexual Developmental Milestones—The SERBAS-Y assessed the ages (in years) when youths experienced various milestones in the development of sexual attraction, identity, and behavior. These milestones were selected based on much past theoretical and empirical research. Youths were asked the ages when they were first attracted to, fantasized about, and were aroused by erotica focusing on the same sex. The mean age of these three milestones was computed to obtain a mean age of awareness of same-sex sexual orientation because the ages were correlated ($.68 < r < .75$) and factor analysis generated a single factor (Cronbach's $\alpha = .88$). Comparable items assessing opposite-sex attractions, fantasies, and erotic arousal were similarly combined (Cronbach's $\alpha = .89$). Youths also were asked about the age when they first thought they “might be” gay/lesbian, when they first thought they “might be” bisexual, when they first thought they “really were” gay/lesbian, and when they first thought they “really were” bisexual. Finally, youths were asked about the age when they first engaged in any one of a several specific sexual activities (i.e., manual, digital, oral, anal-penile, vaginal-penile, and anilingus) with the same sex and with the other sex. The minimum age reported across these various behaviors was used as the age when the youths first had any sex with the same sex and the age when they first had any sex with the other sex. Because identity change would be more likely for youths who more recently experienced developmental milestones (regardless of the age of the youth), we computed, for all of the developmental milestones, the number of years since the youth first experienced the various milestones by subtracting the age at each milestone from the youth's age at the baseline assessment.

Sociosexual Developmental Milestones—As part of an inventory to assess involvement in gay-related activities (Rosario et al., 2001; see below for details), we asked youths at baseline for the age when they first spoke or wrote to anyone (e.g., peer, counselor, teacher, coach, adult, switchboard) about homosexuality or bisexuality. We asked a similar series of questions with respect to ages when they first participated in various social or recreational gay-related activities (e.g., going to a gay bookstore, coffee house). The minimum age across each series was used to compute the age at which the youths first talked to someone about homosexuality and the age at which they first attended or participated in a gay-related activity. As with the psychosexual milestones described above, the number of years since each milestone was computed as the differences between the ages at each milestone and the youths' age at baseline.

Current Sexual Orientation—The SERBAS-Y (Meyer-Bahlburg et al., 1994) was used to assess current sexual orientation at every assessment period by means of three Kinsey-style items. Youths were asked the extent to which their recent sexual attractions, thoughts, and fantasies were focused on the same or the other sex (1) when in the presence of other individuals, (2) while masturbating, dreaming, or day dreaming, and (3) when viewing erotic material in films, magazines, or books. A 7-point Likert response scale was used ranging from always focused on the other sex (0) to always focused on the same sex (6), with a midpoint (3) indicating equally focused on both sexes. Youths were given the option of indicating they had none of the assessed experiences. Current sexual orientation was computed as the mean of the three items (Cronbach's $\alpha = .91 - .92$ across the three assessments).

Recent Sexual Behaviors—The SERBAS-Y (Meyer-Bahlburg et al., 1994) was used to assess whether youths had engaged in various sexual activities (i.e., manual, digital, oral, anal-penile, vaginal-penile, and anilingus) with same-sex or other-sex partners in the past 3 months at the baseline assessment or within the past 6 months (i.e., since the last interview) in the two subsequent assessments. For our analyses, we focused on whether youths reported any sexual activity (i.e., any of the behaviors listed above) with the same sex or other sex.

Measures of Identity Integration

Involvement in Gay-Related Activities—The prevalence of lifetime involvement in gay/lesbian-related social activities was assessed at baseline using a 28-item scale developed for this study (Rosario et al., 2001). At subsequent assessments, youths were asked about their involvement in the past 6 months (i.e., since their last assessment). A factor analysis of the baseline data identified 11 items (e.g., going to a gay bookstore, gay coffee house, gay pride march, gay fairs, gay clubs or bars) that loaded on a single factor. The number of these items that were endorsed was used as the indicator of involvement in gay-related social activities (Cronbach's $\alpha = .64 - .77$ across the three assessments).

Attitudes Toward Homosexuality—A 33-item scale adapted from the Nungesser Homosexual Attitudes Inventory (Nungesser, 1983) was modified for youths by simplifying the language, making it more informal, and generalizing the item content to include both males and females. The full measure was administered at all three assessments using a 4-point response scale ranging from “disagree strongly” (1) through “agree strongly” (4), rather than the original binary (true/false) format. Factor analysis of the baseline data identified two factors. The first factor contained 11 items [e.g., “My (homosexuality/bisexuality) does not make me unhappy”] that assessed attitudes toward homosexuality. The mean of these items was computed at each assessment, with a high score indicating more positive attitudes toward homosexuality (Cronbach's $\alpha = .83 - .85$ across the three assessments). Because the youths' attitudes were negatively skewed at all assessments (e.g., $M = 3.59$ of a maximum possible value of 4.0, $SD = 0.48$ at baseline), the data were transformed using the exponential e to stretch the positive end of the distribution.

Comfort with Homosexuality—A modified version of the Nungesser Homosexual Attitudes Inventory (see above for further description; Nungesser, 1983), was administered at all three assessments using a 4-point response scale ranging from “disagree strongly” (1) through “agree strongly” (4). As noted above, a factor analysis of the baseline data identified 2 factors. The second factor contained 12 items [e.g., “If my straight friends knew of my (homosexuality/bisexuality), I would feel uncomfortable”] that assessed comfort with others knowing the youth's sexuality. The mean of these items was computed for each time period, with a high score indicating more comfort with homosexuality (Cronbach's $\alpha = .89 - .91$ across the three assessments).

Self-Disclosure of Sexual Identity to Others—Youths were asked at baseline to enumerate “all the people in your life who are important or were important to you and whom you told that you are (lesbian/gay/bisexual)” (Rosario et al., 2001). At subsequent assessments, youths were asked about the number of individuals to whom the youth had disclosed during the past six months (i.e., since the last assessment). The number of individuals reported was used as the indicator of self-disclosure to others. Because the follow-up data were positively skewed (i.e., most youths reported very few new disclosures in the past 6 months, for example, median = 2.0, $M = 9.5$, $SD = 20.4$ at the 12-month assessment), the scores for the 6- and 12-month assessments were logarithmically transformed.

Certainty About, Comfort With, and Self-Acceptance of Sexuality—At the 6-month and 12-month assessments, items were added to assess the commitment of the youths to their gay/lesbian identity or to that part of their bisexual identity that was centered on the same sex (Rosario, Hunter, & Gwadz, 1994). We asked youths who had self-identified as gay/lesbian, “How certain are you about being lesbian/gay at this point?” and asked the bisexual youths, “How certain are you about being bisexual at this point?” For comfort with sexuality, we asked the gay/lesbian youths, “How comfortable are you with your lesbianism/

gayness?” and asked the bisexual youths, “How comfortable are you with your lesbian/gay side?” For self-acceptance of sexuality, we asked the gay/lesbian youths, “How accepting of your lesbianism/gayness are you?” and asked the bisexual youths, “How accepting are you of your lesbian/gay side?” We coded the prevalence of being very certain/comfortable/accepting (1) as compared to being less than very certain/comfortable/accepting (0) for each variable.

Other Measures

Social Desirability—The Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1964) was administered at baseline to assess the tendency to provide socially desirable responses. Two items were removed because they were inappropriate for youths, resulting in a 31-item scale, which was administered using the original true-false response format. Factor analysis identified 12 items that loaded on a single factor. The number of these items endorsed by the youths was computed as the indicator of social desirability (Cronbach’s $\alpha = .74$). A similarly reduced Marlowe-Crowne measure has been used elsewhere with GLB youths (Safren & Heimberg, 1999).

Data Analysis

To provide basic descriptive information on the sexual identities of youths in the sample, the percentages of youths who endorsed each sexual identity at each assessment period were computed. Similarly, the percentages of gay/lesbian identified and bisexually identified youths who remained consistent or changed in identities over time were computed for each assessment point. However, these group or sample-level analyses only answer whether the sample as a whole changed. For the “individual” level of analysis, we categorized the consistency and change in sexual identity over time for each youth. Specifically, we examined a matrix composed of the youths by their sexual identity over time. We developed mutually exclusive categories that described the individual patterns of consistency and change that we observed, and computed the percentage of youths in each group. All subsequent analyses were based on comparisons of these categories or groups of identity change (and consistency).

To examine how the categories of identity change (and consistency) were related to other aspects of sexual identity development, the identity change groups were compared in a series of univariate and multivariate analyses. Univariate comparisons were conducted using analysis of variance (ANOVA) to examine the mean differences among groups for continuous variables (e.g., time since milestones, indicators of identity integration) and chi square (χ^2) to examine differences in prevalence among groups for categorical variables (e.g., percent reporting same-sex behavior, percent reporting certainty with their identity). Significant F or χ^2 findings were followed by pairwise comparisons, in which each identity group was compared with every other group by means of Fisher’s protected t -test or χ^2 . Comparisons of the identity groups on gender, ethnicity, SES, age, and social desirability were conducted in the same manner. For the univariate analyses, the value of the significance test is provided, as is the effect size or actual magnitude of the difference among the group means or categories on all other aspects of sexual identity development.

The univariate comparisons were followed by multivariate analyses to compare each identity change group on aspects of sexual identity development, while controlling for any potential covariates (i.e., gender, ethnicity, SES, age, and social desirability) that were found to be related significantly to the identity groups in earlier analyses. Hierarchical linear regression analyses were conducted for each of the continuous outcome variables, and hierarchical logistic regression analyses were conducted for each of the categorical outcomes. In the linear and logistic regression analyses, the covariates were simultaneously entered in the

first step of the regression. They were followed by a single dummy coded variable, entered in the second step of regression, that contrasted two of the identity change groups (e.g., A vs. B). These analyses were repeated to contrast the other sexual identity groups (e.g., A vs. C followed by B vs. C). Examination of the potential interactions of gender by identity change groups was made in a similar manner, with the main effects for gender and (the contrast of two) sexual identity groups entered in the first step of the linear or logistic regression model, and the interaction term entered in the second step. Standardized beta (β) weights from the linear regression analysis are provided throughout as a measure of the effect size or degree of difference between the groups with respect to each continuous aspect of sexual identity development. Odds ratios (*OR*) from the logistic regressions provide a similarly standardized measure of the degree of difference between groups with respect to each categorical aspect of sexual identity development.

Results

Sample-Level Sexual Identity Over Time

The distribution of sexual identities at each of four time periods is presented in Table 1. Prior to the baseline assessment, nearly 40% of youths had self-identified only as gay/lesbian, an equal number had identified as gay/lesbian and bisexual, and one fifth identified exclusively as bisexual. Over the three subsequent assessments, the number of youths identifying as gay/lesbian increased, while the number of youths identifying as only bisexual declined.

The above examination of sexual identity over time ignores potential changes within youths of different sexual identities. Such changes are presented in Table 2. In general, youths either maintained their sexual identity or assumed a gay/lesbian identity over time. Youths who had identified as gay/lesbian at earlier times consistently identified as such at later times. Youths who had identified as both gay/lesbian and bisexual prior to baseline were approximately three times more likely to identify as gay/lesbian than as bisexual at subsequent assessments. Of youths who had identified only as bisexual at earlier assessments, 60–70% continued to identify as bisexual, while approximately 30–40% assumed a gay/lesbian identity over time.

Individual-Level Changes in Sexual Identity Over Time

As valuable as the aforementioned data may be, they are limited because the level of analysis is the sample rather than the individual. Sample-level data fail to address the critical issue of individual change in sexual identity. Therefore, at the individual-level of analysis, we created profiles for each youth of the change in sexual identity over the four longitudinal times (see Table 3), resulting in three major groups composed of youths who (1) consistently self-identified as gay/lesbian, (2) transitioned from bisexual to gay/lesbian identities, or (3) consistently self-identified as bisexual. This trichotomous measure of individual-level change in sexual identity is used in all subsequent analyses. Youths demonstrating other patterns of change in sexual identity also are presented in Table 3; however, there were too few such youths for inclusion in subsequent analyses.

Change in Sexual Identity: Univariate Relations

We used a series of one-way ANOVAs to compare the three GLB sexual identity groups (i.e., consistently gay/lesbian, consistently bisexual, and transitioned to gay/lesbian) with respect to the time since the youths experienced various psychosexual and sociosexual milestones of identity formation (see Table 4). The youths generally did not differ significantly on the time since reaching various psychosexual milestones, contrary to hypothesized expectations. However, as hypothesized, the youths did differ on time since

reaching sociosexual milestones. Consistently gay/lesbian youths had their first discussion about same-sex sexuality with another individual and were involved in a gay-related social activity for at least a year longer than either of the other two groups of youths.

Comparisons among the three GLB sexual identity groups, using ANOVA for continuous variables or chi-square analyses for categorical variables, on sexual orientation, sexual behavior, and aspects of the identity integration process are presented in Table 5. As hypothesized, youths who consistently identified as gay/lesbian differed from consistently bisexual and transited youths on current sexual orientation and sexual behaviors. Consistently gay/lesbian youths reported both a sexual orientation and sexual behaviors that were more same-sex centered than peers who transited to a gay/lesbian identity, and both of these groups of youths differed from peers who consistently identified as bisexual. Youths who consistently identified as gay/lesbian were more certain about, comfortable with, and accepting of their GLB identity than were peers who transited to a gay/lesbian identity or who consistently identified as bisexual. Furthermore, consistently gay/lesbian youths were involved in more gay-related social activities, endorsed more positive attitudes toward homosexuality, and were more comfortable with other individuals knowing about their homosexuality.

Potential Covariates

We examined the associations between potential covariates (i.e., gender, ethnicity, SES, age, and social desirability) and the sexual identity groups (see Table 6). Significant gender and age differences emerged. Follow-up analyses indicated several significant pairwise associations ($p < .05$) between gender and various study outcomes. Specifically, female youths were over three times more likely than male youths (odds ratio = $OR = 3.58$) to identify consistently as gay/lesbian than to transit from a bisexual to a gay/lesbian identity, $\chi^2(1, N = 114) = 6.73$. Female youths also were less likely than male youths ($OR = .20$) to have transited from a bisexual to a gay/lesbian identity as compared with maintaining a bisexual identity, $\chi^2(1, N = 49) = 6.94$. Furthermore, female youths were no more likely than male youths to identify as consistently bisexual as compared with consistently gay/lesbian, $\chi^2(1, N = 109) = 0.51, ns$. Youths who were consistently gay/lesbian were significantly older than youths who had transited to a gay/lesbian identity. In subsequent analyses, we imposed controls for gender and age when examining the relations between individual sexual identity and our indicators of identity formation and integration. Although not associated with changes in GLB sexual identity, we also controlled for ethnicity, SES, and social desirability because significant relations existed between these factors and the other variables.

Change in Sexual Identity: Multivariate Relations

After controlling for the covariates (noted above) by means of hierarchical linear regression for continuous outcomes or hierarchical logistic regression for categorical outcomes, the pattern of findings found at the univariate level (Tables 4 and 5) were generally replicated at the multivariate level. Multivariate comparisons among the sexual identity groups on time since reaching various psychosexual and sociosexual milestones generated only two significant differences. As hypothesized and as was found at the univariate level, consistently gay/lesbian youths had been involved in gay-related social activities for a longer period of time than either consistently bisexual youths ($\beta = .23, p < .01$) or youths who transited from a bisexual to a gay/lesbian identity ($\beta = .18, p < .05$).

The multivariate comparisons among the identity groups on sexual orientation, sexual behaviors, and aspects of identity integration are presented in Table 7. As hypothesized, consistently gay/lesbian youths were less likely to report having sex with the other sex and

their current sexual orientation was more same-sex oriented than that of the other youths. Consistently gay/lesbian youths were more likely than both consistently bisexual and transited youths to indicate certainty about, comfort with, and acceptance of that part of their identity that was homosexual. Consistently gay/lesbian youths also reported involvement in more gay-related activities, more positive attitudes toward homosexuality, and more comfort with others knowing about their homosexuality than consistently bisexual and transited youths.

The multivariate analyses also identified significant differences between youths who transited from a bisexual to a gay/lesbian identity as compared with youths who consistently identified as bisexual. As hypothesized, youths who transited were less likely to report sex with the other sex, their current sexual orientation was more strongly centered on the same sex, and they were more comfortable with others knowing about their homosexuality. In general, youths who transited from a bisexual to a gay/lesbian identity became more like the consistently gay/lesbian and less like the consistently bisexual youths over the course of the study.

Gender Revisited

Although we found gender differences among our three sexual identity groups, such a finding does not address whether developmental processes are similar among the genders. Specifically, our finding that female youths were more likely than male youths to identify consistently as gay/lesbian and less likely to transit between identities does not provide information on whether the relation between sexual identity and another variable differs by gender (i.e., whether male and female youths within a sexual identity group differ from one another with respect to the variable in question). To examine this critical issue, one must consider whether gender moderates the relation between sexual identity and variables of identity formation and integration (cf. Rowe, Vazsonyi, & Flannery, 1994). We investigated over 100 possible gender by sexual identity interactions. Only two significant interactions were significant, less than what would be expected by chance.

Discussion

Although changes in sexual identity are possible over time, very little research has examined such changes and none among both male and female youths. In this report, we found evidence of both considerable consistency and change in GLB sexual identity over time. Youths who identified as gay/lesbian prior to baseline were overwhelmingly consistent in this identity. In contrast, many youths who identified as bisexual or as both gay/lesbian and bisexual prior to baseline later identified as gay/lesbian. These findings suggest that, although there were youths who consistently self-identified as bisexual throughout the study, for other youths a bisexual identity served as a transitional identity to a subsequent gay/lesbian identity.

At the individual level, we found three patterns of sexual identity over time: consistently gay/lesbian, transiting from bisexual to gay/lesbian, and consistently bisexual. Of the youths, 72% consistently identified as gay/lesbian or bisexual over time. This finding of consistency is similar to past research (Diamond, 2000: 70%), despite differences between the two samples on gender, ethnicity, recruitment site, and length of follow-up.

Youths who changed sexual identities were hypothesized to report experiencing psychosexual and sociosexual milestones of identity formation more recently than youths whose sexual identity remained consistently gay/lesbian. For the psychosexual milestones, we found no support for this hypothesis at the multivariate level, given both nonsignificant differences and small effect sizes. One explanation for the null findings is that psychosocial

factors (e.g., a family with strong anti-gay attitudes, experiences of ridicule, greater internalized homophobia) may delay some youths from developing a consistent GLB identity or may lead some youths to adopt a bisexual identity before identifying as gay/lesbian. For the sociosexual milestones, however, we found that among the consistently gay/lesbian youths more time had passed since they experienced sociosexual milestones than was the case among consistently bisexual youths or youths who transitioned from a bisexual to gay/lesbian identity.

Consistent with social psychological theory regarding congruence among affect, cognition, and behavior, and as hypothesized, we found that changes in sexual identity were significantly and strongly associated with current sexual orientation and sexual behaviors. The differences in sexual orientation and sexual behavior between consistently gay/lesbian youths and youths who transitioned to a gay/lesbian identity suggest that, even after adopting a gay/lesbian identity, discrepancies between the new identity and subsequent sexual orientation and behavior continue to exist. Indeed, the observed decrease in the magnitude of these differences over time suggests that even after the adoption of a gay/lesbian identity, transitioned youths continue to change their orientation and behavior to match their new sexual identity. The findings of congruence between sexual identity, orientation, and behavior appear, at first, to contrast with previous research on adults that has found that many individuals with same-sex attractions and behavior do not identify as GLB (Laumann et al., 1994). However, among those in the Laumann et al. study who did identify as GLB (as do these youths), even higher levels of congruence were found.

Changes in sexual identity were hypothesized to be associated with corresponding changes in aspects of the identity integration process. Indeed, we found that consistently gay/lesbian youths differed from youths who transitioned between bisexual to gay/lesbian identities. The differences indicated that even after youths self-identify as gay/lesbian, a great deal of change may continue to take place in many aspects of sexuality. Thus, acceptance, commitment, and integration of a gay/lesbian identity is an ongoing developmental process that, for many youths, may extend through adolescence and beyond.

As hypothesized, consistently bisexual youths scored significantly lower than consistently gay/bisexual youths on most markers of identity integration. These data may indicate that consistently bisexual youths take a longer period of time to form and integrate their sexual identity than do consistently gay/lesbian youths. The data also may indicate that consistently bisexual youths experience more cognitive dissonance than consistently gay/lesbian youths. Clearly, more research into the similarities and differences between bisexual and gay/lesbian youths is needed, with follow-up of samples through adolescence and perhaps into adulthood.

Considerable interest has been expressed in potential gender differences in sexual identity development (e.g., Dubé & Savin-Williams, 1999; Rosario et al., 1996; Savin-Williams & Diamond, 2000). We found that female youths were significantly more likely than male peers to identify consistently as gay/lesbian than to change identities. These findings challenge past research suggesting that the sexual identity of females is more fluid than that of males (e.g., Baumeister, 2000; Kitzinger & Wilkinson, 1995; Peplau, 2003; Rust, 1993). However, because studies of change in sexual identity have been conducted among single-sex samples of females (e.g., Diamond, 2000; 2003; Sophie, 1986), any observed changes may have generated an impression of plasticity, when such a hypothesis could not be tested without comparable data on males. Another indicator of the fluidity hypothesis would be a higher prevalence of bisexuality among female than male youths. However, we found that female youths were no more likely to self-identify as consistently bisexual than were male youths. This finding, although at odds with some cross-sectional findings (Dempsey et al.,

2001; Savin-Williams & Diamond, 2000), is consistent with other cross-sectional findings (Narring et al., 2003). In addition, we found no gender differences in the relation between sexual identity and aspects of sexual identity formation or integration. These findings indicate a similar process of sexual identity development between male and female youths. Because the current study is the first, to our knowledge, to have data on changes in sexual identity over time among both male and female youths, we advocate for more longitudinal research on gender differences in sexual identity.

The study findings are tempered by potential study limitations. First, our sample was recruited from gay-focused organizations and, therefore, the extent to which the findings generalize to a more heterogeneous sample of GLB youths is unknown. However, given that the youths in the current sample were no more consistent in their sexual identity than lesbian and bisexual youths recruited from both gay- and non-gay venues (Diamond, 2000), we do not believe this to be a major limitation. Second, the size of the sample was modest. However, it had sufficient power to detect a medium effect and it was much larger than past research studies on changes in sexual identity (e.g., Diamond, 2000; 2003; Sophie, 1986). Furthermore, the nonsignificant results had effect sizes that were quite small, demonstrating their unimportance. Finally, we followed the youths prospectively for a single year. However, because the developmental task of adolescence is identity formation and integration (Erikson, 1950, 1968) and because adolescence extends through approximately age 25 in the United States (e.g., Jessor, Donovan, & Costa, 1991), we advocate that future research follow individuals through their twenties, allowing researchers to obtain a more thorough understanding of the process of sexual identity development. Our data, although limited to a one-year follow-up period, lend support and provide a rationale for the importance of longitudinal assessments of sexual identity development.

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Table 1

Sexual Identity at Every Assessment Period.

	Before Baseline	Baseline	6 months	12 months
Only gay/lesbian	39%	66%	74%	74%
Both gay/lesbian and bisexual	39%	na	na	na
Only bisexual	22%	31%	23%	19%
Straight	na	1%	4%	5%
Other	na	2%	0%	1%
Neither gay/lesbian nor bisexual	1%	0%	0%	0%
(n)	(156)	(156)	(142)	(140)

Note. Baseline refers to the assessment interview at the time of study recruitment. Na = not assessed. “Other” identity included, for example, youths who identified as “free spirit.” Values may not sum to 100% due to computational rounding error.

Table 2

Consistency and Change in Sexual Identity Over Time.

Assessment Period	Baseline			6 months			12 months		
	Gay/Lesbian	Bisexual		Gay/Lesbian	Bisexual		Gay/Lesbian	Bisexual	
Identity Reported Prior to Baseline (N = 155):									
Only gay/lesbian (n = 60)	100%	0%		93%	7%		98%	2%	
Both gay/lesbian and bisexual (n = 60)	71%	29%		77%	23%		80%	20%	
Only bisexual (n = 35)	6%	94%		40%	60%		40%	60%	
Identity Reported at Baseline (N = 152):									
Gay/lesbian (n = 103)				93%	7%		93%	7%	
Bisexual (n = 49)				41%	59%		49%	51%	
Identity Reported at Six Months (N = 137):									
Gay/lesbian (n = 105)							96%	4%	
Bisexual (n = 32)							30%	70%	

Note. Youths who self-identified as “straight” or “other” were too few to permit analysis of change; thus, they were excluded.

Table 3

Individual-Level Consistency and Change in Sexual Identity Over Time

Self-Identified Sexual Identity	N	%
Consistently gay/lesbian	87	57%
Transited from bisexual to gay/lesbian	27	18%
Consistently bisexual	22	15%
Transited from gay/lesbian to bisexual	8	5%
Transited from bisexual to straight	5	3%
Transited from gay/lesbian to straight	3	2%

Note. Consistency and change in sexual identity occur over the four longitudinal assessment periods: prior to baseline, at baseline, and 6 and 12 months later.

Table 4
Differences in Time Since Developmental Milestones by Change in Sexual Identity

Years since first:	Change in Sexual Identity			F	Effect Size η^2
	Consistently Gay/Lesbian (n = 87)	Transited from Bisexual to Gay/ Lesbian (n = 27)	Consistently Bisexual (n = 22)		
Same-sex sexual attractions, fantasies, and arousal	7.45 ^a	5.49 ^b	5.96 ^b	5.07 ^{**}	.07
Other-sex sexual attractions, fantasies, and arousal	6.82	5.99	6.99	1.11	.02
Thought might be gay or bisexual	6.78	5.96	6.27	0.50	.01
Other-sex sexual activity	6.27	5.45	5.77	0.43	.01
Same-sex sexual activity	4.79	3.75	5.68	1.24	.02
Thought really was gay or bisexual	4.14	3.54	3.23	1.29	.02
Talked to someone about homosexuality or bisexuality	3.84 ^a	2.58 ^b	2.68	2.94 ^H	.04
Participated in a gay-related social activity	2.93 ^a	1.26 ^b	1.38 ^b	9.00 ^{***}	.12

Note. Means with differing superscripts differed significantly at $p < .05$. The measure of effect size, eta squared (η^2), is the proportion of explained variance.

^H
 $p < .06$

*
 $p < .05$

**
 $p < .01$

 $p < .001$

Table 5
Differences in Sexual Orientation, Sexual Behaviors, and the Identity Integration Process by Change in Sexual Identity

	Change in Sexual Identity			Statistical Test	Effect Size
	Consistently Gay/Lesbian (n = 87)	Transited from Bisexual to Gay/Lesbian (n = 27)	Consistently Bisexual (n = 22)		
				<i>F</i>	η^2
Current sexual orientation					
Time 1	5.68 ^a	4.65 ^b	3.50 ^c	56.84 ^{***}	.46
Time 2	5.72 ^a	4.76 ^b	3.20 ^c	89.56 ^{***}	.59
Time 3	5.59 ^a	5.32 ^a	3.07 ^b	82.74 ^{***}	.57
				χ^2	τ
Sex with the same sex					
Time 1	76% ^a	44% ^b	59%	9.91 ^{**}	.05
Time 2	86%	85%	70%	3.17	.01
Time 3	89% ^a	88% ^a	64% ^b	8.53 [*]	.03
Sex with the other sex					
Time 1	1% ^a	11% ^b	68% ^c	65.88 ^{***}	.23
Time 2	6% ^a	0% ^a	70% ^b	57.11 ^{***}	.17
Time 3	4% ^a	20% ^b	73% ^c	53.59 ^{***}	.22
Certainty of sexual identity					
Time 2	90% ^a	52% ^b	39% ^b	28.73 ^{***}	.16
Time 3	92% ^a	65% ^b	60% ^b	16.72 ^{***}	.09
Comfort with gay identity					
Time 2	89% ^a	57% ^b	59% ^b	14.99 ^{***}	.09
Time 3	95% ^a	87% ^a	45% ^b	31.71 ^{***}	.13
Acceptance of gay identity					
Time 2	93% ^a	71% ^b	65% ^b	12.10 ^{**}	.07
Time 3	94% ^a	87%	68% ^b	9.60 ^{**}	.04

	Change in Sexual Identity			Statistical Test	Effect Size
	Consistently Gay/Lesbian (n = 87)	Transited from Bisexual to Gay/Lesbian (n = 27)	Consistently Bisexual (n = 22)		
				F	η^2
Involvement in gay activities					
Time 1	7.20 ^a	5.22 ^b	5.41 ^b	8.47 ^{***}	.11
Time 2	6.38 ^a	5.50	4.80 ^b	4.07 [*]	.06
Time 3	6.05 ^a	5.12	3.91 ^b	5.41 ^{**}	.08
Attitudes toward homosexuality					
Time 1	42.38 ^a	31.90 ^b	36.29	6.54 ^{**}	.09
Time 2	45.42 ^a	30.17 ^b	34.27 ^b	19.58 ^{****}	.24
Time 3	44.48 ^a	33.67 ^b	35.84 ^b	9.16 ^{****}	.13
Comfort with homosexuality					
Time 1	3.01 ^a	2.57 ^b	2.35 ^b	10.66 ^{****}	.14
Time 2	3.07 ^a	2.62 ^b	2.56 ^b	8.10 ^{****}	.12
Time 3	3.22 ^a	2.78 ^b	2.51 ^b	12.75 ^{****}	.17
Self-disclosure to others					
Time 1	7.45	5.74	5.36	2.49 ^H	.04
Time 2	1.08	0.41 ^a	1.63 ^b	2.93 ^H	.05
Time 3	0.78	1.08	0.89	0.35	.01

Note. Sexual identity groups with differing superscripts differed significantly at $p < .05$. Measures of effect size (i.e., proportion of variance explained) were computed with eta square (η^2) for continuous variables and Goodman-Kruskal tau (τ , Goodman & Kruskal, 1979) for categorical variables.

H
 $p < .10$

*
 $p < .05$

**
 $p < .01$

 $p < .001$

Table 6
Associations of Change in Sexual Identity with Sociodemographic Characteristics

	Change in Sexual Identity				Statistical Test	Effect Size
	Consistently Gay/Lesbian (n = 87)	Transited from Bisexual to Gay/Lesbian (n = 27)	Consistently Bisexual (n = 22)			
					χ^2	τ
Gender					8.38*	.03
Male (n = 73)	59%	29%	12%			
Female (n = 63)	70%	10%	21%			
Ethnicity					5.19	.02
Hispanic (n = 50)	66%	22%	12%			
Black (n = 48)	60%	23%	17%			
White (n = 29)	59%	17%	24%			
Other (n = 9)	89%	0%	11%			
Socioeconomic status					4.35	.02
Higher (n = 84)	69%	14%	17%			
Lower (n = 52)	56%	29%	15%			
					<i>F</i>	η^2
Age	18.60 ^a	17.44 ^b	18.23		5.25**	.07
Social desirability	6.21	6.07	5.82		0.16	.00

Note. Youths whose parents received welfare, food stamps, or Medicaid were classified as lower socioeconomic status. Means with differing superscripts differed significantly at $p < .05$. Measures of effect size (i.e., proportion of variance explained) were computed with Goodman-Kruskal tau (τ , Goodman & Kruskal, 1979) for categorical variables and eta square (η^2) for continuous variables.

* $p < .05$.

** $p < .01$.

Table 7
 Multivariate Comparisons of Sexual Orientation, Sexual Behaviors, and the Identity Integration Process Among Sexual Identity Change Groups

	Change in Sexual Identity					
	Consistently G/L vs. Transiting		Consistently Bisexual		Transiting vs. Consistently Bisexual	
	OR	β	OR	β	OR	β
Current sexual orientation						
Time 1		0.53 ^{****}		0.73 ^{****}		0.56 ^{****}
Time 2		0.70 ^{****}		0.78 ^{****}		0.76 ^{****}
Time 3		0.25 [*]		0.76 ^{****}		0.90 ^{****}
Sex with same-sex partner						
Time 1	2.60 ^H		2.07		0.36	
Time 2	0.64		2.34		14.37 ^H	
Time 3	1.05		4.93 ^{**}		3.65	
Sex with other-sex partner						
Time 1	0.01 [*]		0.004 ^{****}		0.05 ^{****}	
Time 2	UD		0.02 ^{****}		0.00	
Time 3	0.09 [*]		0.002 ^{****}		0.11 ^{**}	
Certainty of gay identity						
Time 2	12.18 ^{****}		17.26 ^{****}		2.57	
Time 3	13.89 ^{****}		9.60 ^{****}		1.67	
Comfort with gay identity						
Time 2	4.75 [*]		5.44 ^{**}		1.08	
Time 3	5.23		27.89 ^{****}		9.36 ^{**}	
Self-acceptance of gay identity						
Time 2	5.75 [*]		6.67 ^{**}		1.84	
Time 3	1.46		10.52 ^{**}		6.00	
Involvement in gay-related social activities						
Time 1	0.21 [*]		0.28 ^{**}		0.15	

Change in Sexual Identity					
Consistently G/L vs. Transiting		Consistently G/L vs. Consistently Bisexual		Transiting vs. Consistently Bisexual	
OR	β	OR	β	OR	β
	0.12	0.26**		0.27	
Time 2					
	0.08	0.30**		0.42*	
Time 3					
Attitudes toward homosexuality					
Time 1	0.22*	0.18*		0.05	
Time 2	0.44***	0.35***		-0.04	
Time 3	0.31**	0.29**		0.06	
Comfort with homosexuality					
Time 1	0.21*	0.37***		0.34*	
Time 2	0.25*	0.30**		0.17	
Time 3	0.27**	0.43***		0.36*	
Self-disclosure to others					
Time 1	0.13	0.20*		0.16	
Time 2	0.12	-0.10		-0.32 ^H	
Time 3	-0.09	-0.02		0.09	

Note. G/L = gay/lesbian. Transiting = youths who transitioned from a bisexual to a gay/lesbian identity. UD = Undefined. Controls for sex, age, socioeconomic status, ethnicity, and social desirability were imposed in all analyses. For continuous outcomes, multiple regression was used and standardized regression coefficients ($\beta = \text{beta}$) are reported. For dichotomous outcomes, logistic regression was used and odds ratios (OR) are reported. Beta and OR are measures of effect size. Beta theoretically ranges from zero to one, with zero indicating support for the null hypothesis of no difference between the groups. The OR of logistic regression ranges theoretically from zero to infinity, with one indicating support for the null hypothesis of no difference between the groups.

^H $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$