

Predicting Different Patterns of Sexual Identity Development Over Time Among Lesbian, Gay, and Bisexual Youths: A Cluster Analytic Approach

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Abstract Recent research has suggested that the sexual identity development of lesbian, gay, and bisexual (LGB) youths may not follow a single pattern, but may follow a variety of pathways. Although some research documenting variability in identity development exists, unclear are the potential individual and social contexts that predict these different patterns, as well as the contexts that predict changes in identity integration over time. This report longitudinally examined these issues in an ethnically diverse sample of 156 LGB youths (ages 14–21) in New York City. Cluster analytic techniques identified two patterns of sexual identity formation (i.e., early and more recent), and three patterns of sexual identity integration (i.e., high, middling, and low). Gender and sexual abuse were found to predict identity formation; and, gay-related stress, social support, negative social relationships, sexual orientation,

sexual identity, and gender were found to predict patterns of sexual identity integration and changes in integration over 1 year. These findings document different patterns of sexual identity development and identify potential contextual barriers and facilitating factors that may be used to develop interventions to promote healthy LGB identity development.

Keywords Coming-out process · Psychosexual development · Self-disclosure · Internalized homophobia · Gay-related stress · Social support

The sexual identity development of lesbian, gay, and bisexual (LGB) individuals, often referred to as the “coming-out process,” has become the focus of a growing theoretical and empirical literature. Although early models of sexual identity development hypothesized a series of linear developmental stages (see Eliason 1996, for review), more recent work has documented various departures that call into question the hierarchical nature of linear stage models. As such, some researchers have called for examination of individual variability in the sexual identity development of LGB youths (e.g., Savin-Williams 2001; Schneider 2001). The current report examines potential variability in the sexual identity development of LGB youths over the course of 1 year. Further, this report examines the potential individual and social contexts that may explain these different patterns of sexual identity development. Thus, the report has potential implications for advancing our theoretical understanding of the sexual identity development of LGB youths and it provides evidence on factors that may impede or promote healthy LGB identity development.

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Models of Sexual Identity Development

Despite decades of theoretical work, the proliferation of models describing the sexual identity development of LGB individuals continues (e.g., Cass 1979; Chapman and Brannock 1987; Fassinger and Miller 1996; Minton and McDonald 1984; Meyer and Schwitzer 1999; Troiden 1989). These models propose that LGB individuals progress through a linear series of stages starting with first awareness of same-sex attractions through an eventual acceptance, disclosure, and integration of that identity. Nevertheless, such linear stage models have been critiqued for failing to recognize the diversity of the coming-out process (e.g., Horowitz and Newcomb 2001; Kitzinger and Wilkinson 1995; Sophie 1985/86). Indeed, the proliferation of models attests to the diversity of experiences. For example, some models propose that sexual activity occurs prior to disclosure of sexual identity to others (e.g., Chapman and Brannock 1987; Fassinger and Miller 1996; Minton and McDonald 1984; Rotheram-Borus and Fernandez 1995) and other models stipulate that sexual activity follows disclosure (e.g., Meyer and Schwitzer 1999; Morris 1997). Such theoretical discrepancies suggest the likelihood of multiple pathways for the sexual identity development of LGB individuals.

In this report, we conceptualize sexual identity development as consisting of identity formation and identity integration (Morris 1997; Rosario et al. 2004, 2006). The former involves the initiation of a process of self-discovery and exploration. It includes becoming aware of one's emerging sexual orientation, questioning whether one may be LGB, and engaging in sexual relations with the same sex (Cass 1979; Chapman and Brannock 1987; Morris 1997; Troiden 1989). Identity integration entails an acceptance and commitment to one's sexual identity. Specifically, identity integration involves engaging in LGB-related social activities, transforming negative attitudes toward homosexuality into positive attitudes, feeling comfortable with other individuals potentially knowing about one's identity, and disclosing one's LGB identity to others (Morris 1997; Rosario et al. 2001). Beyond defining identity formation and integration, we hypothesize that they are related, such that identity formation is associated with greater integration. However, we do not specify an order as to when development occurs within identity formation or integration because the patterns of sexual identity development are likely to be diverse.

Variability in Sexual Identity Development

Some researchers have called for a focus on the diversity in the coming-out process (e.g., Diamond 2003; Schneider

2001). Savin-Williams (2001) has argued for the examination of “differential developmental trajectories,” suggesting that the coming-out process is not an identical process for all, but rather that LGB individuals experience a diversity of developmental pathways. He has suggested the need to examine within-group differences in the coming-out process, particularly by gender, ethnicity, and age cohort. Indeed, a growing literature has examined differences in the ages at initiating various milestones of identity development, particularly by gender and, to a lesser extent, by ethnicity and age (D’Augelli and Hershberger 1993; Dubé and Savin-Williams 1999; Floyd and Bakeman 2006; Grov et al. 2006; Maguen et al. 2002; Rosario et al. 1996, 2004). However, even these examinations of variability are limited to comparisons or differences between sociodemographic classifications.

More consistent with the notion of variability in development are studies that have examined different patterns or pathways through the coming-out process (e.g., Dubé 2000; Floyd and Stein 2002; Maguen et al. 2002; Kahn 1991; Rust 1993; Schindhelm and Hospers 2004; Savin-Williams and Diamond 2000). For example, studies have documented variability in the order of various psychosexual milestones, such that some LGB individuals report their first same-sex sexual experience prior to disclosing their sexual identity, but others report disclosing their identity prior to any sexual contact (Dubé 2000; Maguen et al. 2002; Savin-Williams and Diamond 2000; Schindhelm and Hospers 2004). Even greater variability has been observed by Floyd and Stein (2002), who identified five empirically derived patterns of development among LGB youths, including youths who progressed through the coming-out process at a younger age, others who progressed through the process at a later age, those who started at a later age but quickly progressed through developmental milestones, and those who started at an early age but who were then slow to progress to disclosure to others. Despite the findings, these studies of the coming-out process are limited by their use of retrospective data. Retrospective reports are prone to distortions based on the individual's current condition (Henry et al. 1994; Ross 1989). Researchers have argued that LGB sexual identity development should be studied prospectively (Boxer and Cohler 1989; D’Augelli 1994).

Few prospective longitudinal studies have examined the coming-out process. The available studies have documented considerable consistency, as well as change, over time in sexual identity, attractions, and behaviors (Diamond 2000, 2005; Dickson et al. 2003; Rosario et al. 2006; Stokes et al. 1993, 1997). However, potential changes in aspects of identity integration over time and potential variability in these changes remain unstudied. One expects considerable variability in the patterns of identity integration, given variability in patterns of identity formation

(e.g., Floyd and Stein 2002). For example, some LGB youths might report high levels on all aspects of identity integration (e.g., positive attitudes, high comfort, and high disclosure), others might be less self-accepting, and still others might be high on some aspects (e.g., positive attitudes toward their sexuality) but low on other aspects (e.g., reluctant to disclose their identity).

Explanation of Variability in Sexual Identity Development

As important as it is to document the various patterns of identity formation and integration, it is equally important to understand the potential reasons for this variability. In addition, potential predictors of changes in identity formation and integration may be critical for developing programs and services both to reduce barriers that impede healthy identity development and to promote conditions that facilitate it. Nevertheless, understanding the potential individual and social contexts that predict different patterns of identity formation and integration remains under-examined.

We hypothesize that different patterns of identity formation and integration may vary in logical ways. Specifically, we hypothesize that gender, age, and sexual abuse are related to identity formation. The limited empirical literature indicates that young men are more likely than young women to follow a trajectory were they engaged in same-sex behavior prior to identifying as gay (Savin-Williams and Diamond 2000). Older LGB individuals have been found to follow an identity formation pattern that differs from those of younger ages, even among youths (Floyd and Stein 2002). Further, it has been found that experiences of childhood sexual abuse may lead to earlier sexual identity formation among LGB individuals (Matthews et al. 2006; Morris and Balsam 2003; Robohm et al. 2003), and may alter the pattern of identity formation (Bartholow et al. 1994). Given that sexual abuse is 2–16 times more prevalent among LGB youths than heterosexual youths (see Saewyc 2006, for a review), this may be a critical factor for many LGB youths.

We also hypothesize that a number of individual and social context factors are related to different patterns of identity integration, with some factors (i.e., negative social relationships) serving as barriers to identity integration and other factors (i.e., positive social relationships) as facilitators of identity integration. Although no studies were identified which examined predictors of change in identity integration, several cross-sectional studies support our hypotheses. Potential negative relationships (e.g., negative social relationships, gay-related stressors) were found to be associated with lower levels of identity integration

(D’Augelli et al. 1998; Pilkington and D’Augelli 1995), whereas positive relationships (e.g., supportive friends and family) were associated with greater integration (Elizur and Mintzer 2001; Hershberger and D’Augelli 1995; Jordan and Deluty 1998; Wright and Perry 2006). Differences in sexual identity (i.e., lesbian/gay versus bisexual), sexual orientation (i.e., gender of their sexual attractions and fantasies), and gender of their sexual partners also may be associated with greater identity integration (Morris et al. 2001). Furthermore, potential differences by gender and ethnicity/race may exist, given the hypothesis in the literature that girls are more variable (i.e., “fluid”) in their development (e.g., Peplau 2003), and ethnic/racial minority youths may experience lower integration, given greater contextual barriers (e.g., Dubé and Savin-Williams 1999; Rosario et al. 2004).

The current report examined diversity in sexual identity development among LGB youths by retrospectively investigating potential patterns of identity formation and prospectively investigating over 1 year potential patterns of identity integration. We did not impose an arbitrary a priori classification scheme on the data, but allowed the data to dictate the naturally occurring patterns of identity formation and integration. Rather than focusing just on changes in identity (e.g., Diamond 2000; Rosario et al. 2006) or just on identity formation (Maguen et al. 2002; Savin-Williams and Diamond 2000), which has already attracted substantial attention, the current report is the first to examine changes in identity integration over time. Finally, the current report goes beyond describing potential developmental patterns to examining hypothesized individual and social contexts that may serve as barriers and facilitators of the patterns in identity formation and integration.

Method

Participants

One-hundred and sixty-four youths, ages 14–21 years, were recruited from three LGB-focused community-based organizations (CBOs, 85%) and two LGB college student organizations (15%) in New York City. Eight youths were excluded because they did not meet eligibility criteria,¹ resulting in a final sample of 156 youths (49% female),

¹ Specifically, one youth was excluded because she was older than the 21-year age criterion. Four female youths were excluded because they identified as heterosexual and never engaged in sexual activity with the same sex. Two male youths were interviewed twice; their second interviews were discarded. Finally, one youth was excluded because the interviewer believed him to have provided unreliable and invalid responses.

mean age of 18.3 years ($SD = 1.65$). The youths identified as lesbian or gay (66%), bisexual (31%), or other (3%). They were Latino (37%), Black (35%), White (22%), or Asian and other ethnic backgrounds (7%). Of the youths, 34% reported having a parent who received welfare, food stamps, or Medicaid; these youths were classified as low socioeconomic status (SES) and the remainder as high SES.

Procedure

Youths provided voluntary and signed informed consent. The Commissioner of Mental Health for New York State waived parental consent for youths under age 18. Instead, an adult at each CBO served *in loco parentis* to safeguard the rights of every minor in the study. The university's Institutional Review Board and recruitment sites approved the study.

A 2- to 3-h structured interview was conducted at recruitment (Time 1) with follow-up interviews occurring 6 and 12 months later. Youths were interviewed between October 1993 and June 1994, with follow-up interviews conducted through August 1995. The retention rates were 92% ($n = 143$) for the 6-month assessment and 90% ($n = 140$) for the 12-month assessment. Youths received \$30 at each interview.

Measures of Sexual Identity Formation

All sex-related variables were assessed with the Sexual Risk Behavior Assessment—Youth (SERBAS-Y) for LGB youths (Meyer-Bahlburg et al. 1994). The SERBAS-Y has demonstrated moderate to high test–retest reliability over 2 weeks among our sample (Schrimshaw et al. 2006).

For sexual identity formation, the SERBAS-Y assessed the ages when youths experienced each of six psychosexual developmental milestones. Youths were asked the ages when they were first (1) erotically attracted to the same sex, (2) fantasized about the same sex, and (3) were aroused by erotica focusing on the same sex. A factor analysis of the ages at which each of these three milestones were achieved revealed a single factor (Cronbach's $\alpha = .88$), suggesting that the milestones occurred at approximately the same age. As such, the mean of these three milestones was computed to create a single composite milestone indicating the mean age of first awareness of same-sex sexual orientation. The subsequent three milestones were retained as single items. Specifically, youths were asked about (1) the age when they first thought they “might be” lesbian/gay or bisexual and (2) when they first thought they “really were” lesbian/gay or bisexual. Finally, they were asked about (3) the age when they first experienced any of several sexual activities with the same sex. *In toto*, we had four identity formation milestones for analysis. Although nearly all

youths (91%) had experienced all four milestones, there were some who had not (i.e., 8% had not yet had any sexual activity with the same sex, 1 [0.6%] did not believe he or she “really was” LGB). Data were coded as missing for youths who had not experienced a particular milestone.

We agree with others (e.g., Diamond and Savin-Williams 2000) who have critiqued sexual milestone research suggesting that the ages, per se, do not tell us much about the coming-out process, as individuals may first experience these milestones at any time in life. However, because the coming-out process necessarily takes time to work through and integrate, we have argued that more important than age when milestones occur is the length of time between first experiencing these milestones and the present (Rosario et al. 2006). Two young women who first experienced attractions to women at age 15 may differ, if one is currently 16 (1 year later) and the other is 21 (6 years later). Thus, for all of the developmental milestones, we computed 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 Time 1.

Measures of Sexual Identity Integration

Involvement in LGB-Related Social Activities

We developed a 28-item checklist to assess lifetime involvement in gay-related social and recreational activities at Time 1 (Rosario et al. 2001). At follow-up assessments, youths were asked about their activity involvement during the past 6 months (i.e., since their last assessment). Factor analysis of the Time 1 data generated 11 items that loaded on one factor (e.g., going to a gay bookstore, coffee house). We computed how many of the 11 items were endorsed by the youths (Cronbach's $\alpha = .64$ to $.77$ across the three assessments).

Positive Attitudes Toward Homosexuality/Bisexuality

We administered a modified version of the Nungesser Homosexual Attitudes Inventory (NHAI; Nungesser 1983) at all assessments, using a 4-point response scale ranging from “disagree strongly” (1) through “agree strongly” (4). A factor analysis of the Time 1 data resulted in two factors. The first factor, composed of 11 items, assessed attitudes toward homosexuality [e.g., “My (homosexuality/bisexuality) does not make me unhappy”]. We computed the mean of these items at each assessment, with high scores indicating more positive attitudes toward homosexuality (Cronbach's $\alpha = .83$ to $.85$ across the three assessments). Because these data were negatively skewed at all assessments, we transformed the data using the exponential e to stretch the positive end of the distribution.

Comfort with Others Knowing about Your Homosexuality/Bisexuality

As noted above, a factor analysis of the Time 1 data from the NHAI (Nungesser 1983) identified two factors. The second factor, composed of 12 items, assessed comfort with other individuals potentially knowing about the youth's sexuality [e.g., "If my straight friends knew of my (homosexuality/bisexuality), I would feel uncomfortable"]. We computed the mean of these items at each time period, with a high score indicating more comfort with homosexuality (Cronbach's $\alpha = .89$ to $.91$ across the assessments).

Disclosure of Homosexuality/Bisexuality to Others

We asked youths at Time 1 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). Subsequently, youths were asked about the number of new individuals to whom the youth had disclosed during the past six months (i.e., since their last assessment). Because disclosure cannot be undone and because it is carried into the future, the indicator of disclosure is cumulative over time. Therefore, we summed the disclosure data at Time 1 with new disclosures at the 6- and 12-months assessments as our self-disclosure indicator at Time 2. We imposed a logarithmic transformation on the disclosure at Time 2 because these data were positively skewed.

Measures of Hypothesized Individual and Social Context Factors

Current Sexual Orientation

The SERBAS-Y (Meyer-Bahlburg et al. 1994) assessed current sexual orientation at every assessment. Youths were asked to indicate the extent to which their sexual attractions, thoughts, and fantasies focused on the same or other sex: (1) when in the presence of other individuals in a public setting, (2) when masturbating, dreaming, or day dreaming, and (3) when viewing erotic material in films, magazines, or books. A 7-point, Kinsey-type response scale was used ranging from always focused on the other sex (0) to always focused on the same sex (6). Youths were allowed to indicate whether they had not experienced the assessed event. We computed current sexual orientation as the mean of the three items (Cronbach's $\alpha = .91$ to $.92$ across the assessments).

Sexual Identity

An item from the SERBAS-Y (Meyer-Bahlburg et al. 1994) at every assessment inquired, "When you think

about sex, do you think of yourself as lesbian/gay, bisexual, or straight?" Youths who rejected these identities were coded as "other."

Sexual Behaviors

The SERBAS-Y (Meyer-Bahlburg et al. 1994) was used to assess number of lifetime same-sex partners at Time 1. These data were logarithmically transformed because they were positively skewed. The SERBAS-Y also assessed prevalence of recent sex (in the 3 months prior to Time 1) with the same sex.

Childhood Sexual Abuse

A single item from the SERBAS-Y (Meyer-Bahlburg et al. 1994) assessed at Time 1 whether the youth had ever, before age 13 years, had sexual activity with an adult or with another youth more than 5 years older than him or her. Sexual activity was defined as oral, vaginal or anal sex, touching or being touched on the breasts or genitals, exposing oneself or someone exposing themselves, or someone rubbing their body against them in a sexual way.

Social Support from Family and Friends

Procidano and Heller's (1983) measures of perceived social support from family and from friends were adapted, deleting items that might be confounded with psychological health. The two resulting 12-item measures, administered at Time 1 using a yes (1) or no (0) response format, assessed the extent to which needs for support, information, and feedback were met by family and by friends (e.g., "I rely on my [family/friends] for emotional support"). A count of the items endorsed was the index of social support from family (Cronbach's $\alpha = .90$) and friends (Cronbach's $\alpha = .80$). The measure was originally validated on late adolescents (Procidano and Heller 1983).

Negative Social Relationships

The 12-item Social Obstruction Scale (Gurley 1990) was administered at Time 1 to assess the presence of negative social relationships with others, including being treated poorly, being ignored, and being manipulated by others (e.g., "Somebody treats me as if I were nobody"). Items use a response scale ranging from "definitely false" (1) to "definitely true" (4). The responses were internally consistent among Gurley's (1990) heterosexual youths and our LGB youths (Cronbach's $\alpha = .85$). The mean score was computed, with higher scores indicating greater levels of negative social relationships.

Gay-Related Stressful Life Events

A 12-item checklist of stressful events related to homosexuality was administered at Time 1 (e.g., “Losing a close friend because of your [homosexuality/bisexuality]”; Rosario et al. 2002). The youths indicated whether they had experienced any of the events within the past 3 months. The number of events experienced was computed. Because the responses were skewed, we computed a response scale of zero (0), or one or more (1) stressful events.

Measures of Potential Covariates

In addition to sex, age, SES, ethnicity/race, and recruitment site (all assessed at Time 1), we assessed the tendency to provide socially desirable responses at Time 1 by means of the Marlowe-Crowne Social Desirability scale (Crowne and Marlowe 1964). We used its original true–false response format, but deleted 2 of 31 items we considered inappropriate for youths. A factor analysis generated 12 items that loaded on a single factor. The number of these items endorsed was computed as our measure of social desirability (Cronbach’s $\alpha = .74$). A similarly reduced version of this measure has been previously used with LGB youths (Safren and Heimberg 1999).

Data Analysis

We used cluster analysis to identify subgroups of LGB youths with respect to sexual identity formation and integration. Cluster analysis is an iterative, two-stage procedure to determine whether groups exist based on inherent patterns of associations among the variables of interest (e.g., Everitt et al. 2001; Henry et al. 2005; Rabkin and Luke 1993). For the first stage, we used hierarchical clustering, a procedure that utilizes Euclidian distances among cases on the standardized variables of interest, to determine the number of groups or clusters by means of dendograms or trees showing how the individuals group together. In this case, several large unambiguous groups were identified for both identity formation and identity integration. No outliers were noted. In the second stage, we aimed to validate and interpret (or define) the profiles of the original cluster solution by the *K*-means cluster analytic procedure. We specified the number of clusters to be identified (based on the hierarchical cluster results) and the iterative analysis attempted to fit the cases on the standardized variables to those numbers of clusters. Comparison of the hierarchical cluster findings and the *K*-means cluster findings (on size of each cluster, individual membership in each cluster) were highly similar, suggesting a validity of the findings. We then interpreted the clusters that were revealed and investigated the relations among them. This procedure was

followed for identity formation and identity integration clusters at Time 1. To identify if identity integration cluster membership was consistent or changed over time, we examined identity integration at the 12-month assessment (here designated as Time 2) using a similar *K*-means procedure. However, to ensure the clusters were comparable (and thus allowing us to assess change between clusters), we used the cluster centers (i.e., means) identified at Time 1 to assign youths to equivalent clusters based on their Time 2 data.

We examined whether differences existed among our clusters by our hypothesized correlates and potential covariates, using ANOVA for continuous variables and chi-square for categorical variables. We then conducted logistic regression analyses, in which all significant variables at the previous, bivariate level of analysis were examined simultaneously in order to assess which of the hypothesized correlates uniquely provided significant information about our clusters or groups of youths. In order to protect against Type I error, only those logistic regression models with a significant omnibus chi-square were interpreted; this procedure is analogous to Fisher’s protected *t*-test in ANOVA. Next, we examined whether each group changed over time (group-level change) using repeated measures ANOVA. Then, we examined individual-level change in identity integration group membership. For this level of analysis we tracked whether individual youths changed in identity integration from recruitment (Time 1) to the 12-month assessment (Time 2), determining whether they remained in the same cluster or changed cluster membership (e.g., changed to a higher or lower level of integration) over the year. We examined change between the Time 1 and 12-month assessment (leaving out the 6-month assessment) in all of our analyses in order to maximize variability. Finally, we examined the correlates of these individual-level changes at both the bivariate (using ANOVA and chi-square) and multivariate levels (using multiple logistic regression). As noted before, only logistic regression models with significant omnibus chi-square tests were interpreted. For all these analyses, we present effect sizes in the form of the proportion of explained variance, including η^2 for ANOVA and its equivalent τ for chi-square analysis (Goodman and Kruskal 1979), and odds ratios (OR) for the results from logistic regression analyses.

Results

Patterns of LGB Youth Identity Development

To identify potential patterns of LGB identity formation and patterns of identity integration (at Time 1 and Time 2),

three separate cluster analyses were conducted. First, the length of time since first experiencing each of four identity formation milestones (i.e., time since first same-sex attraction, first same-sex behavior, first thought might be LGB, and first thought really were LGB) were entered into a hierarchical cluster analysis. Two identity formation clusters were identified, and subsequently re-examined using *K*-means cluster analysis. The clusters for identity formation denoted a group of youths who, relatively speaking, recently formed their LGB identity (67%) as compared with a smaller group of youths who underwent this process at an earlier time (33%). Indeed, the two groups of youths differed significantly on the time since experiencing each of the four psychosexual milestones examined (see Table 1).

In order to identify potential patterns of LGB identity integration, we cluster analyzed the four indicators of identity integration (i.e., involvement in LGB-related social activities, positive attitudes toward homosexuality/bisexuality, comfort with others knowing about his/her homosexuality/bisexuality, and disclosure of sexuality to others). The cluster analyses of the Time 1 data suggested the existence of three groups of youths that were low, middling, or high on LGB identity integration (see the means in Table 1). At Time 1, all four markers of identity integration significantly differed among the groups. Post-hoc tests between the three groups found that while the high integration and low integration groups differed, the middling group differed from both the low and high groups on attitudes toward homosexuality/bisexuality and comfort with others knowing. However, the middling group was similar to the high integration group on involvement in LGB social activities, but more similar to the low integration group on disclosure to others.

Another cluster analysis was conducted of the identity integration data at Time 2. The cluster analysis of the Time 2 integration data assigned youths to identity integration clusters based on the cluster centroids (i.e., means) obtained from the Time 1 cluster analysis. This provides information on whether individual youths changed identity integration group membership between Time 1 and Time 2. Unlike Time 1, the three identity integration groups differed significantly on attitudes toward homosexuality and comfort with homosexuality (see Table 1), but did not differ in involvement in LGB activities or disclosure to others.

Given our hypothesis that identity formation and integration are related, we examined the associations between the groups of sexual identity formation and sexual identity integration. No significant associations were found between identity formation and identity integration either at Time 1 or Time 2, suggesting that those who began identity formation earlier were not more likely to report a

greater level of identity integration. However, identity integration at Time 1 was associated with identity integration at Time 2, $\chi^2(4, N = 140) = 58.8, p < .001$. Consistency over time was apparent: 60% of the low identity integration youths were consistent, 53% of the middling integration youths were consistent, and 68% of the high integration youths were consistent. Change over time also existed, with much of the change to an adjacent cluster (e.g., 37% of low integration youths transitioned to middling, but only 3% of low integration youths skipped to high).

As a further analysis of potential change, the three identity integration groups at Time 1 were examined to determine whether the groups had implications for subsequent development of identity integration. We used repeated measures ANOVA to examine whether the three identity integration groups exhibited change in the four components of identity integration between Time 1 and Time 2. Indeed, significant changes were found in 8 of 12 analyses (see Fig. 1). Groups differed on whether or not they exhibited significant change. Overall, the pattern indicates that each of the three groups became more similar over the one-year period examined, such that the high integration group decreased on three of four aspects of identity integration and the low integration group increased on two of four aspects of identity integration.

Correlates of Identity Development Among Groups of LGB Youths

Bivariate Analyses

We examined potential predictors of sexual identity formation group membership (see Table 2). The LGB youths who underwent identity formation earlier were more than twice as likely to have been sexually abused (OR = 2.3, 95% CI = 1.1–4.8). Further, early developing youths were older and less likely to be recruited from the college organizations than the more recent developing youths. Gender, social desirability, ethnicity/race, and SES were not significantly associated with identity formation groups.

Similarly, examination of the bivariate predictors of identity integration groups at Time 1 found nine factors significantly associated with identity integration group membership (see Table 2). Follow-up pairwise comparisons indicated that youths high or low on integration always differed from each other, with the middling group either differing from one or the other group, or not differing significantly from either group. As compared with the low integration group, the high group of youths possessed a cognitive sexual orientation that was more centered on the same sex, perceived more support from

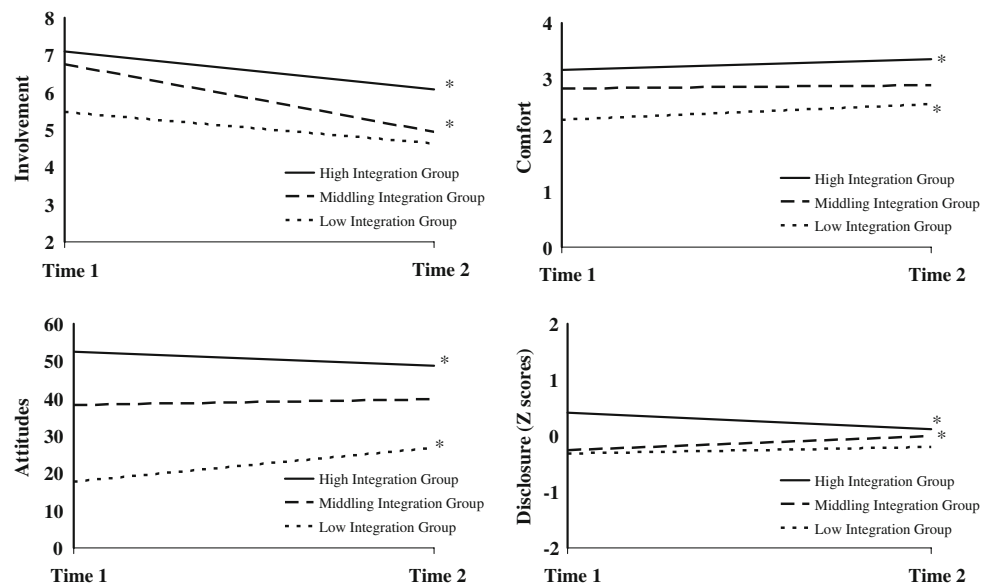
Table 1 Differences on variables composing the groups of identity formation and integration at Time 1 and Time 2

	Identity formation groups: Time 1			Test statistic <i>F</i>	Effect size η^2	Total sample (<i>n</i> = 156) <i>M</i>
	Recent development (<i>n</i> = 105) <i>M</i>	Early development (<i>n</i> = 51) <i>M</i>				
Time 1: Years since first:						
Same-sex attractions, fantasies, and arousal	5.55	9.58		73.21*	.32	6.87
Thought might be LGB	4.64	9.73		95.25*	.38	6.30
Same-sex sexual activity	2.56	8.68		153.67*	.52	4.70
Thought really was LGB	2.70	5.73		63.66*	.29	3.70
	Identity integration groups: Time 1			Test statistic <i>F</i>	Effect size η^2	Total sample (<i>n</i> = 156) <i>M</i>
Time 1:	High (<i>n</i> = 64) <i>M</i>	Middling (<i>n</i> = 59) <i>M</i>	Low (<i>n</i> = 33) <i>M</i>			
Involvement in LGB-related social activities	7.27 ^a	6.56 ^a	5.21 ^b	6.83*	.08	6.56
Positive attitudes toward homo/bisexuality	52.80 ^a	38.24 ^b	17.85 ^c	635.52*	.89	39.81
Comfort with others knowing about your homo/bisexuality	3.19 ^a	2.78 ^b	2.26 ^c	24.88*	.25	2.83
Disclosure to others	8.72 ^a	5.42 ^b	5.06 ^b	10.50*	.12	6.70
	Identity integration groups: Time 2			Test statistic <i>F</i>	Effect size η^2	Total sample (<i>n</i> = 140) <i>M</i>
Time 2:	High (<i>n</i> = 57) <i>M</i>	Middling (<i>n</i> = 55) <i>M</i>	Low (<i>n</i> = 28) <i>M</i>			
Involvement in LGB-related social activities	5.33	5.69	4.64	1.24	.02	5.34
Positive attitudes toward homo/bisexuality	53.60 ^a	37.93 ^b	19.36 ^c	519.56*	.88	40.60
Comfort with others knowing about your homo/bisexuality	3.29 ^a	3.00 ^b	2.42 ^c	19.15*	.22	3.00
Disclosure to others	2.80	2.72	2.38	1.22	.02	2.69

Note. For identity integration groups, means with differing superscripts differed at $p < .05$. The means for attitudes toward homosexuality/bisexuality and for disclosure at Time 2 are based on transformed data due to skewness. Thus, the values for disclosure at Time 1 and Time 2 are not comparable

* $p < .001$

Fig. 1 Prospective changes in each of the four aspects of identity integration over 1 year for each of the three identity integration groups (from Time 1). * indicates that the change was significant at $p < .05$ for that identity group



family and friends, had fewer negative social relationships, was less likely to experience gay-related stress, was older, provided more socially desirable responses, was more likely to identify as lesbian/gay than bisexual, and was more likely to be female than male. Factors not significantly related to identity integration at Time 1 were lifetime number of sexual partners, prevalence of recent sex with the same sex, ethnicity/race, SES, and recruitment site.

For the identity integration groups at Time 2, several significant associations were identified (see Table 2). Follow-up pairwise comparisons found the greatest number of differences between the high and low groups, with the middling group now more similar to the high group than to the low group. In addition, many correlates identified at Time 1 were still related to integration a year later. The high as compared with the low integration group had a cognitive sexual orientation that was more same-sex centered at Time 1, perceived more family support at Time 1, experienced fewer negative social relationships at Time 1, was more likely to identify as lesbian/gay than bisexual at Time 1, was more likely to be female than male, and differed on ethnicity/race. No significant differences were found among the groups on Time 1 prevalence of recent sex with the same sex, gay-related stress, age, SES, and recruitment site.

Multivariate Analyses

To determine which of the significant bivariate associations would predict the groups of sexual identity formation and integration after controlling for all other significant bivariate associations, multivariate logistic regression analysis was performed. For sexual identity formation, although

sexual abuse was only marginally significant in multivariate analyses ($p = .065$), the consistently high magnitude of the association, OR = 2.1, 95% CI = 0.96–4.5, and the fact that this effect hardly decreased from the bivariate analyses suggests that abuse remains an important predictor of subsequent identity formation. Age was significantly associated with identity formation, OR = 1.5, 95% CI = 1.1–1.9, $p = .01$.

For the three identity-integration groups at Time 1 and Time 2, pairwise comparisons were made using logistic regression (see Table 3). The overall model was found to distinguish (i.e., the omnibus chi-square was significant) between each of the identity integration groups at both Time 1 and Time 2. At Time 1, the high group as compared with the low group of youths had fewer negative social relationships, was less likely to experience gay-related stress, and was older and more likely to be female than male. In contrast, the high group as compared to the middling group of youths had a cognitive sexual orientation that was more same-sex centered, experienced more family support, and was more likely to be female.

Comparisons of the identity integration groups at Time 2 (see Table 3) indicated that, as compared with the low group, the high group perceived more family support at Time 1, had fewer negative social relationships at Time 1, and was more likely to be female. The high as compared with the middling group reported marginally less friend support at Time 1 and was nearly four times more likely to be Black. The middling as compared with the low group reported a cognitive sexual orientation that was more same-sex focused at Time 1, reported fewer negative social relationships at Time 1, and its members were more likely to be female, but less likely to be Black.

Table 2 Bivariate predictors of group membership at Time 1 and Time 2

	Identity formation groups: Time 1			Test statistic	Effect size
	Recent development (<i>n</i> = 105) <i>M</i>	Early development (<i>n</i> = 51) <i>M</i>			
Time 1:				<i>F</i>	η^2
Age	17.9	19.0		16.35***	.10
	%	%		χ^2	τ
Sexual abuse	56	75		4.90*	.03
Recruitment site (colleges)	24	11		4.65*	.03
	Identity integration groups: Time 1			Test statistic	Effect size
	High (<i>n</i> = 64) <i>M</i>	Middling (<i>n</i> = 59) <i>M</i>	Low (<i>n</i> = 33) <i>M</i>		
Time 1:				<i>F</i>	η^2
Current sexual orientation	5.4 ^a	5.0	4.6 ^b	5.01**	.06
Social support: family	7.5 ^a	5.8 ^b	4.9 ^b	5.60**	.07
Social support: friends	10.4 ^a	10.3 ^a	9.3 ^b	2.90†	.04
Negative social relationships	1.9 ^a	2.2 ^b	2.4 ^b	6.24**	.08
Age	18.5 ^a	18.4 ^a	17.5 ^b	4.53*	.06
Social desirability	6.8 ^a	5.4 ^b	5.5 ^b	4.48*	.06
	%	%	%	χ^2	τ
Gay-related stress	31 ^a	41	58 ^b	6.27*	.02
Identify as lesbian/gay versus bisexual	75 ^a	72 ^a	45 ^b	9.17**	.02
Female sex	64 ^a	46 ^b	24 ^c	14.2***	.04
	Identity integration groups: Time 2			Test statistic	Effect size
	High (<i>n</i> = 57) <i>M</i>	Middling (<i>n</i> = 55) <i>M</i>	Low (<i>n</i> = 28) <i>M</i>		
Time 1:				<i>F</i>	η^2
Current sexual orientation	5.3 ^a	5.2 ^a	4.3 ^b	7.78***	.10
Number of same-sex partners-lifetime	1.4	1.7 ^a	1.1 ^b	2.71†	.04
Social support: family	6.7 ^a	6.8 ^a	4.3 ^b	4.02*	.06
Social support: friends	10.1	10.7 ^a	9.2 ^b	3.71*	.05
Negative social relationships	2.1 ^a	2.1 ^a	2.5 ^b	3.82*	.05
Social desirability	6.7 ^a	5.5 ^b	5.6	3.17*	.04
	%	%	%	χ^2	τ
Identify as lesbian/gay versus bisexual	78 ^a	73 ^a	37 ^b	15.05***	.04
Female sex	58 ^a	49 ^a	25 ^b	8.20*	.02
Ethnicity/race:					
Black	46 ^a	18 ^b	50 ^a	12.53*	.05
Latino	32 ^a	47 ^b	25 ^a		
White/other	23	35	25		

Note: For identity integration groups, means or percents with differing superscripts differ at $p < .05$

† $p < .06$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 3 Multivariate predictors of group comparisons at Time 1 and Time 2

	High versus middling OR (95% CI)	High versus low OR (95% CI)	Middling versus low OR (95% CI)
<i>Identity integration group comparisons: Time 1</i>			
Time 1 predictors:			
Current sexual orientation	1.8* (1.1, 2.9)	–	–
Social support: family	1.1† (1.0, 1.3)	–	–
Social support: friends	–	–	–
Negative social relationships	–	0.4* (0.1, 1.0)	–
Gay-related stress	–	0.2* (0.1, 0.7)	–
Age	–	1.7* (1.1, 2.6)	1.4† (1.0, 1.9)
Social desirability	–	–	–
Identify as lesbian/gay versus bisexual	–	–	–
Female sex	3.6** (1.5, 8.9)	14.4*** (3.2, 64.2)	3.2† (1.0, 10.3)
<i>Identity integration group comparisons: Time 2</i>			
Time 1 predictors:			
Current sexual orientation	–	–	4.1** (1.6, 10.9)
Social support: family	–	1.2* (1.0, 1.5)	–
Social support: friends	0.8† (0.7, 1.0)	–	–
Negative social relationships	–	0.4† (0.2, 1.1)	0.3* (0.1, 0.9)
Number of same-sex partners-lifetime	–	–	–
Social desirability	–	–	–
Identify as lesbian/gay versus bisexual	–	–	–
Female sex	–	11.3** (2.4, 53.2)	13.9** (2.1, 91.2)
Ethnicity/race: Black versus white/other	3.6* (1.2, 11.0)	–	0.1* (0.0, 0.7)
Ethnicity/race: Latino versus white/other	–	–	–

Note: The full model was found to distinguish (i.e., significant omnibus chi-square) between each of the identity integration groups. The odds ratio for individual variables that significantly distinguished between these groups are reported, and nonsignificant variables are marked with a dash

† $p < .08$, * $p < .05$, ** $p < .01$, *** $p < .001$

Correlates of Individual-Level Change in Identity Integration

Bivariate Analyses

As valuable as the previous information may be, those changes and their correlates are assessed at the level of the group, and thus do not provide any information on patterns or predictors specific to individual changes. Therefore, we examined if youths changed in their identity integration groups between Time 1 and Time 2 at the level of the individual. As indicated in Table 4, nearly two-thirds of youths were consistent over time, but the remainder changed. Given the small number of youths in some categories, we were only able to focus subsequent analyses on youths who were consistently high, increased from low or middling to high, decreased from high to middling, were consistently middling, and were consistently low.

Table 5 contains the significant bivariate associations along with pairwise comparisons. Youths who were

Table 4 Individual-level consistency and change in identity integration groups over 1 year

From Time 1 to Time 2:	<i>n</i>	%
Consistently high integration	39	28
Increased from middling to high integration	17	12
Consistently middling integration	28	20
Consistently low integration	18	13
Decreased from high to middling integration	16	11
Increased from low to middling integration	11	8
Decreased from middling to low integration	8	6
Increased from low to high integration	1	1
Decreased from high to low integration	2	1

Note. Percentages do not sum to 100% due to rounding error

consistently high differed from those who were consistently low on many factors, including being more same-sex focused in their cognitive sexual orientation at Time 1, reporting more support from both family and friends at Time 1, having fewer negative social relationships at Time

Table 5 Bivariate associations predicting individual-level consistency and change in identity integration groups

	Consistency or change in identity integration groups					Test statistic	Effect size
	Consistently high	Increased from low/middling to high	Decreased from high to middling	Consistently middling	Consistently low		
Time 1:	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>F</i>	η^2
Current sexual orientation	5.5 ^a	4.9	5.3 ^a	5.2 ^a	4.2 ^b	3.85**	.12
Social support: family	7.0 ^a	6.1	8.6 ^a	6.4	4.6 ^b	2.31†	.08
Social support: friends	10.4 ^a	9.4	10.8 ^a	10.7 ^a	8.7 ^b	3.21*	.10
Negative social relationships	2.0 ^a	2.3	1.9 ^a	2.2 ^a	2.6 ^b	3.25*	.10
Number of same-sex partners-lifetime	1.2 ^{ab}	1.8 ^{ac}	1.9 ^c	1.5	0.9 ^b	2.51*	.08
Social desirability	7.2 ^a	5.7	6.1	5.0 ^b	5.4 ^b	3.12*	.10
	%	%	%	%	%	χ^2	τ
Gay-related stress	28 ^a	44	31 ^a	32 ^a	67 ^b	8.92†	.02
Identify as lesbian/gay versus bisexual	76 ^a	82 ^a	75 ^a	75 ^a	29 ^b	15.76**	.03
Female sex	64 ^a	44	63 ^a	46 ^a	17 ^b	12.46*	.03

Note. Means or percents with differing superscripts differ at $p < .05$

† $p < .07$, * $p < .05$, ** $p < .01$

1, experiencing less gay-related stress at Time 1, as well as being more likely to identify as lesbian/gay at Time 1, being more likely to be female, and providing more socially desirable responses at Time 1. Youths who decreased from high to middling and youths who were consistently middling were often similar to the consistently high integration group and significantly different from the consistently low group on these same variables. In contrast, youths who increased from low or middling to high integration often did not differ from the consistently high integration group, the consistently middling group, or the consistently low group. Consistently low integration youths were uniformly the lowest group in terms of family and friend support, and highest in negative relationships and experiences of gay-related stress. They also reported the lowest levels of same-sex sexual orientation, the fewest same-sex sexual partners, and they were least likely to identify as lesbian/gay or to be female. Prevalence of same-sex behavior and ethnicity/race were not associated with identity integration change.

Multivariate Analyses

Each of the factors identified in the bivariate analyses as significantly associated with identity integration change groups was subsequently re-examined in multivariate logistic regression analyses in which each group was contrasted with the others; controls for gender and social desirability were imposed in all analyses. These multivariate findings largely replicated the bivariate findings, with the consistently low group differing from most other

identity integration change groups (see Table 6). Indeed, the full model was found to distinguish (i.e., significant omnibus chi-square tests) between the consistently low group and each of the other identity change groups. Youths who were consistently high in identity integration, as compared with youths consistently low in identity integration, had a cognitive sexual orientation that was more same-sex centered at Time 1, perceived more support from both friends and family at Time 1, had fewer negative social relationships at Time 1, experienced less gay-related stress at Time 1, and were more likely to identify as lesbian/gay at Time 1. Youths who increased from low or middling to high integration during the year, relative to youths who remained consistently low in integration, were more same-sex centered in their sexual orientation at Time 1, had more same-sex partners at Time 1, and were more likely to be lesbian/gay self-identified at Time 1. Youths who decreased from high to middling also differed significantly from the consistently low integration group on all the Time 1 variables, reporting a more same-sex centered cognitive sexual orientation, more family and friend support, fewer negative social relationships, less gay-related stress, more same-sex partners, and a greater tendency to identify as lesbian/gay. Finally, consistently middling youths as compared with consistently low youths were more same-sex centered in their orientation at Time 1 and reported at Time 1 more friend support, fewer negative social relationships, less gay-related stress, more same-sex partners, and a greater likelihood of identifying as lesbian/gay. The overall model did not significantly distinguish between the consistently high youths, youths who

Table 6 Multivariate associations predicting comparisons of individual-level consistency and change in identity integration

Time 1:	Comparison of change in identity integration groups				
	Consistently high versus increased from low/mid to high, OR (95% CI)	Consistently high versus consistently low, OR (95% CI)	Increased from low/mid to high versus consistently low, OR (95% CI)	Decreased from high to middling versus consistently low, OR (95% CI)	Consistently middling versus consistently low, OR (95% CI)
Current sexual orientation	1.5† (0.9, 1.5)	4.5** (1.7, 11.9)	1.6† (1.0, 2.7)	2.9* (1.2, 7.3)	5.1** (1.8, 14.7)
Social support: family	–	1.2† (1.0, 1.4)	–	1.2* (1.0, 1.5)	–
Social support: friends	–	1.3† (1.0, 1.7)	–	1.7* (1.1, 2.6)	1.4* (1.0, 1.9)
Negative social relationships	–	0.2** (0.1, 0.7)	–	0.3* (0.1, 1.0)	0.2** (0.1, 0.7)
Gay-related stress	–	0.2* (0.1, 0.9)	–	0.1* (0.0, 0.8)	0.2* (0.1, 0.8)
Number of same-sex partners-lifetime	–	–	3.4** (1.4, 8.6)	3.8* (1.3, 11.3)	2.1* (1.1, 3.9)
Identify as lesbian/gay versus bisexual	–	7.8** (1.8, 33.9)	13.0** (2.2, 79.1)	6.7* (1.2, 38.6)	14.9** (2.6, 87.1)

Note: Controls were imposed for sex and social desirability in all contrasts. Although tested, the full model did not distinguish (i.e., the omnibus chi-square test was nonsignificant) between the consistently high versus decreased group, the consistently high versus consistently middling group, the increasing versus decreasing group, the increasing versus consistently middling group, or the decreasing versus consistently middling groups. Therefore, these nonsignificant logistic regression models are not reported here. The odds ratios of individual variables that significantly distinguished between identity change groups are reported, whereas nonsignificant variables are indicated with a dash

† $p < .08$, * $p < .05$, ** $p < .01$

increased from low or middling to high, youths who decreased from high to middling, and consistently middling youths as evidenced by the nonsignificant omnibus chi-square tests for the logistic regression models.

Discussion

Given the discrepancies between various models in the order of sexual identity development stages and the different patterns of development empirically identified, the current report sought to examine different patterns of identity formation and identity integration among LGB youths and the implications the patterns might have for subsequent identity development. In contrast to much past work that examined a specific theoretically based pattern of development, the current study did not impose an a priori structure on the data because we had no basis for such a structure. Instead, we assessed various theoretically important dimensions of sexual identity formation and integration and allowed the data to suggest the naturally occurring patterns that might characterize and differentiate groups of youths. Also of critical concern in this report were the potential individual and social contextual factors hypothesized to predict the different patterns that might emerge, and the contextual factors that might predict changes in identity development over time.

Different Patterns of Identity Integration and Formation

The sexual identity formation of the LGB youths was found to develop in one of two naturally occurring patterns. One group consisted of a small number of youths ($n = 51$) who had undergone various milestones of sexual identity formation much earlier than the second and larger group of youths ($n = 105$). The early developing group was found to be older and to be more likely to have experienced childhood sexual abuse ($p < .07$). These findings are consistent with past research that suggests that sexual abuse may facilitate an earlier sensitivity to sexuality in general that may lead to an earlier awareness of sexual feelings, earlier (voluntary) sexual behavior, and an earlier questioning of sexual identity (e.g., Bartholow et al. 1994).

Three patterns of sexual identity integration were identified at Time 1, and the stability of these three patterns was examined at Time 2. One group reported high levels on all aspects of integration, a second group reported low levels on all aspects, and a middling group that was moderately high (like the high group) on some aspects and moderately low (like the low group) on other aspects. The groups differed on all four dimensions of identity integration at Time 1. They differed only on attitudes toward homosexuality/bisexuality and comfort with homosexuality/

bisexuality at Time 2. Because these two factors are the internal aspects of identity integration, one reason for this finding at Time 2 is that it may take time to work through one's biases. The other (nonsignificant) dimensions of integration at Time 2, involvement in LGB-related social activities and disclosure to others, are more external because they involve other individuals in the social networks of LGB persons. The lack of significant difference on these two dimensions at Time 2 may indicate a ceiling effect that is reached after someone has been integrating his or her sexual identity for some time. A flurry of activity involvement and disclosure to others may occur within a certain window of sexual identity development, followed by a relative flattening or decrease in the frequency of both dimensions. Future research must confirm the patterns or profiles of sexual identity formation and integration that were found here.

Our hypothesis that youths who began identity development earlier would be further along in the identity integration process was not supported. The identity formation groups were unrelated to the groups of sexual identity integration, suggesting that time since undergoing identity formation had little relation to identity integration. Sexual identity formation logically sets sexual identity integration in motion, but like a catalyst, it seems to initiate a process, but fails to chart the unfolding of that process. We suggest that sexual identity formation is necessary for sexual identity integration, but that the formation of an LGB identity is not sufficient for the continued unfolding of sexual identity integration. The nonsignificant association may indicate that some youths who experienced early identity formation experienced barriers that stalled subsequent integration of their new LGB identity, while other youths did not.

The current study is the first to identify potential individual and social context factors that serve as barriers to and facilitators of identity integration, both cross sectionally and longitudinally. Specifically, multivariate analyses demonstrated that the group of youths high on integration differed from the middling and low integration groups in that they had a cognitive sexual orientation that was more same-sex focused, perceived receiving more family support, had fewer negative social relationships, and was less likely to experience gay-related stress. These findings suggest the critical role of positive factors, such as a supportive family, for optimal development of LGB youths. The findings also suggest that negative social interactions (e.g., gay-related stress, negative relationships) may not only have negative mental health consequences (e.g., Bontempo and D'Augelli 2002), but may also impede further identity development. Furthermore, the fact that many of these findings were identified longitudinally (Time 1 factors associated with identity integration a year later at

Time 2) suggests that these associations are potential causal predictors of identity integration. These data not only indicate why different groups of LGB youths may exist, but they also may suggest that LGB youths, just like their heterosexual peers, need supportive social relationships in order to develop and thrive.

Individual Changes in Identity Integration Over Time

In addition to group level differences, we also examined whether individual youths changed over the course of the year. These individual-level analyses found that many youths remained relatively consistent over the year, meaning they varied little over time. Changes in identity integration also were apparent. These transitions were both toward increasing integration (i.e., middling to high integration, 12%) and toward decreasing integration (i.e., high to middling integration, 11%). Other transitions occurred, but fewer numbers of youths experienced them (8% or less). However, the presence of decreasing integration suggests that identity integration is an ongoing process, and that changes in external or contextual factors (e.g., stress, support) may lead some youths to fluctuate in their integration over time. Also, transitions representing large changes, such as leaps from low to high integration over 1 year, were rare (1%), suggesting that the process of identity integration takes time and that profound changes of this magnitude are not likely to occur in the short time frame examined here.

As hypothesized, the individual and social context factors identified as cross sectionally and longitudinally associated with identity integration groups were also found to predict individual-level changes in identity integration over time. The comparison of youths who were consistently high with those who were consistently low found that the former were more same-sex focused in their cognitive orientation, reported more support from family and friends, experienced fewer negative social relationships, and were less likely to have had gay-related stress. Similarly, the youths who decreased from high to middling integration and youths who were consistently middling also significantly differed from the consistently low integration group on these same factors. However, the psychosocial factors examined were generally unable to distinguish among the youths who were consistently high, those who increased from low or middling to high, those who decreased from high to middling, and those who were consistently middling in their LGB identity integration. Future research with larger samples than available here may wish to examine these predictors of change in identity integration.

These findings offer a number of important implications for those who design or deliver interventions or services to LGB youths in community settings. First, the findings of

diverse patterns of identity formation and integration suggest that a single program to promote a healthy LGB identity may not serve all youths well. Rather, the findings suggest that programs must take into account and be tailored to each youth's identity integration at that specific moment in time. At particular risk, and perhaps in most need of supportive assistance, are those youths who remain consistently low in their identity integration (e.g., relatively poorer attitudes toward homosexuality, lower participation in LGB social activities, less comfort with others potentially knowing about their sexuality, and less disclosure to others relative to other LGB youths). However, the finding that some youths decreased in identity integration suggests that all youths may need support to maintain their current level of integration, especially in times of stress or conflict. Fortunately, the findings also suggest potential ways that individuals and community-based organizations may promote LGB identity integration. Efforts to reduce the experiences of rejection, ridicule, and victimization among LGB youths, as well as negative social relationships more generally, clearly are important in assisting LGB identity integration. Further, the provision of emotionally supportive relationships, the development of supportive friendships, and efforts to facilitate supportive parent–child relationships would promote a healthy LGB identity for these youths. Although interventions to reduce experiences of gay-related stress and to promote support may be undertaken with the LGB youths individually, these findings also suggest the need to address the larger social context in which the youths find themselves. For example, efforts in the schools may both reduce victimization and provide safe supportive spaces (e.g., gay-straight alliances). Similarly, working with the families of LGB youths may help family members learn ways in which they can provide nurturance and support to their child particularly as he/she undergoes the process of identity development. Indeed, our findings suggest that efforts, such as those noted above, to address the larger social context of LGB youths are likely to facilitate healthy LGB identity development.

Limitations

Our study has a number of limitations. First, our sample was modest in size, although we did have sufficient numbers of cases to detect medium effect sizes. Second, we only had a one-year longitudinal period of analysis. Despite the relatively narrow assessment window and the likelihood that sexual identity development takes time, we did find important changes. Nevertheless, longer follow-up periods should be proposed to examine the degree of consistency and change in sexual identity development; our study provides the rationale for such studies. Lastly, because our youths were recruited from New York City

and from gay-focused programs and community organizations, generalizability may be limited. As we encourage attempts to identify and understand diversity among LGB youths, we also encourage diversity in the samples of such youths.

Conclusions

The current report found that LGB youths experience a diverse set of coming-out experiences, and no single pattern was found to be typical. We found multiple patterns of identity formation, identity integration, and change in identity integration over time. Further, the findings of both increasing and decreasing identity integration suggest that this may be an ongoing developmental process. In addition, we found that several hypothesized factors predicted the sexual identity development patterns of LGB youths. Therefore, future research should be sensitive to the diversity that exists among LGB youths before data are aggregated across the youths. In addition, future research should consider the implications of any diversity for the youths' continuing development and their mental and physical health. The higher prevalence of poor mental and physical health found among LGB youths relative to heterosexual peers (e.g., Bontempo and D'Augelli 2002; Fergusson et al. 1999; Russell and Joyner 2001; Valleroy et al. 2000) may be attributed to a subgroup(s) of LGB youths, rather than all LGB youths. If true, the identification of that subgroup(s) would advance our scientific understanding and hone our intervention efforts.

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