Essentialist Beliefs, Sexual Identity Uncertainty, Internalized Homonegativity and Psychological Wellbeing in Gay Men

James S. Morandini and Alexander Blaszczynski
The University of Sydney

Michael W. Ross
The University of Minnesota

Daniel S. J. Costa and Ilan Dar-Nimrod
The University of Sydney

The present study examined essentialist beliefs about sexual orientation and their implications for sexual identity uncertainty, internalized homonegativity and psychological wellbeing in a sample of gay men. A combination of targeted sampling and snowball strategies were used to recruit 639 gay identifying men for a cross-sectional online survey. Participants completed a questionnaire assessing sexual orientation beliefs, sexual identity uncertainty, internalized homonegativity, and psychological wellbeing outcomes. Structural equation modeling was used to test whether essentialist beliefs were associated with psychological wellbeing indirectly via their effect on sexual identity uncertainty and internalized homonegativity. A unique pattern of direct and indirect effects was observed in which facets of essentialism predicted sexual identity uncertainty, internalized homonegativity and psychological wellbeing. Of note, viewing sexual orientation as immutable/biologically based and as existing in discrete categories, were associated with less sexual identity uncertainty. On the other hand, these beliefs had divergent relationships with internalized homonegativity, with immunutability/biological beliefs associated with lower, and discreteness beliefs associated with greater internalized homonegativity. Of interest, although sexual identity uncertainty was associated with poorer psychological wellbeing via its contribution to internalized homophobia, there was no direct relationship between identity uncertainty and psychological wellbeing. Findings indicate that essentializing sexual orientation has mixed implications for sexual identity uncertainty and internalized homonegativity and wellbeing in gay men. Those undertaking educational and clinical interventions with gay men should be aware of the benefits and of caveats of essentialist theories of homosexuality for this population.

Keywords: sexual orientation beliefs, essentialism, gay, internalized homonegativity, sexual identity uncertainty

Within the general public there are a range of beliefs about the nature and origins of sexual orientation (i.e., sexual orientation beliefs). Some view sexual orientation through an essentialist prism, perceiving it as biologically determined, fixed across the life span and existing in discrete categories (e.g., homosexual, bisexual, heterosexual). Many also hold anti-essentialist beliefs, maintaining that sexual orientation is dependent upon social factors such as upbringing, can be chosen, may be fluid across time and place, and exists on a spectrum from straight to gay.

In recent decades there has been significant psychological interest in lay people’s beliefs about homosexuality and their impact on sexual prejudice. To date research has focused predominately on heterosexual’s beliefs with the aim of determining whether certain accounts of homosexuality can promote or ameliorate prejudicial attitudes. Typically it has been found that homosexuals who believe sexual minority status is biologically determined and immutable hold more favorable attitudes toward sexual minorities, than those who perceive it as freely chosen or learnt (e.g., Aguero, Block, & Byrne, 1984; Haslam & Levy, 2006; Haslam, Rothschild & Ernst, 2002; Hegarty & Pratto, 2001; Jayaratne et al., 2006; Whitley, 1990).

In comparison, scarce attention has been paid to the sexual orientation beliefs held by sexual minority individuals. More so than heterosexuals, nonheterosexuals may be expected to form beliefs about sexual orientation to make sense of their own sexuality. Most lesbian, gay, and bisexual (LGB) individuals are socialized with the expectation that they will be heterosexual, and as such the emergence of same-sex attraction leads to attempts to make sense of how and why one is different. Given the pervasiveness of homophobic stigma and discrimination, and the subsequent struggles many LGB people face in accepting their sexuality, sexual orientation beliefs may hold deep personal significance for many LGB individuals.

As in heterosexuals, it appears there is much variability in the beliefs LGB individuals construct about sexual orientation. For
instance, some gay activists have publically embraced biological theories of sexual orientation, insisting they were “born this way” (Lady Gaga, 2011), whereas other LGB individuals prefer to view their sexuality as socially constructed (see Kitzinger, 1987) or at least partly chosen (Whisman, 1996). At present the implications of these beliefs for same-sex attracted individuals are unknown. As will be discussed below in detail, beliefs sexual minority individuals endorse about sexual orientation may be relevant to how they conceive of their own sexual identity and their level of comfort with their sexuality. As scientific inquiry into the nature and origins of gay male sexual orientation continues to arouse popular interest and controversy (Conrad & Markens, 2001), gay identifying men may be particularly likely to engage with bioessentialist theories of sexuality on a personal level. As such the present study will investigate whether essentialist beliefs about sexual orientation are associated with sexual identity uncertainty and internalized homonegativity specifically among gay males.

**Essentialist Beliefs About Sexual Orientation**

*Psychological essentialism* refers to the belief that membership of certain social categories is determined by an underlying “essence” shared by its members. This essence is typically assumed to be biological in nature, such as genes or neuroanatomy (Dar-Nimrod & Heine, 2011), and is thought to give rise to the defining characteristics of the group. With relation to sexual orientation essentialism, research has almost exclusively investigated heterosexuality’s beliefs about gay and lesbian sexual orientation and paints a complex picture of the link between essentialism and sexual minority prejudice. One significant finding is that sexual orientation essentialism appears to be a multidimensional construct (Haslam & Levy, 2006; Haslam, Rothschild, & Ernst, 2000; Haslam et al., 2002; Hegarty & Pratto, 2001) with two dimensions reliably emerging in the empirical literature. The first, which will be referred to as *naturalness*, encapsulates beliefs that sexual orientation is biologically based, immutable, fixed early in life, and is culturally and historically universal. The second dimension comprises the notion that sexual orientation exists in discrete and nonoverlapping categories such as homosexual versus heterosexual (discreteness), and that these categories are identity defining, informative of an individual member’s characteristics, and that category members are homogenous (entitativity; Haslam & Levy, 2006; Hegarty & Pratto, 2001).

Critically, these facets of sexual orientation essentialism are consistently found to have divergent relationships with homonegativity among heterosexuals. Those who endorse naturalness beliefs tend to hold more tolerant attitudes toward gay men and lesbians (e.g., Haslam & Levy, 2006; Hegarty & Pratto, 2001). This has commonly been explained via attribution theory in the context of stigma (Weiner, Perry, & Magnusson, 1988) (i.e., those perceived to have caused their stigma [in this case homosexuality] will be evaluated more negatively than those whose stigma is perceived to be the result of factors outside of their control [such as a “gay gene”]). On the other hand, discreteness/entitativity beliefs are found to predict more negative attitudes toward LGB individuals as they accentuate the perception of group based differences and promote stereotype endorsement (Dar-Nimrod & Lisdendrilli, 2012; Haslam et al., 2002; Rothbart & Taylor, 1992). Collectively, these findings indicate that individuals tend to endorse a mixture of essentialist and social constructivist beliefs in make sense of group differences in sexual orientation and that both essentialist and social constructivist beliefs have mixed implications for sexual prejudice.

But what of the essentialist beliefs held by sexual minorities? There are reasons to suggest that sexual orientation beliefs of LGB individuals are not identical to those held by heterosexuals. Indeed a recent empirical study identified that among sexual minorities, sexual orientation essentialism was best captured by four factors (Arseneau, Grzanka, Miles & Fassinger, 2013). This included a factor corresponding to naturalness, two separate factors corresponding to discreteness and entitativity, and a fourth factor reflecting the perceived social and personal importance of sexual orientation to an individual’s identity. Subsequent testing of this four-factor structure in a predominately heterosexual sample showed unacceptable fit (Arseneau et al., 2013). As such this factor structure appears unique to LGB individuals and can be used to inform the investigation of essentialist beliefs and their correlates in sexual minority samples (Arseneau et al., 2013).

At present little is known about the consequences of ingroup essentialism among minorities generally, or for gay men specifically. Below we discuss how sexual identity uncertainty and self-stigma may be related to sexual orientation essentialism in gay males.

**Identity Uncertainty and Essentialist Beliefs Among Sexual Minorities**

*Sexual identity uncertainty* refers to the extent to which an individual is uncertain or confused about their own sexual orientation. Identity uncertainty is often conceptualized as an early stage of sexual identity development during which individuals question their presumed heterosexual identity (see Cass, 1979) and which gives way to commitment to a stable sexual minority identity. However more recent scholarship suggests that identity uncertainty occurs in nontrivial levels among self-identified LGB individuals (Borders, Guillen, & Meyer, 2014; Worthington & Reynolds, 2009). As such some authors suggest that sexual orientation uncertainty is best understood as a dimensional construct which varies between individuals, and which may derive from distinct processes including (a) “normal curiosity and exploration” (Borders et al., 2014, p. 502) with regard to sexual interests and identity; (b) a negative response to living in a heterosexist and homophobic environment including influences such as internalized homophobia and ambivalence in committing to a stigmatized identity (Borders et al., 2014).

Identity uncertainty is associated with increased levels of internalized homophobia and psychological distress in LGB individuals (Borders et al., 2014; Feinstein, Davila, & Yoneda, 2012; Mohr & Fassinger, 2000). One plausible explanation is that sexual minority individuals who are less certain about their sexual orientation may be more likely to internalize society’s negative attitudes toward homosexuality to define themselves (Feinstein et al., 2012). This is in-line with research documenting that those with lower self-concept clarity are found to be more susceptible to external influences, such as other’s opinions or impressions of them (Campbell, 1990). Indeed, Feinstein et al., (2012) found that self-identified gay and lesbian individuals who reported greater sexual identity uncertainty, experienced lower self-esteem, and increased depressive symptoms.
More recently Borders et al. (2014) reported that sexual orientation uncertainty predicted depressive symptoms in LGB individuals, and that this relationship was partly mediated by rumination. The authors theorized that individuals who experience identity uncertainty may perceive it as a failure to establish a clear sense of identity and may ruminate in an attempt find a solution to this uncertainty. Given there exists substantial social pressure to identify with a particular a sexual orientation, failure to achieve certainty with regards to one’s sexual orientation may result in ongoing rumination and psychological distress (Borders et al., 2014).

Uncertainty about the self and one’s social world is inherently aversive (Hogg, 2000). Indeed experimental studies find that self-categorization is often motivated by a need to reduce subjective uncertainty (Hogg, 2000, 2007, 2009). Recently, Cheung, Dar-Nimrod, and Gonsalkorale (2014) suggested that essentialist beliefs may be used to satisfy epistemic needs, in particular “certainty in perceived personal and group identity” (p. 631). That is perceiving one’s social identity as immutable and discrete may foreseeably reduce uncertainty about how one should think, feel, and behave in a particular situation. In addition, one’s level of identification with a social group may be enhanced by perceiving membership of the group as based on genetic/biological factors and as being discrete in nature (Cheung et al., 2014).

Applying this argument to the present context, essentialist beliefs should have particular relevance to an individual’s level of uncertainty about their own sexual orientation. Gay men who perceive sexual orientation as biologically based/immutable/ fixed and as existing in discrete categories may perceive a greater level of stability and exclusiveness with regard to their sexuality, and therefore experience less sexual identity uncertainty. Although not previously examined, it would suggest that sexual orientation essentialism may be associated with greater commitment to a gay identity among same-sex attracted men, which may have positive consequences for self-stigma and psychological wellbeing (Borders et al., 2014; Feinstein et al., 2012; Mohr & Fassinger, 2000).

### Internalized Homonegativity and Essentialist Beliefs Among Sexual Minorities

Internalized homonegativity represents “the gay person’s direction of negative social attitudes toward the self” (Meyer & Dean, 1998, p. 161). This results in inner-conflict as the individual experiences self-stigma and shame in response to same-gender desires and sexual behavior (Williamson, 2000). Research has shown that internalized homonegativity has an adverse effect on a range of psychosocial outcomes in gay men (Frost & Meyer, 2009; Newcomb & Mustanski, 2010; Rossier, Bockting, Ross, Miner & Coleman, 2008; Williamson, 2000). As such, identifying factors, which predict internalized homonegativity, is of importance to public health measures and counseling interventions within LGB populations.

Similar to the case in heterosexuals, some gay men may deem their sexuality more acceptable if it is perceived to be beyond their control. In line with attribution theory (Weiner, Perry, & Magnusson, 1988), gay men perceiving choice in their sexuality may experience greater self-blame, perceiving their sexuality as a personal failing and in turn experience higher levels of internalized homonegativity. Indeed organic explanations of other stigmatized traits have previously been reported to relieve self-blame and guilt (e.g., Easter, 2012). An extreme example are gay men motivated to undertake conversion therapies to change their sexual orientation (Tozer & Hayes, 2004), or pursue opposite sex relationships with the intention of overcoming same-sex desires (Malcolm, 2000). Inherent in such homonegative motivations is the assumption that one’s sexuality is at least partly controllable and can be changed with self-discipline. Furthermore, as naturalness beliefs imply that one’s sexual orientation is an inherent/core aspect of the self, they may foster integration of one’s sexual orientation (Fassinger & Miller, 1996) into one’s self-concept, and thus lead to greater acceptance of one’s sexuality.

Another reason to suspect naturalness beliefs reduce internalized homonegativity relates to the naturalistic fallacy. A substantial body of psychological literature documents peoples tendency to conflate facts about the natural world with moral claims in general (e.g., Curry, 2006) and as they relate to essentialism in particular (Dar-Nimrod & Heine, 2011). Likewise LGB individuals who subscribe to naturalness beliefs may feel that such theories imply homosexuality is no more or less natural than heterosexuality and therefore equally legitimate. Although the moral justifiability of homosexuality is not logically connected to its etiology, some may still derive comfort in perceiving their sexual orientation as part of the natural order of things, as opposed to an aberration or acquired characteristic (see Dar-Nimrod & Heine, 2011).

To our knowledge only one empirical study has directly examined whether perceiving sexual orientation as immutable is associated with reduced self-stigma in sexual minorities. In a cross sectional survey of self-identified LGB adults, Herek, Gillis and Cogan (2009) found that gay and lesbian individuals reporting greater perceived choice in their sexual orientation demonstrated lower levels of internalized homonegativity. The authors concluded that essentialism may hold different meanings depending on one’s sexual identity and that among gay and lesbian individuals, expressing ones sexuality as involving volition may in fact be identity affirming and self-empowering. These conclusions need to be considered with caution, at least as they apply to gay men. Critically, the authors collapsed the sex of homosexually identified participants in their analysis and a closer inspection of means reveals that only lesbian women participants (but not gay men) endorsing choice displayed lower internalized homonegativity. As women report greater sexual fluidity (Baumeister, 2000; Fassinger & Arseneau, 2008) and perceived choice in sexual orientation relative to men (Whisman, 1996), it is possible that women are less likely than men to endorse sexual orientation essentialism. Given this, essentialist beliefs need to be considered separately for men and women, especially as they relate to internalized homonegativity. Further the operationalization of essentialism by Herek et al. (2009) was limited to a single item assessing extent of “choice” in being “gay, lesbian or bisexual” (p. 37). Given the multidimensional nature of sexual orientation essentialism in LGBs (Arseneau et al., 2013) it is necessary to assess these distinct dimensions to make valid conclusions about the relationship between essentialism and internalized homonegativity.
The Present Study

The present study sought to explore whether components of sexual orientation essentialism are related to psychological well-being indirectly via their influence on identity uncertainty and self-stigma. In doing so, our work draws on previously theorized models of the association between sexual minority stressors (e.g., internalized homonegativity) and mental health outcomes in gay men (Meyer, 2003). We assessed essentialist beliefs using a measure that was developed in a sexual minority sample (Arseneau et al., 2013). Three factors observed in the scale; naturalness, discreteness, and entitativity were examined as predictors of identity uncertainty and internalized homonegativity. The fourth factor, which measures the perceived personal and social importance of sexual orientation, was omitted from analysis as it was not theorized to be directly related to identity uncertainty or self-stigma in the present sample. Psychological wellbeing was operationalized as comprising self-esteem, depression, and life satisfaction, components of subjective wellbeing which have been found to be particularly influenced by internalized homonegativity and sexual identity conflict in previous studies of LGB populations (Feinstein et al., 2012; Newcomb & Mustanski, 2010).

As shown in Figure 1, we predicted that:

1. Naturalness and discreteness beliefs would be negatively associated with identity uncertainty in gay men (see path A and C). This is because naturalness and discreteness beliefs provide a stable and categorical framework for making sense of one’s same-sex attraction and in deriving one’s sexual identity. On the other hand, perceiving gay men as more reified and homogenous may increase perceived difference/distinctiveness of the group, and thus exacerbate uncertainty about one’s group membership (path E).

2. With regard to internalized homonegativity, as naturalness beliefs render a stigmatized sexuality uncontrollable, they may reduce efforts to change or resist one’s sexuality and foster self-acceptance. Likewise gay men, who perceive homosexuality as biologically determined and therefore a “naturally” occurring variant of sexuality, may judge their sexual orientation as more acceptable (Dar-Nimrod & Heine, 2011). In both cases, naturalness beliefs should result in lower internalized homonegativity (path B). However, we predicted that essentialism would be a double edged sword when it comes to gay men’s homonegativity. Negative societal attitudes regarding sexual minorities cast these identities as fundamentally distinct. Insofar as gay men perceive themselves as a discrete group, we suggest this will also be associated with a greater sense of marginalization and a more negative perception of being gay, in line with findings among heterosexuals (Haslam & Levy, 2006; path D). Likewise, we suggest that ingroup entitativity, to the extent to which it renders gays as homogenous and reifies group characteristics, will reflect greater internalization of negative stereotypes, and will be associated with more negative perceptions of homosexuality (Haslam & Levy, 2006; path F).

3. We predicted that in addition to direct influences on self-stigma, naturalness, discreteness and entitativity beliefs would contribute to internalized homonegativity indirectly via their associations with sexual identity uncertainty. Based on previous scholarship we hypothesized that sexual identity uncertainty would influence gay men’s susceptibility to internalized homonegativity (path G) as (a) those less certain about their sexual orientation will be more reliant on negative societal messages about homosexuality in defining themselves (Feinstein et al., 2012); (b) attempts to overcome latent homonegative beliefs and assumptions would be fostered by greater certainty about one’s sexuality. As naturalness and discreteness beliefs reduce identity uncertainty they would be indirectly associated with reduced internalized homonegativity, whereas entitativity, given its predicted association with increased identity uncertainty, would be associated with greater internalization of homonegative messages.

4. As internalized homonegativity in gay men is theoretically and empirically linked to a raft of negative psychosocial
outcomes (Williamson, 2000; Meyer, 2003) we predict that internalized homonegativity will be negatively associated with psychological wellbeing in the present sample (path I).

5. No previous studies have examined whether sexual identity uncertainty is related to psychological wellbeing independently of internalized homophobia. In line with previous scholarship, we hypothesize that as identity uncertainty is inherently aversive (Hogg, 2000; Feinstein et al., 2012) uncertainty about one’s sexual orientation will be associated with poorer psychological wellbeing in gay men (path H).

Method

Participants and Procedure

Participants in the present study were drawn from a larger cross-sectional survey examining same-sex attracted individuals’ beliefs about the nature and etiology of their sexual orientation, their experience of minority stress, and their psychological wellbeing. To be eligible for participation, recruits were required to be aged 18 years and over and Australian residents. From this larger survey of 2,133 participants, 862 respondents self-identified as gay men.

Participants ranged in age from 18 to 77 years ($M = 32.11, SD = 12.40$). Seventy-five percent of respondents identified as Anglo-Saxon (i.e., British or Irish decent), 8.7% as North West/ South East European (e.g., Italian, German), 6.5% as Asian, 1.3% as Middle Eastern, and 5% as mixed ethnicity. The majority of participants were nonreligious (71.4%), Christian (16.2%), Buddhist (2.9%), Muslim (0.6%) and Jewish (0.7%). All participants resided in Australia, with 53.4% residing in an inner metropolitan area, 35.9% in an out metropolitan area, 10.2% in a rural area, and 0.5% in a remote area. Fifty-six percent of our sample had completed an undergraduate or postgraduate degree. The demographics of this sample were largely commensurate with other large-scale online samples of LGB Australians (e.g., Leonard et al., 2012).

Respondents were directed to a URL address that linked to a participant information statement and consent form. Participants were asked to verify that they were eligible for participation and, after consenting, completed the 30–45 min questionnaire hosted on Limesurvey™. At the completion of the survey, participants were provided with a debriefing screen detailing the aims of the research and contact details should participants require counseling assistance. The survey was accessible via a website from February 2013 to July 2014. We used a combination of snowball and targeted sampling. This included via email announcements across a number of LGB advocacy organizations and university groups, as well as through social media, and a paid advertisement in a widely circulated LGB community online newspaper.

Measures

Measures were all validated self-report scales. They were presented in a fixed order starting with demographics, followed by sexual orientation beliefs, identity uncertainty, internalized homophobia, and psychological wellbeing scales.

Sexual orientation beliefs. Essentialist beliefs about the nature and etiology of sexual orientation were measured via the Sexual Orientation Beliefs Scale Form 1 (SOBS; Arseneau et al., 2013). This scale was developed on a large sample of LGB participants and consists of 35 items and four factor subscales. The naturalness subscale contained 12 items measuring the extent to which sexual orientation was viewed as biologically based, fixed early in life and immutable (e.g., “biology is the main basis of an individual’s sexual orientation”). The discreteness subscale (six items) measured the extent to which sexual orientation categories were viewed as distinct and nonoverlapping (e.g., “sexual orientation is a category with clear boundaries: A person is either gay/lesbian, bisexual, or heterosexual”). The entitativity subscale (10 items) assessed the extent to which sexual orientation categories were viewed as informative of members characteristics as well as the perceived homogeneity and interconnectedness of members (e.g., “you can tell a lot about someone if you know their sexual orientation”). Respondents rated how well these items reflected their beliefs about sexual orientation on a 5-point Likert-type scale ranging from 1 (strongly agree) to 5 (strongly disagree). Higher scores on individual subscales reflected greater endorsement of the measured construct. Internal consistency was acceptable to ideal for each subscale in the present study (naturalness = .74; discreteness = .81; entitativity = .80).

Identity uncertainty. Sexual identity uncertainty was assessed via the four-item identity uncertainty subscale of the Lesbian Gay Identity Scale (Mohr & Fassinger, 2000; Mohr & Kendra, 2011). This scale consisted of items that assessed uncertainty/confusion in deciding on one’s particular sexual orientation and included items such as “I’m not totally sure what my sexual orientation is.” All items were measured on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Good internal consistency was demonstrated for the items ($\alpha = .82$).

Internalized homonegativity. Internalized homonegativity was measured via the seven-item Internalized Homonegativity Scale for Men–Short Form (Smolenski, Diamond, Ross, & Rosser, 2010). All items were measured on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). This scale consists of items reflecting the extent of personal comfort (e.g., “Even if I could change my sexual orientation, I wouldn’t”), social comfort (e.g., “I feel comfortable discussing homosexuality in a public situation”), and public identification (“I feel comfortable being a gay man”) as a gay man. Internal consistency for all seven items was acceptable ($\alpha = .74$) and comparable to previous web-based studies using the scale ($\alpha = .70$) (Ross et al., 2010).

Depression. The Depression, Anxiety, Stress Scale (DASS-21: Lovibond & Lovibond, 1995) consists of three subscales each containing seven items; however, only the Depression subscale was analyzed in the present study. The Depression subscale measures symptoms of depressed or dysphoric mood (e.g., “I felt downhearted and blue”) and corresponds to diagnostic criteria for depression. Items are rated on a Likert-type scale ranging from 0 (did not apply to me at all) to 3 (applied to me very much). Respondents are asked to indicate how much each item applied over the last week. Higher scores indicate greater severity of symptoms. Excellent internal consistency of the Depression subscale was demonstrated in the present study ($\alpha = .92$).

Self-esteem. Self-esteem was assessed via the Rosenberg Self-Esteem Inventory (RSE; Rosenberg, 1965). Participants rated on a 4-point Likert-type scale their level of agreement with 10
statements (e.g., “On the whole, I am satisfied with myself”). Higher scores indicated greater self-esteem. Internal consistency was excellent (α = .92).

**Satisfaction with life.** Life satisfaction was assessed using the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985), which consists of five items developed to measure the cognitive component of subjective wellbeing. The Satisfaction with Life Scale demonstrated excellent internal consistency (α = .91).

### Data Analytic Plan

We planned to undertake structural equation modeling (SEM) in Mplus Version 6.11 (Muthen & Muthen, 2010) to test the hypothesized associations between variables. SEM allows empirical testing of both direct and indirect effects, can examine associations between multiple independent and dependent variables and allows assessment of overall fit of the data to the model. Model parameters were estimated using mean- and variance-adjusted weighted least squares, which is recommended when data are ordinal in nature. We planned to examine modification indices for significant areas of model misfit, and where theoretically justified, make modifications and rerun the model. Model fit was tested via a recommended two-step procedure (Anderson & Gerbing, 1988). First, a measurement model for all latent variables was tested; that is, a confirmatory factor analysis was conducted including naturalness, discreteness, entitativity, internalized homogeneity, identity uncertainty, depression, self-esteem, and life satisfaction and their items, where no structural (i.e., causal) paths between the latent variables were specified but their correlations were estimated. Then, the hypothesized structural paths were estimated. In addition to the model chi-square (for which \( p > .05 \) was taken to indicate good model fit), two fit indices were examined in determining model fit: the root-mean square error of approximation (RMSEA; values below .06 acceptable; Hu & Bentler, 1999); and the comparative fit index (CFI; values above .95 acceptable; Hu & Bentler, 1999). Following Shrout and Bolger’s (2002) suggestions, we calculated estimated standard errors using bootstrap resampling methods. \( p \) Values were generated using bootstrapping with 1,000 resamples for all analyses.

### Results

#### Data Preparation and Descriptive Statistics

First, we assessed the data for missingness. To ensure the availability of items representing all of the variables of interest we have excluded partial-completers from the analysis. That is, respondents failing to complete at least one entire measure of interest were excluded from analyses as a large proportion of missing data in individual cases can bias imputation estimates (Allison, 2000). The final sample, therefore, consisted of 639 men giving a response rate of 74% of those who started the survey.

We compared completers and noncompleters on all available demographic and questionnaire items. Noncompleters were found to be significantly younger than completers (\( M = 29.61, SD = 11.31 \) vs. \( M = 32.98, SD = 12.65 \); t[860] = −3.51, \( p < .05 \)) and demonstrated lower educational attainment (\( M = 3.16, SD = 1.19 \) vs. \( M = 3.56, SD = 1.16 \); t[861] = −4.55, \( p < .05 \)). The other demographics and questionnaire items did not differ significantly between these two subgroups. Missing data analysis indicated that less than 1% of data were missing for any one item. Following recommended practices for handling missing data (Schlomer, Bauman, & Card, 2010), estimation maximization (EM) was used to estimate missing data using SPSS version 21.

Descriptive statistics and bivariate correlations among all measured variables are presented in Table 1. Means for depression, self-esteem and life-satisfaction were all within the normal range for nonclinical samples (Henry & Crawford, 2005; Pavot & Diener, 1993; Schmitt & Allik, 2005). Normative data do not exist for the remaining scales.

#### Measurement Model

As noted above, confirmatory factor analysis was used to test a measurement model prior to testing the theorized structural model. The measurement model consisted of 11 latent variables (naturalness, discreteness, entitativity, internalized homogeneity, identity uncertainty, depression, self-esteem, and life satisfaction, depression, self-esteem, and life satisfaction) three of which (depression, self-esteem, and life satisfaction) were posited to reflect a higher-order latent variable, psychological wellbeing. Each latent variable was formed based on all respective scale

### Table 1

**Means, Standard Deviations, and Correlations for Demographics and Overall Scales (N = 639)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
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<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
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<tbody>
<tr>
<td>1. Naturalness</td>
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<td>2. Discreteness</td>
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<td>—</td>
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<tr>
<td>3. Entitativity</td>
<td>−.06</td>
<td>.19**</td>
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<td>4. Uncertainty</td>
<td>−.25**</td>
<td>−.18**</td>
<td>.09*</td>
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<td>5. IH</td>
<td>−.14**</td>
<td>.05</td>
<td>−.01</td>
<td>.24**</td>
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<td>—</td>
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<td>6. Depression</td>
<td>.00</td>
<td>.08*</td>
<td>.02</td>
<td>.17**</td>
<td>.27**</td>
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<td>7. Self-esteem</td>
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<td>.05</td>
<td>−.21**</td>
<td>−.40**</td>
<td>−.70**</td>
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<td>8. Life satisfaction</td>
<td>.03</td>
<td>−.06</td>
<td>.05</td>
<td>−.16**</td>
<td>−.37**</td>
<td>−.60**</td>
<td>−.72**</td>
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<td>( M )</td>
<td>4.08</td>
<td>2.33</td>
<td>2.34</td>
<td>1.54</td>
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<td>3.37</td>
<td>3.14</td>
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<tr>
<td>SD</td>
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<td>.74</td>
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<td>.93</td>
<td>.97</td>
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<td>.62</td>
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<tr>
<td>Skew (SE)</td>
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<td>.58 (.09)</td>
<td>.35 (.09)</td>
<td>2.39 (.09)</td>
<td>.88 (.09)</td>
<td>−1.36 (.09)</td>
<td>−.44 (.09)</td>
<td>−.45 (.09)</td>
</tr>
<tr>
<td>Kurtosis (SE)</td>
<td>.54 (.19)</td>
<td>.19 (.19)</td>
<td>.71 (.19)</td>
<td>6.19 (.19)</td>
<td>.92 (.19)</td>
<td>1.34 (.19)</td>
<td>−.56 (.19)</td>
<td>−.46 (.19)</td>
</tr>
</tbody>
</table>

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items. All items demonstrated factor loadings >.30 and were significant (p < .001), which provides evidence supporting the construct validity of the instruments. This measurement model demonstrated an acceptable model fit to the data ($\chi^2(1751) = 3687, p < .001, CFI = .957, RMSEA = 0.042 (0.040, 0.043)$. Because of the chi-squared test’s known sensitivity to sample size, the measurement model was considered to have good fit and was used to test the theorized structural model.

**Structural Model: Sexual Orientation Beliefs, Identity Uncertainty, Internalized Homonegativity, and Psychological Wellbeing**

SEM was used to test the hypothesized structural models. The first model (Model A) tested the proposed theoretical model (see Figure 1). That is, naturalness, discreteness, and entitativity were theorized to predict psychological wellbeing in gay men indirectly via their associations with identity uncertainty and internalized homonegativity. The hypothesized structural paths for Model A fit the data well, $\chi^2(1754) = 3591, p < .001, CFI = .959, RMSEA = 0.040 (0.039, 0.042)$. Furthermore, of the nine hypothesized structural paths (paths A to I) seven were significant ($p < .05$; see Figure 2). Likewise, nine of the predicted 13 indirect effects were found to be significant ($p < .05$; see Table 2). We also tested Model A with both direct and indirect effects from essentialist beliefs to psychological wellbeing, to rule out the possibility that indirect effects were artificially inflated via direct effects being forced into indirect paths. Using the DIFFTEST option we found that the more parsimonious model (i.e., indirect effects only) demonstrated significantly worse fit than the less parsimonious model (i.e., direct and indirect effects), $\chi^2(2) = 259.4, p < .05$, which fit the data well, $\chi^2(1751) = 3687, p < .001, CFI = .957, RMSEA = 0.042 (0.040, 0.043)$. However again, inspection of structural parameters indicated that naturalness, discreteness, and entitativity beliefs failed to mediate between identity uncertainty, internalized homonegativity, and psychological wellbeing (indirect effects, $p > .05$, see Table 3).

Based on the above model testing we decided to retain the proposed theoretical Model A as our final model. This was because Model A revealed significant indirect effects from essentialist belief factors to psychological wellbeing via identity uncertainty and internalized homonegativity. In comparison, as demonstrated in Model B, essentialist beliefs did not mediate the relationship between identity uncertainty, internalized homonegativity, and psychological wellbeing. In addition, Model A demonstrated marginally better fit to the data than Model B (indirect effects only) and Model B (direct and indirect effects) based on CFI and RMSEA indices.

In the final model (Model A; see Figure 2) we observed significant negative associations between both naturalness and discreteness and identity uncertainty ($p < .05$), and a significant positive
association between entitativity and identity uncertainty ($p < .05$). Furthermore, a significant positive association between discreteness and internalized homonegativity and a significant negative association between entitativity and internalized homonegativity were observed ($p < .05$). There was no significant direct association between naturalness and internalized homonegativity ($p > .05$). Identity uncertainty was strongly associated with internalized homophobia ($p < .05$); however, it was not significantly associated with psychological wellbeing. Internalized homonegativity was significantly negatively associated with psychological wellbeing ($p < .05$) (see Figure 1).

### Indirect Effects

Results from Model A indicated that all exogenous variables (naturalness, discreteness, entitativity) had significant indirect effects on internalized homonegativity via identity uncertainty ($p < .05$), and on psychological wellbeing via identity uncertainty and internalized homonegativity ($p < .05$; see Table 2). Both discreteness and entitativity had significant negative indirect effects on psychological wellbeing via internalized homophobia ($p < .05$); however, no significant indirect effect was observed for naturalness ($p > .05$). Finally, a significant indirect effect was observed for identity uncertainty on psychological wellbeing via internalized homophobia ($p < .05$).

### Discussion

As heterosexist stigma and discrimination continue to be a fixture in many societies, internalized homonegativity and sexual identity distress are common and have serious consequences for the wellbeing of LGB people (e.g., Newcomb & Mustanski, 2010; Rosser et al., 2008). Although a body of literature has amassed documenting the impact of sexual orientation essentialism on antigay attitudes in heterosexuals, no corresponding literature has examined the consequences of these beliefs in LGB individuals. In this study, we investigated whether the way in which gay men construct beliefs about the origins of sexual orientation, the boundaries of sexual orientation categories, and the nature of sexual orientation category members have implications for the level of certainty and comfort with their sexual orientation.

Although some have assumed that biological theories of homosexuality have emancipatory consequences for LGB individuals (e.g., LeVay, 1996), no empirical literature has examined this assumption among sexual minority individuals. We found that at least as it related to gay men, sexual orientation essentialism had

<table>
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<tr>
<th>Table 2</th>
<th>Model A (Indirect Effects Only): Analyses of the Magnitude and Statistical Significance of the Indirect Effects</th>
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<tbody>
<tr>
<td>Independent variable</td>
<td>Mediator variable</td>
</tr>
<tr>
<td>Naturalness→</td>
<td>IH→</td>
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<tr>
<td>Naturalness→</td>
<td>Identity uncertainty→</td>
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<tr>
<td>Naturalness→</td>
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<tr>
<td>Discreteness→</td>
<td>Identity uncertainty→→IH→</td>
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<tr>
<td>Entitativity→</td>
<td>IH→</td>
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<td>Entitativity→</td>
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<td>IH→</td>
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*Note. IH = internalized homonegativity.*

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<tr>
<th>Table 3</th>
<th>Model B (Direct and Indirect Effects): Analyses of the Magnitude and Statistical Significance of the Indirect Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Independent variable</td>
<td>Mediator variable</td>
</tr>
<tr>
<td>Identity uncertainty→</td>
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</tr>
<tr>
<td>Identity uncertainty→</td>
<td>Discreteness→</td>
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<td>IH→ Discreteness→</td>
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<td>IH→</td>
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<tr>
<td>Identity uncertainty→</td>
<td>IH→</td>
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</tbody>
</table>

*Note. IH = internalized homonegativity.*
mixed implications for identity certainty and self-stigma. Believing that sexual orientation is biological, immutable, and fixed early in life was not associated with reduced internalized homonegativity as predicted, although it did predict greater sexual identity certainty among gay men, which in turn was associated with lower levels of internalized homonegativity. However, another facet of essentialism (which is consistent with biological deterministic accounts of homosexuality), the belief that sexual orientation exists in discrete categories, predicted increased identity certainty but simultaneously increased internalized homonegativity. One possible interpretation of this finding is that although perceiving sexual orientation as comprising discrete categories reduces identity uncertainty in gay men, it also makes homonegative messages particularly salient contributing to an increased sense of marginalization and otherness.

Contrary to predictions, the perceived entitativity of sexual orientation categories, a strong predictor of antigay attitudes among heterosexuals, was associated with lower internalized homonegativity among gay men. One plausible explanation is that for highly identified individuals, a sense of group entitativity is a positive feature of an ingroup (Sherman, Hamilton & Lewis, 1999). Indeed, perceiving one’s ingroup as identity defining and coherent is arguably important in deriving a sense of group identity (Verkuyten & Brug, 2004). As such, entitativity appears to have different implications in heterosexuals versus nonheterosexuals with regards to homonegativity. Somewhat in contrast, entitativity was found to be associated with greater identity uncertainty. Perceiving gay men as a highly reified and homogenous social category may lead one to perceive gay men as more different to oneself and contribute to sexual identity uncertainty.

The present study also contributed to a recent literature investigating sexual identity uncertainty and its relationship to psychological wellbeing (Feinstein et al., 2012; Borders et al., 2014). Notably, although uncertainty showed significant zero-order correlations with depression, low self-esteem, and low life satisfaction, our structural model found that sexual identity uncertainty was not associated with psychological wellbeing independently of internalized homophobia in gay men. Contrary to recent findings (e.g., Borders et al., 2014) this suggests that sexual identity uncertainty may not be inherently problematic or indicative of mal-adjustment among gay men.

**Implications for Counseling Psychology**

The present findings have a number of implications for counseling interventions with gay men. Although there has been much debate in the academic literature between those forwarding biological theories of homosexuality (Rahman, 1999; LeVay, 1996) and those who argue that sexual orientation is socially constructed (e.g., Kitzinger, 1987) it appears that (a) most gay men embrace a mixture of essentialist and anti-essentialist beliefs and (b) neither way of understanding sexual orientation appears entirely beneficial or entirely maladaptive.

Perhaps because of the historically and politically contentious nature of scientific research into the nature and origin of sexual orientation, there has been scarce consideration of how such research may be appropriately addressed in counseling psychology with sexual minority individuals. How should therapists respond to questions about the origins or boundaries of sexual orientations from gay and questioning men? How should we make sense of essentialist/anti-essentialist narratives of sexuality held by our patients? What is the impact of popular bio-essentialist notions of homosexuality on sexual identity development and adjustment among gay male clients? The present study provides some preliminary insights. First, for some gay men accepting one’s same-sex desires as natural and discrete may be important in affirming a gay identity, and overcoming uncertainty or resistance in identifying as gay. Immutability beliefs may be particularly helpful in this context because they imply one’s sexual orientation is a core/inherent aspect of the self which may facilitate integration and acceptance of one’s sexuality.

Some authors have criticized gay affirmative therapies (see Langdridge, 2007) on the basis that actively encouraging identification with particular sexual orientation categories may limit or prematurely foreclose the sexual identity development of a patient (Langdridge, 2007). Our findings in addition suggest that encouraging a perception of sexual identity categories as discrete/non-overlapping may have some adverse implications for same-sex attracted men in that it may increase the salience of antigay messages and lead to a greater sense of marginalization. As such therapists and LGB advocates should be aware of the potential impact of their framing of sexual orientation categories on same-sex attracted and questioning men.

It should be cautioned that our findings are derived from men who identify with the normative category “gay.” The implications of essentialist beliefs for identity certainty and self-stigma may differ in sexual minority women, and among bisexual and queer identifying individuals. Indeed, discreteness beliefs may contribute to sexual identity uncertainty and emotional distress among individuals who experience greater sexual fluidity or identify as bisexual.

**Limitations and Future Directions**

A major limitation of the present study was its correlational cross-sectional design. Cross-sectional analyses can generate biased estimates of longitudinal mediation, even finding opposite patterns of mediations to those observed in longitudinal studies (Maxwell & Cole, 2007; Maxwell, Cole & Mitchell, 2011). As such, it must be emphasized that causality cannot be inferred from the present findings. For instance, although we hypothesized that identity uncertainty contributes to internalized homonegativity and in turn poorer psychological wellbeing, it is also possible that higher levels of internalized homonegativity lead to greater identity uncertainty (due to resistance in committing to a devalued sexuality). Future longitudinal research is required to verify the direction of causation is as hypothesized in the present study.

A further limitation relates to the possibility that the observed relationship between sexual orientation beliefs and identity uncertainty in the present study can be accounted for by a third variable, sexual fluidity (Diamond, 2008). That is, gay men whose sexual orientation was more fluid (or who experienced nonexclusive same-sex attraction) may have drawn on their own experience of sexuality in informing their sexual orientation beliefs, and therefore would have been less inclined to view sexual orientation as fixed or discrete. In addition, these gay men would have also likely reported greater levels of sexual orientation uncertainty given that sexual fluidity implies less categorical patterns of sexual attraction.
Future studies may attempt to control for variations in sexual fluidity or nonexclusivity in investigating the implications of sexual orientation beliefs.

Finally, these data were obtained from a convenience sample of gay men recruited via social media, gay press, and LGB organizations. As such our sample is likely more affiliated with the gay community, more educated, and younger than the gay male population at large (Ross, Mansson, Daneback, Cooper, & Tikkanen, 2005). However, anonymous Internet-based surveys such as ours have some benefits in reaching hard-to-reach populations, particularly gay men who are less affiliated with the gay community or less open about their sexuality (Meyer & Wilson, 2009). In addition, targeting informal social networks, support groups, and gay media may have contributed to the minimization of the representativeness issue.

The present study focused on gay men. Future studies must investigate whether sexual orientation essentialism has implications for internalized homonegativity and sexual identity outcomes in other sexual minority groups. As noted previously, same-sex attracted women report greater sexual fluidity over the life-course (Savin-Williams & Diamond, 2000) and are more likely to perceive personal choice as playing an important role in their sexual orientation (Herek et al., 2009; Whisman, 1996). Likewise essentialist beliefs are likely to have distinct implications among bisexual or queer identified individuals who explicitly reject sexuality binaries/categories.

Conclusion

There a number of implications of the present findings. Understanding how gay men view their sexual orientation and the implications of these beliefs for identity development and self-stigma are of relevance to those providing counseling interventions to LGB clients. An awareness of the benefits and caveats of essentialist narratives for gay men may assist counselors in supporting sexual minorities struggling to form a positive sexual minority identity and to overcome internalized homonegativity. Furthermore, research points to a host of attitudinal and behavioral responses when people learn about biogenic underpinnings that differentiates their social group (Dar-Nimrod, Cheung, Ruby, & Heine, 2014; Dar-Nimrod & Heine, 2011). Thus, as advances in molecular genetics and neuroimaging technologies will likely generate further research into the biological basis of sexual orientation, it is important to understand how biogenic theories of homosexuality influence not only heterosexuals’ attitudes regarding sexual minorities but how LGB individuals see themselves.

References


ESSENTIALIST BELIEFS IN GAY MEN


Received September 8, 2014
Revision received February 3, 2015
Accepted February 4, 2015