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# Sexual Orientation Differences in Attitudes about Sexuality, Race, and Gender

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**ABSTRACT**

Researchers have extensively documented sociodemographic predictors of race and gender attitudes, and the mechanisms through which such attitudes are formed and change. Despite its growing recognition as an important status characteristic, sexual orientation has received little attention as a predictor of Americans' race and gender attitudes. Using nationally representative data from the American National Election Survey 2012 Time Series Study, I compare heterosexuals' and lesbian, gay, and bisexual (LGB) people's attitudes about sexuality, race, and gender. For most attitudes, LGB people hold significantly more liberal attitudes about sexuality, race, and gender than do heterosexuals, even upon controlling for other powerful sociodemographic predictors of social attitudes. However, a substantial proportion of these sexual orientation gaps in attitudes – especially about race and gender – are explained by LGB people's relatively liberal political ideology. The findings provide evidence for the necessity of incorporating sexual orientation in future assessments of Americans' social and political attitudes.

(Word Count: 150)

**KEYWORDS**

discrimination, gender attitudes, political ideology, prejudice, race attitudes, sexual orientation

# Sexual Orientation Differences in Attitudes about Sexuality, Race, and Gender

> "The dirty little secret about the homosexual population is that white gay people are just as racist as white straight people."
>
> (Boykin 1996: 234)

> "Gay culture, [gay activists say], is better because it is less sexist, less classist, and less racist than heterosexual culture."
>
> (Savin-Williams 2005: 17)

## 1. INTRODUCTION

Many scholars and activists have speculated about the race and gender attitudes of lesbian, gay, and bisexual (LGB) people relative to the views of heterosexuals. Anecdotal accounts, such as the quotes at the opening of this article, have presented two contradictory predictions about the views of LGB people. Some have suggested that LGB people share the views of their heterosexual counterparts, specifically in terms of race and gender attitudes (Smith 1999; Taywaditep 2001). Others have argued that LGB culture, organizations, and movements are less likely to harbor prejudice toward other oppressed groups due to their own marginalized status in society (Savin-Williams 2005). However, little research has empirically examined the effect of sexual orientation on Americans' race and gender attitudes. Indeed, although sexual orientation is recognized as an important status characteristic (Johnson 1995; Webster and Hysom 1998), one that likely influences individuals' attitudes and values (Mucciaroni 2011), it is rarely

considered in attitudinal research. Scholars have long investigated attitudes *toward* LGB people, while consistently overlooking the attitudes *of* LGB people.

The present study uses data from the American National Election Survey (ANES) 2012 Time Series Study, a nationally representative sample of Americans ages 18 and older, to investigate sexual orientation differences in attitudes regarding sexuality, race, and gender. Specifically, this paper investigates two research questions. First, given LGB people's marginalized status in society, do they hold more liberal attitudes toward Black Americans and women, as well as themselves, than their heterosexual counterparts? Second, to what extent are potential sexual orientation gaps in these attitudes explained by sexual orientation differences in education, religion, and/or political ideology?

## 2. SEXUAL ORIENTATION AND ATTITUDES: COMPETING EXPECTATIONS

In addition to documenting trends in sexuality, race, and gender attitudes over time, social scientists have extensively investigated sociodemographic differences in, as well as other social determinants of, such attitudes (e.g., Brooks and Bolzendahl 2004, Loftus 2001). Prior research suggests that socioeconomic status (especially education), age, religion, region of the country, and urbanicity are consistent predictors of social attitudes (Bolzendahl and Myers 2004; Carter and Carter 2014; Cunningham et al. 2005; Hunt 2007). Studies on racial differences in gender and sexuality attitudes, and gender differences in race attitudes have yielded mixed findings (Hughes and Tuch 2003; Kane 2000; Kane and Whipkey 2009; Loftus 2001). While such research is extensive, scholars have rarely considered the effect of sexual orientation on Americans' social attitudes. In addition, though many of these sociodemographic characteristics also predict attitudes toward lesbian women and gay men (Andersen and Fetner 2008; Loftus 2001; Powell et al. 2010), research on sexuality attitudes almost exclusively focuses on LGB

people as the *targets* of such attitudes held among heterosexuals. LGB people's own sexuality attitudes, as well as their race and gender attitudes have been understudied.

Generally, most studies on LGB people's social attitudes lack a comparable heterosexual sample (e.g., Harr and Kane 2008; Hirsch and Rollins 2007; Rollins and Hirsch 2003) and/or are limited to attitudes toward themselves or specific LGB subgroups (e.g., Cragun and Sumerau 2015; Doan, Loehr, and Miller 2014; Stone 2009). Relying on small, non-representative samples, some early studies on sexual orientation differences in race and gender attitudes yield mixed findings. While some studies have found no differences between sexual minorities and heterosexuals in social attitudes in general (Bailey 1999; Bell and Weinberg 1978; Saghir and Robins 1973), others suggest LGB people may be more tolerant toward Black Americans, women, and other stigmatized groups (Beran et al. 1992; Corbett, Troiden, and Dodder 1977; Lalonde, Doan, and Patterson 2000; McDonald and Moore 1978). More recently, political scientists have used election data and large surveys to examine differences in LGB and heterosexuals' political attitudes and behaviors (Egan 2012; Hertzog 1996; Lewis, Rogers, and Sherrill 2011). This research suggests that LGB people are politically distinct from their heterosexual counterparts, finding, in particular, that they are overwhelmingly liberal (Egan 2012; Hertzog 1996; Schaffner and Senic 2006). Such research has not yet extended beyond a limited range of political attitudes. No study to date has used nationally representative data to examine sexual orientation differences in social attitudes – in the present case, attitudes toward Black Americans and women.

The present study offers an exploratory analysis of sexual orientation differences in attitudes about sexuality, race, and gender using nationally representative data. I draw from two sources to propose possible patterns for the association between sexual orientation and

individuals' views on sexuality, race, and gender: first, from prior research on sociodemographic (especially racial and gender) differences in social attitudes; and, second, from prior scholarship on the unique social, political, and demographic profile of LGB Americans. Based on this prior research, there exist three possibilities for the effect of sexual orientation and attitudes: (1) no sexual orientation differences in sexuality, race, and gender attitudes, (2) LGB people's significantly more liberal sexuality, but not race or gender, attitudes, and, (3) LGB people's significantly more liberal attitudes toward Black Americans and women, as well as themselves.

### 2.1 No Significant Sexual Orientation Differences in Attitudes

The first possible association between sexual orientation and attitudes regarding sexuality, race, and gender is that there is little to no difference between heterosexuals' and sexual minorities' views. One's sexual orientation may simply have no influence on one's attitudes toward LGB people, Black Americans, and women, particularly upon controlling for the effects of other powerful sociodemographic predictors of such attitudes. Prior research on attitudes, particularly on gender attitudes, has identified primary socialization through one's family as a key mechanism through which one develops particular attitudes (Liao and Cai 1995; Maio et al. 2003). Unlike racial socialization within families of color (Brown and Lesane-Brown 2006), for example, there is little evidence that socialization processes that center on non-heterosexuality exist (Epstein 1992; Stacey and Biblarz 2001). Rather, LGB and heterosexual people alike are overwhelmingly reared in predominantly heterosexual families (Gonsiorek 1995; Sherrill 1996). Parenting practices tend to be *heteronormative* – that is, these practices treat heterosexuality as normal, natural, and taken-for-granted, while homosexuality and bisexuality are seen as deviant or are otherwise invisible (Kane 2006; Martin 2009). Other agents

of socialization, including schools and the media, further contribute to the heteronormative socialization of children (Martin and Kazyak 2009; Myers and Raymond 2010).

Further, secondary socialization into distinct lesbian, gay, bisexual, transgender, and queer (LGBTQ) communities tends to occur later in life, if at all, and is less formative than primary (heteronormative) socialization (Epstein 1992). Unlike the other predictors of sexuality, race, and gender attitudes that are established in early life, namely race and ethnicity, gender, religion, and political ideology, one's sexual orientation develops in early adolescence or adulthood – especially for non-heterosexuals (Sherrill 1996). Sexual minority youth tend to have few connections with other sexual minorities; rather, their friendships are largely with heterosexual youth of their same race and grade level in school (Ueno 2005 and 2010). Only one in four LGB people have ever lived in predominantly LGBTQ neighborhoods (Pew Research Center 2013), and such communities have become less segregated and distinctive from the rest of the predominantly heterosexual society (Ghaziani 2014). Thus, these sexual orientation-based socialization processes come up against norms, values, and a sense of self that have already been established. Further, scholars have suggested that LGBTQ communities, organizations, and social movements are, at times, divided by race and ethnicity, gender, and class (Armstrong 2002; Battle et al. 2002; Barrett and Pollack 2005; Taywaditep 2001; Ward 2008). Thus, while important, a significant effect of sexual orientation on sexuality, race, and gender attitudes at the baseline may be explained by other sociodemographic characteristics, namely socioeconomic status, age, and religion (Bailey 1999; Herek et al. 2010; Pew Research Center 2013).

> *Hypothesis 1:* There are no significant sexual orientation differences in sexuality, race, and gender attitudes, particularly upon controlling for other sociodemographic characteristics.

### 2.2 Significant Sexual Orientation Differences in Sexuality Attitudes Only

In the second possibility for the association between sexual orientation and attitudes, the stigmatized status of LGB people may lead them to hold sexuality, but not race or gender, attitudes that are distinct from those of heterosexuals. Though declining, there remains a high level of antipathy toward sexual minorities in the US (Andersen and Fetner 2008; Loftus 2001; Powell et al. 2010). A sizeable minority of Americans, including particular segments of the population, strongly opposes LGBTQ rights (e.g., same-sex marriage, civil liberties) (Adamczyk and Pit 2009; Kenneavy 2012; Sherkat et al. 2011). LGB people face pervasive interpersonal discrimination and violence (Herek 2009; Tilcsik 2011), which is further compounded by institutional discrimination (Levitt et al. 2008). For many, experiences of victimization begin in childhood and adolescence (Freidman et al. 2008; Hatzenbuehler 2011). As a consequence of the prejudice, discrimination, and violence they face, LGB people may have a unique view of the social world, or "double consciousness" (DuBois 1903; Lewis et al. 2011; Orne 2013). Drawing upon the *underdog thesis*, LGB people may be keenly aware and critical of bi- and homophobic oppression, and may hold more favorable attitudes toward social policies that eliminate it (Davis and Robinson 1991; Robinson 1983; Robinson and Bell 1978).

Yet, the liberalizing effect of one's "underdog" status as a sexual minority may be limited to attitudes about LGB people, relationships, and rights; LGB Americans may be indistinguishable from heterosexuals in terms of attitudes toward Black Americans and women. In fact, in its original conceptualization, the underdog thesis was considered a manifestation of self-interest (Robinson and Bell 1978). That is, the liberal attitudes of marginalized individuals may be driven by their interest in promoting their own equal status, while the more conservative attitudes of members of privileged groups may be driven by their interest in maintaining the

status quo (Bolzendahl and Myers 2004; Davis 2005; Kane and Whipkey 2009). Indeed, early work using non-representative samples suggests that sexual minorities' attitudes may be indistinguishable from those of heterosexuals (Bailey 1999; Bell and Weinberg 1978; Connell 1992; Saghir and Robins 1973). These findings are similar to those on Black Americans' and women's greater awareness of social inequality, yet greater intolerance toward other stigmatized groups (e.g., atheists, the homeless) (Edgell, Gerteis, and Hartmann 2006; Lee, Farrell, Link 2004). As such, the effect of sexual orientation may be limited to the domain of sexuality attitudes, perhaps driven by LGB people's own self-interest (Schaffner and Senic 2006).

> *Hypothesis 2:* LGB Americans hold significantly more liberal sexuality attitudes than their heterosexual counterparts; however, there are no sexual orientation differences in race and gender attitudes.

### 2.3 Significant Sexual Orientation Differences in Sexuality, Race, and Gender Attitudes

In the third possible effect of sexual orientation on sexuality, race, and gender attitudes, the "underdog" status of LGB people may lead them to hold more liberal attitudes toward themselves, as well as Black Americans and women. That is, they may be more likely than heterosexuals to acknowledge pervasive racist and sexist discrimination, favor policies to redress such discrimination, and feel warmth and empathy toward Black people and women. Some early work suggests that sexual minorities report more favorable attitudes toward and greater awareness of discrimination against racial and ethnic minorities and women, among other stigmatized groups (Beran et al. 1992; Corbett et al. 1977; Lalonde et al. 2000; McDonald and Moore 1978). Other scholars have found that LGB identified people are more pro-feminist and more likely to support legal access to abortion services than are heterosexual identified people (Hertzog 1996; Rothblum 2011; Schaffner and Senic 2006). There exists a distinct LGBTQ

culture, containing a set of shared values, including the explicit celebration of diversity within LGBTQ communities, and coalitions with other marginalized communities (Armstrong 2002; Bernstein 2002; D'Emilio 2004; Lewis et al. 2011; Ward 2008). Thus, the results may suggest that LGB people, indeed, hold more liberal race and gender attitudes, as well as those about sexuality, than do heterosexuals.

*Hypothesis 3:* LGB Americans hold significantly more liberal sexuality, race, and gender attitudes than heterosexuals, net of other sociodemographic predictors of such attitudes.

### 2.4 Possible Explanations for Sexual Orientation Gaps in Attitudes

The present study also explores possible mechanisms that produce sexual orientation differences in sexuality, race, and gender attitudes, specifically education, religion, and political ideology. Prior research has documented a number of factors that shape Americans' attitudes, particularly with regard to race and gender: group position and group threat, self-interest, contact, exposure, and socialization (Bolzendahl and Myers 2004; Davis and Greenstein 2009; Hughes and Tuch 2003; Kane and Whipkey 2009). However, since these predictors of attitudes overwhelmingly reflect the lives of heterosexual people, they are less useful for understanding the attitudes of sexual minorities. For example, it is unclear whether marriage and one's spouse's work status affects LGB individuals' gender attitudes in the same ways and to the same extent as they do heterosexuals' attitudes (Bolzendahl and Myers 2004; Davis and Greenstein 2009). Indeed, this oversight reflects a broader trend in attitudinal research on the predictors of and mechanisms that drive privileged group members' attitudes (Hunt 2004; Samson 2012).

Sexual orientation differences in attitudes could stem, in part, from differences in the demographic profiles of heterosexual and LGB Americans. In particular, LGB people tend to be more highly educated, less religious, and more politically liberal than general (heterosexual)

population (Gates 2015; Pew Research Center 2013). Historically, religion has played a central role in the opposition to LGBTQ rights and in bi- and homophobic prejudice (Fetner 2008; Loftus 2001; Sherkat et al. 2011). LGB people are generally less religious, and more likely than heterosexuals to switch to a more liberal religion or to reject religion all together in adulthood (Herek et al. 2010; Lewis et al. 2004; Pew Research Center 2013; Smith and Haider-Markel 2002). Political scientists have found that LGB people overwhelmingly self-identify as liberal, with the majority of LGB voters supporting Democratic candidates (Bailey 1999; Herzog 1996; Lewis et al. 2011; Smith and Haider-Markel 2002). In addition, LGB people tend to hold more liberal positions than heterosexuals on war, environmental issues, and domestic spending, and are more likely to reject traditional values regarding marriage and family (Bailey 1999; Egan 2012; Hertzog 1996; Meier, Hull, and Ortyl 2009).

Education, religion, and political orientation reflect three documented mechanisms of sexuality, race, and gender attitudes, namely explaining racial and gender differences in such attitudes (Bolzendahl and Myers 2004; Hunt 2007; Loftus 2001). For example, Black Americans tend to be more conservative than their white counterparts on issues that are guided by religiosity (e.g., abortion; Davis 2005). LGB people's greater education, relatively low religiosity, and greater liberalism may explain, in part, their more liberal sexuality, race, and gender attitudes.

> *Hypothesis 4:* Significant sexual orientation differences in sexuality, race, and gender attitudes are explained, in large part, by sexual orientation differences in education, religion, and political ideology.

Using data from the ANES 2012 Time Series Study, I examine whether lesbian, gay, and bisexual people hold more liberal sexuality, race, and gender attitudes than heterosexuals. Using this nationally representative data, I investigate whether differences found between heterosexual

and LGB people's attitudes hold net of the effects of other sociodemographic predictors of attitudes: gender, race and ethnicity, household income, age, marital/partner status, and region of the country. In addition, I assess the extent to which three documented mechanisms that drive social attitudes – education, religion, and political ideology – explain potential sexual orientation gaps in sexuality, race, and gender attitudes.

## 4. METHODS

### 4.1 Data

The present study uses data from the American National Election Survey (ANES) 2012 Time Series Study (see ANES 2014 for a full description of the survey's methodology and questions). The ANES is a national, full probability pre- and post-election survey of non-institutionalized US citizens ages 18 years or older, conducted by the University of Michigan Center of Political Studies. The survey has been conducted during years of presidential elections since 1948, assessing Americans' voting behaviors, as well as their political and social attitudes. The ANES is an ideal source of data for the present paper given its large, nationally representative sample, wide variety of measures of sexuality, race, and gender attitudes, and inclusion of information about respondents' sexual orientation.

In 2012, the ANES was administered to 5,916 respondents through two modes: face-to-face interviews with 2,054 US eligible voters (38 percent response rate), and an Internet survey with 3,860 US eligible voters (2 percent response rate). Respondents who completed face-to-face interviews were selected through address-based, stratified, multistage cluster sampling, with oversamples of Black and Hispanic Americans. These interviews were supplemented with a panel of respondents drawn from GfK, which was recruited through address-based sampling and random-digit dialing; prospective panelists were offered free Internet service and hardware if

they did not already have Internet access. Appendix A displays the descriptive statistics for the ANES sample, including bivariate differences between respondents who completed the face-to-face interviews and those who completed the Internet survey. Sample weights (described below) account for all but one difference between the subsamples (i.e., religious attendance). All multivariate analyses in the present paper include a control for survey version to account for these remaining differences between the subsamples.

The ANES was administered in two parts, including the pre-election section (beginning two months prior to the 2012 presidential election) and the post-election section (conducted from November 7, 2012 through January 2013).[1] Analyses for the present study are restricted to respondents who completed both the pre- and post-election surveys. Listwise deletion for missing information on independent and dependent variables is employed, yielding a final sample of 4,526 respondents.[2] Analyses are based on weighted data, which account for probability of household selection, selection within the household, nonresponse, and random sampling error; sample weights also adjust for differences between the ANES sample and the US population on key sociodemographic characteristics (i.e., race, ethnicity, gender, education, income, homeownership, age, marital status, region, urbanicity, and nativity).

[1] The Internet version of the survey was administered as two smaller pre-election surveys and two smaller post-election surveys, thus totaling four short surveys.

[2] Data for these variables are systematically missing in a few ways. However, analyses using multiple imputations for missing data on independent variables yield generally similar results to those presented using listwise deletion (available upon request).

### 4.2 Measures

*Sexuality, Race, and Gender Attitudes.* The ANES includes a number of items regarding respondents' attitudes toward women and sexual and racial minorities. Sexuality attitudes include four items: warmth toward lesbians and gay men, recognition of homophobic discrimination, support for legal recognition of same-sex couples, and support for legally allowing same-sex couples to adopt children. I assess eleven items regarding attitudes toward Black Americans, including support for Affirmative Action, recognition of racist discrimination and inequality, warmth and feelings toward Black Americans, and racial resentment. Finally, gender attitudes include twelve items, which assess views on traditional gender roles, recognition of sexist discrimination, and support for legal access to abortion services. All sexuality, racial, and gender attitudinal items are coded with higher values representing liberal or favorable responses and lower values representing conservative or unfavorable responses. Appendix B provides the means, standard deviations, and metrics for these attitudinal outcomes.[3]

[3] Alternative ways of measuring variables were considered for three gender attitudinal outcomes (analyses available upon request). Analyses assessing a four-point version of the belief that working mothers can establish warm and secure relationships with their children (0=a great deal harder; 4=neither easier nor harder/easier), which combines the responses "neither easier nor harder," "slightly easier," "somewhat easier," and "a great deal easier" into a single category, yield similar results to those using the original seven-point version (0=a great deal harder; 6=a great deal easier). Analyses that use a version of the item regarding opposition to restrictions on abortion (0-2) that combine "legal abortion for reasons other than rape, incest, or danger" and "legal abortion as a matter of personal choice" into a single category yield similar results to those

*Sexual Orientation.* ANES respondents were asked the following question to collect information regarding sexual orientation: "Do you consider yourself to be heterosexual or straight, homosexual or gay/lesbian, or bisexual?" I measure sexual orientation using a dichotomous variable, wherein lesbian, gay, and bisexual (LGB) identified respondents are coded as 1 and heterosexual identified respondents are coded as 0.[4] I collapse lesbian/gay and bisexual respondents into a single group because of their shared status and experiences as sexual minorities and their small subsample sizes within the ANES.[5]

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using the original variable (0-3). Finally, analyses that include an additional item in the abortion scale ($\alpha$=.875) – support for legalized abortion if the reason is because the child is the "wrong" sex – are similar to those presented excluding this item from the scale ($\alpha$=.881); maximum likelihood factor analyses yield a single factor, on which the excluded item weakly loads.

[4] Three percent of respondents (*n*=128) are missing exclusively on sexual orientation, including 40 respondents who responded, "don't know."

[5] Supplemental analyses using dichotomous variables for bisexuals (yes=1) and lesbians and gays (yes=1), compared to heterosexuals, reveal a number of interesting patterns (available upon request). On six items, lesbian women and gay men, but not bisexuals, are significantly more liberal than heterosexuals, including feeling sympathy for Black people (Models 1-2), admiring Black people (all three models), believing that a working mother can form a warm bond with her children (Models 1-2), and favoring legal abortion (Models 1-2). Lesbian and gay respondents are significantly more liberal than both bisexuals and heterosexuals on four attitudinal items regarding beliefs about gender: it is worse for a family if the man works and the woman is a homemaker (all three models); men have more opportunities to advance than do women (all

*Sociodemographic Controls.* To examine the effect of sexual orientation on sexuality, race, and gender attitudes, I control for other variables that research has shown to influence these and other social attitudes. I include dichotomous variables to measure *race and ethnicity*, compared to non-Hispanic whites (1=yes for each): non-Hispanic Black, Latina/o, and other nonwhites. *Gender* is measured using a dichotomous variable (woman=1, man=0). I measure *income* using the natural logarithm of respondents' annual household income (*M*=10.60 [approximately $42,500]). *Age* is measured in years, ranging from 18 to 90 and older (M=47.5).[6] I measure *marital or partner status* using a binary indicator for respondent's current relationship

three models); women demand equal treatment, not special rights (Models 1-2); and, women do not cause more problems by complaining about sexist discrimination (Models 1-2). On one items, a significant rank-order emerges, wherein lesbians and gays are the most liberal, followed by bisexuals, followed by heterosexuals: warmth toward gays and lesbians (all three models). However, given the small subsample sizes of lesbian women and gay men (*n*=110) and bisexual people (*n*=93), these patterns should be interpreted with caution.

[6] The original ANES measure of household income is a categorical variable, ranging from under $5,000 (0) to $250,000 or more (27). The present paper uses a transformed version of this variable, for which the natural logarithm of the midpoint of each range represents the original category (7.824-12.492). For example, I recoded 24 ($125,000-$149,999) to the natural logarithm of $137,500 (or 11.831). However, supplemental analyses using the original categorical measure of household income are similar to those presented (available upon request).

status (currently married or partnered=1). *Region of the country* is measured using a dichotomous variable for respondents living in the US South (yes=1) compared to the rest of the country.[7]

*Potential Mechanisms.* To explore which social factors drive the potential relationships between sexual orientation and attitudes, I control for three possible mediating variables that have been shown to influence social attitudes. *Education* is a measure of the highest degree respondents have earned, ranging from less than high school (0) to a graduate degree (4) (*M*=1.92 [some college=2]). I measure *religious attendance* using an ordinal variable of the frequency with which respondents attend religious services, apart from weddings, baptisms, and funerals, ranging from never (0) to more than once per week (5) (*M*=1.62).[8] Finally, *political ideology* is a measure of the extent to which respondents identify as politically liberal, ranging from 0 (extremely conservative) to 6 (extremely liberal) (*M*=2.76 [moderate=3]).[9]

### 4.3 Analysis Plan

[7] Supplemental analyses using dichotomous variables for all four regions, including West, North Central, and South, compared to Northeast, yield similar results (available upon request).

[8] Supplemental analyses using biblical literalism (0=actual word of God; 2=not the word of God) yield results that are generally similar to those to those presented (available upon request).

[9] Supplemental analyses using political party affiliation (0=strong Republican; 6=strong Democrat) yield similar results, with four exceptions. The effects of sexual orientation remain significant – wherein LGB respondents hold more liberal views – in Models 3 for the following items: the belief that whites have too much control in US politics, sympathy for Black people, symbolic racism, and the belief that media should pay more attention to sexist discrimination.

The analyses presented here include the following steps, after providing descriptive statistics for the ANES sample. First, I estimate the effect of sexual orientation on each sexuality, race, and gender attitudinal item, net of survey version. Second, I estimate the effects of sexual orientation on each item, controlling for race and ethnicity, gender, household income, age, marital/partner status, and region of the country. In particular, this step examines whether significant effects of sexual orientation on sexuality, race, and gender attitudes are accounted for by other important sociodemographic characteristics. The third set of multivariate models estimate the effects of sexual orientation with additional controls for education, religious attendance, and political ideology. In addition, I use post-hoc Sobel tests (Sobel 1982) to assess whether education, religious attendance, and/or political ideology mediate the effects of sexual orientation on outcomes for which there are significant sexual orientation gaps. This final step will assess the extent to which these potential mechanisms explain significant differences in LGB and heterosexual respondents' sexuality, race, and gender attitudes. Appropriate regression modeling is used for the multivariate analyses: ordinary least squares (OLS) regression for additives scales that were created; binary logistic regression for binary outcomes; and, ordered logistic regression for ordinal outcomes.

## 5. RESULTS

### 5.1 Descriptive Statistics

Table 1 presents the descriptive statistics for the entire ANES sample, as well as the heterosexual and LGB subsamples. Similar to other national estimates, 4 percent of ANES respondents identify as lesbian, gay, or bisexual (Gates 2011 and 2015; Gates and Newport 2012b). Bivariate regression analyses reveal a few sociodemographic differences between LGB and heterosexual ANES respondents. Consistent with past research, LGB respondents in this sample are younger,

live in households with less income, attend religious services less frequently, and are more politically liberal than heterosexuals (Gates 2015; Herek et al. 2010; Pew Research Center 2013; Gates and Newport 2012a). LGB people are also less likely to be currently married or partnered than are heterosexual people.

[INSERT TABLE 1 HERE]

Table 1 also provides descriptive statistics for two sexual minority subgroups, bisexual respondents and lesbian and gay respondents, which mirror prior estimates (Gates 2014; Pew Research Center 2013). Women are less likely to identify as lesbian/gay than bisexual or heterosexual (also see Gates 2015). The aforementioned significant household income difference between heterosexual and LGB people is unique to bisexual respondents. In addition, lesbians and gays report significantly more education, on average, than do heterosexuals and bisexuals (also see Pew Research Center 2013 and Gates and Newport 2012a). Finally, lesbians and gays, bisexuals, and heterosexuals are rank-ordered on age, wherein bisexuals are the youngest, followed by lesbians and gay men, and then heterosexuals. Similarly, there is a rank-order on political ideology, wherein lesbians and gays are the most liberal, followed by bisexuals, and then heterosexuals. These sexual orientation differences will be accounted for in multivariate regression analyses of sexuality, race, and gender attitudes that control for these sociodemographic characteristics.

### 5.2 Sexuality Attitudes

In the first set of multivariate analyses, I focus on the association between sexual orientation and sexuality attitudes to assess whether LGB respondents differ from heterosexuals, at least in the domain of attitudes toward themselves. Table 2 presents the regression estimates for the first two sexuality attitudinal outcomes, including regression estimates for the feeling thermometer for gay

men and lesbian women and ordered logistic odds ratios for the perceived amount of discrimination toward lesbian women and gay men in the US. Table 3 presents the ordered logistic odds ratios for support for legal recognition of same-sex relationships and favoring legal adoption of children for same-sex couples. For each attitudinal outcome, Model 1 displays the results for the effect of sexual orientation, controlling for survey version. Models 2 add sociodemographic controls, including respondents' gender, race and ethnicity, household income, age, marital/partner status, and region of the country. Finally, in Models 3, I add controls for education, religious attendance, and political ideology.

[INSERT TABLE 2 HERE]

In Models 1 (Table 2), the effects of sexual orientation are positive and statistically significant for both warmth toward lesbians and gays and perceived amount of homophobic discrimination. LGB respondents report significantly more warmth toward ($\beta$=30.93; $p$<.001) and perceive greater discrimination against (OR [odds ratios]: 3.16; CI [confidence intervals]: 2.30-4.32) lesbian women and gay men than do heterosexuals. Net of sociodemographic controls in Models 2, the effects of sexual orientation are again significant on these two altitudinal items. In the final model – Model 3 – LGB respondents are once again report being significantly more warm toward ($\beta$=30.93; $p$<.001) and perceive more discrimination against (OR: 2.13; CI: 1.53-2.93) lesbians and gays than heterosexuals, net of gender, race and ethnicity, household income, age, marital/partner status, region, education, religious attendance, and political ideology.

The estimates for sexual orientation differences in favoring legal recognition of same-sex couples and favoring allowing same-sex couples to adopt children (Table 3) mirror those of the first two attitudes toward sexuality. Across all three models, LGB respondents are significantly

more likely than heterosexuals to favor recognition of same-sex couples (OR: 3.98; CI: 2.29-6.93 [Model 3]) and allowing such couples to adopt children (OR: 6.89; CI: 3.43-13.87).

Taken together, there are significant sexual orientation gaps in all four of the aforementioned sexuality attitudes, even net of sociodemographic controls, including education, religious attendance, and political ideology. Compared to heterosexuals, LGB respondents hold significantly more liberal attitudes toward themselves. Thus, at least with regard to views on LGB people, relationships, and rights, sexual orientation has a significant effect on respondents' attitudes. The following analyses will assess whether the significant effect of sexual orientation on attitudes extends beyond LGB respondents' self-interest.

[INSERT TABLE 3 HERE]

### 5.3 Race Attitudes

Next, I examine whether LGB and heterosexual ANES respondents differ significantly in their race attitudes. Table 4 displays the regression estimates for the effects of sexual orientation on eleven race attitudinal items, which reflect the following domains: support for Affirmative Action programs and policies, perceptions of racist discrimination and inequality, and feelings toward Black Americans. Models 1 regress each racial attitudinal outcome on sexual orientation, controlling for survey version. Models 2 add controls for gender, race and ethnicity, gender, household income, age, marital/partner status, and region of the country. Finally, Models 3 add additional controls for education, religious attendance, and political ideology.

[INSERT TABLE 4 HERE]

In Models 1, the effect of sexual orientation is positive and significant for one of the two items regarding support for Affirmative Action. LGB respondents are significantly more likely to favor Affirmative Action for Black Americans in higher education (OR: 1.62; CI: 1.11-2.35)

compared to heterosexuals. The effect of sexual orientation on this attitudinal outcome is also significant in Model 2 (OR: 1.50; CI: 1.00-2.25). That is, LGB people hold more liberal views on this outcome than heterosexuals, net of other sociodemographic controls. Upon controlling for education, religious attendance, and political ideology in Model 3, there is no longer a significant difference in LGB and heterosexual respondents' views on this outcome. However, across all three models, there is no significant difference between LGB people and heterosexual people on favoring Affirmative Action for Black people in hiring (OR: .87; CI: .56-1.34 [Model 3]).

The effects of sexual orientation on perceptions of racist discrimination and inequality are positive and significant for all three items in this domain in Models 1 and 2. Net of sociodemographic controls (Models 2), LGB respondents perceive significantly greater racist discrimination (OR: 2.29; CI: 1.54-3.38), and too much influence of white Americans (OR: 2.75; CI: 1.76-4.29) and too little influence of Black Americans (OR: 2.00; CI: 1.29-3.12) in US politics. In Models 3, which control for education, religious attendance, and political ideology, the effect of sexual orientation remains significant for only one of these items – perceived amount of discrimination against Black people (OR: 1.57; CI: 1.05-2.35) – wherein LGB people perceive a significantly greater amount of racist discrimination than do heterosexual people

There are significant sexual orientation gaps for half of the six items regarding respondents' feelings toward Black people: sympathy and admiration for Black Americans, and racial resentment. LGB people report significantly greater sympathy for Black people (OR: 1.77; CI: 1.23-2.55) and less racial resentment ($\beta$=1.78; $p$<.001) than do heterosexuals, net of sociodemographic controls; however, the effects of sexual orientation on these feelings are nonsignificant in Models 3, which control for the three potential mechanisms. Across all three models, the effect of sexual orientation is positive and significant for admiration for Black

Americans. Net of sociodemographic controls, as well as education, religious attendance, and political ideology, LGB respondents report feeling significantly more admiration toward Black people (OR: 1.50; CI: 1.04-2.17). The effects of sexual orientation on the remaining three items – view of Black Americans as hardworking and as intelligent, and warmth toward Black Americans – are nonsignificant in all three models.

Taken together, LGB respondents hold more liberal race attitudes than heterosexuals, net of other important sociodemographic characteristics (Models 2) for nearly two-thirds of the outcomes (7 of 11, or 64 percent). In particular, compared to heterosexuals, LGB people are significantly more likely to favor Affirmative Action in higher education for Black Americans, perceive a great deal of racist discrimination and inequality (in politics), feel sympathy and admiration for Black people, and hold relatively low racial resentment. However, upon controlling for the potential mechanisms – education, religious attendance, and political ideology – the effects of sexual orientation remain significant on only two of the race attitudes (2 out of 11, or 18 percent): perceived amount of discrimination against and admiration for Black people.

### 5.4 Gender Attitudes

In the third set of analyses, I examine whether LGB and heterosexual ANES respondents differ significantly in their gender attitudes, which include the domains of traditional gender roles, recognition of sexist discrimination, and support for legalized abortion. Table 5 provides the regression estimates for the effects of sexual orientation on the twelve gender attitudinal items. Models 1 regress each gender attitudinal item on sexual orientation, controlling for survey version. Models 2 add controls for respondents' race and ethnicity, gender, education, income, age, region, and religious attendance. Finally, in Models 3, I add controls for political ideology.

[INSERT TABLE 5 HERE]

Across all three models, the effects of sexual orientation are positive and significant for two of the three items regarding gender roles. LGB respondents are significantly more likely than heterosexuals to see having a woman president in the next 20 years as beneficial for the US (OR: 1.61; CI: 1.07-2.40 [Model 3]) and that it is worse for families to have women work in the home while their husbands work outside of it (OR: 1.59; CI: 1.14-2.21 [Model 3]). In addition, in Model 1, LGB people are significantly more likely than heterosexuals to agree that it is easier for a working mother to establish warm and secure relationships with her children than mothers who do not work outside of the home (OR: 1.46; CI: 1.01-2.11); however, the effect of sexual orientation on this outcome is nonsignificant in Models 2 and 3.

The effects of sexual orientation are positive and significant on four of the seven items regarding recognition of sexist discrimination in Models 1, and in Models 2 net of sociodemographic controls. LGB respondents perceive significantly more sexist discrimination in the US (OR: 2.86; CI: 1.92-4.26 [Model 2]), and are significantly more likely to report that sexism is a serious problem in the US (OR: 2.00; CI: 1.26-3.15 [Model 2]), than do heterosexuals. Additionally, LGB respondents are significantly more likely than heterosexuals to report that men have more opportunities than women (OR: 1.81; CI: 1.24-2.63) and that that the media should pay more attention to sexist discrimination (OR: 2.15; CI: 1.45-3.17 [Model 2]). However, LGB people do not differ significantly from heterosexuals in the extent to which they perceive that employers discriminate against women in the workplace. In addition, the effects for sexual orientation on two items that reflect modern sexism – that is, the belief that women are demanding special favors rather than equal treatment, and that they cause more problems by complaining about discrimination – are nonsignificant. Taken together, LGB people report significantly more liberal views, net of other important sociodemographic characteristics, on

over half of the items regarding sexist discrimination. The effect of sexual orientation is significant net of education, religious attendance, and political ideology (Models 3) for only one item: perceived amount of discrimination (OR: 2.14; CI: 1.44-3.16).

Finally, the effects of sexual orientation are positive and significant on both abortion attitudes in Models 1 and 2. Even net of sociodemographic characteristics, LGB respondents are significantly more likely to favor legal access to abortion services than are heterosexual respondents. However, upon controlling for education, religious attendance, and political ideology in Models 3, the effect of sexual orientation on abortion attitudes is nonsignificant.

In sum, there are significant sexual orientation gaps in gender attitudes, net of other important sociodemographic predictors (Models 2), for two-thirds of the outcomes (8 out of 12, or 67 percent). Compared to heterosexuals, LGB respondents hold more liberal attitudes regarding gender roles, are more likely to recognize pervasive sexist discrimination as a problem, and are more likely to oppose restrictions on access to abortion services. For these outcomes, the effects of sexual orientation remain significant even upon accounting for the influence of other powerful determinants of gender attitudes. However, the effects of sexual orientation remain significant net of education, religious attendance, and political ideology (Models 3) for only one-quarter of gender attitudinal outcomes (3 out of 12, or 25 percent): seeing a woman president as beneficial to the US; believing that women as homemakers is worse for families; and, perceiving a great amount of sexist discrimination in the US.

### 5.5 Explaining Sexual Orientation Gaps in Attitudes

In Models 2 of the aforementioned multivariate analyses, there were significant sexual orientation gaps in all four sexuality attitudes, as well as for a majority of the attitudes regarding race (7 out of 11) and gender (8 out of 12), net of gender, race and ethnicity, household income,

age, marital/partner status, and region of the country. Upon controlling for education, religious attendance, and political ideology in Models 3, it appears that almost all of these gaps were reduced, at least slightly. Indeed, the difference between LGB and heterosexual respondents' attitudes was nonsignificant for five race attitudes and five gender attitudes, net of these potential mechanisms. It is possible that sexual orientation differences in education, religious attendance, and/or political ideology (Models 3) explain LGB respondents' relatively more liberal sexuality, race, and gender attitudes.

In the final set of analyses, I use post-hoc Sobel tests for mediation, including sociodemographic controls, to investigate the extent to which education, religious attendance, and political ideology mediate the effects of sexual orientation on attitudes. These attitudes include the four sexuality attitudes, seven race attitudes, and eight gender attitudes for which there were significant sexual orientation gaps in Models 2 (Tables 2-5). Table 6 presents the estimates for mediation analysis for the potential mechanisms; these estimates include the level at which the mediation is statistically significant, the Sobel test statistic (*Z*), and the percentage of the total effect of sexual orientation on each attitude that is explained by the mechanism. Whereas preliminary results (available upon request) suggest that education does not significantly mediate the effect of sexual orientation on any attitude, these estimates are not included in Table 6.

[INSERT TABLE 6 HERE]

The effects of sexual orientation on seven of these nineteen items (37 percent) are significantly mediated by religious attendance. Sexual orientation differences in religious attendance explain 3-5 percent of the significant sexual orientation differences for three sexuality items: warmth toward lesbians and gays ($Z$=2.24; $p$<.05); favoring legal recognition of same-sex

couples ($Z$=2.26; $p$<.05); and, favoring legalizing adoption for same-sex couples ($Z$=3.75; $p$<.05). Interestingly, for two racial attitudinal items – sympathy ($Z$=-2.14; $p$<.05) and admiration ($Z$=-2.16; $p$<.05) toward Black Americans – religious attendance widens the gap between LGB and heterosexual respondents' feelings. That is, religious attendance appears to suppress the effects of sexual orientation on these two items. Finally, religious attendance explains roughly 6 percent of LGB respondents' more liberal views regarding the benefits of a woman president ($Z$=1.99; $p$<.05) and the harm of having women as homemakers for their families ($Z$=2.17; $p$<.05). Taken together, the mediating role of religious attendance of the sexual orientation-attitudes link is selective and generally small.

Interestingly, the effects of sexual orientation on attitudes are significantly mediated by political ideology for all nineteen sexuality, race, and gender attitudes. Liberal political ideology explains between 14.09 (favor legal adoption for same-sex couples; $Z$=8.422; $p$<.001) and 32.00 (perceive great amount of homophobic discrimination; $Z$=8.25; $p$<.001) percent of the significant sexual orientation gap in sexuality attitudes. The mediating role of political ideology on the sexual orientation-attitudes is markedly stronger for race and gender attitudes, explaining, on average, roughly 55 percent of the total effects of sexual orientation on these attitudes. For race attitudes, this explanatory power of political ideology ranges from 22.60 percent (i.e., admiration for Black people [$Z$=5.79; $p$<.001]) to 94.70 percent (i.e., favoring Affirmative Action for Black people in higher education [$Z$=8.82; $p$<.001]). Its explanatory ranges from 25.69 percent (i.e., perceived amount of sexist discrimination [$Z$=7.87; $p$<.001]) to 116.98 percent (i.e., legalized abortion scale [$Z$=9.12; $p$<.001]). For the latter item – views regarding legal access to abortion services – the effect of sexual orientation becomes nonsignificant and reverses in direction (i.e., negative) upon the inclusion of a control for political ideology. Thus, it appears that LGB

respondents' relatively more liberal political ideology explains a substantial amount of their more liberal attitudes toward Black Americans and women. In many cases, it explains half of to nearly the full total effect of sexual orientation on race and gender attitudes.

## 6. DISCUSSION

In the present paper, I sought to extend preliminary research on the effect of sexual orientation on sexuality, race, and gender attitudes using a nationally representative sample of lesbian, gay, bisexual (LGB) and heterosexual Americans. In particular, I examined whether LGB people, given their marginalized status, hold more liberal attitudes toward women and Black Americans, as well as themselves, than do their heterosexual counterparts. I also assessed the extent to which sexual orientation gaps in attitudes are explained by sexual orientation differences in three mechanisms that shape attitudes: education, religion, and political ideology. Building upon prior attitudinal research, I identified four possibilities for the relationship between sexual orientation and attitudes: 1) no sexual orientation differences, especially upon accounting for the influence of other sociodemographic characteristics; 2) LGB people's more liberal attitudes toward themselves, perhaps due to self-interest; 3) LGB people's more liberal sexuality, race, and gender attitudes, perhaps due to their "underdog" status in society; and, finally, 4) LGB people's more liberal sexuality, race, and gender attitudes, partially driven by their relatively high level of education and political liberalism, yet low religiosity.

The results offer two key findings. First, there is clear evidence that sexual orientation has a strong effect on Americans' sexuality, race, and gender attitudes, wherein LGB people tend to hold more liberal views regarding lesbian and gay rights, racial and gender equality. Compared to their heterosexual peers, LGB people are more likely to favor legal same-sex marriage, adoption by same-sex couples, and feel warmer toward and recognize greater discrimination against lesbian women and gay men. Similar patterns were found for the majority of attitudes regarding race (7 out of 11 items [64 percent]) and gender (8 out of 12 items [67 percent]), net of the influence of other powerful sociodemographic predictors of these attitudes.

These results suggest that there are substantial sexual orientation gaps in a number of domains, wherein LGB people are more liberal in their views than are heterosexuals: recognition of racist and sexist discrimination; recognition of racial and gender inequality; racial resentment; sympathy and admiration toward Blacks; rejection of traditional gender roles; and, favoring unrestricted and legal access to abortion services. Initially, these findings offer support for Hypothesis 3, wherein LGB people hold more liberal sexuality, race, and gender attitudes even once accounting for the effects of other sociodemographic characteristics.

Second, the majority of the aforementioned nineteen significant sexual orientation gaps in sexuality, race, and gender attitudes were explained, at least partially, by LGB's relatively more liberal political ideology. Upon controlling for education, religious attendance, and political ideology, the effects of sexual orientation became nonsignificant for ten of these nineteen attitudinal outcomes (e.g., racial inequality in politics, racial resentment, abortion, level of sexist discrimination); the effects of sexual orientation on many of the other nine attitudinal items are reduced (e.g., all four sexuality attitudes, racist discrimination, rejection of traditional gender roles). Sexual orientation differences in political ideology explained nearly one-fourth, on average, of LGB people's more liberal sexuality attitudes. Notably, LGB people's greater political liberalism explained, on average, over half of the significant sexual orientation differences in race and gender attitudes. These patterns offer partial support for Hypothesis 4, wherein sexual orientation gaps in sexuality, race, and gender attitudes are partially driven by sexual orientation differences in political ideology, and slightly by religious attendance (but not education). These findings complement prior work on LGB Americans' distinctive politically liberal profile, highlighting that their liberal views also extend to racial and gender issues (Beran

et al. 1992; Corbett et al. 1977; Hertzog 1996; Lalonde et al. 2000; McDonald and Moore 1978; Schaffner and Senic 2006).

On the whole, the results offer greatest support for the prediction that sexual orientation gaps exist in sexuality, race, and gender attitudes that are driven, in large part, by political ideology. However, to varying degrees, the present paper's findings can be interpreted to lend support for the role of socialization, and self-interest and empathy (both via the underdog thesis). The role of heteronormative socialization in shaping heterosexuals' and sexual minorities' attitudes alike cannot be overlooked. For example, a small minority (6-7 percent) of LGB people reported unfavorable or conservative attitudes toward themselves: cold feelings toward gays and lesbians; perception of little or no homophobic discrimination; and opposition to same-sex marriage and adoption. LGB adults are perhaps not entirely immune from the prejudiced values and attitudes of their families, peers, and the influence of other social institutions. Yet, the overwhelming rejection of homophobic attitudes by LGB respondents may reflect an active rejection of their parents' values, particularly those that clash with their own identities and experiences (Ojeda and Hatemi 2015).

There is greater evidence, however, of an alternative view of the role of socialization in producing sexual orientation differences in attitudes. The results of the present study parallel Egan's (2012) finding that nearly half of the difference in political attitudes and behaviors between LGB and heterosexual people is attributable to differences in upbringing, wherein LGB people are more likely to be raised in liberal homes and communities (Felson 2011; also see Butler 2005 and McCabe, Brewster, and Tillman 2011). In particular, certain characteristics of respondents' upbringing explained LGB people's relatively more liberal political ideology: college-educated mothers, younger age, urban hometown, raised in a region of the country with

greater acceptance of homosexuality, and being raised by both parents who were born in the US. In other words, similar to one variant of exposure as a mechanism through which gender attitudes are shaped (Bolzendahl and Myers 2004; Davis and Greenstein 2009), LGB people are more likely to be exposed to liberal values during childhood and adolescence. Indeed, Egan (2012) argues that LGB Americans are politically cohesive as a group even before or in the absence of group mobilization and contact with fellow LGBTQ people in general; their distinctiveness has already emerged by the start of adulthood.

The present paper cannot adequately investigate the potentially complex interplay between sexual identity and sociopolitical attitudes during childhood socialization given its reliance on cross-sectional data. For example, socialization within a liberal household may influence children to be more open regarding diverse sexual identities (including exploring their own) (Stacey and Biblarz 2001); yet, prior research suggests that the effect of socialization on attitudes (especially on gender roles) gives way to the influences of experiences and relationships in adulthood (Davis and Greenstein 2009). Socialization alone, then, may not explain sexual orientation differences in attitudes. Future research should investigate other potential mechanisms (e.g., discrimination, marriage, the extent to which one is "out" or public about their LGB identity) that may strengthen or weaken the effects of sexual orientation on social and political attitudes, with particular attention their influence over the life course.

The results also suggest that the underdog thesis (Davis and Robison 1991; Robinson 1983; Robinson and Bell 1978) may be applicable for explaining LGB people's relatively liberal sexuality, race, and gender attitudes. LGB Americans, as an "underdog" group – a population subjected to widespread discrimination and violence – are more aware of sexual, racial, and gender inequality, especially discrimination, and are more likely to favor programs and policies

that redress such inequality. It is noteworthy that LGB people's underdog status influences their views about their own equal treatment, but also the equal treatment of Black Americans and women. Yet, compared to attitudes toward themselves, LGB people's liberal race and gender attitudes were explained to a much greater extent by their more liberal political ideology. This slight distinction may be driven, in part, by the greater strength of LGB people's motivation to advance their own rights and status in society (i.e., self-interest) than that of their liberal political ideology and, presumably, their liberal upbringing (Lewis et al. 2011; Schaffner and Senic 2006).

A few limitations of this study should be noted. First, the analyses rely on cross-sectional data, which prohibit the investigation of the relationships among sexual orientation and attitudes over time. Additionally, the ANES does not include measures that reflect respondents' upbringing nor experiences of discrimination and violence. Future research using longitudinal design should further examine the relationships and temporal ordering among upbringing, sexual identity, experiences of stigma and discrimination (as "underdogs"), and social attitudes.

Second, the ANES data include a small subsample size of lesbian, gay, and bisexual individuals ($n$=203). As such, the results may present a conservative estimate of the extent and strength of sexual orientation gaps in sexuality, race, and gender attitudes. The small subsample size prevented meaningful comparisons between bisexual respondents and lesbian and gay respondents. Supplemental analyses comparing the three groups – bisexuals, lesbians and gays, and heterosexuals – suggested that the two former groups differ significantly on eleven outcomes (see Footnote #5). In particular, lesbians and gays are perhaps more liberal in their sexuality, race, and gender than are bisexuals. Indeed, there may be important demographic, ideological, and experiential differences among bisexuals, lesbians, and gays (e.g., socioeconomic status, age

at coming out, LGBTQ community involvement, experiences of discrimination, voting behaviors; Pew Research Center 2013). However, given the extremely small subsample sizes of sexual orientation groups, these results should be interpreted with caution. In addition, the small number of LGB identified ANES respondents also prohibited an investigation of intersections among sexual orientation and other important identities like race, gender, and social class. Perhaps similar to research on (the absence of) gender differences in whites' race attitudes (Hughes and Tuch 2003), researchers may also find that whites' race attitudes do not vary by sexual orientation due to a shared racial group position. Obtaining large and representative samples of LGB people, as a hard-to-reach population, remains a challenge for survey research (Binson et al. 2010; Meyer and Wilson 2009).

A final limitation is the use of self-reported sexual identity as a measure of sexual orientation. This measure is limited in a few ways. First, nearly three percent of ANES respondents did not disclose their sexual orientation. Certain populations – for example, those with lower levels of education – are more likely to refuse such information (Jans et al. 2015). Given the stigma that surrounds same-sex sexuality, an unknowable number of sexual minorities may have refused to identify as LGB during the ANES interview or online survey; however, greater social acceptance of LGBTQ people has coincided with less non-response on questions pertaining to sexual identity and increased LGB identification (Jans et al. 2015). Second, the ANES sexual orientation item was limited to heterosexual, lesbian, gay, and bisexual identities, thus overlooking other identities (e.g., queer, pansexual). Some research suggests that less visible and uncommon identities may be associated with more radical views (Harr and Kane 2008; Rollins and Hirsh 2003, 2007). Finally, other dimensions of sexuality – namely attraction and behavior (Sell 2010) – were not considered in the analyses. Though overlapping, same-sex

attraction, same-sex sexual behavior, and LGB identity do not perfectly correlate in the population; the majority of adults who report any same-sex sexual partners identify as heterosexuals (Gates 2011; Herbenick et al. 2010). It is unclear, for example, whether the attitudes of heterosexual identified people who are attracted to or have had relationships with people of their own gender would mirror those of other heterosexuals, those of LGB identified people, or be distinct from both. Future research on attitudes should offer a more inclusive set of sexual identities and include measures of multiple dimensions of sexuality.

The aforementioned limitations considered, the present paper offers the first estimates of the effects of sexual orientation on sexuality, race, and gender attitudes within a nationally representative sample of American adults. It contributes to research on the predictors of Americans' sexuality, race, and gender attitudes, in particular, lending strong support for adding sexual orientation to the list of sociodemographic predictors of attitudes. This study also contributes to the growing body of research on the social, political, and demographic profile of LGBTQ Americans. Along with other studies, it highlights the social and political distinctiveness of this marginalized population. Future research should continue to examine the role that sexuality plays in one's sexual and non-sexual lives, including one's attitudes and worldviews.

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**TABLE 1. Descriptive Statistics for Sociodemographic Characteristics by Sexual Orientation (*N*=4,526)**

| | SAMPLE (*N*=4,526) | Heterosexuals Respondents (*n*=4,323) | Lesbian, Gay, and Bisexual Respondents | | |
|---|---|---|---|---|---|
| | | | All LGB (*n*=203) | Bisexual (*n*=93) | Lesbian/Gay (*n*=110) |
| Lesbian, gay, or bisexual (1=yes) | .04 | -- | -- | -- | -- |
| Female (1=yes) | .51 | .51 | .43 | .57 | .31$^{***A}$ |
| Black (1=yes) | .11 | .11 | .12 | .14 | .10 |
| Latina/o (1=yes) | .11 | .11 | .14 | .10 | .17 |
| Other nonwhite (1=yes) | .06 | .06 | .07 | .09 | .05 |
| Household income (logged; 10.60=$42,500) | 10.61 | 10.62 | 10.37$^{*}$ | 10.28$^{**}$ | 10.45 |
| Age, in years (18-90+) | 47.40 | 47.68 | 40.96$^{***}$ | 40.06$^{***}$ | 41.72$^{*A}$ |
| Married/Partnered (1=yes) | .63 | .64 | .44$^{***}$ | .40$^{***}$ | .46$^{***}$ |
| US South (1=yes) | .37 | .38 | .32 | .38 | .28 |
| Education (0=less than high school; 4=graduate degree) | 1.94 | 1.94 | 1.99 | 1.69 | 2.24$^{***A}$ |
| Religious attendance (0=never; 5=more than once per week) | 1.59 | 1.62 | .84$^{***}$ | 1.04$^{**}$ | .67$^{***}$ |
| Political ideology (0=extremely conservative; 6=extremely liberal) | 2.77 | 2.71 | 4.04$^{***}$ | 3.50$^{***}$ | 4.50$^{***A}$ |

Source: 2012 American National Election Survey.

*Notes:* $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$ compared to heterosexuals.

Sample sizes based on unweighted data.

$^{A}$ Lesbian and gay respondents significantly differ from bisexual respondents ($p<.05$).

**TABLE 2. OLS Regression Estimates and Odds Ratios for the Effects of Sexual Orientation on Sexuality Attitudes (*N*=4,526)**

| | Warmth toward Gays and Lesbians[a] | | | Amount of Homophobic Discrimination[b] | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 1** | **Model 2** | **Model 3** |
| Lesbian, Gay, or Bisexual | 30.93*** (2.32) | 30.15*** (2.36) | 22.16*** (2.15) | 3.16*** (2.30-4.32) | 3.17*** (2.31-4.36) | 2.13*** (1.54-2.93) |
| Female | | 9.23*** (1.08) | 9.32*** (1.01) | | 1.40*** (1.22-1.61) | 1.35*** (1.17-1.56) |
| Black | | 3.55* (1.79) | 2.91 (1.82) | | 2.04*** (1.58-2.63) | 1.72*** (1.32-2.26) |
| Latina/o | | 3.77 (1.96) | 4.54* (1.80) | | 1.19 (.92-1.53) | 1.06 (.81-1.37) |
| Other Nonwhite | | -5.07* (2.56) | -6.11* (2.45) | | .93 (.67-1.29) | .89 (.64-1.23) |
| Income | | 2.44*** (.53) | 1.46** (.54) | | 1.00 (.94-1.07) | 1.03 (.96-1.11) |
| Age | | -.18*** (.03) | -.09** (.03) | | 1.00 (1.00-1.00) | 1.00 (1.00-1.01) |
| Married/ Partnered | | -2.43* (1.21) | -.87 (1.13) | | .85* (.72-.99) | .90 (.76-1.05) |
| US South | | -5.17*** (1.16) | -3.37** (1.08) | | .95 (.82-1.10) | 1.02 (.87-1.18) |
| Education | | | 3.14*** (.46) | | | .92* (.86-.98) |
| Religious Attendance | | | -2.82*** (.32) | | | .97 (.93-1.01) |
| Liberal | | | 4.81*** (.36) | | | 1.41*** (1.34-1.49) |

Source: 2012 American National Election Survey.

*Notes:* All models control for survey version. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

[a] Ordinary least squares (OLS) regression estimates, with standard errors in parentheses.

[b] Ordered logistic odds ratios, with 95 percent confidence intervals in parentheses.

**TABLE 3. Odds Ratios for the Effects of Sexual Orientation on Attitudes Regarding Same-Sex Couples and Adoption (*N*=4,526)**

| | Legal Recognition of Same-Sex Couples[a] | | | Allow Same-Sex Couples to Adopt[b] | | |
|---|---|---|---|---|---|---|
| | **Model 1** | **Model 2** | **Model 3** | **Model 1** | **Model 2** | **Model 3** |
| Lesbian, Gay, or Bisexual | 7.17*** (4.44-11.58) | 6.70*** (4.13-1.87) | 3.98*** (2.29-6.93) | 10.41*** (4.89-22.16) | 10.52*** (4.88-22.66) | 6.89*** (3.43-13.87) |
| Female | | 1.30*** (1.12-1.51) | 1.39*** (1.19-1.64) | | 1.51*** (1.28-1.79) | 1.71*** (1.42-2.07) |
| Black | | .75* (.59-.95) | .65** (.50-.85) | | .94 (.72-1.23) | .91 (.67-1.24) |
| Latina/o | | .97 (.75-1.26) | .95 (.72-1.26) | | .65** (.49-.85) | .62** (.46-.85) |
| Other Nonwhite | | .67* (.49-.93) | .56** (.38-.81) | | .67* (.47-.95) | .52** (.35-.79) |
| Income | | 1.11** (1.03-1.19) | 1.06 (.98-1.16) | | 1.11** (1.03-1.20) | 1.07 (.98-1.17) |
| Age | | .98*** (.98-.99) | .99*** (.99-1.00) | | .98*** (.98-.99) | .99** (.98-1.00) |
| Married/ Partnered | | .77** (.66-.91) | .87 (.73-1.04) | | .89 (.74-1.07) | 1.03 (.84-1.26) |
| US South | | .67*** (.58-.79) | .74*** (.63-.88) | | .70*** (.59-.84) | .78* (.65-.95) |
| Education | | | 1.30*** (1.20-1.41) | | | 1.29*** (1.17-1.41) |
| Religious Attendance | | | .69*** (.66-.73) | | | .69*** (.65-.73) |
| Liberal | | | 1.71*** (1.60-1.81) | | | 1.60*** (1.48-1.72) |

Source: 2012 American National Election Survey.

*Notes:* All models control for survey version. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

[a] Ordered logistic odds ratios, with 95 percent confidence intervals in parentheses.

[b] Binary logistic odds ratios, with 95 percent confidence intervals in parentheses.

**TABLE 4. Ordered Logistic Odds Ratios and OLS Regression Estimates for the Effects of Sexual Orientation on Race Attitudes (*N*=4,526)**

| | Model 1 | | Model 2 | | Model 3 | |
|---|---|---|---|---|---|---|
| | **OR** | **(95% CI)** | **OR** | **(95% CI)** | **OR** | **(95% CI)** |
| *Affirmative Action* | | | | | | |
| Affirmative Action for Blacks in higher education | 1.62* | (1.11-2.35) | 1.50* | (1.00-2.25) | 1.02 | (.66-1.58) |
| Affirmative Action for Blacks in hiring | 1.43 | (.98-2.07) | 1.31 | (.89-1.93) | .87 | (.56-1.34) |
| *Discrimination and Inequality* | | | | | | |
| Great deal of discrimination against Blacks in US today | 2.26*** | (1.55-3.29) | 2.29*** | (1.54-3.38) | 1.57* | (1.05-2.35) |
| Whites have too much influence in US politics | 2.66*** | (1.81-3.92) | 2.75*** | (1.76-4.29) | 1.54 | (.99-2.40) |
| Blacks have too little influence in US politics | 2.11*** | (1.45-3.06) | 2.00** | (1.29-3.12) | 1.27 | (.79-2.03) |
| *Feelings toward Black People* | | | | | | |
| Sympathy toward Blacks | 1.68** | (1.20-2.37) | 1.77** | (1.23-2.55) | 1.44 | (1.00-2.07) |
| Admiration toward Blacks | 1.49* | (1.08-2.07) | 1.60* | (1.12-2.30) | 1.50* | (1.04-2.17) |
| Blacks are hardworking | 1.29 | (.98-1.71) | 1.30 | (.96-1.77) | 1.09 | (.79-1.50) |
| Blacks are intelligent | .98 | (.73-1.31) | 1.00 | (.73-1.37) | .94 | (.68-1.29) |
| Warmth toward Blacks[a] | .64 | (2.18) | 1.70 | (2.33) | .55 | (2.33) |
| Racial resentment scale[a] | 1.93*** | (.39) | 1.78*** | (.39) | .65 | (.39) |

*Source:* 2012 American National Election Survey. *Notes*: * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed tests). Higher odds and estimates represent more liberal attitudes for each racial attitude outcome.
Models 1 control for sexual orientation and survey version.
Models 2 add controls for race and ethnicity, gender, income, age, marital/partner status, and region.
Models 3 add controls for education, religious attendance, and political ideology.
[a] OLS regression coefficients with standard errors in parentheses.

**TABLE 5. Ordered Logistic Odds Ratios and OLS Regression Estimates for the Effects of Sexual Orientation on Gender Attitudes (*N*=4,526)**

| | Model 1 | | Model 2 | | Model 3 | |
|---|---|---|---|---|---|---|
| | **OR** | **(95% CI)** | **OR** | **(95% CI)** | **OR** | **(95% CI)** |
| *Gender Roles* | | | | | | |
| Good for the US to have a woman president in next 20 years | 2.48*** | (1.71-3.60) | 2.51*** | (1.68-3.77) | 1.61* | (1.07-2.40) |
| Working mothers can establish warm and secure relationships with children | 1.46* | (1.01-2.11) | 1.45 | (1.00-2.12) | 1.23 | (.84-1.81) |
| Worse for family if man works and woman is a homemaker | 2.60*** | (1.87-3.60) | 2.27*** | (1.63-3.16) | 1.59** | (1.14-2.21) |
| *Sexist Discrimination* | | | | | | |
| Great deal of sexist discrimination in US today | 2.66*** | (1.80-3.93) | 2.86*** | (1.92-4.26) | 2.14*** | (1.44-3.16) |
| Sexist discrimination in the US is a serious problem | 2.01** | (1.30-3.11) | 2.00** | (1.26-3.15) | 1.38 | (.88-2.15) |
| Employers often discriminate against women in the workplace | 1.37 | (.91-2.06) | 1.36 | (.89-2.08) | 1.14 | (.74-1.76) |
| Men have many more opportunities for achievement than women | 1.63** | (1.14-2.35) | 1.81** | (1.24-2.63) | 1.26 | (.89-1.79) |
| Media should pay more attention to sexist discrimination | 2.03*** | (1.42-2.90) | 2.15*** | (1.45-3.17) | 1.42 | (.96-2.09) |
| Women demand equality, not special favors. | 1.36 | (.88-2.11) | 1.45 | (.95-2.20) | .93 | (.61-1.43) |
| Women do not cause problems by complaining about discrimination | 1.44 | (.89-2.33) | 1.44 | (.88-2.34) | 1.03 | (.63-1.66) |
| *Abortion* | | | | | | |
| No restrictions on abortion | 2.21*** | (1.56-3.14) | 2.24*** | (1.56-3.22) | 1.19 | (.81-1.76) |
| Legalized abortion scale[a] | 6.29*** | (1.51) | 6.29*** | (1.48) | -.59 | (1.16) |

*Source:* 2012 American National Election Survey. *Notes*: * $p < .05$, ** $p < .01$, *** $p < .001$ (two-tailed tests). Higher odds and estimates represent more liberal attitudes for each gender attitude outcome.
Models 1 control for sexual orientation and survey version.
Models 2 add controls for race and ethnicity, gender, income, age, marital/partner status, and region.
Models 3 add controls for education, religious attendance, and political ideology.
[a] OLS regression coefficients with standard errors in parentheses.

**TABLE 6. Summary of Mediation Analyses for Religious Attendance and Political Ideology on the Sexual Orientation-Attitudes Relationships**

| | Religious Attendance | | | Political Ideology | | |
|---|---|---|---|---|---|---|
| | **Sig.** | ***Z*** | **% explained** | **Sig.** | ***Z*** | **% explained** |
| *Sexuality Attitudes* | | | | | | |
| Warmth toward gays and lesbians | * | 2.239 | 3.457 | *** | 8.660 | 19.189 |
| Amount of homophobic discrimination | ns | - | - | *** | 8.245 | 32.001 |
| Favor legal recognition of same-sex couples | * | 2.261 | 4.693 | *** | 8.888 | 23.344 |
| Belief that same-sex couples should be legally permitted to adopt children | * | 2.257 | 3.745 | *** | 8.422 | 14.093 |
| *Race Attitudes* | | | | | | |
| Affirmative Action for Blacks in higher education | ns | - | - | *** | 8.823 | 94.695 |
| Great deal of racist discrimination in US today | ns | - | - | *** | 8.193 | 43.563 |
| Whites have too much influence in politics | ns | - | - | *** | 8.491 | 54.767 |
| Blacks have too little influence in politics | ns | - | - | *** | 8.402 | 63.843 |
| Sympathy toward Blacks | * | -2.143 | -1.430 | *** | 7.511 | 41.262 |
| Admiration toward Blacks | * | -2.156 | -10.990 | *** | 5.788 | 22.596 |
| Racial resentment scale[a] | ns | - | - | *** | 9.044 | 60.999 |
| *Gender Attitudes* | | | | | | |
| Good for the US to have a woman president in next 20 years | * | 1.985 | 5.723 | *** | 8.403 | 42.155 |
| Worse for family if man works and woman is a homemaker | * | 2.166 | 5.988 | *** | 7.124 | 35.393 |
| Great deal of sexist discrimination today | ns | - | - | *** | 7.867 | 25.691 |
| Sexist discrimination in the US is a serious problem | ns | - | - | *** | 8.296 | 50.424 |
| Men have many more opportunities for achievement than women | ns | - | - | *** | 7.540 | 54.759 |
| Media should pay more attention to sexist discrimination | ns | - | - | *** | 8.467 | 49.920 |
| No restrictions on abortion | ns | - | - | *** | 8.637 | 68.069 |
| Legalized abortion scale[a] | ns | - | - | *** | 9.122 | 116.980 |

*Source:* 2012 American National Election Survey. *Notes*: $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$. Controls include survey version, race, ethnicity, gender, income, age, marital/partner status, region, and education. Percentages represent how much of the effect of sexual orientation on the attitudinal outcome is explained.

**APPENDIX A. Descriptive Statistics for Sociodemographic Characteristics by Survey Version (*N*=4,823)**

| | **SAMPLE (*N*=4,526)** | **Face-to-Face Version (*n*=1,174)** | **Internet Version (*n*=3,352)** |
|---|---|---|---|
| Lesbian, gay, or bisexual (1=yes) | .04 | .03 | .04 |
| Female (1=yes) | .51 | .52 | .50 |
| Black (1=yes) | .11 | .10 | .12 |
| Latina/o (1=yes) | .11 | .10 | .11 |
| Other nonwhite (1=yes) | .06 | .06 | .06 |
| Household income (logged; 10.60=$42,500) | 10.61 | 10.71 | 10.58** |
| Age, in years (18-90+) | 47.40 | 46.52 | 47.73* |
| Married/Partnered (1=yes) | .63 | .65 | .62 |
| US South (1=yes) | .37 | .37 | .38 |
| Education (0=less than high school; 4=graduate degree) | 1.94 | 2.01 | 1.91 |
| Religious attendance (0=never; 5=more than once per week) | 1.59 | 1.69 | 1.55* |
| Political ideology (0=extremely conservative; 6=extremely liberal) | 2.77 | 2.81 | 2.75 |

Source: 2012 American National Election Survey.

*Notes:* $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$ compared to respondents who completed the face-to-face version of the survey. Sample sizes based on unweighted data.

**APPENDIX B. Means, Standard Deviations, Metrics, and Descriptions of American National Election Survey (ANES) Attitudinal Items about Sexuality, Race, and Gender**

| Variable | Metric | *M* (SD) |
|---|---|---|
| *Sexuality Attitudes* | | |
| Warmth toward gay men and lesbian women | 0 = very cold or unfavorable feeling, 50 = no feeling at all, 100 = very warm or favorable feeling | 51.95 (27.82) |
| Perceived amount of homophobic discrimination in the US today | 0 = none at all, 2 = moderate amount, 4 = a great deal | 2.56 (1.07) |
| View on legal recognition of same-sex relationships | 0 = no recognition, 1 = civil unions only, 2 = marriage | 1.16 (.80) |
| Believe that gay or lesbian couples should be legally permitted to adopt children | 0 = no, 1 = yes | .64 (.48) |
| *Race Attitudes* | | |
| Favor allowing universities to increase number of Black students by considering race in choosing students | 0 = oppose a great deal, 3 = neither, 6 = favor a great deal | 1.95 (1.86) |
| Favor allowing companies to increase number of Black workers by considering race when choosing employees | 0 = oppose a great deal, 3 = neither, 6 = favor a great deal | 1.81 (1.83) |
| Perceived amount of racist discrimination in the US today | 0 = none at all, 2 = moderate amount, 4 = a great deal | 2.09 (1.02) |
| Whites have too much little influence in American politics | 0 = too little, 1 = just about the right amount, 2 = too much | 1.18 (.59) |
| Blacks have too little influence in American politics | 0 = too much, 1 = just about the right amount, 2 = too little | 1.16 (.66) |
| Warmth toward Blacks | 0 = very cold or unfavorable feeling, 50 = no feeling at all, 100 = very warm or favorable feeling | 64.72 (22.10) |
| How often feel sympathy for Blacks | 0 = never, 2 = about half of the time, 4 = always | 1.27 (1.05) |
| How often feel admiration for Blacks | 0 = never, 2 = about half of the time, 4 = always | 1.49 (1.07) |
| How hardworking Blacks are | 0 = extremely lazy, 3 = neither lazy nor hardworking, 6 = extremely hardworking | 3.04 (1.42) |
| How intelligent Blacks are | 0 = extremely unintelligent, 3 = neither unintelligent nor intelligent, 6 = extremely intelligent | 3.42 (1.33) |

*(Continued on next page.)*

*(Appendix B continued from previous page.)*

| Variable | Metric | *M* (SD) |
|---|---|---|
| Racial resentment scale (α=.80): belief that (1) Blacks are not worse off than whites because they do not work hard enough, (2) Blacks have gotten less than they deserve, (3) Blacks should not have to work their way up without special favors to overcome prejudice, and (4) generations of slavery and discrimination made it difficult for Blacks to work their way out of the lower class | 0 = strongly disagree with all four statements, 8 = midpoint, 16 = strongly agree with all four statements | 5.85 (6.16) |
| *Gender Attitudes* | | |
| How good it be for the US to have a woman president in next 20 years | 0 = extremely bad, 3 = neither, 6 = extremely good | 3.80 (1.49) |
| How much easier is it for working mothers to establish warm and secure relationships with their children | 0 = a great deal harder, 3 = neither, 6 = a great deal easier | 1.74 (1.28) |
| It is worse for the family if the man works outside of the home and the woman takes care of the home and family | 0 = much better, 3 = makes no difference, 6 = much worse | 1.99 (1.44) |
| Perceived amount of sexist discrimination in the US today | 0 = none at all, 2 = moderate amount, 4 = a great deal | 1.76 (.96) |
| How serious a problem is sexist discrimination in the US | 0 = not a problem at all, 4 = extremely serious problem | 1.68 (.94) |
| How often do employers discriminate against women in making decisions about hiring and promotion | 0 = never, 2 = about half of the time, 4 = always | 1.36 (.79) |
| Men have more opportunities to achieve than women | 0 = women have many more, 3 = equal, 6 = men have many more | 4.13 (1.37) |
| The news media should pay more attention to sexist discrimination | 0 = a great deal less, 3 = same amount, 6 = a great deal more | 3.44 (1.57) |
| Perceived frequency that women demand equality, not special favors these days | 0 = always seek special favors, 4 = never seek special favors | 2.78 (.96) |
| Perceived frequency that women cause more problems than they solve when complaining about discrimination | 0 = always cause more problems, 4 = never cause more problems | 2.54 (.95) |
| View on legal restrictions against abortion | 0 = abortion should never be permitted, 3 = a woman should always be able to obtain an abortion as a matter of personal choice | 1.95 (1.08) |
| Legalized abortion scale (α=.88): favor abortion if (1) staying pregnant would hurt woman's health, (2) staying pregnant would cause woman to die, (3) pregnancy was caused by incest, (4) pregnancy was caused by rape, (5) fetus will be born with a serious birth defect, (6) having | 0 = greatly oppose abortion in seven circumstances, 28 = midpoint, 56 = greatly favor abortion in all seven circumstances | 34.12 (15.84) |

the child would be extremely difficult financially, and
(7) woman chooses to have an abortion