

BELIEFS ABOUT THE ORIGINS OF HOMOSEXUALITY AND SUPPORT FOR GAY RIGHTS

AN EMPIRICAL TEST OF ATTRIBUTION THEORY

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Abstract In this study, we employ Weiner’s attribution theory of controllability to examine beliefs about the origins of homosexuality. If the cause of homosexuality is perceived as controllable (learned, environmental, or an individual choice), negative affect toward homosexuals and reduced support for policies relevant to the group can be expected. If the cause is perceived as uncontrollable (biological or genetic in origin), positive affect and increased support for policies is anticipated. Our analyses of data from two unique surveys of national adults corroborate these hypotheses, showing that positive feelings toward gays, support for gay civil rights, civil unions, and same-sex marriage are strongly determined by a genetic attribution for homosexuality. Attributions are in fact the strongest predictor of support. We distinguish our analysis from previous research by examining the important role of religion, ideology, and experience, in shaping attributions.

“Do you believe homosexuality is a choice?”

—Bob Schieffer, CBS News, moderator of the third and final 2004 presidential debate.

The answers to queries about the origins of homosexuality frequently divide into opposing causal attributions. Some people attribute homosexuality to lifestyle

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choices while others believe it is innate, genetic in origin. President Bush's cautious and uncertain response to Journalist Bob Schieffer's question during the final 2004 presidential debate underscored the electoral risk of declaring a specific attribution: "You know, Bob, I don't know. I just don't know." Similarly, Kerry's more resolute response can be judged to maximize an expected political effect. Evoking Dick Cheney's lesbian daughter, Kerry stated flatly: "... she would tell you that she's being who she was; she's being who she was born as. I think if you talk to anybody, it's not a choice."

The political dialogue about the causes of homosexuality provides an intriguing context for the study of attributions. Attributional analyses begin with an outcome, such as the behavior and circumstances of a group or an individual. People then seek to determine the cause of that outcome. Specifically individuals try to establish the locus of cause; people determine whether the behavior stems from internal, enduring dispositions or emerges from less stable situational forces (Heider 1944, 1958).

With locus (internal/external) and stability (stable/unstable), a third dimension of causality, controllability, was introduced by Weiner (1979, 1985). Controllability concerns whether or not a person is believed to control their own behavior and the subsequent attitudinal and perceptual implications. Though initially applied to achievement settings, Weiner and colleagues utilized attributions of controllability to study reactions to stigmatized individuals and groups (Weiner, Perry, and Magnusson 1988). The theory states that people who are observed to have caused their stigma will be evaluated more negatively than those who are stigmatized as a consequence of misfortune or the actions of others. Therefore asserting that homosexuality is biological in origin suggests sexual orientation cannot be controlled. On the other hand, a belief that homosexuality is acquired, learned, or a personal choice suggests homosexuals can control, and therefore are responsible for, their homosexuality. The selected attribution should then influence affect toward homosexuals and policies specific to homosexuals.

Prior research has convincingly demonstrated that political attributions are consequential for affect toward social groups (Nelson 1999; Iyengar 1989, 1990, 1991; Haider-Markel and Joslyn 2001), but Weiner's focus on controllability adds considerable detail to our understanding of the underlying mechanisms involved in attributions of stigmatized groups generally and homosexuality specifically. For example, the classic Heider (1944, 1958) dichotomy of dispositional and situational attributions does not map cleanly onto attributions of homosexuality. How should we treat genetics as a cause? Genetics is clearly not a situational variable, but is it a dispositional attribution? What about individual choice? Is choice a dispositional or situational attribution? The answers are not immediately apparent.

Although Iyengar (1990, 1991) successfully utilized Heider's theory to examine beliefs about poverty, terrorism, unemployment, and racial inequality, the conventional dispositional/situational categorization is not applicable to

our case. A genetic cause for homosexuality can be construed as outside the reach of individual control whereas situational sources or individual choices are controllable. These attributions in turn influence policy preferences in predictable ways. To our knowledge, there are no systematic national studies of adults that utilize attributions about the origins of homosexuality as the dependent variable, though some researchers have examined their political impact (Haider-Markel and Joslyn 2005; Herek 2002; Tygart 2000; Sakalli 2002; Whitely 1990; Wilcox and Norrander 2002; Wilcox and Wolpert 2000; Wood and Bartkowski 2004).

Attribution Theory

In its most basic form, attribution theory was proposed by Heider (1944, 1958). Heider assumed that people strive to predict and control their environments. Control and prediction can be achieved through an understanding of the causes of behavior. Observed behaviors are attributed to the person (internal/dispositional) or the environment (situational/external). The manner of response to observed behaviors generally depends on whether dispositional or situational attributions are selected.

Using Heider's basic formulation, Weiner (1979, 1985) argued that an additional, separate dimension-labeled controllability must be included. Whereas dispositional and situational factors refer to perceived causes of behavior, controllability has to do with behavior that is voluntarily produced and individuals are viewed as responsible for it. Controllability is a significant extension of attribution theory and distinct from general concepts of causation. For example, there are causes for which a stigmatized person may not be held responsible – uncontrollable – and others for which there is personal responsibility – controllable. We assert that the perceived responsibility of homosexual behavior is crucial to understanding related policy preferences and strongly influenced by political forces.

The emphasis on responsibility has been especially useful for analyses of causal attributions related to stigmatized groups. For instance, DeJong (1980) discovered that evaluations of obese people are more negative when obesity is attributed to voluntary overeating as opposed to a psychological malady (see also Crocker, Cornwell, and Major 1993). Levine and McBurney (1977), established that assessments of people with unpleasant body odors were more negative when the odor was attributed to personal hygiene as opposed to a physiological disorder. And in a broader study, Weiner, Perry, and Magnusson (1988) established that stigmas with a behavioral origin such as child abuse, AIDS, and Vietnam War Syndrome were more likely attributed to controllable causes than stigmas with a physical basis such as Alzheimer's, heart disease, and cancer. Predictably, attributing stigmas to a controllable cause elicited greater anger and negative affect toward the stigmatized.

Applying the theory of controllability attributions to the social stigma of homosexuality, researchers hypothesized that people who considered homosexuality as a controllable state would report more negative attitudes toward homosexuals than those who viewed homosexuality as uncontrollable. The data generally confirmed the hypothesis (Aguero, Block, and Byrne 1984; Sakalli 2002; Tygart 2000; Whitley 1990; Wilcox and Norrander 2002; Wilcox and Wolpert 2000; Wood and Bartkowski 2004). Though limited in scope, these studies imply that if homosexuality is perceived as uncontrollable – genetic in origin – it may protect homosexuals from potentially negative policy consequences (Quist and Wiegand 2002).

POLITICAL IDEOLOGY AND ATTRIBUTIONS

Different political ideologies produce distinct attributions. For example, Williams (1984) reported that liberals, compared to conservatives, were less likely to attribute blame to welfare clients and theft victims. Liberals also expressed more sympathy for the victims. Studies showed that conservatives attribute poverty to individual dispositions whereas liberals attribute poverty to situational sources (Griffin and Oheneba-Sakyi 1993; Zucker and Weiner 1993).¹ This research suggests there may be a political motive driving the attributions. Because liberals view the homeless as victims of larger social and market forces, government becomes the instrument through which poverty can be alleviated. Thus a situational/environmental cause of poverty fits well with the liberal orientation, producing support for governmental intervention in the market place. A conservatives' dispositional attribution, by contrast, places blame on the homeless and thereby justifies a more limited view of governmental intervention. In both instances attributions arise from and reinforce ideological beliefs.

How then should this perspective be applied to attributions about homosexuality? Similar to the environmental attribution for homelessness, liberals are likely to select an attribution which removes individual responsibility and opens the door for government assistance and social change. Genetics as the cause of homosexuality serves this function. Liberals, then, believe that both poverty and homosexuality are largely beyond the control of the individual and advance social and political support for effected groups. Conservatives, however, defenders of the status quo, especially as it applies to traditional morality and gender roles, will likely prefer an attribution that limits governments' role and stresses individual responsibility. Personal choice or situational factors as the cause of homosexuality fits the description. Thus, as with poverty, conservatives are likely to attribute homosexuality to controllable sources.

1. Similarly, Pellegrini et al. (1997) found that Democrats were more likely to attribute homelessness to situational factors and Republicans attribute homelessness to personal characteristics.

RELIGION AND ATTRIBUTIONS

Undoubtedly, ideological differences are refined and sharpened by an elite conflict over gay and lesbian civil rights. While citizens seek cues to reduce their political uncertainty, elites provide ready-made accounts that are pivotal to the public's causal reasoning (Karp 1998; Lupia 1994; McGraw 2001; Riker 1986). This two-step flow of communications from authority figures to public should apply to religious settings as well. The clergy's respected position within the church suggests a powerful role for influencing causal explanations about homosexuality. A religious education often includes negative references to homosexuals (Layman and Carmines 1997; Wood and Bartkowski 2004): Homosexuality is frequently considered a sin or crime against nature, the moral standards of homosexuals are questioned, and the Books of Leviticus calls homosexual acts between men an abomination (Tygart 2000). The logic is that one's sinful acts are chosen. Therefore, as a sin, homosexuality could hardly be genetically based or deterministic. Instead, viewing homosexuality as a sin presumes that it is a controllable choice. The controllability attribution should then be most prominent among individuals with the most exposure to the tenants of a religious tradition as well as an affiliation with conservative denominations.

Data and Methods²

A Pew Research Center for the People and Press survey conducted from October 15 to 19, 2003, provides an excellent opportunity to test our hypotheses. The central topic concerned homosexuality and religion. Respondents were asked their opinions about the origins of homosexuality: "In your opinion, when a person is homosexual is it...something that people are born with, or is it something that develops because of the way people are brought up, or is it just the way that some people prefer to live?" Approximately 32 percent chose the "born with" statement, 14 percent believed that one's upbringing was responsible, and about 40 percent attributed homosexuality to personal choice. The remaining 14 percent did not provide an answer. Thus, of those who responded to the question, nearly 47 percent believed homosexuality was a controllable state (Pew 2003).

The upbringing response and personal choice were combined to form a dichotomous-dependent variable coded 1 for born with and 0 for upbringing/personal choice. An additional query immediately after the origins question provides justification for this categorization. Respondents were asked, "Do you think a gay or lesbian person's sexual orientation can be changed or cannot be changed?" Forty-two percent believed that sexual orientation of gays and lesbians can be changed and another 42 percent believed it cannot be changed. The

2. The response rate for the Pew October 15–19, 2003 survey was 27% (AAPOR RR2).

remaining 16 percent did not provide an answer. We expected a large majority of respondents attributing homosexuality to innate origins would also believe gays and lesbians cannot change their sexual orientation. This was the case for 85.5 percent. In addition respondents attributing homosexuality to either upbringing or an explicit preference generally believed that sexual orientation of homosexuals can be changed (69.5 percent). Finally, those attributing homosexuality to upbringing and those attributing it to personal choice did not report significant differences in beliefs about whether sexual orientation of homosexuals can be changed (Pew 2003).

Recall that political ideology and religiosity are the key independent variables for our analysis. Respondents were asked to describe their political views as very conservative, conservative, moderate, liberal, or very liberal. Responses were combined to form two dummy variables – conservatives and liberals – with moderates as the baseline. We expect liberals to attribute homosexuality to a biological cause. For religiosity, we utilized a conventional question assessing respondent's level of church attendance – more than once a week, once a week, once or twice a month, a few times a year, seldom, or never. Regardless of the specific denomination, respondents who attended church most frequently are the most religious. However, given that conservative Protestant denominations and evangelical (born-again) Christians are most likely to publicly disapprove of homosexuality (Melton 1991; Wilcox and Norrander 2002), we also included a control for Protestant, coded 1 if the respondent was Protestant and 0 otherwise, and born-again, coded 1 if the individual was born-again and 0 otherwise. In addition several exogenous influences likely to affect causal attributions about homosexuality were included. Based on previous research on attitudes about gay rights, we expect the highly educated, women, those reporting a gay friend, whites, those without children, those who have never been married, and younger respondents to attribute a biological cause to homosexuality (Bailey et al. 2003; Brewer 2003a, 2003b; Egan and Sherrill 2005; Herek 2002; Sherrill and Yang 2000; Wood and Bartkowski 2004).³

RESULTS

We used logistic regression to estimate the effects of the independent variables. The first model, shown in column 1 of table 1, provides a reasonable fit to the

3. Though the experience of knowing someone who is gay may have a significant influence on the likelihood of selecting a biological attribution, disentangling the causal arrow is problematic. Gay people may choose to be open about their orientation to people they believe will be more accepting, rather than the effect occurring from knowing someone who is gay. However, as societal tolerance increases and more individuals reveal their homosexuality, some may disclose their dispositions to less accepting individuals. Indeed, even though less than five percent of the population might be gay or lesbian, 62 percent of respondents reported knowing someone who is gay or lesbian (Egan and Sherrill 2005; Sherrill and Yang 2000).

Table 1. The Determinants of Causal Attributions about the Origins of Homosexuality – Genetics as Cause

Independent variables	Genetic attribution
Education	.280** (.067)
Age	.124* (.062)
Female	.622** (.153)
Gay friend	.754** (.160)
Religiosity	-.144** (.054)
Protestant	-.358* (.161)
Born-again	-.920** (.182)
Conservative	-.452** (.171)
Liberal	.312# (.194)
White	.365# (.213)
Never married	-.244 (.241)
Children	-.352# (.182)
Constant	-1.695** (.438)
Log likelihood	-561.279
Pseudo R-square	.17
Chi-square	225.43**
N	1007

NOTES.—Coefficients are logistic regression coefficients; standard errors are in parentheses. ** $p < .01$, * $p < .05$, # $p < .10$.

SOURCE.—The data are from an October 2003 survey conducted by the Pew Center Research Center.

data. The education and gender variables perform as expected. The educated, whites, those without children, and women were more likely to attribute homosexuality to a biological cause. Knowing a gay person also increased the likelihood of reporting a biological attribution, as did advancing age. Both of these findings are intriguing because they capture life experience.⁴

4. Because the experience of knowing a gay person shapes attributions, we also investigated how this life experience interacts with other characteristics. In analysis of interaction variables

Because previous research established that older Americans are less supportive of gay rights (Wilcox and Wolpert 2000; Wood and Bartkowski 2004) we expected a nonbiological attribution. Analysis of the descriptive statistics does in fact show a clear majority of older respondents attributing homosexuality to a nonbiological cause, but *relative* to young respondents, older respondents were more likely to attribute the cause to biology. Perhaps the youth's exposure to a variety of individuals that adopt temporary lifestyles and behaviors produces the environmental attribution. If lifestyle appears temporary then attributing homosexuality to an environmental cause is consistent with that perception. By contrast aging accumulates social experiences that would engender a broader perspective. People may temporarily change but they are nonetheless tethered to their innate dispositions. As a result the expression that the apple does not fall far from the tree may ring true for many aging adults.⁵

However, even after controlling for these factors, ideology and religiosity emerge as significant predictors. Conservatives are less likely to attribute homosexuality to innate origins whereas liberals are more likely to do so. In addition, increased church attendance, being affiliated with a Protestant denomination, and being a born-again Christian significantly reduces the likelihood of attributing homosexuality to biological origins.

The statistical analysis thus offers support for the hypotheses that link ideology and religiosity to causal attributions about the origins of homosexuality. The effects of conservative ideology are strong and speak to the powerful role of group politics in attribution processes. The estimated effects of religion on causal attributions are strong as well. In fact, 53 percent of respondents in our sample thought it a sin to engage in homosexual behavior. Among respondents who never attended church 20 percent considered homosexual behavior a sin while nearly 85 percent of frequent church attendees believed homosexual behavior sinful. Frequent attendees were also asked whether their clergy speaks out on laws regarding homosexuals. Fifty two percent noted their clergy did

available from the authors we demonstrated that knowing a gay person has no additional influence on attributions regardless of age, education, ideology, being born-again or church attendance. However, women and Protestants were more likely to make a biological attribution when they knew a gay person.

5. A rival explanation evokes cohort changes. Older adults may have direct knowledge about the beginning of the gay and lesbian movement in the late 1960s. These respondents would be aged 18–30 when the movement was young and might have been influenced by this exposure. Although our data do not allow a definitive answer, a subsequent model with age categories (18–24, 25–34, 35–44, 45–54, 55–64, 65+) showed that the middle cohorts do not appear to be affected whereas the youngest cohort is most likely to select an environmental attribution. A likelihood ratio test did however reveal that the cohort dummy variables did not perform better than the linear formulation. Given this evidence and the fact that older adults are less supportive of gay civil rights, it seems likely that the relationship between age and attribution is based on life experience rather than cohort effects.

so, and 75 percent of this group reported their clergy publicly discouraged homosexuality. These distributions clearly point to the potential power of the pulpit in shaping causal attributions about homosexuality.

Affect, Policy, and Attributions

Though key determinants of causal attributions about homosexuality have been identified, it is important to demonstrate that such attributions matter. In general, researchers study attributions because they are viewed as antecedents to emotions, preferences, and behaviors. The mere discussion of this type of causal attribution in the third presidential debate of 2004 demonstrates reporters and politicians also intuit the importance of attributions in the development of policy positions. We then ask if there is a link between causal attributions about the origins of homosexuality, affect toward gays and lesbians, and support for gay civil rights policies.

According to attribution theory, the perceived cause of behavior should determine affective reactions toward the stigmatized group and related attitudes, including support for policies that protect the rights of group members. If the cause of homosexuality is perceived as controllable, then we should expect negative affect toward gays and lesbians and reduced support for policies that benefit the group. Conversely, individuals attributing homosexuality to biological causes should be less likely to exhibit negative affect and be more supportive of lesbian and gay civil rights.

These hypotheses were tested with several questions from the same 2003 Pew Center for People and Press survey. The independent variables in table 1 were also used in the analysis. Respondents were asked; "Would you say your overall opinion of gay men (lesbian women) is very favorable, mostly favorable, mostly unfavorable, or very unfavorable." Columns 1 and 2 in table 2 present the results of a logistic regression model using affect toward gay men and lesbian women as the dependent variables, coded 1 if respondent reported favorable opinion and 0 if unfavorable.

Attributing homosexuality to genetic causes is an important and powerful predictor of affect toward gays and lesbians. Calculated marginal effects for the independent variables indicated that attributions are the most potent factor influencing feelings toward gays and lesbians (.392), more than 50 percent above the estimated effect of the second most important variable of knowing someone who is gay (.242), and almost three times that of the third largest variable being born-again (-.137).

Two additional questions specific to homosexual rights were also analyzed. Respondents were asked, "Do you strongly favor, favor, oppose, or strongly oppose allowing gays and lesbians to marry legally." And, "Do you strongly favor, favor, oppose, or strongly oppose allowing gay and lesbian couples to

Table 2. Predicting Affect Toward Gays and Lesbians and Support for Gay Civil Rights

Independent variables	Affect			
	Toward gay men	Toward lesbians	Marry legally	Same rights as married couples
Genetic attribution	1.655** (.182)	1.549** (.184)	1.318** (.185)	1.244** (.180)
Education	.389** (.079)	.345** (.078)	.293** (.079)	.285** (.076)
Age	-.238** (.073)	-.230** (.071)	-.218** (.073)	-.170* (.070)
Female	.266 (.175)	.010 (.173)	.131 (.179)	.391* (.171)
Gay friend	1.011** (.182)	.949** (.177)	.296 (.189)	.641** (.177)
Religiosity	-.053 (.062)	-.164** (.061)	-.358** (.063)	-.399** (.061)
Protestant	-.493** (.185)	-.368* (.183)	-.275 (.184)	-.174 (.181)
Born-again	-.563** (.201)	-.461* (.196)	-.500* (.213)	-.517** (.194)
Conservative	-.500** (.191)	-.617** (.187)	-.624** (.200)	-.581** (.183)
Liberal	.480* (.234)	.187 (.231)	.985** (.221)	.802** (.232)
White	.285 (.241)	.138 (.236)	-.170 (.238)	.066 (.230)
Never married	.375 (.278)	.588* (.277)	.581* (.268)	.685* (.269)
Children	-.381# (.206)	-.268 (.202)	-.003 (.206)	.065 (.199)
Constant	-1.338** (.499)	-.503 (.485)	-.221 (.494)	-.184 (.484)
Log likelihood	-440.326	-451.216	-431.446	-462.094
Pseudo <i>R</i> -square	.30	.28	.30	.30
Chi-square	382.90	351.68	367.12	390.26
<i>N</i>	915	905	941	951

NOTES.—Coefficients are logistic regression coefficients; standard errors are in parentheses. ** $p < .01$, * $p < .05$.

SOURCE.—The data are from an October 2003 survey conducted by the Pew Center Research Center.

enter into legal agreements with each other that would give them many of the same rights as married couples?" Responses were dichotomized into favor and oppose categories.

Logistic regression estimates are shown in the last two columns of table 2. Relative to the other independent variables, the probability of support for same-sex marriage and equal rights for married couples was highest for the genetic attribution variable (.287 and .301, respectively), ahead of liberal ideology (.226 and .198), conservative ideology (−.128 and −.142), and being born-again (−.103 and −.127). Thus not only do attributions effect policy preferences, the influence of attributions is greater than those forces (ideology and religion) that have traditionally been viewed as the strongest predictors of policy preferences on gay and lesbian civil rights (Bailey et al. 2003; Brewer 2003a, 2003b; Egan and Sherrill 2005; Herek 2002; Haider-Markel and Joslyn 2005; Wood and Bartkowski 2004).

REPLICATION AND EXTENSION

Clearly, causal attributions about homosexuality are shaped powerfully by religion and ideology. It is equally evident that attributions influence affect toward gays and policies specific to this group. Two final issues are relevant. First, can these empirical results be replicated across a broader array of policy questions? Second, given attributions are influenced by political and religious orientations, as well as exposure to gays and lesbians, can individual causal attributions be changed? If so, how might change occur?

To address the first issue we made use of a May 2006 Gallup national survey of adults that asked respondents about their preferences over a broader series of gay civil rights questions.⁶ In the Gallup survey the question about attributions was slightly different than the one used by Pew. Gallup asked: "in your view, is homosexuality something a person is born with, or is homosexuality due to factors such as upbringing and environment?" Respondents were allowed to refuse these choices and indicate both or neither. We used those respondents who indicated "born with" (46 percent) or "upbringing/environment" (54 percent). These responses were coded 0 and 1, respectively.

The specific policy-related dependent variables for this replication and extension are based on the following questions, with coding in parentheses: (1) "Do you favor (0) or oppose (1) a constitutional amendment defining marriage as between a man and a woman?" (2) "Should homosexual marriages be recognized by the law as valid? should be valid (1), should not be valid (0);" (3) "Should homosexual relations between consenting adults be legal (1) or illegal (0);" (4) "Do you believe homosexual behavior morally acceptable (1),

6. The response rate for the Gallup May 8–11, 2006 survey was 25% (AAPOR RR2).

or morally wrong (0)?" (5) "Should homosexuality be considered and acceptable alternative lifestyle?" yes (1), no (0); and (6) "Should homosexuals have equal rights in terms of job opportunities?" Should (1), should not (0). Logistic regression estimates are shown in table 3.

While our models are similar to those estimated with the Pew data, Gallup did not ask respondents if they knew someone who is gay or lesbian. Nevertheless, we were able to include a variety of control variables including gender, never having been married, having children, race, church attendance, Protestant religious denomination, being a born-again evangelical Christian, education, and being conservative or liberal.

The results are highly consistent with the analysis of the Pew 2003 data. The first column of table 3 provides results for predictions of attributions. Once again religion and ideology play a central role. Across a range of policies and questions regarding the morality of homosexuality, the models predict opinion reasonably well. Variables for religion, ideology, and education are generally strong predictors of policy preferences and assessments of the morality of homosexuality. Most importantly, attributions about the causes of homosexuality are statistically significant. Respondents who believed that homosexuality can be attributed to the environment were less supportive of gay civil rights and were less likely to believe homosexuality was moral or acceptable. Indeed, the largest marginal effect on the probability of a given response for each question was in fact the attribution variable (ranging from .074 to .400). Across models, conservative and liberal ideology exert a substantial influence, but it is often less than half that of the attribution variable (ranging from $-.038$ to $-.240$).

To ease interpretation, table 4 displays the models from table 3, but this time showing predicted probabilities rather than logit coefficients. The results demonstrate the powerful influence of making a biological attribution on policy preferences. For example, making a biological attribution increases the probability of supporting legal same-sex relations by almost 37 percent and of believing that homosexuality is morally acceptable by 40 percent. In comparison, being conservative decreases the probability of supporting same-sex relations by almost 23 percent and of believing that homosexuality is morally acceptable by 11 percent. Meanwhile, being born-again or conservative decreases the probability of attributing homosexuality to a genetic source by more than 18 percent.

A final issue concerns temporal change. Since 1977, causal attributions about homosexuality have exhibited significant changes (see figure 1). The genetic attribution increased from 13 percent in 1977 to 41 percent in 2006. Figure 1 also shows that the genetic attribution correlates with trends in support for gay civil rights. This pattern indicates that the association between attribution and policy preferences is fairly well developed and likely to continue. The apparent change also signifies the dynamic nature of these attributions. Because the question of the cause of homosexuality remains open and because the attribution is so prominent a predictor of policy preferences, political debate

Table 3. Confirmatory Analysis: Predicting Attributions and the Effect of Attributions on Attitudes, 2006 Gallup Data

Independent variables	Causal attribution:		Support legal same-sex relations	Support equal rights	Believe it is an acceptable lifestyle	Homosexuality is morally acceptable	Support legal same-sex marriage		Oppose constitutional ban on same-sex marriage	
	born with	-					1.631**	1.520**	1.735**	1.697**
Attribution: born with										
Education	.147* (.057)		.323** (.069)	.285** (.088)	.291** (.068)	.284** (.070)	.062 (.066)	.039 (.061)	(.172)	
Religiosity	-.142* (.059)		-.349** (.071)	-.289** (.103)	-.419** (.070)	-.546** (.072)	-.365** (.067)	-.174* (.062)		
Protestant	-.053 (.165)		-.403* (.196)	-.300 (.289)	-.501* (.192)	-.496* (.191)	-.452* (.184)	-.461* (.174)		
Born-again	-.763** (.182)		-.732** (.207)	-.634* (.317)	-.567* (.206)	-.691** (.207)	-.185 (.206)	-.491* (.192)		
Never married	-.514# (.268)		-.124 (.320)	-.493 (.445)	.165 (.320)	.015 (.312)	.177 (.301)	.326 (.286)		
Children	-.368# (.198)		.151 (.237)	.138 (.352)	-.110 (.234)	-.029 (.232)	-.128 (.222)	.037 (.211)		
White	.482# (.262)		.953** (.303)	-.641 (.429)	.163 (.288)	.270 (.301)	.319 (.293)	.223 (.273)		

Continued

Table 3. Continued

Independent variables	Causal attribution: born with	Support legal same-sex relations	Support equal rights	Believe it is an acceptable lifestyle	Homosexuality is morally acceptable	Support legal same-sex marriage	Oppose constitutional ban on same-sex marriage
Female	.478** (.156)	.064 (.190)	.421# (.254)	.630** (.188)	.579** (.190)	.426* (.181)	-.191 (.170)
Age	.006 (.006)	-.024** (.007)	-.017# (.009)	-.020** (.007)	-.026** (.007)	-.017* (.007)	-.006 (.006)
Liberal	.642** (.219)	.619* (.306)	-.108 (.520)	.277 (.291)	.883** (.281)	.789** (.245)	.791** (.246)
Conservative	-.787** (.172)	-.951** (.201)	-.747* (.312)	-.828** (.197)	-.459* (.201)	-1.066** (.197)	-1.039** (.183)
Constant	-.996# (.605)	-.228 (.692)	3.247** (.977)	.381 (.687)	.297 (.702)	.610 (.686)	.683 (.649)
Log likelihood	-510.525	-367.690	-221.656	-379.512	-377.301	-408.226	-452.311
Pseudo R-square	.14	.36	.22	.34	.36	.29	.22
Chi-square	171.58**	405.70**	127.14**	390.90**	432.60**	334.55**	260.38**
Number of cases	865	834	852	839	857	848	841

NOTES.—Coefficients are logistic regression coefficients; standard errors are in parentheses. ** $p < .01$, * $p < .05$, # $p < .10$.
SOURCE.—The data are from a May 2006 survey conducted by the Gallup organization.

Table 4. Predicted Probabilities: Predicting Attributions and the Effect of Attributions on Attitudes, 2006 Gallup Data

Independent variables	Causal attribution: born with	Support legal			Believe it is		Support legal		Oppose	
		same-sex relations	rights	an acceptable lifestyle	morally acceptable	same-sex marriage	constitutional ban on same-sex marriage			
Attribution:	-	.365**	.074**	.389**	.400**	.320**	.243**			
born with [^]										
Education	.051*	.108**	.019**	.098**	.099**	.020	.014			
Religiosity	-.051*	-.121**	-.020**	-.147**	-.196**	-.124**	-.063*			
Protestant [^]	-.013	-.096*	-.014	-.120*	-.123*	-.105*	-.115*			
Born-again [^]	-.185**	-.174**	-.032*	-.136*	-.170**	-.043	-.122*			
Never married [^]	-.123 [#]	-.030	-.028	.039	.004	.042	.081			
Children [^]	-.090 [#]	.036	.007	-.026	-.007	-.030	.009			
White [^]	.115 [#]	.234**	-.025	.040	.067	.072	.055			
Female [^]	.117**	.015	.021 [#]	.151**	.143**	.100*	-.048			
Age	.026	-.096**	-.014 [#]	-.081**	-.106**	-.066*	-.026			
Liberal [^]	.159**	.139*	-.005	.065	.216**	.191**	.194**			
Conservative [^]	-.191**	-.226**	-.038*	-.198**	-.114*	-.240**	-.232*			

NOTES.—Variables with [^] show the predicted probability of a discrete change from 0 to 1; all others reflect predicted probability based on a standard deviation increase in the value of the variable; and all other variables are held at their means. ** $p < .01$, * $p < .05$, # $p < .10$.
SOURCE.—The data are from a May 2006 survey conducted by the Gallup organization.

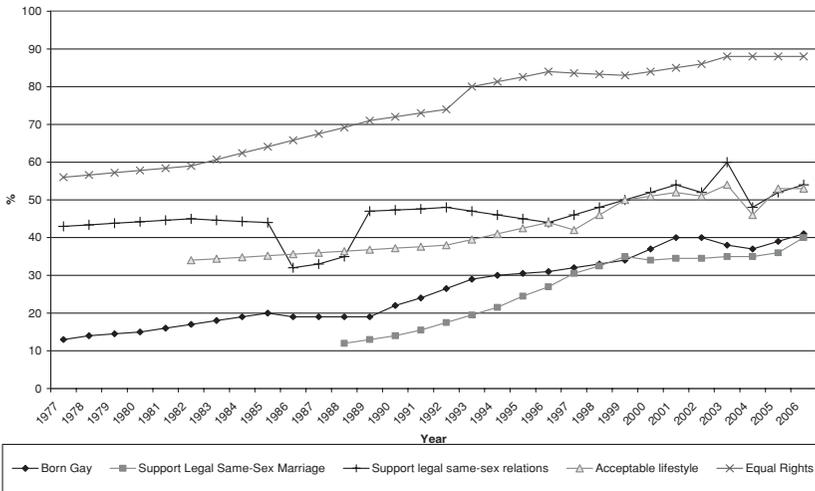


Figure 1. Biological Attributions about Homosexuality and Related Attitudes, 1977–2006. NOTES.—Data are compiled by the authors from Gallup surveys of national adults. Data were imputed for years when questions were not asked. The survey questions are explained in the text.

is unlikely to cease about the origins of homosexuality. Indeed the dynamic character of these attributions implies that political elites will continue their attempts to manipulate individual opinion even as that opinion may shift with cohort replacement in the population (Wilcox and Wolpert 2000; Wilson 1994).

Conclusions

Our research applied Weiner's attribution theory of controllability to explain individual beliefs about the causes of homosexuality. According to Weiner's theory, the causes of homosexuality are perceived as either controllable (environmental/personal choice) or not controllable (biological/genetically determined). Controllability suggests personal responsibility for behaviors and as a result a predictable configuration of negative affect toward gays and lack of support for gay civil rights. Noncontrollability is distinguished by the fact that observers do not hold persons responsible for their behavior and, thus, attitudes toward those persons are more favorable. Our findings were consistent with this expectation. We found attributions to be powerful predictors of people's affective orientations toward gays and a variety of policies relevant to gay civil rights. The biological attribution generated support for a variety of such policies and translated into more favorable feelings toward gays as a group. And distinct from prior research, our results indicate that attributions were by far the strongest predictors of attitudes toward gays and gay civil rights.

Also, previous studies neglected the political nature of attributions about homosexuality. The focus concerned the effects of attributions but not their antecedents. Our findings showed that individuals rely heavily on ideology, religion, and life experience to form beliefs. Liberals rely on a biological attribution, which eliminates choice as the cause of homosexuality and thus avoids casting blame on gays for their distinctive sexual orientation. Conservatives prefer the environmental attribution which implies a degree of control involved in sexual orientation. Perceiving responsibility for the behavior naturally evokes questions about the morality of homosexuality and support for policies that favor conventional relationships follows. Likewise highly religious individuals overwhelmingly believe that homosexuality is a product of individual choice/environmental circumstances. For the highly religious and ideological, we suspect communications from authoritative sources, political or otherwise, reinforce initial attribution tendencies.

Our findings lead to two sets of conclusions. The first conclusion concerns theory while the second deals with substantive implications. With respect to theory, our empirical results converge impressively with Weiner's perspective. Weiner extended the traditional disposition-environmental axis of attributions to perceptions of controllable and uncontrollable behaviors. People are perceived as responsible or not responsible for their stigmatized behaviors. The traditional Heider dichotomy does not fit our case but the Weiner approach does and adds considerably to understanding attributions about homosexuality. We believe future studies that examine attributions of stigmatized groups would do well to adopt this theoretical perspective.

It should be noted however that our data do not prove that respondents believe homosexuality can be controlled. Rather, it has been inferred from theoretical expectations and prior research that respondents in fact believe so. One potentially productive avenue of research would be to incorporate self-reported measures of responsibility and blame for the stigma. Such measures have bolstered Weiner's theory (Weiner, Perry, and Magnusson 1988) but inclusion in a broad cross-sectional survey would provide additional support. Yet since our surveys cannot definitively validate respondents' perceptions of controllability, it is appropriate to view the present study as demonstrating the plausibility and parsimony of Weiner's attribution theory.

Our findings also trigger a variety of important and perhaps disturbing substantive implications. First, it is clear that attributions about homosexuality are shaped by politics. Decades ago it was conservatives utilizing a biological attribution to explain differences between whites and blacks in economic status. African Americans were perceived to be born with inferior intelligence. Though blacks were not necessarily blamed, integration was not endorsed. Liberals preferred an environmental cause, attributing differences to situational factors. The environmental attributions justified governmental intervention to alter the conditions that produced inequity (Carmines and Layman 1998). The preferred attribution was thus tied strongly to existing political beliefs.

But, politics is never static and, as exhibited in figure 1, attributions are subject to change. Currently there does not appear to be a consensus in the scientific community regarding the biological basis for homosexuality (Wilcox 2003). However there is an obvious increase over the past several decades in the publication of studies linking genetics to all forms of behavior including homosexuality (Wilcox 2003). The news media reporting of such studies and subsequent debates among political elites will be important information sources likely to affect future attributions about homosexuality.

Finally, whether an emphasis on genetic causes will breed tolerance for inborn differences remains an open question. If homosexuality comes to be largely viewed as a result of genetics, our results predict greater support for gay and lesbian civil rights. Perhaps the predominance of genetic explanations may even reduce the stigma associated with homosexuality. Or, the future could be much different. If homosexuality is not a personal choice or a result of environmental forces but rather caused by a specific gene, the next step may not be tolerance but intervention. If the homosexual gene can be altered or manipulated in some way, the notion that homosexuality can be “cured” will surely be considered. Those who do not pursue such therapies may face discrimination. Thus rather than greater acceptance of differences, genetic discoveries may conceivably produce further prejudice on this and other issues.

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