

FRAMING AND AFFECTIVE SOURCES OF POLITICAL JUDGMENT

J. Scott Matthews
Queen's University
scott.matthews@queensu.ca

May 2007

**** DRAFT VERSION. DO NOT CITE WITHOUT AUTHOR'S PERMISSION. ****

Prepared for presentation at the Canadian Political Science Association 2007 Annual Meeting, Saskatoon, SK, May 30th to June 1st, 2007.

INTRODUCTION

Does the quality of political reasoning increase with levels of political knowledge? An answer to this question depends, among other things, on how one defines *quality*. Consider two subtly different yet compatible definitions. First, the quality of political reasoning increases with the involvement of abstract political principles in thinking about political matters. That is, in the language of students of public opinion, the quality of political reasoning increases with the weight or salience of political values in the formation of political attitudes. Second, the quality of political reasoning decreases with the involvement of “gut-level” (Carmines and Stimson 1980) or emotional impulses in thinking about political matters. Put differently, the quality of political reasoning is inversely related to the weight or salience of affective orientations in the formation of political attitudes.

There is little doubt, following the first definition, that the quality of political reasoning increases with political knowledge. The pivotal contribution on the topic is Sniderman, Brody and Tetlock (1991), who demonstrate that the politically informed are more likely than the less informed to involve abstract principles—general orientations on egalitarianism or social conservatism, for example—in reasoning about political matters. As regards the second definition, Sniderman and his colleagues again make the crucial contribution, but here the findings are less sanguine: the weight of affective orientations in political judgment is essentially unrelated to political knowledge. Specifically, they find that emotional responses to salient social groups are involved in political judgment for both the politically informed and uninformed alike, and to roughly the same degree (Sniderman, Brody and Tetlock 1991).

But is it always thus? Empirical evidence on the interaction between political knowledge and affective sources of political judgment is, in fact, surprisingly sparse. Furthermore, theoretical developments elsewhere in the political cognition field suggest new and interesting possibilities. In particular, recent work on the psychology of framing effects offers good reason to suspect that the weight of affective considerations in political reasoning may fall with levels of political knowledge. The argument in detail is presented below, but the basic claim can be easily summarized: reception of framing discourse that emphasizes the importance of abstract political principle in political reasoning may reduce the impact of other, non-principled considerations in political judgment, including—if not especially—affective sources of political judgment. Insofar as such frame reception is indexed to political knowledge, the impact of affect on political reasoning should fall as knowledge rises.

The aim of this paper, then, is to re-examine the relationship between political knowledge and affective sources of political judgment. As it happens, the paper finds only weak—if fairly consistent—support for its theoretical expectations. Even so, the weak result is highly suggestive theoretically and is, in any case, at variance with the received wisdom.

The paper is organized as follows. The first section of the paper develops the theoretical argument, starting with a review of the framing effects literature. The next two sections

cover the empirics. The focus is on the structure of public opinion on gay rights (or LGBT rights) in the United States and Canada; the theoretical warrant for this empirical focus is presented below. Discussion of data sources (ANES 2004 and CES 1993, 1997 and 2004) and methodology comes first, followed by presentation of results. The final section of the paper summarizes, discusses the theoretical implications of the results, and considers future research directions.

FRAMING EFFECTS, AFFECTIVE ORIENTATIONS & POLITICAL REASONING

The central proposition in the literature on framing effects is by now a piece of political science conventional wisdom: the social construction of political issues and events—especially by elites and especially as transmitted by the mass media—to a great extent governs the set of considerations members of the mass public will invoke in the formation of judgments relevant to those issues and events. The proposition is a commonplace in public opinion scholarship and, indeed, empirical examples of framing effects are legion (for a review, see Druckman 2001). What is less clear, however, is the precise mechanism by which framing effects operate.

The earliest interpretations of framing effects in political science emphasized an accessibility process (Iyengar and Kinder 1987; Iyengar 1991; Zaller 1992; Nelson and Kinder 1996; Miller and Krosnick 1996). The idea here, made familiar in cognate scholarship on agenda-setting and priming, is that frames operate by bringing into conscious awareness the considerations (e.g., political values or perceptions) included in the frame, thereby raising the likelihood that these considerations will come to mind during the opinion formation process. The theory rests on the assumption that political attitudes reflect a kind of average of the considerations that are cognitively accessible or “top of the head” (Zaller 1992) when the attitude is expressed. Accessibility, in this view, is powerfully conditioned by the nature of the information stream or discourse to which an individual is exposed, especially through the media. The effect of a frame, thus, may reflect its impact on the accessibility of those considerations contained in the frame.

A spate of recent work, however, casts the accessibility interpretation in significant doubt (Nelson, Clawson and Oxley 1997; Nelson, Oxley and Clawson 1997; Brewer 2001; Nelson 2004), at least as regards the impact of frames that invoke political values. Here, the impact of frames is seen to operate through a much more deliberate and “thoughtful,” rather than automatic and “passive,” cognitive process (Brewer 2001). In this view, individuals do not simply accept the interpretations of issues and events contained in frames, they actively evaluate them, and accept only those frames to which they respond favourably. Furthermore, having accepted the interpretation embodied in a frame, the frame influences opinion formation not by unconsciously raising the cognitive accessibility of its constituent arguments and considerations, but by altering the subjective importance (or weight) of these considerations in the opinion formation process. Indeed, a crucial empirical finding in favour of this “thoughtful receiver” (Brewer 2001) or “interactionist” (Nelson 2004) image of the framing process is that the

importance of a given consideration can increase without affecting its cognitive accessibility (Nelson, Clawson and Oxley 1997).

An intriguing component of this “thoughtful receiver” interpretation of framing effects is its emphasis on the significance of frames as *arguments* (see, especially, Nelson 2004). The perspective suggests that frames consciously engage receivers in deliberation over the relative merits of framing arguments, encouraging receivers to elaborate connections between the issues or events that are the subject of the frame and the receivers’ beliefs and values (cf. Brewer 2001: 48-9). At the same time, however, as arguments *for* a particular interpretation of an issue or event, frames also may be seen as arguments *against* other interpretations. That is, if a frame argues that a given consideration x_1 is most important, it necessarily (if implicitly) argues that considerations x_2 through x_k are less important, or even unimportant. Thus, even as a frame induces receivers to elaborate new connections between an issue or event and the receivers’ beliefs and values, it may also sever existing connections of this sort. More directly, a frame that increases the weight of consideration x_1 may reduce the weight of considerations x_2 through x_k .

If such a dynamic is in operation, it may have particular significance for affective sources of political judgment. Emotions are among the easiest and most readily employed bases for political judgment (Marcus, Neuman and Mackuen 2000). Consequently, absent the evaluative criteria supplied by elite and media framing of political issues and events, affective considerations may be the most widely used basis for political attitude formation (Carmines and Stimson 1980; Sniderman, Brody and Tetlock 1991). Thus, on the logic above, exposure to frames that invoke, for example, principled arguments about political values as opinion making criteria may be expected to regularly and systematically erode the affective basis of political evaluation, by making implicit counter-arguments against non-principled (e.g. affective) criteria of judgment.

To make the foregoing speculations more concrete, consider the following stylized portrait of the ‘life-cycle’ of a political issue. At time t_1 , issue y emerges. y is a policy choice that involves conferring benefits on group A . Apart from this information concerning y ’s implications for A , no details of the policy or its implications for other groups or policy goals is transmitted. Asked for her opinion on y at t_1 , the typical individual has nothing to go on but her general, affective orientation toward A . Her opinion on y , as a consequence, is likely to be powerfully influenced by this orientation, if only because the link between the two is so easy to make (cf. Carmines and Stimson 1980; Sniderman, Brody and Tetlock 1991; see also Campbell et al. 1960: Ch. 10 and Converse 1964). Now imagine that a frame for issue y is introduced at t_2 . The frame asserts that a given political value is most important to opinion formation on y . Evaluated at t_3 , the theory developed here suggests that, *ceteris paribus*, the impact of affect toward A on opinion toward y should be less than its impact at t_1 .

This stylized issue life-cycle, in its broad outline, no doubt reflects the life course of many political issues. Many issues must, upon emergence, be understood principally in terms of the interests of the groups they implicate. A classic case may be the same-sex marriage issue in Canada. While a live question in some quarters for decades, the issue

was mostly invisible on the Canadian public agenda until the late 1990s (Smith 2002; Hiebert 2002). During this early period, it seems reasonable to assume that global, affective orientations toward gays and lesbians were crucial determinants of public opinion on the question. In a sequence of decisions starting in the middle of the decade, however, the Supreme Court of Canada brought the issue to national prominence and, crucially, effectively framed same-sex marriage as a question of equal rights (Matthews 2005). In other words, the Court successfully argued to Canadians that one's orientation toward the goals of social and political equality were important—perhaps the most important—considerations in opinion formation on same-sex marriage. The perspective presented above suggests that one consequence of this framing process should have been an erosion in the impact of affect toward gays and lesbians on same-sex marriage opinion. (This hypothesis has yet to be tested; an effort to do so is made below.)

Note that, although the above discussion is couched in terms of dynamics over-time, the theoretical argument has obvious cross-sectional implications. The key dynamic variable is reception of framing discourse. If certain groups in the population are more likely to receive framing messages, then we should expect members of these groups to invoke affective considerations to a lesser extent than others. A standard expectation in this regard would be for framing effects to maximize among the politically knowledgeable (Nelson, Oxley and Clawson 1997). Thus, in the presence of framing discourse that emphasizes non-affective considerations, the impact of affect on political judgment should fall as political knowledge rises. An assessment of this hypothesis is the core empirical business of this paper.

METHODOLOGY

The Case

As noted above, the testbed for the paper's theoretical conjectures is the structure of public opinion on gay rights in Canada and the US. The data are the Canadian Election Studies of 1993, 1997 and 2004¹ and the American National Election Study, 2004. The analysis covers four substantive political controversies: legal marriage for gays and lesbians (in Canada 1993, 1997, 2004, and US 2004); adoption of children by gay and lesbian couples (US 2004); anti-discrimination protections for gays and lesbians (US 2004); and the issue of 'gays in the military' (US 2004).

The case of public opinion on gay rights is apt for three reasons. First, the link between a relevant affective orientation—*affect toward gays and lesbians as a group* (*per* Sniderman, Brody and Tetlock 1991; see also Brewer 2003a, 2003b)—and support for gay rights should be obvious. Put simply, the four issues in the analysis do not simply involve the interests of gays and lesbians, they implicate them manifestly. The question of same-sex marriage, for instance, would simply not be an issue absent its implications for homosexuals. Thus, it is fair to assume that anyone who is able to recognize and respond to questions about these issues must also be aware of their implications for gays

¹ The 2000 wave of the CES is excluded, as it does not include the requisite measure of group affect toward gays and lesbians.

and lesbians, at least roughly speaking. Absent exposure to framing discourse in relation to these issues, consequently, it seems highly plausible to expect that affective orientations toward gays and lesbians would structure the relevant political attitudes to at least a minimal extent.

A second argument in favour of a focus on gay rights issues is that the existence of genuine emotional responses to gays and lesbians as a group—responses that are exogenous to politics—is a plausible assumption. That is, gays and lesbians have a social and cultural existence quite apart from their involvement in politics. Consequently, it seems reasonable to assume that the vast majority of the mass public possesses real affective orientations toward homosexuals as a group—orientations that are not simply derivative of cognitive and evaluative postures that are mainly political in nature. This is simply not the case for some other groups in relation to which affective responses have been measured in public opinion research—feminists and environmentalists, for instance, who exist almost exclusively in connection with their political concerns.

Finally, a focus on gay rights issues is apt because discourse on these issues has engaged strong principled arguments on both sides: egalitarian arguments in favour and socially conservative or morally traditionalist arguments against. This has been the case in both the United States (Brewer 2003a, 2003b) and Canada (Hiebert 2002; Smith 2002, 2005). Consequently, there is reason to anticipate the existence of powerful framing effects on these issues.

Hypotheses

The basic empirical question animating what follows is, what is the relationship between reception of frames that emphasize the importance of abstract political principles, especially political values, in political judgment and the impact of affective orientations on political attitudes? The analytical approach is to model this relationship statistically by interacting indicators of frame reception with indicators of both political values and affective orientations.

Two indicators of frame reception are deployed: the passage of time and political knowledge. The passage of time works for an examination of dynamics in the impact of affect toward gays and lesbians on support for same-sex marriage in Canada from 1993 to 2004, in relation to the hypothesis described above. The discursive development of the issue and, in particular, the rise to prominence of an ‘equal rights’ frame for the issue has been depicted elsewhere (Hiebert 2002; Smith 2002, 2005; see also Matthews 2005). As discussed below, the assumption in the analysis is that reception of frames emphasizing the importance of political values, especially orientations toward equality rights and traditional values, increases with the passage of time (especially after 2000).

Political knowledge only works as a measure of frame reception in the presence of two critical, if highly plausible, assumptions. First, exposure and reception of frames increases with political knowledge and its covariates (political sophistication, media attention, and so forth). Nelson, Oxley and Clawson (1997) make a strong theoretical

and empirical argument for this assumption (see also Brewer 2003a). Second, for each of the issues in the analysis, framing discourse emphasizing political values actually was disseminated to the mass public. The assumption rests on past empirical work (for Canada, Hiebert 2002; Smith 2002, 2003; Matthews 2005; for the US, Brewer 2003a, 2003b) and on statistical results (reported below) that show that, *per* standard framing expectations, the interaction between political values and political knowledge is almost uniformly strong and positive.²

Given these assumptions, two (*ceteris paribus*) hypotheses can be derived. The first is particular to the dynamics of same-sex marriage support in Canada; the second generalizes to all four gay rights issues in the analysis:

H₁: The impact of affective orientations toward gays and lesbians on support for legal same-sex marriage declines over time in Canada.

H₂: The impact of affective orientations toward gays and lesbians on attitudes toward gay rights declines with political knowledge.

Measurement

The dependent variables in the analysis are support for the rights of gays and lesbians in each of the following areas: *marriage*; *adoption of children*; *military service*; and *protection from job discrimination*. The measures of same-sex marriage support are as follows:

[Canada 1993] Homosexual couples should be allowed to get legally married. (strongly agree, somewhat agree, somewhat disagree, or strongly disagree)

[Canada 1997] Homosexual couples should be allowed to be legally married. (strongly agree, somewhat agree, somewhat disagree, or strongly disagree, not sure)

[Canada 2004] Gays and lesbians should be allowed to get married. (strongly agree, somewhat agree, somewhat disagree, or strongly disagree)

[US 2004] Should same-sex couples be allowed to marry, or do you think they should not be allowed to marry?³

² Of course, this finding is also consistent with other theoretical possibilities. In particular, the positive interaction may reflect a *sui generis* effort to order one's specific policy attitudes with more general political beliefs and principles. That said, most accounts of belief system constraint assume the influence of some external, social source of the relevant "interstitial links" (Converse 1964; see also Feldman 1988), even if the concepts of framing theory are not directly invoked.

³ Respondents who volunteered that they opposed legal marriage but supported "civil union" for same-sex couples are recorded in the ANES data, but discarded in the present analysis.

The author has argued elsewhere that the three Canadian measures are roughly comparable (Matthews 2005), and so plausibly included together in the pooled analysis reported below.

Measures of support for the remaining ‘gay rights’ are only available for US respondents. They are:

Do you think gay or lesbian couples, in other words, homosexual couples, should be legally permitted to adopt children?

Do you think homosexuals should be allowed to serve in the United States Armed Forces or don't you think so?

Do you favor or oppose laws to protect homosexuals against job discrimination?

For all the dependent variables, ‘don’t knows’ and ‘not sures’ are assigned middle values.

Two other key variables in the analysis are the measures of *affect toward gays and lesbians* and *political knowledge*. For the former, the analysis relies on the ‘feeling thermometer’ measures of group affect for gays and lesbians, included in both the CES and ANES. For the latter, a range of indicators of general political knowledge are utilized. For the CES 1997 and 2004, additive knowledge scales are constructed from responses to a series of office recall questions—queries regarding the identity of provincial premiers, federal finance ministers and the like. A similar scale is constructed for the ANES 2004, except that in this case the questions address office recognition, rather than recall—e.g. ‘Tony Blair. What job or political office does he now hold?’ Finally, for the CES 1993, interviewer ratings of general political knowledge are used.

The measurement of core value orientations is also an important component of the analysis. As suggested above, in both Canada and the US, the principal value orientations invoked in discourse concerning gay rights issues are *egalitarianism* and *moral traditionalism*. For Canada, the relevant dispositions are tapped using single items⁴, whereas in the US it is possible to construct reliable scales from the standard multi-item batteries.⁵ These variables function both as controls and, as noted above, as indicators of the presence and effectiveness of value frames relevant to the issues in the analysis.

⁴ For Canada, egalitarianism is measured with an item that asks respondents to express their level of agreement with the following statement: “We have gone too far in pushing equal rights in this country.” Moral traditionalism among Canadians is measured two different ways, depending on the year: in 1993, respondents are invited to agree with this statement: “People today don’t have enough respect for traditional values”; in 1997 and 2004, the statement changes to: “This country would have many fewer problems if there were more emphasis on traditional family values.” These two items clearly address different, albeit overlapping, sets of concerns (see also Matthews 2005: 852). The effect of the wording variation is controlled in the analysis with the inclusion of interactions between these items and the survey years.

⁵ This follows the approach of Brewer (2003a, 2003b).

The remaining variables in the analysis serve strictly as controls. For Canada, these are *age*, *gender* (woman=1), *ethnicity* (non-Europeans vs. others), *religion* (no religion vs. others), *education* (degree-holders vs. others), *income*, *region* (Atlantic, Quebec and West vs. Ontario), and *party identification*.⁶ For the US, the controls are *age*, *gender* (woman=1), *income*, *education* (degree-holders vs. others), *religion* (Protestants, Catholics, and non-religious vs. others), *religious practice* (frequency of prayer), *religious belief* (biblical literalism), and *party identification*. All this follows relevant precedents in the literature (for Canada, Matthews 2005; for the US, Brewer 2003a, 2003b).

Summary statistics for all variables are included in the appendix in Table A1.⁷

RESULTS

The crucial implication of the argument developed above is that reception of frames that emphasize the importance of political values should erode the impact of affective considerations in political reasoning. H₁ and H₂ concretize this implication for empirical analysis.

Start with H₁: *the impact of affective orientations toward gays and lesbians on support for legal same-sex marriage declines over time in Canada*. Table 1 reports estimates of an ordered logit model of same-sex marriage support in Canada, pooling data from the 1993, 1997 and 2004 waves of the CES. Marginal effects by year for the coefficients of theoretical interest—*affect toward gays and lesbians* (or *GL affect*), *egalitarianism* and *moral traditionalism*—are rendered graphically in Figure 1.⁸

Looking first at the table, note that the effects of the three variables are statistically and substantively significant, and in the theoretically expected direction. Whatever the year, *affect toward gays and lesbians* and *support for egalitarianism* positively effect support for same-sex marriage. Conversely, *support for moral traditionalism* consistently reduces support. And the effects are of significant magnitudes. Figure 1 shows that the impact of *affect* is the largest of the three, whatever the year, and simply massive in some years: in 2004, for instance, a shift from an absolutely negative (0) to absolutely positive (100) affective orientation toward gays and lesbians produces a 62 point shift in the probability of taking the most supportive view of legal same-sex marriage. By comparison, the effects of *moral traditionalism* and *egalitarianism* are much smaller, even at their maximums—also in 2004: here, a unit shift in *moral traditionalism* produces a 12 point

⁶ For 1993 and 1997, the models include dummies for Liberal, Progressive Conservative, Bloc Quebecois, Reform and New Democrat partisans. For 2004, the model includes dummies for Liberal, Conservative, Bloc Quebecois and New Democrat partisans. For the pooled (1993 to 2004) analysis, the model includes dummies for Liberal, ‘conservative’ (pooling Reform, PC, and CPC partisans), BQ and NDP partisans.

⁷ Full question wordings and coding details available from the author.

⁸ Unless otherwise indicated in the text, marginal effects reflect unit shifts on the variable of interest while fixing values of other predictors at their means. Marginal effects were computed using *CLARIFY* (Tomz, Wittenberg and King 2003).

negative shift in the probability of expressing the most supportive view, whereas an equivalent shift in egalitarianism produce a 7 point positive shift.⁹

The important question for present purposes, however, concerns the over-time dynamics in these effects. First of all, is there evidence of framing effects, that is, does the impact of political values on same-sex marriage support increase over time? The answer is clearly yes. For both egalitarianism and moral traditionalism, interactions with the survey years are in the expected direction and, at least in the case of moral traditionalism, statistically significant.¹⁰ Figure 1 shows that the impact of both variables grows steadily across the analysis period. This comports with the assumption above that frame reception on the same-sex marriage issue increased over time in Canada. It also, crucially, renders plausible the assumption that values frames were *received* in this case, and so may have led to a reduction in the impact of affect toward gays and lesbians on same-sex marriage support.

The evidence bearing on this latter proposition is mixed to negative. There *is* a significant reduction in the impact of GL affect between 1993 and 1997, but this is followed by a huge, near quadrupling of effects between 1997 and 2004. Indeed, the impact of feeling toward gays and lesbians is larger in 2004 than in 1993. This is precisely the opposite of theoretical expectations. If anything, the relative reduction in the impact of GL affect should be greater later in the analysis period, when value framing discourse in relation to the same-sex marriage issue should have been ubiquitous. By 2004 same-sex marriage was a legal reality in Canada and the major political parties had begun to engage the issue directly. And yet, even in this most propitious of settings, the rising impact of values would seem to have done little to offset the impact of affective considerations.

What if the analysis is stratified by political knowledge? Perhaps the pattern varies for the most informed and attentive respondents. Re-estimating the models separately for respondents above and those at or below the midpoint (.5) on the political knowledge measure shows no evidence of this (results unreported). The impact of GL affect declines for all in 1997, and to roughly the same degree. In 2004, the effect of GL affect is unmoved for the highly knowledgeable, but increases sharply for everyone else. This is impossible to square with theoretical expectations. If the 1997 drop in the impact of affect for these respondents reflects persuasion by ‘implicit counter-arguments’, why were these arguments not at least as persuasive in 2004, when they were much easier to come by?

⁹ This comparison somewhat overstates the relative asymmetry in these effects, reflecting the distribution of same-sex marriage support. That is, just 17 percent of respondents expressed the most supportive view of same-sex marriage. Computing shifts in the probability of expressing one of the top two most supportive opinions on same-sex marriage makes the comparison somewhat less dramatic, although affect still stands out in terms of magnitude: the relevant figures are, for affect, 85 points; for moral traditionalism, -36 points; for egalitarianism, 20 points.

¹⁰ The interaction between egalitarianism and the year 2004 is close to significance ($p=.132$); not so for the 1997 interaction ($p=.497$). This fits previous work suggesting that an ‘equal rights’ frame of same-sex marriage was not prominent until after a sequence of high profile Supreme Court of Canada decisions in 1999 (Matthews 2005).

All in all, then, the fate of H₁ seems a dubious one. A complication for the analysis is over-time variation in survey mode. In 1997, the measure of same-sex marriage support is only available in the mail back portion of the CES. Consequently, the analysis in that year likely addresses a more politically participant—*ergo* more politically interested and sophisticated—stratum of the population. Thus, the 1993-1997 drop may reflect variation in political knowledge. Of course, this finding is quite congenial to the argument of this paper—that is, it only makes sense if we assume political knowledge increases reception of frames that militate against the impact of affective considerations. This is an important positive result in relation to H₂. That said, it remains that, even with survey mode held constant, the impact of affect is not smaller, but greater in 2004 than in 1993.

Turn now to results bearing directly on H₂: *the impact of affective orientations toward gays and lesbians on attitudes toward gay rights declines with political knowledge*. Start with Tables and Figures 2 through 4. The former report estimates of ordered logit models of same-sex marriage support in Canada by year, including interactions between the key predictors and political knowledge; the figures render effects of interest graphically for those at the bottom (0) and top (1) end of the knowledge distribution.¹¹ First, note that values effects generally increase with political knowledge. In this regard, results for egalitarianism are quite clear (the value matters hardly at all for the less knowledgeable, whatever the year), whereas for moral traditionalism, the pattern is more equivocal (the value interacts strongly with political knowledge in 1993 and 2004; effects do not vary with political knowledge in 1997). Even so, the results generally fit the critical assumption that political knowledge tracks value frame reception.

What of the relationship between political knowledge and the impact of GL affect? In two of the three years, the relationship is negative, as predicted, although in every year the interaction is statistically insignificant. Of course, with three overlapping interaction terms in the model, collinearity makes it a challenge to find any statistically significant effects. However, note here that four of the six interactions between knowledge and values are significant. Furthermore, the estimates for the GL affect-political knowledge interactions imply substantively small effects that would leave the impact of GL affect largely undisturbed. At best, then, these results lend only weak support to H₂.

How does the proposition fair in the data among US respondents? The relevant results are reported in Tables 5 through 8, containing model estimates, and Figures 5 through 8, containing marginal effects.¹² Note first that, as in the Canadian results, the key predictors are statistically significant and in the expected direction theoretically. Across the four dependent variables—support for the rights of gays and lesbians with regard to marriage, protection from job discrimination, military service, and adoption of children—affect toward gays and lesbians exerts a massive impact on support for gay rights. Likewise, in every case, egalitarianism pushes respondents toward gay rights,

¹¹ Marginal effects computed as described in fn. 8. As above, effects for GL Affect reflect a shift from 0 to 100 on the measure.

¹² Marginal effects computed as described in fns. 8 and 11.

while moral traditionalism pushes away. The impact of egalitarianism is greatest with regard to anti-discrimination, while the impact of moral traditionalism is greatest with regard to adoption of children. The former makes intuitive sense, given the legacy of the civil rights era in the domain of discrimination in jobs and housing with respect to other social categories, such as race (Kinder and Sanders 1996). The latter finding also seems sensible, in view of the obvious centrality of child rearing to traditional notions of the family.

What of the critical assumption that political knowledge tracks value frame reception? The story is somewhat more subtle here than in the Canadian data. To be sure, in most cases, the impact of a given value disposition increases with political knowledge. Egalitarianism, for instance, matters only among the relatively knowledgeable in the case of support for gay rights with respect to anti-discrimination, military service and adoption of children. Likewise, moral traditionalism matters more among the highly knowledgeable with regard to support for same-sex marriage and gay and lesbian military service. All this fits standard expectations.

Three other results, however, bear further explanation. First is the insignificant interaction between political knowledge and moral traditionalism with regard to support for gay and lesbian adoption. One possible explanation is that the centrality of child rearing to traditional conceptions of the family may make the link between moral traditionalism and attitudes on adoption uniquely easy and, therefore, ubiquitous—not unlike the simplicity of affective connections (cf. Carmines and Stimson 1980). If this is so, then the finding does not trouble the assumption that political knowledge and frame reception are positively related. The second awkward result is the statistically insignificant but substantively large and *negative* interaction between political knowledge and egalitarianism with respect to same-sex marriage support. This, of course, is precisely opposite to expectations. Yet it fits with earlier work on support for same-sex marriage in the US suggesting that two competing interpretations of the implications of equality are salient for Americans, one implying a positive link between egalitarianism and same-sex marriage support, the other implying a negative link (see Brewer 2003a for details). On this reasoning, it may be sensible for egalitarianism effects to diminish with political knowledge, with some small impact confined to the least knowledgeable who may be unaware of the competing interpretations.¹³ Finally, the statistically insignificant but substantively large *positive*—i.e. offsetting—interaction between political knowledge and moral traditionalism with respect to support for anti-discrimination also falls afoul expectations. The interaction implies that the value mattered strictly for the least knowledgeable and was inconsequential for the most knowledgeable. Note, however, that the result may fit the paper’s general theoretical perspective, even if it troubles certain of its empirical assumptions. Specifically, the non-impact of moral traditionalism arguments may reflect the strength of egalitarianism arguments in the domain of anti-discrimination (see above). That is, the dominance of one value frame with regard to this issue may eclipse the importance of other political values, in addition to any impact the frame may have on the weight of affective considerations.

¹³ This also assumes, of course, that a positive association between egalitarianism and support for gay rights is more obvious than a negative one.

In any event, with these ‘friendly’ amendments in mind, the results for the US provide support to the assumption that political knowledge tracks frame reception. In view of this, the key question concerns the relationship between political knowledge and the impact of affect on political judgment. In every case, the relationship is, as predicted, a negative one. That said, in no case is the effect statistically significant and in only one case is the effect of more than trivial magnitude: the effect of a 0-100 shift in GL Affect shrinks from 70 to 54 points as one moves from the minimum to the maximum on the political knowledge scale—a 14 point gap. For the other dependent variables, the differences are only 9 (marriage), 4 (military service) and 2 (adoption of children) points. As with the Canadian results, then, the US data provide only weak support for H₂.

DISCUSSION AND CONCLUSION

To summarize: results for H₁ (*the impact of affective orientations toward gays and lesbians on support for legal same-sex marriage declines over time in Canada*) are essentially negative. Although there is an indication that the weight of affective considerations dropped in 1997, the finding could also be artefactual (owing to over-time changes in survey mode). Furthermore, the impact of affect is clearly greater in 2004 than in 1993—a strikingly negative finding, given that intensity of political activity (and, by implication, framing discourse) around the same-sex marriage issue was far higher in the later year. In short, H₁ fails.

Results for H₂ (*the impact of affective orientations toward gays and lesbians on attitudes toward gay rights declines with political knowledge*) are more congenial to the paper’s theoretical claims, although they are weakly supportive at best. The analysis tests the hypothesis directly seven times, and in six of the seven tests the results are consistent with the hypothesis. Yet, in all of these cases, the effects of interest are statistically insignificant and, for the most part, substantively small.

At the same time, however, two aspects of the empirical analysis lend incidental support to H₂, and to the paper’s broader theoretical argument. First is the possible role of survey mode in explaining the drop in the impact of GL Affect from 1993 to 1997. If, as suggested above, the effect reflects the more politically interested and sophisticated character of respondents to the mail back component of the CES, then the result is obviously consistent with H₂. A second source of incidental support for the paper’s theoretical argument is the apparently offsetting effect of political knowledge on the impact of moral traditionalism with respect to support for anti-discrimination protections for gays and lesbians (in the US results). If the result reflects, as suggested above, the strength of frames emphasizing the importance of egalitarianism to reasoning about anti-discrimination, then this obviously comports with the argument that reception of a given value frame should reduce the importance of other considerations in political reasoning.

Overall, then, the results lend some, albeit weak, support to the theory developed above. This raises a theoretically pregnant question: why? More specifically, why are the results

so weak? An obvious response is simply that the theory is wrong. This possibility aside, three more affirmative answers strike the author as plausible.

First, the weakness of the negative interaction between political knowledge and affect toward gays and lesbians with respect to support for gay rights may reflect error in the measurement of GL Affect. Indeed, there is good reason to suspect that the group feeling thermometer items in both the CES and ANES tap excessively political—and thereby cognitive rather than affective—orientations toward gays and lesbians. For one thing, in both surveys, the items are included amongst a long list of manifestly political groups. In the US, for instance, the group affect battery includes not only feminists and environmentalists, as noted above, but also labor unions, liberals and conservatives, the Supreme Court and even Congress. Another concerning fact about the measures of affect toward gays and lesbians is their high correlations with directly political attitudes, including political values such as moral traditionalism and egalitarianism. Indeed, only small fractions of both the American and Canadian samples are cross-pressured in regard to GL Affect and these political values—that is, relatively few individuals take, for example, a generally negative view of homosexuals but have a positive orientation to equality or a negative orientation to traditional values, and vice versa.¹⁴ This is surprising if one assumes (quite plausibly) that emotional reactions to social groups are formed independently of the political realm, at least largely.¹⁵ Thus, the weak effects reported in this paper may result from a confounding of a variable whose impact is offset by value frame reception ('real' GL Affect) with another variable whose impact is unaffected or even strengthened with value frame reception (measured GL Affect).

A second possibility is more theoretically suggestive: the weakness of the negative interaction between political knowledge and the impact of affective considerations on political judgment may reflect the fact that the implicit counter-arguments in frames are not obvious. Indeed, it may require a relatively high level of deliberation about frames for individuals to elaborate these logically necessary but unstated premises. If so, it would, of course, be unsurprising if only a minority of the population regularly engages in such intense political cognition. One imaginable test of this hypothesis would be to examine the impact of affective considerations with more finely grained indicators of political knowledge, or even measures of motivation for cognition (cf. Petty and Cacioppo 1986).

A final possibility takes this logic a little further: it might be that implicit counter-arguments are essentially never elaborated by the mass public. Consequently, we should only expect the impact of affective—or any other—considerations in political judgment to decline in the presence of explicit counter-arguments that assert that a given consideration is unimportant to political judgment. For instance, in the case of opinion on gay rights, eroding the impact of affective orientations toward gays and lesbians may require reception of an argument that explicitly suggests that such considerations are irrelevant—that the issue is really one of “equality” or “traditional family values,” for

¹⁴ Details of this analysis available from the author.

¹⁵ This is an important, if implicit, assumption in work on the role of group affect as a political heuristic (Sniderman, Brody and Tetlock 1991; see also Carmines and Stimson 1980).

instance. Absent such discourse, the impact of affective considerations may persist unnoticed, even if it is offset by persuasive arguments about the importance of political values.

This final theoretical possibility suggests an interesting and potentially productive contrast between, what we might term, *positive* and *negative frames*. A positive frame, in this sense, is a frame that proposes a connection between a given consideration (e.g. a political value, a certain belief about the state of the world, etc.) and political judgment. A negative frame, by contrast, is one that argues against a connection between a given consideration and political judgment. Political science scholarship on framing effects is absolutely dominated by work on positive framing (for reviews, see Nelson, Oxley and Clawson 1997 and Druckman 2001). A productive line of inquiry might be to examine the impact of negative frames—to discover if cognitive associations can be weakened as easily as they are strengthened.¹⁶ This kind of research would have intrinsic value, but it would also have special significance to broader work on framing effects. The reason is that if negative frames ‘work,’ it would constitute quite powerful confirmation of the “thoughtful receiver” interpretation of framing effects, as the “accessibility” theory has directly opposite implications: the accessibility interpretation implies that all frames should raise the salience of the considerations they include, even if the semantic content of the frame negates the importance of the consideration.

The results presented above, of course, can not speak to these possibilities. Still, they are suggestive of a more complex relationship between political knowledge and affective sources of political judgment than is commonly realized.

¹⁶ There are obvious resonances here with work on frame competition (Brewer 2003a; Sniderman and Theriault 2004). In the language of this discussion, however, the focus of this literature is on alternative positive frames, rather than negative frames.

BIBLIOGRAPHY

- Brewer, Paul R. 2001. 'Value Words and Lizard Brains: Do Citizens Deliberate about Appeals to Their Core Values?' *Political Psychology* 22-1: 45-64.
- Brewer, Paul. 2003a. 'Values, Political Knowledge and Public Opinion about Gay Rights: A Framing-based Account.' *Public Opinion Quarterly* 67: 173-201.
- Brewer, Paul. 2003b. 'The Shifting Foundations of Public Opinion about Gay Rights.' *Journal of Politics* 65-4: 1208-1220.
- Campbell, Angus, Philip Converse, Warren E. Miller and Donald E. Stokes. 1960. *The American Voter*. New York: Wiley & Sons.
- Carmines, Edward and James Stimson. 1980. 'The Two Faces of Issue Voting.' *American Political Science Review* 74-1: 78-91.
- Converse, Philip. 1964. 'The Nature of Belief Systems in Mass Publics,' in *Ideology and Discontent*, ed. David Apter. New York: Free Press.
- Druckman, James. 2001. 'The Implications of Framing Effects for Citizen Competence.' *Political Behavior* 23-3: 225-56.
- Feldman, Stanley. 1988. 'Structure and Consistency in Public Opinion: The Role of Core Beliefs and Values.' *American Journal of Political Science* 32: 416-440.
- Hiebert, Janet. 2002. *Charter Conflicts: What's Parliament's Role?* Montreal: McGill-Queen's University Press.
- Iyengar, Shanto. 1991. *Is anyone responsible? : how television frames political issues*. Chicago : University of Chicago Press.
- Iyengar, Shanto and Donald Kinder. 1987. *News That Matters: Television and American Opinion*. Chicago: University of Chicago Press.
- Kinder, Donald and Lynn Sanders. 1996. *Divided by Color: Racial Politics and Democratic Ideals*. Chicago: University of Chicago Press.
- Marcus, George, Russell Neuman, and Michael MacKuen. 2000. *Affective Intelligence and Political Judgement*. Chicago: University of Chicago Press.
- Matthews, J. Scott. 2005. 'The Political Foundations of Support for Same-Sex Marriage in Canada.' *Canadian Journal of Political Science* 38-4: 841-66.
- Miller, J. M. and J. A. Krosnick. 1996. 'News media impact on the ingredients of presidential evaluations: A program of research on the priming hypothesis,' in

- Political Persuasion and Attitude Change*, eds. D. Mutz, P. Sniderman and R. Brody. Ann Arbor, MI: University of Michigan Press.
- Nelson, Thomas. 2004. 'Policy Goals, Public Rhetoric and Political Attitudes.' *Journal of Politics* 66-2: 581-605.
- Nelson, Thomas, Rosalee Clawson and Zoe Oxley. 1997. 'Media framing of a civil liberties conflict and its effect on tolerance. *American Political Science Review* 91: 567-583.
- Nelson, Thomas and Donald Kinder. 1996. 'Issue Frames and Group-Centrism in American Public Opinion.' *Journal of Politics* 58-4: 1055-78.
- Nelson, Thomas, Zoe Oxley and Rosalee Clawson. 1997. 'Toward a Psychology of Framing Effects.' *Political Behavior* 19-3: 221-46.
- Petty, Richard and John Cacioppo. 1986. *Communication and Persuasion: Central and Peripheral Routes to Attitude Change*. New York: Springer-Verlag.
- Smith, Miriam. 2002. 'Recognizing same-sex relationships: The evolution of recent federal and provincial policies.' *Canadian Public Administration* 45-1: 1-23.
- Smith, Miriam. 2005. 'The Politics of Same-Sex Marriage in Canada and the United States.' *PS: Political Science and Politics* 38-2: 225-8.
- Sniderman, Paul M., Richard A. Brody, and Philip E. Tetlock. 1991. *Reasoning and Choice: Explorations in Political Psychology*. Cambridge, UK: Cambridge University Press.
- Sniderman, Paul M. and Sean Theriault. 2004. 'The Structure of Political Argument and the Logic of Issue Framing,' in *Studies in Public Opinion: Attitudes, Nonattitudes, Measurement Error and Change*, eds. W. Saris and P. Sniderman. Princeton, NJ: Princeton University Press.
- Tomz, Michael, Jason Wittenberg, and Gary King. 2003. CLARIFY: Software for Interpreting and Presenting Statistical Results. Version 2.1. Stanford University, University of Wisconsin, and Harvard University. January 5. Available at <http://gking.harvard.edu/>
- Zaller, John. 1992. *The Nature and Origins of Mass Opinion*. Cambridge, UK: Cambridge University Press.

Table 1. Same-Sex Marriage Support, Canada, 1993-2004

	Same-Sex Marriage Support		Same-Sex Marriage Support
Age	-0.021*** (0.002)	BQ PID	-0.054 (0.130)
Woman	0.188*** (0.060)	Gay & Lesbian Aff.	0.045*** (0.002)
Non-European	0.002 (0.124)	GL Affect*1997	-0.015*** (0.003)
Non-religious	0.581*** (0.083)	GL Affect*2004	0.006** (0.003)
University Degree	-0.145** (0.070)	Egalitarianism	0.462** (0.181)
Income	0.043 (0.099)	Egalitarianism*1997	0.161 (0.237)
Atlantic	0.031 (0.105)	Egalitarianism*2004	0.393 (0.261)
Quebec	0.350*** (0.092)	Moral Traditionalism	-0.675*** (0.217)
West	0.094 (0.074)	Moral Trad.*1997	-0.566** (0.269)
Liberal PID	-0.060 (0.075)	Moral Trad.*2004	-0.918*** (0.287)
Cons. PID	-0.273*** (0.082)	1997	1.119*** (0.286)
NDP PID	0.420*** (0.115)	2004	0.746** (0.319)
Observations			4664
Pseudo R-squared			0.21
Log pseudolikelihood			-5464.39

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 2. Same-Sex Marriage Support, Canada, 1993

	I	II	III
<i>Group Affect, Values & Knowledge</i>			
Gay & Lesbian Affect	0.043*** (0.002)	0.040*** (0.005)	0.045*** (0.005)
Moral Traditionalism	-0.612*** (0.219)	-0.603*** (0.219)	0.750 (0.595)
Equality Rights	0.424** (0.185)	0.420** (0.185)	-0.536 (0.486)
Political Knowledge	-0.170 (0.229)	-0.463 (0.481)	0.690 (0.958)
GL Affect*Pol. Know.		0.006 (0.008)	-0.003 (0.009)
Moral Trad.*Pol. Know			-2.243** (0.940)
Equality Rts.*Pol. Know			1.599** (0.769)
<i>Controls</i>			
Age	-0.023*** (0.004)	-0.023*** (0.004)	-0.024*** (0.004)
Woman	0.046 (0.107)	0.047 (0.107)	0.047 (0.108)
Non-European	0.072 (0.197)	0.073 (0.197)	0.062 (0.197)
Non-religious	0.524*** (0.140)	0.521*** (0.140)	0.516*** (0.140)
University Degree	-0.056 (0.122)	-0.056 (0.122)	-0.081 (0.123)
Income	0.090 (0.177)	0.089 (0.177)	0.086 (0.178)
Atlantic	0.114 (0.181)	0.119 (0.181)	0.098 (0.181)
Quebec	0.334** (0.160)	0.339** (0.160)	0.327** (0.160)
West	-0.032 (0.129)	-0.032 (0.129)	-0.042 (0.129)
Liberal PID	-0.213 (0.134)	-0.213 (0.134)	-0.213 (0.134)
PC PID	-0.177 (0.143)	-0.173 (0.143)	-0.167 (0.143)
NDP PID	0.293 (0.189)	0.292 (0.189)	0.284 (0.188)
Reform PID	-0.422 (0.264)	-0.419 (0.264)	-0.413 (0.265)
BQ PID	-0.153 (0.219)	-0.155 (0.219)	-0.160 (0.220)
Observations	1647	1647	1647
Pseudo R-squared	0.18	0.18	0.18
Log pseudo-likelihood	-1900.32	-1900.08	-1893.79

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 3. Same-Sex Marriage Support, Canada, 1997

	I	II	III
<i>Group Affect, Values & Knowledge</i>			
Gay & Lesbian Affect	0.037*** (0.002)	0.030*** (0.005)	0.033*** (0.005)
Moral Traditionalism	-1.584*** (0.180)	-1.560*** (0.181)	-1.836*** (0.463)
Equality Rights	0.796*** (0.167)	0.791*** (0.168)	-0.240 (0.423)
Political Knowledge	-0.926*** (0.192)	-1.435*** (0.415)	-2.352*** (0.721)
GL Affect*Pol. Know.		0.010 (0.007)	0.006 (0.007)
Moral Trad.*Pol. Know			0.400 (0.630)
Equality Rts.*Pol. Know			1.585*** (0.597)
<i>Controls</i>			
Age	-0.019*** (0.004)	-0.019*** (0.004)	-0.019*** (0.004)
Woman	0.173* (0.102)	0.179* (0.102)	0.176* (0.102)
Non-European	0.236 (0.202)	0.238 (0.203)	0.255 (0.202)
Non-religious	0.390*** (0.148)	0.387*** (0.148)	0.376** (0.148)
University Degree	0.026 (0.121)	0.022 (0.122)	0.012 (0.122)
Income	-0.094 (0.167)	-0.081 (0.167)	-0.081 (0.167)
Atlantic	0.225 (0.178)	0.225 (0.179)	0.243 (0.179)
Quebec	0.544*** (0.151)	0.544*** (0.151)	0.530*** (0.151)
West	0.353*** (0.126)	0.349*** (0.126)	0.349*** (0.126)
Liberal PID	0.011 (0.125)	0.013 (0.125)	-0.006 (0.126)
PC PID	-0.027 (0.152)	-0.025 (0.152)	-0.030 (0.152)
NDP PID	0.655*** (0.197)	0.641*** (0.197)	0.604*** (0.199)
Reform PID	-0.505** (0.217)	-0.496** (0.217)	-0.480** (0.218)
BQ PID	0.079 (0.218)	0.090 (0.218)	0.099 (0.219)
Observations	1593	1593	1593
Pseudo R-squared	0.18	0.18	0.18
Log pseudo-likelihood	-1938.17	-1937.20	-1933.66

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 4. Same-Sex Marriage Support, Canada, 2004

	I	II	III
<i>Group Affect, Values & Knowledge</i>			
Gay & Lesbian Affect	0.046*** (0.003)	0.044*** (0.004)	0.047*** (0.004)
Moral Traditionalism	-1.424*** (0.195)	-1.414*** (0.196)	-0.361 (0.416)
Equality Rights	0.758*** (0.192)	0.751*** (0.192)	0.361 (0.385)
Political Knowledge	-0.103 (0.218)	-0.383 (0.499)	0.906 (0.863)
GL Affect*Pol. Know.		0.005 (0.008)	-0.003 (0.008)
Moral Trad.*Pol. Know			-1.978*** (0.699)
Equality Rts.*Pol. Know			0.812 (0.665)
<i>Controls</i>			
Age	-0.017*** (0.004)	-0.017*** (0.004)	-0.018*** (0.004)
Woman	0.273** (0.113)	0.269** (0.113)	0.260** (0.114)
Non-European	-0.451* (0.266)	-0.451* (0.266)	-0.449* (0.269)
Non-religious	0.878*** (0.151)	0.873*** (0.151)	0.857*** (0.152)
University Degree	-0.258** (0.129)	-0.260** (0.129)	-0.287** (0.130)
Income	0.230 (0.184)	0.227 (0.184)	0.223 (0.184)
Atlantic	-0.225 (0.190)	-0.226 (0.190)	-0.266 (0.191)
Quebec	0.094 (0.178)	0.096 (0.178)	0.074 (0.178)
West	0.051 (0.136)	0.056 (0.136)	0.035 (0.137)
Liberal PID	0.079 (0.140)	0.078 (0.140)	0.085 (0.140)
Conservative PID	-0.515*** (0.160)	-0.513*** (0.160)	-0.490*** (0.160)
NDP PID	0.312 (0.222)	0.303 (0.222)	0.282 (0.223)
BQ PID	-0.020 (0.249)	-0.014 (0.249)	-0.029 (0.249)
Observations	1423	1423	1423
Pseudo R-squared	0.25	0.25	0.25
Log pseudo-likelihood	-1543.23	-1543.04	-1536.87

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 5. Same-Sex Marriage Support, United States, 2004

	I	II	III
<i>Group Affect, Values & Knowledge</i>			
Gay & Lesbian Affect	0.042*** (0.005)	0.045*** (0.011)	0.043*** (0.011)
Egalitarianism	0.272 (0.603)	0.267 (0.603)	1.300 (1.347)
Moral Traditionalism	-4.601*** (0.635)	-4.621*** (0.638)	-3.035** (1.398)
Political Knowledge	-0.055 (0.491)	0.317 (1.204)	3.067 (2.291)
GL Affect*Pol. Know.		-0.007 (0.020)	-0.004 (0.020)
Egalitarianism*Pol. Know			-2.019 (2.284)
Moral Trad.*Pol. Know			-3.142 (2.467)
<i>Controls</i>			
Age	-0.014** (0.006)	-0.014** (0.006)	-0.013** (0.007)
Woman	0.343 (0.222)	0.342 (0.222)	0.341 (0.224)
Income	-0.700 (0.432)	-0.701 (0.433)	-0.718* (0.435)
University Degree	0.562** (0.248)	0.559** (0.248)	0.561** (0.249)
Protestant	-0.720 (0.583)	-0.703 (0.582)	-0.705 (0.586)
Catholic	-0.454 (0.591)	-0.435 (0.591)	-0.436 (0.595)
Non-religious	-1.350** (0.619)	-1.339** (0.617)	-1.325** (0.623)
Religious Practice	-1.004*** (0.361)	-1.002*** (0.362)	-0.999*** (0.362)
Religious Belief	-2.189*** (0.390)	-2.189*** (0.391)	-2.188*** (0.391)
Party Identification (Democrat)	0.359 (0.364)	0.360 (0.365)	0.344 (0.366)
Ideology (Liberal)	0.642*** (0.242)	0.645*** (0.242)	0.634*** (0.242)
Observations	839	839	839
Pseudo R-squared	0.42	0.42	0.42
Log pseudo-likelihood	-362.16	-362.10	-361.03

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 6. Support for Anti-discrimination Laws for Homosexuals, United States, 2004

	I	II	III
<i>Group Affect, Values & Knowledge</i>			
Gay & Lesbian Affect	0.031*** (0.003)	0.036*** (0.006)	0.036*** (0.006)
Egalitarianism	2.427*** (0.422)	2.435*** (0.421)	-0.149 (0.929)
Moral Traditionalism	-0.609 (0.419)	-0.663 (0.424)	-0.988 (0.873)
Political Knowledge	0.083 (0.331)	0.529 (0.626)	-2.814* (1.541)
GL Affect*Pol. Know.		-0.010 (0.012)	-0.011 (0.012)
Egalitarianism*Pol. Know			4.818*** (1.561)
Moral Trad.*Pol. Know			0.813 (1.465)
<i>Controls</i>			
Age	0.001 (0.004)	0.001 (0.004)	-0.001 (0.004)
Woman	0.059 (0.150)	0.056 (0.150)	0.032 (0.151)
Income	0.330 (0.295)	0.327 (0.295)	0.329 (0.295)
University Degree	0.012 (0.174)	0.013 (0.174)	0.028 (0.175)
Protestant	-0.058 (0.415)	-0.050 (0.413)	-0.033 (0.417)
Catholic	0.259 (0.422)	0.271 (0.420)	0.265 (0.424)
Non-religious	-0.088 (0.444)	-0.085 (0.442)	-0.079 (0.446)
Religious Practice	-0.257 (0.257)	-0.245 (0.258)	-0.186 (0.260)
Religious Belief	-1.041*** (0.264)	-1.052*** (0.264)	-1.095*** (0.266)
Party Identification (Democrat)	0.339 (0.239)	0.345 (0.240)	0.349 (0.242)
Ideology (Liberal)	0.314* (0.177)	0.313* (0.178)	0.302* (0.178)
Observations	894	894	894
Pseudo R-squared	0.15	0.15	0.16
Log pseudo-likelihood	-974.05	-973.70	-968.88

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 7. Support for Homosexuals in Military, United States, 2004

	I	II	III
<i>Group Affect, Values & Knowledge</i>			
Gay & Lesbian Affect	0.029*** (0.003)	0.029*** (0.006)	0.030*** (0.006)
Egalitarianism	0.929** (0.410)	0.929** (0.411)	0.003 (0.910)
Moral Traditionalism	-1.439*** (0.426)	-1.439*** (0.432)	-0.836 (0.892)
Political Knowledge	-0.417 (0.335)	-0.414 (0.609)	-0.715 (1.508)
GL Affect*Pol. Know.		-0.000 (0.011)	-0.002 (0.012)
Egalitarianism*Pol. Know			1.604 (1.477)
Moral Trad.*Pol. Know			-1.027 (1.468)
<i>Controls</i>			
Age	0.008* (0.004)	0.008* (0.004)	0.007 (0.004)
Woman	0.585*** (0.153)	0.585*** (0.153)	0.569*** (0.153)
Income	1.102*** (0.303)	1.102*** (0.303)	1.079*** (0.304)
University Degree	-0.026 (0.175)	-0.025 (0.175)	-0.020 (0.175)
Protestant	-0.497 (0.446)	-0.496 (0.447)	-0.469 (0.449)
Catholic	-0.407 (0.451)	-0.407 (0.452)	-0.392 (0.455)
Non-religious	-0.430 (0.474)	-0.430 (0.474)	-0.410 (0.477)
Religious Practice	-0.334 (0.259)	-0.334 (0.259)	-0.307 (0.260)
Religious Belief	-0.550** (0.270)	-0.550** (0.270)	-0.552** (0.271)
Party Identification (Democrat)	0.318 (0.246)	0.318 (0.246)	0.306 (0.247)
Ideology (Liberal)	0.230 (0.183)	0.230 (0.183)	0.216 (0.184)
Observations	894	894	894
Pseudo R-squared	0.13	0.13	0.13
Log pseudo-likelihood	-926.59	-926.58	-925.59

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table 8. Support for Adoption by Gay & Lesbian Couples, United States, 2004

	I	II	III
<i>Group Affect, Values & Knowledge</i>			
Gay & Lesbian Affect	0.038*** (0.004)	0.039*** (0.008)	0.039*** (0.008)
Egalitarianism	0.243 (0.510)	0.243 (0.510)	-0.180 (1.129)
Moral Traditionalism	-4.098*** (0.542)	-4.104*** (0.546)	-4.196*** (1.148)
Political Knowledge	1.077*** (0.402)	1.151 (0.899)	0.570 (1.846)
GL Affect*Pol. Know.		-0.001 (0.016)	-0.002 (0.016)
Egalitarianism*Pol. Know			0.793 (1.881)
Moral Trad.*Pol. Know			0.200 (1.908)
<i>Controls</i>			
Age	-0.007 (0.005)	-0.007 (0.005)	-0.007 (0.005)
Woman	0.698*** (0.188)	0.697*** (0.188)	0.692*** (0.189)
Income	0.244 (0.366)	0.245 (0.366)	0.242 (0.367)
University Degree	0.258 (0.211)	0.257 (0.211)	0.259 (0.212)
Protestant	-0.143 (0.528)	-0.140 (0.528)	-0.139 (0.529)
Catholic	0.328 (0.536)	0.332 (0.536)	0.330 (0.537)
Non-religious	-0.036 (0.563)	-0.033 (0.563)	-0.037 (0.563)
Religious Practice	-0.357 (0.305)	-0.356 (0.305)	-0.351 (0.306)
Religious Belief	-0.921*** (0.315)	-0.921*** (0.315)	-0.923*** (0.315)
Party Identification (Democrat)	0.252 (0.296)	0.253 (0.296)	0.254 (0.298)
Ideology (Liberal)	0.349* (0.211)	0.349* (0.211)	0.345 (0.211)
Observations	897	897	897
Pseudo R-squared	0.30	0.30	0.30
Log pseudo-likelihood	-527.48	-527.48	-527.39

Standard errors in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

Table A1. Descriptives

Variable	Obs	Mean	Std. Dev.	Min	Max
<i>Canada, 1993-2004</i>					
SSM Support	8650	0.434	0.392	0	1
Age	11910	45.519	16.553	18	102
Woman	13143	0.478	0.500	0	1
Non-European	12278	0.085	0.279	0	1
No Religion	11799	0.163	0.369	0	1
Degree	13014	0.221	0.415	0	1
Income	10646	0.390	0.320	0	1
Atlantic	13143	0.098	0.298	0	1
Quebec	13143	0.235	0.424	0	1
West	13143	0.407	0.491	0	1
Liberal PID	12047	0.272	0.445	0	1
Conservative PID	11965	0.212	0.409	0	1
NDP PID	12047	0.072	0.259	0	1
BQ PID	12047	0.074	0.262	0	1
GL Affect	9383	49.150	29.869	0	100
Moral Trad.	5606	0.680	0.289	0	1
Equality Rights Political Knowledge	5557	0.532	0.320	0	1
12041	0.517	0.295	0	1	
<i>US, 2004</i>					
SSM Support	1133	0.365	0.475	0	1
Anti-Dis. Support	1057	0.710	0.370	0	1
Mil. Svc. Support	1056	0.752	0.347	0	1
Adoption Support	1058	0.497	0.489	0	1
Age	1212	47.272	17.142	18	90
Woman	1212	0.533	0.499	0	1
Income	1070	0.634	0.273	0	1
Degree	1212	0.299	0.458	0	1
Protestant	1205	0.558	0.497	0	1
Catholic	1205	0.242	0.429	0	1
No Religion	1205	0.150	0.357	0	1
Religious Practice	1192	0.619	0.342	0	1
Religious Belief	1179	0.605	0.348	0	1
Democrat PID	1195	0.521	0.349	0	1
Liberal Ideology	1212	0.411	0.460	0	1
GL Affect	1059	48.544	26.870	0	100
Egalitarianism	1066	0.631	0.196	0	1
Moral Trad.	1066	0.563	0.224	0	1
Political Knowledge	1209	0.517	0.268	0	1

Note: Data are unweighted.

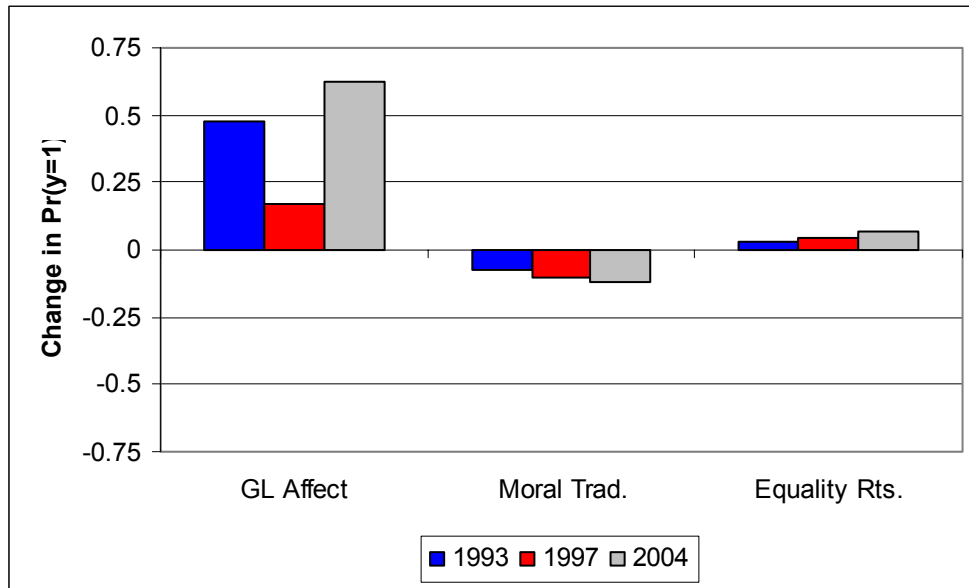


Figure 1. Affect, Values and Same-Sex Marriage Support, Canada 1993-2004

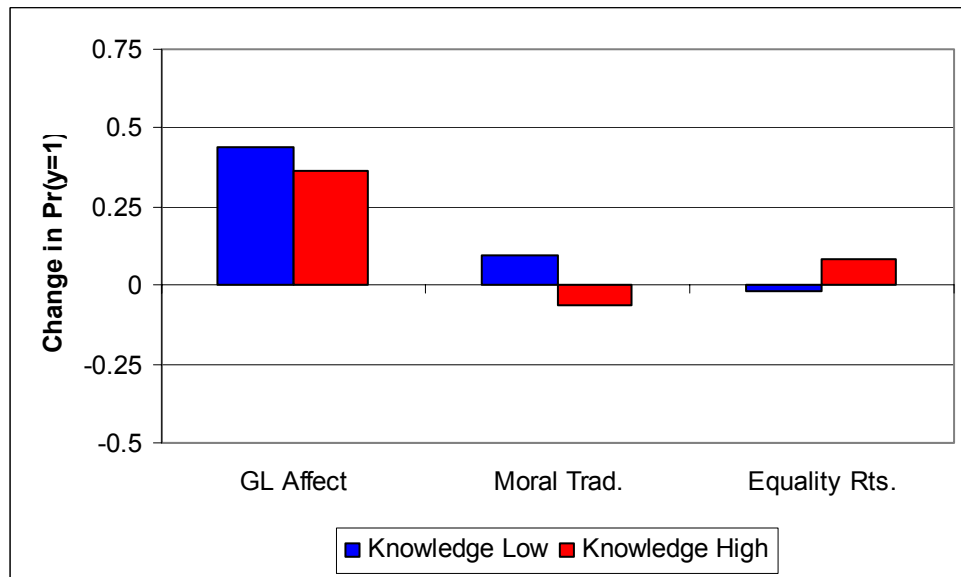


Figure 2. Affect, Values and Same-Sex Marriage Support, Canada 1993

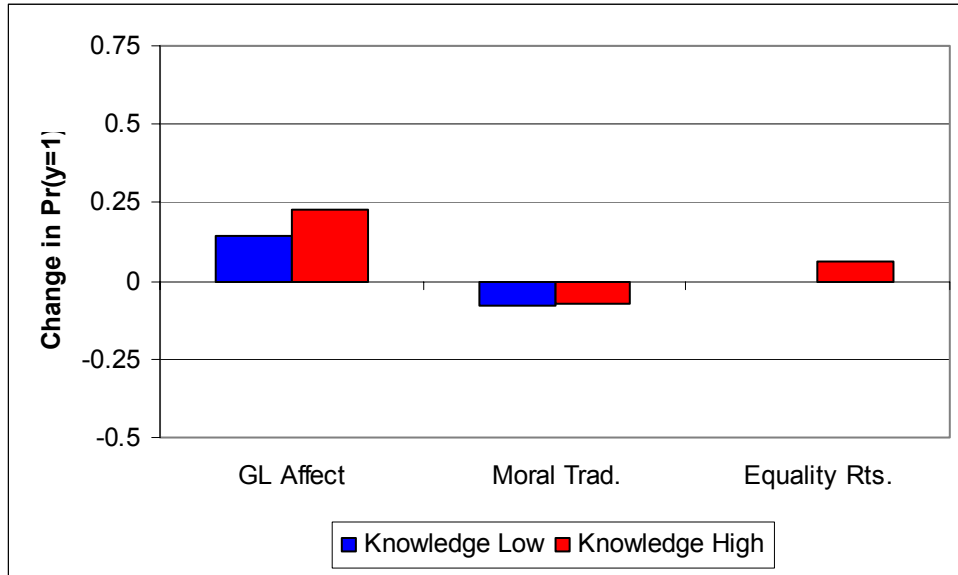


Figure 3. Affect, Values and Same-Sex Marriage Support, Canada 1997

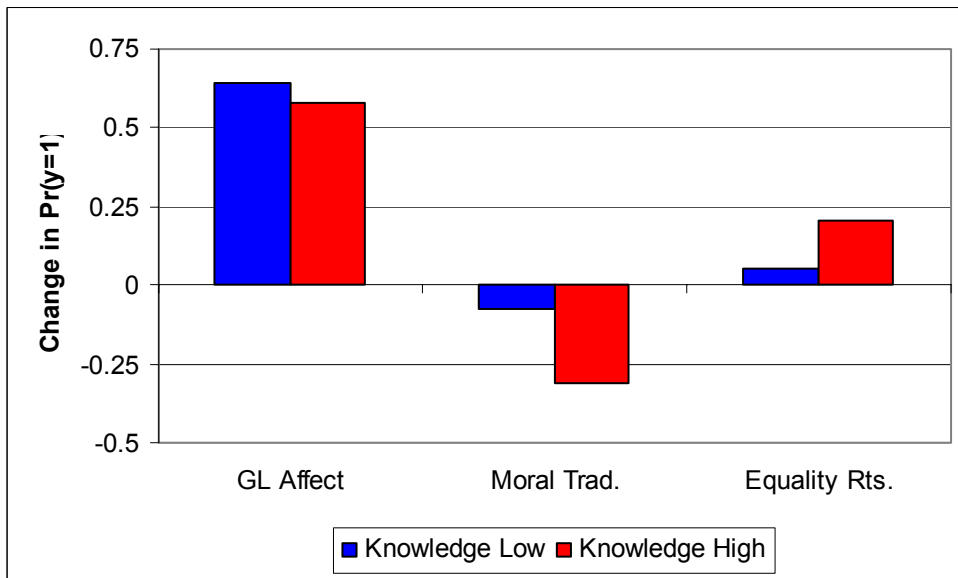


Figure 4. Affect, Values and Same-Sex Marriage Support, Canada 2004

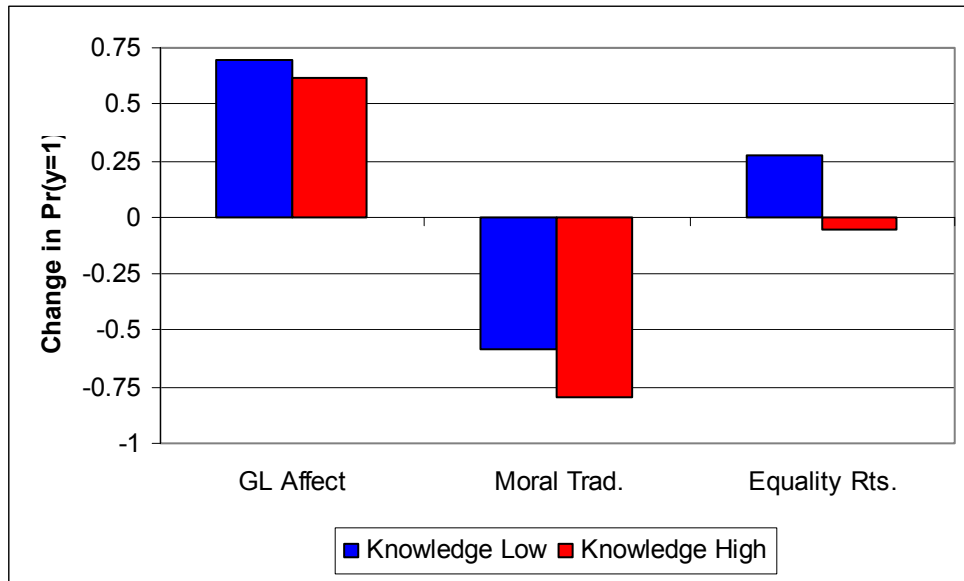


Figure 5. Affect, Values and Same-Sex Marriage Support, US 2004

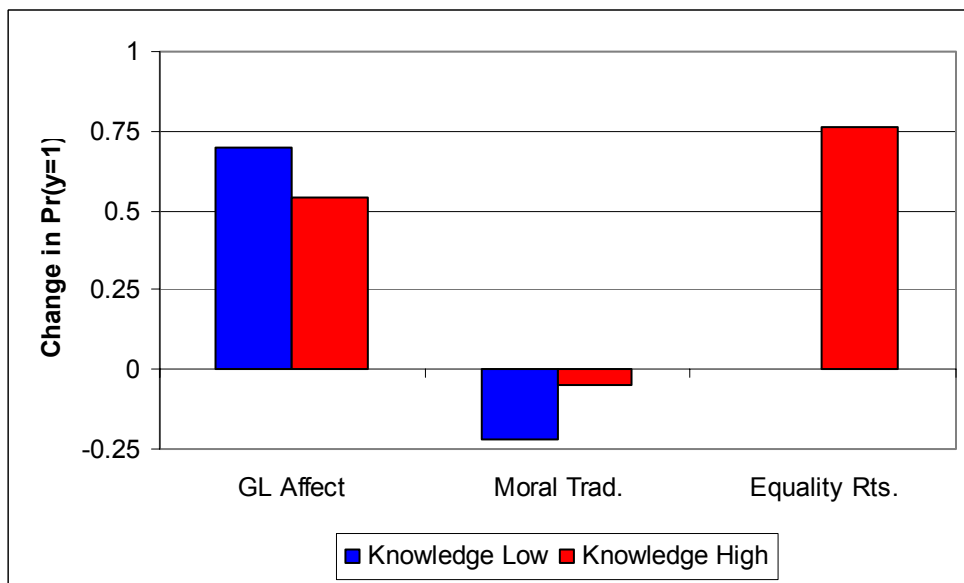


Figure 6. Affect, Values and Anti-Discrimination Support, US 2004

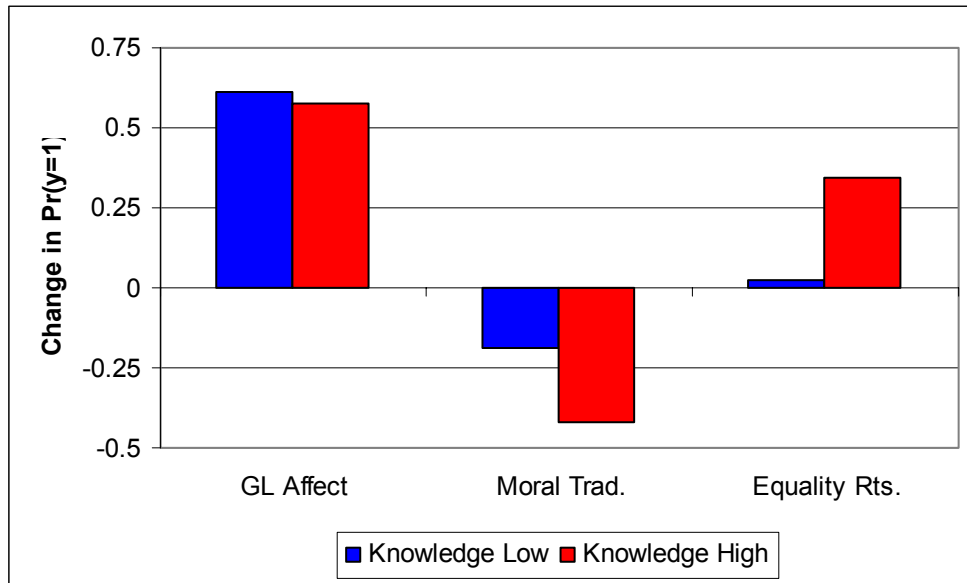


Figure 7. Affect, Values & Support for Homosexuals in the Military, United States, 2004

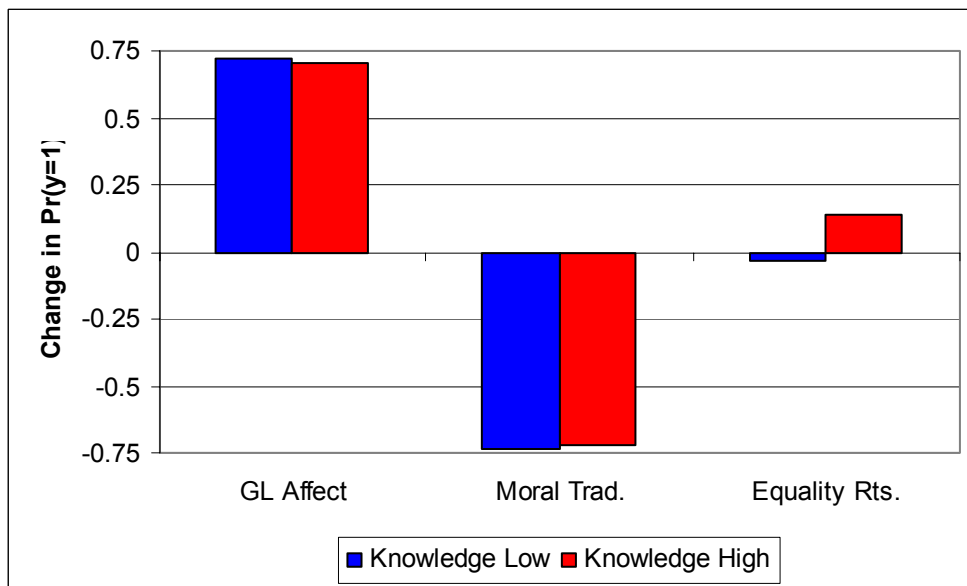


Figure 8. Affect, Values & Support for Gay & Lesbian Adoption, United States, 2004