

UC Berkeley

Working Papers

Title

Built on Rock or Sand? The Stability of Religiosity and Attitudes Toward Abortion

Permalink

<https://escholarship.org/uc/item/4qv057q9>

Author

Sides, John

Publication Date

1999-12-31

**“Built on Rock or Sand? The Stability of Religiosity and
Attitudes Towards Abortion”**

John Sides

University of California, Berkeley

WP 99-13

***Working Papers* published by the Institute of Governmental Studies provide quick dissemination of draft reports and papers, preliminary analysis, and papers with a limited audience. The objective is to assist authors in refining their ideas by circulating results and to stimulate discussion about public policy. *Working Papers* are reproduced unedited directly from the author’s page.**

“Built on Rock or Sand? The Stability of Religiosity and Attitudes Towards Abortion”

John Sides

University of California, Berkeley

Introduction**

V.O. Key once likened public opinion research to “coming to grips with the Holy Ghost.” Recently, a growing literature in political behavior has taken that metaphor literally. That is, scholars have begun to examine in greater detail the effect of religiosity on how people think and act politically. This paper extends that inquiry by examining two questions. First, is religiosity stable over time? Second, does religiosity stabilize attitudes over time?

The first question is as yet little discussed in political behavior, which relies mostly on cross-sectional data. Nevertheless, if religiosity has great explanatory power at any point in time but little stability over time, the inference we can make changes considerably. We may know that people who attend church frequently tend towards conservative views, but we will not know how often they will attend church in the future. If their church attendance changes, their attitudes might change accordingly.

** I thank Meg Carne, Zach Elkins, and Eric Schickler for many helpful comments on a draft of this paper. Merrill Shanks was instrumental in the genesis of this project. I also thank John Zaller for several insights and Ken Bollen for his assistance with the analysis.

The second question taps into the long-standing debate over the stability of political attitudes. Thus far, this debate has centered on the extent and nature of that instability, in particular the relative roles of “fuzzy people” and “fuzzy questions,” a.k.a. measurement error. To a lesser extent, scholars have examined the correlates of stability. In this paper I provide several reasons why religiosity could help stabilize political attitudes. I then test this expectation with data from the new National Election Study (NES) panel study.

There is a strong normative impetus behind the second question: if democracy is predicated on the interest and involvement of the people, the *demos*, and if most Americans display little interest in politics and have incoherent and transitory opinions about political issues, what is the true quality of our democracy? If religiosity does stabilize attitudes, then it may prove salutary for the state of democracy, even though the intersection of religion and politics is often viewed with suspicion.

The paper proceeds by first discussing the long-standing debate over attitude stability. In doing so, I present some initial notions about how an attitude might become more stable over time. Drawing on these ideas, I then explain why and how different aspects of religiosity may affect attitude stability. After describing the data and analytical procedure, I examine the stability of religiosity and then the effect of religiosity on the stability of attitudes.

Attitudes and Attitude Stability

In Converse’s (1964) famous monograph, he documents what appears to be a grotesque amount of instability in mass public opinion. In particular, he finds that attitudes in the second and third waves of the 1956-60 NES panel study correlate no more strongly than attitudes in the first and third waves. This leads him to develop the “black and white” model, in which the

attitudes of a small segment of the public are modeled as fixed while the vast majority are modeled as purely random. This model predicts quite well aggregate opinion on a question about the role of government in housing and utilities. On the whole, instability over time is a logical symptom of a “non-attitude”: if some substantial number of citizens answer survey questions almost at random, then they should appear to change their minds on a regular basis. However, it is important to note that no one, Converse included, believes that the mass public lacks political attitudes entirely, or that the black-and-white model would generalize to all issue areas.¹ Converse (1964, 1970) also argues that attitudes and non-attitudes come in degrees and proposes a “centrality continuum” to capture that variation. In this formulation, the objects of non-attitudes are non-central, while true attitudes involve highly central objects. Converse finds that party identification is the most stable attitude, while policy opinions are much less so.² However, as Converse and Markus (1979) demonstrate, some policy opinions demonstrate more stability than others, which suggests a process they term “crystallization.” In particular, they find greater stability in attitudes towards racial and moral issues, such as busing to promote racial integration, the legalization of marijuana, and abortion.

Others have take issue even with this qualified argument. Degrees of centrality and crystallization are immaterial, say these dissenters, since most observed instability in attitudes derives from measurement unreliability. Achen (1975) makes this claim most forcefully, singling out “fuzzy questions” as the culprit (see also Erikson 1979). According to him, people’s underlying political attitudes remain constant while their responses to survey questions vary. This variation comes about because survey questions often employ vague terms like

¹ Converse found himself making precisely this point. See his 1974 rejoinder to Pierce and Rose (1974).

“occasionally,” “somewhat,” and “a lot.” Because Achen and Erikson can find no evidence that other characteristics of the respondent, like sophistication, have any impact on stability, they target fuzzy questions exclusively (though cf. Zaller (1990) and Feldman (1989) on the impact of political sophistication on stability).

However, Luskin (1987) has pointed out that measurement error proponents must confront some “embarrassing” evidence. For example, elites demonstrate more stability than the masses. Is this because they are confronted with better survey questions? Luskin thinks not. Furthermore, why is party identification more stable than policy attitudes? Because the questions measuring party identification are that much better?³ Luskin also points out that the stability of an attitude varies with interest in the policy area, which seems to reflect Converse’s point about centrality. Finally, there is indirect evidence of instability, such as the extent to which responses change with minute variations in question wording, which suggests that attitudes are weakly held and thus susceptible to tangential cues. Furthermore, respondents’ willingness to give opinions on fictional issues and to evaluate fictional political actors does not speak highly of the alleged fixity and authenticity of political attitudes.

The debate over the relative roles of measurement error and attitude instability has not been resolved, but in recent years a middle ground of sorts has emerged. Zaller and Feldman (1992) examine this debate and find both positions lacking. They take measurement error proponents to task for failing to specify what measurement “error” consists of and how it is

² Later, the stability of party identification itself was challenged by, among others, Fiorina (1981), Franklin and Jackson (1983), and, at the aggregate level, MacKuen, Erikson, and Stimson (1989). However, for rejoinders, see Green and Palmquist (1990), Cain and Ferejohn (1981), and Schickler and Green (1997).

³ Krosnick (1991) says that they are. He undertakes an analysis of many different survey questions across a range of issues and finds that differences in stability derive mostly from how these questions are asked. In particular, the branching format and seven-point scale of the standard Michigan party identification question produce a particularly reliable measure, whereas many policy questions, which are one-shot and have fewer response categories, are less reliable.

generated. They also take issue with the concept of crystallization, as presented by Converse and Markus. They wonder “how crystallization can be measured apart from its supposed effect on response stability. Since no one has ever said, attitude crystallization remains...more a metaphor than a testable theory of attitude change” (582).

Attitude Crystallization Reconsidered

However, I believe Zaller’s theory of survey response offers us some purchase on the nature of crystallization. In brief, Zaller (1992) argues that survey respondents answer questions by averaging across the relevant “considerations” that exist on the top of their heads. These considerations are not true attitudes, but neither are they always devoid of meaning or content. Nevertheless, as these considerations change, or as the relative weight accorded certain considerations change, so will reported attitudes.⁴

The “top of the head” simply implies that certain considerations are “accessible.” Zaller and Feldman elaborate: “The accessibility of any given consideration depends on a stochastic sampling process, where considerations that have been recently thought about are somewhat more likely to be sampled” (586). Thus, for an attitude to (appear to) change, the respondent must have different considerations in mind, or else treat certain considerations as more important. This in turn implies that a stable attitude, meaning a consistent survey response, can result from one of two processes. First, the respondent has a stable set of considerations in her head regarding a certain issue. Those considerations are then resolved through the sampling process in the same way, producing the same survey response. Alternatively, an attitude might

⁴ Zaller and Feldman argue that change is entirely likely because people often hold opposing considerations, that is, they are “ambivalent.” Alvarez and Brehm (1995, 1997, 1998), also find that ambivalence, operationalized as competing values underlying an issue, produces greater variance in response.

become stable because the set of considerations underlying that attitude become more homogeneous, reducing ambivalence.⁵

Either process, then, helps produce crystallization. Obviously, this is not an entirely satisfactory nor rigorous definition of crystallization, but it does, I think, take us beyond pure metaphor. It can be investigated, even tested. We can begin to conceive of ways in which people gather and generate considerations, from their families, friends, and co-workers, from political elites, or from the mass media – when and how, in essence, they are persuaded. For example, if a child grows up hearing from his parents that the Democrats are going to lead this country deep into debt, then chances are the child’s later evaluation of Democrats may reflect in part the idea that the Democrats are irresponsibly profligate. Zaller’s own evidence demonstrates the particular power of elite discourse. For example, as elite opinion on the Gulf War diverged, with Congressional Democrats more and more in opposition, the views of politically aware Democrats in the mass public diverged in like manner. Different considerations were brought to bear for these Democrats, and their attitudes changed accordingly.

Furthermore, we can explore how often people are exposed to messages that emphasize certain considerations. This involves two questions. First, who emphasizes what considerations? To get at this question, we can explore the attitudes of families, friends, and co-workers. We can undertake content analysis of media coverage. We can track Congressional

⁵ This does not exhaust the means by which an attitude might become crystallized. A very thoughtful survey respondent might be aware of the considerations she carries and consciously work them out in the same way over time. Or, it is possible that some respondents do not conform to Zaller’s model at all and retrieve a pre-existing attitude instead of sampling across considerations. This is similar to “on-line” processing (Hastie and Park 1986, Lodge, McGraw, and Stroh 1989). Finally, if, as Zaller (1992: 95-96) contends, public opinion is often driven by elite opinion leadership and affected by survey question wording, one could imagine that attitudes on an issue would appear crystallized if elites are united behind a particular issue position, or if surveys are worded in such a way as to elicit consistent support for a position over time.

debate on an issue. Second, how often and how intensely are citizens exposed to messages that emphasize certain considerations? For example, how often does a person engage in political discussions and with whom (Huckfeldt and Sprague 1987; Stoker and Jennings 1995)? How often does a person read the newspaper or watch the news, and what are they reading and watching (Iyengar and Kinder 1987)? In sum, we can begin to paint a picture of inputs to the political mind, which in turn gives us a sense of what considerations will be most accessible when the NES comes a-callin’.

Religiosity and Attitude Crystallization

Religiosity could play a key role in attitude crystallization by stabilizing or homogenizing the set of considerations in a person’s head and by ensuring that those considerations are summarized in a consistent attitude statement over time. What aspects of religiosity might be particularly powerful in this respect and how do they operate?

Before answering these questions, it is necessary to elucidate a working conceptualization of religiosity. The literature on the measurement of religion in political behavior has identified three components: *belief*, *behavior*, and *belonging*.⁶ Belief encompasses theology, “an understanding of the divine and humanity’s relationship to it,” and “social theology,” which “connects the individual and the institutional church to the world” (Kellstedt et al. 1997).

The second component of religiosity, behavior, is also usefully divided into two major dimensions: ritual activity and private devotion (Kellstedt et al. 1997). The most important kind

⁶ This is an elaboration of the doctrinal-denominational distinction discussed by Wilcox (1986) and the belief-belonging distinction elucidated by Wald and Smidt (1993). Other sources on the measurement of religion include Kellstedt (1989) and, more recently, Kellstedt and Green (1993) and chapter 10 in Kellstedt et al. (1996).

of ritual activity is participation in organized religious communities such as churches, synagogues, and mosques. Private devotion includes such activities as prayer and reading the Bible.

Kellstedt et al. (1997) also distinguish two kinds of belonging: denominational affiliation and religious movement identification. Denominational affiliation refers to identification as a member of a particular organized denomination, such as the Southern Baptist Convention or the Evangelical Lutheran Church in America. Given the proliferation of religious denominations, Kellstedt and his co-authors suggest a measure that aggregates denominations into *religious traditions*, which they define as “a group of local churches and denominations that share a set of beliefs, practices, and a common heritage, and, as a result, generate distinctive worldviews” (4). Examples include Evangelical and Mainline Protestants. The former encompasses such denominations as the Southern Baptists and the Assemblies of God, while the latter includes denominations such as Episcopalians and (some) Methodists.

The second dimension of belonging is religious movement identification. It captures a dynamic component of belonging as opposed to the static component of denominational affiliation (Kellstedt et al. 1997). Within any given denomination or religious tradition there are often people agitating for a more conservative theological or political stance, as well as those favoring a more liberal stance. In recent years, numerous denominations have experienced conflicts among what could be considered competing religious movements. The battle between moderates and conservatives within the Southern Baptist Convention is but one example.⁷

⁷ Even members of ideologically similar religious movements bicker. For example, fundamentalists and charismatics came into conflict during the 1988 Presidential election, when Jerry Falwell, a fundamentalist, supported George Bush instead of his fellow Christian Rightist Pat Robertson, a charismatic. Jelen and Wilcox (1992) show that Falwell and Robertson’s support bases were also confined to people who shared their respective theological traditions.

It is not entirely clear that all of these aspects of religiosity will have a substantive impact on the stability of attitudes. For example, consider religious tradition. While we might expect an Evangelical Protestant to have a more conservative stance than a Mainline Protestant on some issues, there is no reason that Evangelical Protestant's attitude should be more stable. Baptists do not necessarily possess more crystallized attitudes than Episcopalians, or vice versa. There is nothing inherent in any religious tradition that should produce more stable attitudes than do other religious traditions. This may even be true for those who fall into the "secular" tradition. These people could derive consistency from their identity as seculars. For example, they might consistently oppose school prayer over time because of their general distaste for religion.⁸ The same logic applies to religious movement identification: there can be highly stable fundamentalists and highly unstable charismatics, or the reverse. These variables generate no clear expectation vis-à-vis attitude stability.

Other variables do. First, one's *belief* could, other things equal, affect attitude stability. If, for example, a person believes the Bible is the literal Word of God, there are a great many "cues" within scripture that could make his opinion on certain issues more consistent over time. Take those passages that, on their face, seem to designate homosexual behavior a grave sin. If this person sees in those passages the hand of the divine, then his view of homosexuality might be more consistent than one who sees the Bible differently.

Second, one's *behavior* could have a similar stabilizing impact. For example, if I attend church on a regular basis, I may be exposed to a set of cues, from the pulpit or from fellow parishioners, that emphasize certain considerations over others. I may, as time goes on,

⁸ However, those who fall into the secular tradition are likely to score low on other indicators of religiosity, like church attendance, that should affect attitude stability. The important point is that religious tradition *qua* religious tradition should not matter.

assimilate those cues and accord them salience, especially if they come from as respected a personage as a pastor. Thus, my reported attitude towards the issues that these cues inform could become more stable.

Finally, attitude stability could be affected not just by the quality or quantity of religiosity, but by the *stability of religiosity* itself. A change in religious belief, belonging, or behavior could induce a change in attitude. For example, if one leaves a Baptist church and joins an Episcopalian church, the resulting change in religious tradition – from Evangelical to Mainline Protestant – could produce attitude change. Similar results could obtain from a switch in religious movement identification, a varying view of scripture, or an inconstant rate of church attendance. This demonstrates the necessity of examining the stability of religiosity itself, since it may in turn affect the stability of attitudes.

In sum, a person's attitude should become more crystallized as the set of considerations in a person's head becomes more homogeneous, or as these considerations are consistently resolved in the same way. Different parts of a person's environment can contribute to crystallization. Thus far, I have attempted to explain why different aspects of religiosity, as well as a change in religiosity itself, could play such a role. It is important to emphasize that not all aspects of religiosity should have this effect. Religious tradition and movement identification do not generate clear expectations about attitude stability, whereas church attendance and one's view of scripture do. However, a change in *any* of these indicators could induce instability. The next task is to test these expectations.

Data and Measures

Measures of Religiosity

For data, I rely on the National Election Study's most recent panel survey, which consists of 597 respondents interviewed in 1992, 1994, and 1996. This survey incorporates the new religiosity questions developed in the 1989 Pilot Study (Leege, Kellstedt, and Wald 1990). This improved battery enables researchers to measure religiosity better and thus to test its impact on other political phenomena with more validity.

To measure religious belief, I use the standard NES question regarding the respondent's view of Scripture. Regarding religious behavior, the NES includes questions about three practices in particular: church attendance, prayer, and reading the Bible. I make use of the church attendance variable.⁹

The NES taps belonging through an extensive set of questions and follow-ups which allows for a fairly nuanced understanding of a respondent's religious denomination. Following Kellstedt et al. (1997), I combine these denominational categories (which number 123) into religious traditions. Below I focus on the most populous categories: Evangelical Protestants, Mainline Protestants, Catholics, and Seculars.¹⁰ I also incorporate religious movement identification with a question that asks self-identified Christians whether their faith is best described as "evangelical," "fundamentalist," "charismatic or spirit-filled," or "moderate-to-liberal."¹¹

⁹ Though, naturally, prayer and reading the Bible should be considered as well. I leave that to future research.

¹⁰ **This coding was done in consultation with Kellstedt, Guth, and Smidt. Specific codings, and a discussion of the categories themselves, are available from the author.**

¹¹ **However, there are several problems with this measure.** For one, the categories — fundamentalist, evangelical, charismatic — are not mutually exclusive historically speaking. Both fundamentalism and the charismatic movement grew out of evangelicalism (Marsden 1991). Thus, they are best understood as subsets of evangelicalism, not distinct and independent traditions (Smidt 1988). Furthermore, as Wilcox et al. (1993) report, if given the chance respondents often choose more than one or even all three of these categories. For example, on the

Finally, I also rely on a generic question about the importance of religion in the respondent's life. This question is intended not as a specific indicator of belief, belonging, or behavior, but rather as a general indicator of the strength of respondent's religiosity. We might expect that people who say religion is important to them will have more stable attitudes than people for whom religion is not important.

Unfortunately, the NES did not ask panel respondents the entire battery of religiosity questions in all three waves. In particular, there is no information about church attendance, religious movement identification, or religious denomination (and hence religious tradition) in 1994, though the importance of religion and view of scripture questions were included.

Independent Variables: Religiosity and Change in Religiosity

As described above, I expect only a subset of religiosity variables – church attendance, view of scripture, and importance of religion – to have an impact on attitude stability in and of themselves. However, a change in any indicator of religiosity, including religious tradition and movement identification, might affect attitude stability. Thus, it is necessary to operationalize both ideas: religiosity itself as well as change in religiosity.

I operationalize religiosity by first taking the importance of religion, view of scripture, and church attendance questions and excluding those respondents whose answers to these questions changed over time. This reduces the sample to respondents who gave the same answer each time the question was asked. The disadvantage of this strategy is that it produces low

1989 NES Pilot Study, nearly one-quarter of those respondents who chose one of these descriptors chose all three of them. Beatty and Walter (1988) also found that 90% of charismatic ministers call themselves fundamentalists. Finally, the “moderate-to-liberal” designation is problematic, since it may cue ideology as much as theology. The term “moderate” is particularly attractive, which may explain why close to half the sample (48% in 1992 and 45% in 1996) gave this response.

samples sizes on some questions. Also, these low sample sizes are generally not evenly distributed because the response distribution of the religiosity questions is often skewed.¹²

To maintain adequate sample sizes and to provide a general robustness check, I operationalize religiosity one other way: averaging the indicators of religiosity thought to affect attitude stability over the entire time period. This produces a person's average view of scripture, average church attendance, and the average importance of religion in her life. Respondents are then divided as evenly as possible into quartiles, so as to compare those who, on average, were highly religious by these measures with those who were not very religious.

A *change in religiosity* is more difficult to operationalize, given differences in question wording and in how often certain questions were asked. For those questions included only in 1992 and 1996 – religious tradition, religious movement identification, and church attendance – I construct simple measures of the difference in response between the two time periods. A change in religious tradition or movement identification (both categorical variables) is simply dichotomous, change or no change. A change in church attendance is the number of response categories a person moved between 1992 and 1996, which could range from zero to five.¹³

The importance of religion and view of scripture questions were asked in all three time periods. I construct a measure of change in each indicator simply by noting whether the respondent's answer changed between 1992 and 1994, and again between 1994 and 1996. This captures the *instance* of change, not its magnitude. Given that the response categories in nearly any survey question are imprecise (hence, the danger of mistaking “fuzzy questions” for attitude change), it is risky to invest much in the magnitude of change. For example, regarding the

¹² Because of those problems, I collapsed attendance into two categories for the analysis, one including respondents who said that they attend church “almost once a week” or more, and the other including respondents who said that they attend church “once or twice a month” or less.

importance of religion question, is the difference between “some” importance and “a great deal” of importance (a two-unit shift) necessarily greater than the difference between “quite a bit” of importance and “a great deal” of importance (a one-unit shift)? Furthermore, radical shifts in response to these two questions were rare. For example, between 1992 and 1994, 92% of respondents either gave the same answer or moved to an adjacent category on the importance of religion question.

Finally, I construct a summary index to capture the stability of religiosity more broadly. This index simply sums up the number of indicators on which each respondent gave a stable response over time, in either two or three waves, depending on the question. Because there are five such indicators – religious tradition, religious movement identification, view of scripture, church attendance, and importance of religion – the index ranges from 0 (complete instability) to 5 (complete stability).

Dependent Variable: Abortion

As an initial test of the impact of religion on attitude stability, I consider an issue that has direct relevance to religion generally: abortion. While religious voices in the political arena have not limited themselves to discussing social or “family values” issues (witness Catholic bishops’ often liberal statements on economic equality, or the Christian Coalition’s stance on the “marriage tax”), abortion is arguably the most salient for many religious people. It is well-known that religiosity has an impact on attitudes towards abortion themselves, i.e. on the mean

¹³ For analysis, this was collapsed into: no change, one category of change, two categories of change, and more than two categories of change.

of abortion attitudes.¹⁴ This analysis will determine whether religiosity also affects the stability of these attitudes.

The NES included questions on abortion in all three waves of the panel survey.¹⁵ The abortion question simply asks respondents:

There has been some discussion about abortion during recent years. Which one of the opinions ... best agrees with your view?

1. By law, abortion should never be permitted.
2. The law should permit abortion only in case of rape, incest, or when the woman's life is in danger.
3. The law should permit abortion for reasons other than rape, incest, or danger to the woman's life, but only after the need for the abortion has been clearly established.
4. By law, a woman should always be able to obtain an abortion as a matter of personal choice.

The resulting variable is the four-point scale this question produces.

Analytical Procedure

Stability of Religiosity

The procedure for analyzing the stability of religiosity depends on whether there are two or three waves of data available. For those indicators included in only 1992 and 1996, the analysis is simply descriptive, since instability cannot be separated from measurement unreliability with only two waves of data. However, for the view of scripture and importance of religion questions, one can take into account measurement error.

[Figure 1 about here]

¹⁴ For example, among the panel respondents in 1992, three religious variables – church attendance, importance of religion, and a dummy for Mainline Protestants – had a statistically significant effect on abortion in a regression equation, even while controlling for age, gender, education, income, race, ideology, and party identification.

¹⁵ I also undertook an analysis of school prayer, using the same measures and model. However, there were numerous difficulties in estimating the Wiley-Wiley model for this issue. At times the maximum likelihood model would not converge. Other successful runs generated nonsensical coefficients, large standard errors, and/or negative error variances. I am as yet unsure why this was so. I also wanted to examine gay rights, but the NES chose not to

In panel data, the accepted model for doing so is the structural equation model developed by Wiley and Wiley (1970).¹⁶ Figure 1 provides a diagram of the model. This structural equation model consists of these two equations:

$$\eta = \beta\eta + \zeta \quad (1)$$

$$X = \Lambda\eta + \varepsilon \quad (2)$$

Equation (1) provides the latent variable model. Here the latent variables (η) are, for example, a person's true view of scripture at each point in time. A person's attitude at one point in time is a function of her attitude at the previous point in time, plus some error. Two coefficients will result from this equation: β_{21} , which indicates the stability of a person's true attitude between 1992-94, and β_{32} , which indicates the same between 1994-96. The measurement model provided in Equation (2) takes into account the role of measurement error. Here, a person's survey response (the observed variable X) is a function of her true attitude (η) plus some measurement error (ε).¹⁷ I estimate Wiley-Wiley models using the maximum likelihood estimator available in both AMOS and LISREL. This generates stability coefficients "purged" of measurement error.

ask panel respondents about that issue in 1994. With only two waves of responses, it is impossible to separate attitude instability from measurement unreliability (Finkel 1995).

¹⁶ See Heise (1969) for an earlier formulation and Erikson (1978) for a comparison of the two models. Brady (1993) demonstrates why a Wiley-Wiley model might produce biased estimates when non-attitudes, operationalized as Converse's black-and-white model, are present in the data. As yet, this paper does not take into account that possibility.

¹⁷ As it is presented, the model is underidentified, meaning it has an insufficient amount of information to estimate the number of parameters. Following Wiley and Wiley (1970), I make two assumptions to identify the model. First, they assume that the relationship between the latent variables and observed indicators is perfect, such that all elements of $\Lambda=1$. Second, I assume that the variances of the measurement errors are equal (σ^2_ε are equal for all ε). Two other assumptions are that the errors for the equations (ζ) and the measurement errors are not correlated across time. The assumption of uncorrelated measurement error is fairly tenuous, given that we might expect excluded variables which would fall into this error term to be correlated across time. Unfortunately, with only three waves of data, models with correlated errors are "generally so sensitive to sampling error that they are uninformative" (Palmquist and Green 1992:119).

Impact of Religiosity on Attitude Stability

To get at the impact of religiosity and of changes in religiosity on attitude stability, I first stratify the sample by the indicators described above. Then, the stability of respondents' attitudes is estimated first by regressing the 1994 response on the 1992 response, and then by regressing the 1996 response on the 1994 response. The unstandardized regression coefficients this generates provide estimates of stability.¹⁸ However, to take into account the argument of Achen and other proponents of "fuzzy questions," I estimate Wiley-Wiley models as well. In these models, the latent variables are a person's true attitude towards abortion, while the observed variables are their actual response to the NES question about abortion.

To determine whether there were statistically significant differences among different levels of religiosity, I estimate the Wiley-Wiley model allowing β_{21} and β_{32} to vary across levels of religiosity for each indicator. Then, I estimate the same model constraining those parameters to be equal across groups, such that β_{21} was equal for frequent and infrequent church attenders, for those with no change in their religious tradition and for those with a change, and so on. The same constraint was placed on β_{32} . The constrained model is "nested" in the unconstrained model, in the sense that its parameters are a subset of the other's.

Nested models can be compared to determine if the constraints imposed in the restricted model significantly worsen the model's fit (see Bollen 1989: 361). Fit is measured by the chi-squared statistic generated for each model. Generally speaking, if the chi-squared is statistically significant, the fit of the model is poor. The difference in the chi-squareds of the restricted and unrestricted models also follows a chi-squared distribution, with degrees of freedom equal to the

¹⁸ Pearson's correlation coefficient, so often used to examine aggregate stability within a sample, is inappropriate when making comparisons among groups. Because the correlation is standardized by dividing by the standard

difference in degrees of freedom between the two models. If this difference is statistically significant, then the restricted model's fit is significantly worse. However, if the difference is insignificant, then the constraints of the restricted model do not significantly worsen its fit, and those constraints can be seen as appropriate additions to the model, at least on the grounds of parsimony.¹⁹ Thus, if constraining the stability of attitudes to be equal across levels of religiosity does not worsen the fit of the model, we can infer that religiosity does not produce significant differences in attitude stability.

Results: Stability of Religiosity

Religious Tradition

As discussed before, the literature on religion and political behavior has emphasized the usefulness of religious tradition and the importance of measuring it correctly. Thus, it is crucial to understand the stability of religious tradition over time. Table 1 provides a summary of tradition stability broken down by the four most numerous traditions.

[Table 1 about here]

As the total figures show, religious tradition is by and large a stable attribute, with nearly four out of five respondents (79%) maintaining the same tradition over the four years of the survey. The three major religious traditions – Evangelical and Mainline Protestantism and Catholicism – showed a greater degree of stability than the sample at large. The Protestant traditions are

deviation of each variable, changes in correlations among groups may reflect not the actual covariance of the variables in questions, but different variances within different groups (Achen 1977; King 1986).

¹⁹ This is akin to a the general likelihood-ratio test in other maximum likelihood models.

similarly stable, while Catholics display an even more striking consistency: 93% remained Catholic between 1992 and 1996. This finding is somewhat intuitive, given that the line between Mainline and Evangelical Protestantism is somewhat fuzzy. Thus it is conceivable to switch between them. Catholics, by contrast, possess a more distinctive and in some sense exclusive identity. The pattern of “defection” between religious traditions shows that Evangelical Protestants are most likely to switch to Mainline Protestantism, while Mainline Protestant defectors are fairly evenly distributed among the other traditions.

In contrast, Seculars exhibit a striking lack of stability: nearly half switched traditions between 1992 and 1996, most of them moving into the Evangelical and Mainline Protestant traditions. One could argue that this finding illustrates the religious predisposition of the American public. There may be, all things being equal, a “regression to the mean” tendency in religious affiliation, with that mean being a non-Secular tradition. Of course, another wave several years after 1996 could show that many of these “converted” Seculars have reverted to secularism once again. The fluidity of this category certainly makes that seem possible.

Religious Movement Identification

As mentioned previously, the NES includes a question asking Christians to describe their faith as fundamentalist, evangelical, charismatic or spirit-

filled, or moderate-to-liberal. Table 2 gives a cross-tabulation of 1992 responses by 1996 responses:

[Table 2 about here]

Overall, religious movement identification is far from invariant over time. Moderate-to-liberal Christians exhibited the greatest degree of stability, with approximately three-fourths remaining consistent from 1992 to 1996, while charismatics were quite mobile – barely half gave the same response in each wave. Evangelicals and fundamentalists fell somewhere in between. The pattern of “defection” varied across movements. Fundamentalists defected to the other three categories in equal numbers. Evangelicals were more likely to switch to a charismatic or moderate-to-liberal identification. Charismatics, interestingly enough, move most into the moderate-to-liberal category. Moderate-to-liberals generally went to either the charismatic or evangelical designation. One notable pattern is that defectors in each of the latter three groups – evangelicals, charismatics, and moderate-to-liberals – were least likely to realign themselves as fundamentalists. Perhaps that term has enough of a negative connotation to deter potential movement identifiers. Finally, the marginals show that the overall composition of the panel respondents changed little, shifting slightly away from moderate-to-liberals towards the other three categories, but only by a few percentage points.

Church Attendance

As with religious tradition and movement identification, there are only two waves of data to draw on when evaluating the stability of church attendance. The church attendance variable has six categories, ranging from those who attend more than once a week to those who attend not at all. One serviceable measure of stability in this indicator is the shift in response categories between the two waves. In other words, if a respondent moves from “more than once a week” to “never,” she will have moved 5 categories. Table 3 presents a summary.

[Table 3 about here]

One clear trend is that stability is much higher among frequent attenders than among infrequent attenders. Over two-thirds (64%) of those who said in 1992 that they attended more than once a week gave the same response in 1996. By contrast, less than a fifth (18.5%) of those who said in 1992 that they never attended gave the same response. However, low attenders were very likely to move only into an adjacent category, suggesting that their predisposition to eschew morning worship is fairly consistent. The middle categories (“almost once per week” and “once or twice a month”) were the most mobile, with a substantial minority shifting two or more categories. On the whole, church attendance is not entirely stationary over time. If attendance in 1996 is regressed on attendance in 1992, the adjusted r-squared is only .55, suggesting that other factors explain nearly half the variance.

View of Scripture and Importance of Religion

[Table 4 about here]

Because the questions regarding respondents' view of scripture and the importance of religion in their lives were asked in all three waves, it is possible to estimate the stability of religiosity while taking into account measurement error. Table 4 presents one set of coefficients from a simple regression model in which responses in 1994 are regressed on those from 1992, and then those from 1996 are regressed on 1994. The results – large, highly significant coefficients – indicate that both measures are quite stable. The Wiley-Wiley coefficients demonstrate that any instability that remains derives largely from measurement error. Once that is corrected for, the stability of both indicators jumps above .90.

Results: Impact of Religiosity on the Stability of Abortion Attitudes

As discussed before, I evaluated the stability of abortion attitudes across a range of indicators of religiosity – operationalized two different ways – and of change in religiosity. These were:

- *church attendance (consistent response and average response)*
- *view of scripture (consistent response and average response)*
- *importance of religion (consistent response and average response)*
- *change in religious tradition*
- *change in religious movement identification*
- *change in church attendance*
- *change in view of scripture*
- *change in importance of religion*
- *overall stability of religiosity*

Clearly and unequivocally, the hypothesis of religiosity as a stabilizing force was not supported by these data. Nearly every one of these twelve measures of religiosity or change in religiosity had no significant impact on the stability of attitudes towards abortion. There were

only two exceptions when the difference in the chi-squareds of the restricted and unrestricted models was statistically significant.

[Table 5 about here]

This table presents the impact of the importance of religion. At the bottom of the table are the results of the chi-squared difference test. The left-hand side of the table presents the coefficients from the simple regression model described above. These coefficients show no clear relationship between the importance of religion and the stability of abortion attitudes. In 1992-94, the “none” group, i.e. those for whom religion is not important, was actually the most stable. The Wiley-Wiley results are similarly inconclusive. In fact, the significant chi-squared seems to be driven by one outlying coefficient: $\beta_{21}=1.75$ for the “quite a bit” stratum, although the large standard error still places the coefficient within one standard error of 1.0. It may be that one of the assumptions of the Wiley-Wiley model is violated for this group, or that the small sample size is a problem. In any case, the results certainly fail to support the hypothesis.

[Table 6 about here]

Table 6 presents the results for the *average* importance of religion. Quartile #1 includes those respondents who, on average, said that religion was not very important. Quartile #4 includes the opposite extreme, those for whom religion is very important. The regression results show no clear relationship. The most religious quartile even demonstrates slightly less stability in 1994-96 than all of the other quartiles. These results are reflected in the Wiley-Wiley model as well. In 1994-96, the two middle quartiles actually appear more stable than the two quartiles at the extremes. In 1992-94 there are no systematic differences, and the coefficients are all quite high.

[Table 7 about here]

I present Table 7 simply to show a typical non-significant result. It gives the impact of the overall index of religious stability described above. The sample sizes show a nearly normal distribution for this indicator, with most respondents stable on three indicators and relatively few completely stable or unstable. The OLS results are somewhat suggestive in 1992-94, with a monotonic increase in attitude stability as the stability of religion increases (though differences among the upper three categories are slight). However, in 1994-96 this relationship does not hold. The Wiley-Wiley estimates again fail to support the hypothesis. The coefficients are by and large quite high and show no systematic differences based on religious stability.

Conclusion

This paper provides a first cut at both the stability of religiosity and how religiosity affects the stability of attitudes over time. The analysis of the stability of religiosity generated some useful results. Though by and large many indicators of religiosity produced fairly consistent responses in repeated waves, a few – religious movement identification in particular – demonstrated notable variance. Several tasks remain for future research. One of the most important is to examine further the factors that affect the stability of religiosity. Are inconstant responses over time simply the result of error? Or of characteristics of the respondent like education or age? Are there specific religious profiles that prove more unstable?

Regarding the second topic, the results showed conclusively that religiosity has little impact on the stability of abortion attitudes. Across a variety of indicators and operationalizations, zealots gave no more consistent responses than the unwashed heathen, especially once measurement error was taken into account. Several factors could account for this null result. One is simply that abortion is not the best test case. Because it has been hotly

debated for years, many people may have already-crystallized opinions, making instability a fairly rare phenomenon.²⁰ This makes the difficulties with modeling school prayer, an issue which generated less stable responses, all the more lamentable. Future analyses could include the battery of traditionalism questions on the NES as well as other questions that tap non-social issues. Another possible explanation for the null result is simply that survey data is too crude to get at the relationship between religiosity and attitude stability. In particular, the measures of religiosity are still somewhat superficial and cannot tap the complex interaction between the theological and the political in religious people's heads. Previous studies of churches themselves (Wald et al. 1988) have shown that these communities have a substantial impact on members' political attitudes. A more ethnographic approach might find the same regarding attitude stability.

Of course, it is entirely possible that there simply is no relationship to be found. Although much has been made of politicized religiosity in recent years, we still do not have a good sense of, for example, how many religious people are hearing political messages at church. Many churches may not deal directly with political issues for fear of divisiveness. Others may eschew them because they focus on purely spiritual matters – the life to come rather than the life on earth. The interaction of God and Caesar is not yet clear.

²⁰ A Wiley-Wiley analysis of the stability of abortion attitudes in the whole sample also generates large coefficients (in the .90 range). However, the debate over “partial-birth abortion” has apparently shifted the marginals on the typical *New York Times* poll slightly away from the pro-choice position, indicating that some change in opinion is apparently possible.

Figure 1. Wiley-Wiley Model

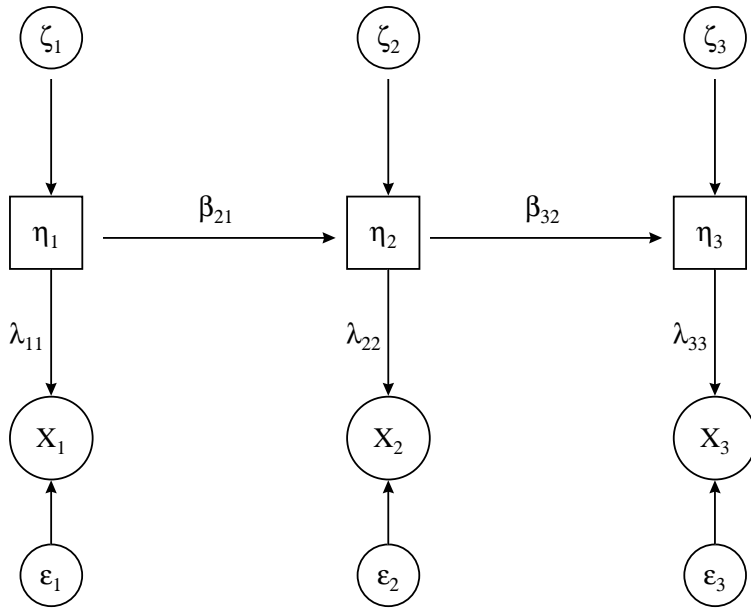


Table 1. The Stability of Religious Tradition

Initial Religious Tradition (1992)	N	No Change	Subsequent Religious Tradition (1996)					TOTAL
			Evang.	Mainline	Catholic	Secular	Other	
Evangelical Protestant	148	81.8 (121)	—	9.4 (14)	4.1 (6)	4.7 (7)	0.0 (0)	18.2 (27)
Mainline Protestant	121	83.5 (101)	5.8 (7)	—	3.3 (4)	4.1 (5)	3.3 (4)	16.5 (20)
Catholic	143	93.0 (133)	.007 (1)	3.5 (5)	—	2.8 (4)	0.0 (0)	7.0 (10)
Secular	108	54.6 (59)	19.4 (21)	12.0 (13)	6.5 (7)	—	7.4 (8)	45.4 (49)
Entire Sample	597	79.1% (472)	4.9 (29)	5.4 (32)	2.8 (17)	2.7 (16)	2.0 (12)	20.9% 125

Cell entries are percentages with Ns in parentheses.

Table 2. Stability of Religious Movement Identification

1992 Responses	1996 Responses				Row Total
	Fundamentalist	Evangelical	Charismatic or Spirit-filled	Moderate-to-Liberal	
Fundamentalist	62.5 (30)	12.5 (6)	12.5 (6)	12.5 (6)	12.9 (48)
Evangelical	8.5 (6)	59.2 (42)	18.3 (13)	14.1 (10)	19.0 (71)
Charismatic or Spirit-filled	11.1 (8)	13.9 (10)	54.2 (39)	20.8 (15)	19.3 (72)
Moderate-to-liberal	6.0 (11)	12.1 (22)	9.3 (17)	72.5 (132)	48.8 (182)
Column Total	14.7 (55)	21.4 (80)	20.1 (75)	43.7 (163)	100.0 (373)

Cell entries are percentage of 1992 responses giving a particular response in 1996, with Ns in parentheses. These Ns are smaller than one might expect because this question is asked only of self-identified Christians.

Table 3. Stability of Church Attendance

Church Attendance (1992)	Sample size	Difference in 1992 and 1996 Responses			
		No difference	One category	Two categories	More than two categories
More than once per week	187	64.2 (120)	21.4 (40)	10.2 (19)	4.3 (8)
Once per week	95	42.1 (40)	42.1 (40)	9.5 (9)	6.3 (6)
Almost once per week	76	32.9 (25)	42.1 (32)	17.1 (13)	7.9 (6)
Once or twice a month	66	37.9 (25)	21.2 (14)	37.9 (25)	3.0 (2)
A few times per year	90	20.0 (18)	61.1 (55)	8.9 (8)	10.0 (9)
Never	81	18.5 (15)	70.4 (57)	7.4 (6)	3.7 (3)

Cell entries are percentages with Ns in parentheses.

Table 4. Stability of View of Scripture and Importance of Religion

	Sample size	OLS Coefficient		Wiley-Wiley Coefficient	
		1992-94	1994-96	1992-94 (β_{21})	1994-96 (β_{32})
View of scripture	562	.72 (.03)	.74 (.03)	.97 (.05)	.97 (.04)
Importance of Religion	585	.72 (.03)	.76 (.03)	.90 (.04)	.95 (.04)

Cell entries include both unstandardized regression coefficients and unstandardized maximum likelihood coefficients from a Wiley-Wiley model. Standard errors in parentheses.

Table 5. Stability of Attitude towards Abortion by Importance of Religion

Importance of Religion	Sample size	OLS Coefficient		Wiley-Wiley Coefficient	
		1992-94	1994-96	1992-94 (β_{21})	1994-96 (β_{32})
None	92	.87 (.07)	.59 (.07)	.95 (.12)	.63 (.09)
Some	36	.65 (.11)	.90 (.10)	.81 (.15)	1.15 (.16)
Quite a bit	49	.70 (.13)	.52 (.12)	1.75 (.89)	1.00 (.21)
A great deal	134	.71 (.06)	.62 (.06)	.90 (.10)	.80 (.08)

Cell entries include both unstandardized regression coefficients and unstandardized maximum likelihood coefficients from a Wiley-Wiley model. Standard errors in parentheses.

H₀: β_{21} and β_{32} equivalent across groups (restricted)

H₁: β_{21} and β_{32} different across groups (unrestricted)

Chi-square difference test (restricted-unrestricted)

$\chi^2=15.90$; df=6

(p=.01)

(H₀ rejected)

Table 6. Stability of Attitude towards Abortion by Average Importance of Religion

	Sample size	OLS Coefficient		Wiley-Wiley Coefficient	
		1992-94	1994-96	1992-94 (β_{21})	1994-96 (β_{32})
Quartile #1 (not very important)	122	.74 (.07)	.62 (.06)	.83 (.10)	.69 (.08)
Quartile #2	177	.75 (.06)	.71 (.06)	1.12 (.13)	1.01 (.09)
Quartile #3	183	.66 (.05)	.73 (.05)	.90 (.09)	1.02 (.09)
Quartile #4 (very important)	110	.76 (.07)	.60 (.06)	.97 (.11)	.76 (.08)

Cell entries include both unstandardized regression coefficients and unstandardized maximum likelihood coefficients from a Wiley-Wiley model. Standard errors in parentheses.

H₀: β_{21} and β_{32} equivalent across groups (restricted)

H₁: β_{21} and β_{32} different across groups (unrestricted)

Chi-square difference test (restricted-unrestricted)

$$\chi^2=15.63; df=6$$

(p=.02)

(H₀ rejected)

Table 7. Stability of Attitudes towards Abortion by Religious Stability

	Sample size	OLS Coefficient		Wiley-Wiley Coefficient	
		1992-94	1994-96	1992-94 (β_{21})	1994-96 (β_{32})
Stability in 5 indicators	57	.88 (.06)	.83 (.10)	1.06 (.11)	1.00 (.11)
4 indicators	149	.83 (.06)	.71 (.05)	1.09 (.10)	.90 (.07)
3 indicators	199	.80 (.05)	.78 (.04)	.89 (.06)	.86 (.06)
2 indicators	111	.66 (.06)	.76 (.08)	.86 (.10)	1.07 (.11)
0-1 indicators	38	.54 (.16)	.73 (.12)	.94 (.34)	1.15 (.26)

Cell entries include both unstandardized regression coefficients and unstandardized maximum likelihood coefficients from a Wiley-Wiley model. Standard errors in parentheses.

H₀: β_{21} and β_{32} equivalent across groups (restricted)

H₁: β_{21} and β_{32} different across groups (unrestricted)

Chi-square difference test (restricted-unrestricted)

$\chi^2=10.26$; df=8

(p=.25)

(fail to reject H₀)