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# Religion and Paranormal Belief

ALAN ORENSTEIN

*This article uses a Canadian national sample to examine the relationship between conventional religious belief, church attendance, and belief in paranormal phenomena. Greater religious belief is strongly associated with greater paranormal belief. Church attendance (and other measures of religious participation) are only weakly associated with paranormal belief until conventional religious belief is statistically controlled; once this is done, greater church attendance is strongly associated with lowered paranormal belief. Together, these two religious variables explain about one-quarter of the variance in paranormal belief, making them the strongest predictors that have yet to be identified.*

## INTRODUCTION

In 1978, using a survey sample from the San Francisco SMSA, Robert Wuthnow (1978:75) concluded that “none of the usual background variables typically associated with other kinds of beliefs or attitudes shows any relationship” with beliefs about ESP or reports of having experienced ESP. “The only characteristics we have been able to examine that seem to be consistently associated with ESP in the Bay Area have had to do with religion.”

Other research has identified some consistent correlates of paranormal beliefs—particularly gender and age (Irwin 1993). Nevertheless, it remains true that there has been only limited success in describing the social location of and the social influences on paranormal beliefs and reported paranormal experiences. As for religion, it has not proven to be a very strong or a very consistent predictor.

There is evidence that members of the most conservative denominations score lowest in believing paranormal claims, while more liberal denominations score higher (Donahue 1993). However, Emmons and Sobal (1981) show that this ordering holds only for certain types of paranormal phenomena (such as ESP and clairvoyance) but not for other types (such as astrology and belief in ghosts) and that some denominations seem to violate the ordering (Lutherans being unexpectedly high and Episcopalians unexpectedly low in paranormal belief). Reviewing this literature, Irwin (1993:13) concludes that the specific religion or denomination with which an individual identifies “appears to have no bearing on paranormal belief.”

Studies of religion’s relationship with the paranormal have often been guided by the question of whether paranormal beliefs have become a substitute for (or a functional alternative to) mainstream religion. From this perspective, it is expected that people who are outside of mainstream religion will be most in need of an alternative set of ideas that can address the same kinds of ultimate questions that religion addresses (Emmons and Sobal 1981). More specifically, respondents who have no religious preference, or do not hold conventional religious beliefs, and/or do not participate in conventional religious activities should be disproportionately attracted by the paranormal.

The first of these hypotheses is that people without religious affiliations (who answer “none” when asked about their religious preference) are more likely to believe in and to experience paranormal phenomena. The available data are mixed. Emmons and Sobal (1981) found that “nones” are more likely to believe paranormal claims but the correlations were low and many were not statistically significant when background characteristics were controlled. A Texas study

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(Mears and Ellison 2000), in which purchasing New Age books and tapes is the dependent variable, found a similar pattern: “nones” were the most frequent purchasers, but not after their social backgrounds were controlled. In contrast, Wuthnow (1978) reports that compared to those whose preference is a conventional religious group, “nones” are more sure that ESP exists (40 percent vs. 32 percent) and more likely to report having experienced ESP themselves (60 percent vs. 55 percent), although the size of these differences must be considered modest. Bainbridge and Stark (1980) found that compared with other students, those with no religion were more favorable toward the occult on only three out of seven items and that the differences were only a few percentage points. Finally, Fox (1992) found that “nones” in a national sample did not report more paranormal or more *deja vu* experiences. The hypothesis that the paranormal has a special appeal for those without a religious preference has extremely limited support.

A second hypothesis is that people who hold conventional religious beliefs will be less likely to support the paranormal. To measure religious belief, Sheils and Berg (1977) present respondents with statements such as: “I think that Heaven and Hell are actual places.” To measure paranormal belief, they use statements such as: “I think it is possible for some people to communicate directly from mind to mind.” With college students as subjects, they found that the greater the religious belief, the less likely the individual is to believe in psychic events. However, using this same methodology with another college sample, Tobacyk and Milford (1983) found a more complicated pattern: high religious belief was associated positively with belief in precognition and witchcraft, negatively with spiritualism, and nonsignificantly with belief in mental telepathy, extraordinary life forms, and superstitiousness.

Contrary to the hypothesis that belief in the paranormal is an alternative to conventional religion, some studies have concluded that greater religious belief is associated with greater paranormal belief. Wuthnow (1978) compares those who “definitely believe” and “don’t believe” in God and finds that the first group is six percentage points higher in believing in ESP. Emmons and Sobal (1981), using Gallup polling data, examine 12 religious and paranormal items and find that they all correlate positively with each other “even if only slightly.” Goode (2000a) reports the same result with a college sample.

Goode (2000a, 2000b) argues that a positive relationship between religious and paranormal belief is to be expected because both belief systems violate known laws of science. For the traditionalist Christian, Goode (2000a:31) writes, it is not that much of a leap “from spirits to ghosts, from the wrath of God to King Tut’s curse, from miracles at Lourdes to psychic surgery, from the power of prayer to therapeutic touch, from angels to aliens.” Wuthnow (1978:71) also argues that there is a similarity between religious and paranormal beliefs: “ESP and religion both affirm the existence of realities beyond the mundane existence of everyday life.” Similarly, Bainbridge and Stark (1980:25) contend that “people who believe humans have souls that transcend the material world already share some of the assumptions behind belief in ESP.” Despite these arguments, the available studies do not clearly show whether religious belief is positively related, negatively related, or unrelated to paranormal belief.

A third hypothesis deriving from a functional alternatives perspective is that people who do not attend religious services will be more likely to believe in the paranormal. The evidence for this hypothesis is also mixed: Greeley (1975), Wuthnow (1976), and Bainbridge and Stark (1980) support it; a number of studies find no relationship (Sheils and Berg 1977; MacDonald 1995; Mears and Ellison 2000); and Haraldsson (1981), using an Icelandic sample, finds the opposite relationship. Some of these writers suggest that church authorities have a self-interest in disparaging paranormal claims because they fear that these claims will provide an alternative source of revelation and legitimacy that is not under the church’s control (Greeley 1975; Wuthnow 1978). This suggests that variables that indicate commitment to religious organizations should be associated with lowered paranormal belief, but if this is so, the available data do not show it very convincingly.

Finally, in addition to religious belief and religious attendance, studies have examined variables such as self-rated religiosity, the perceived importance of religion in the respondent’s life,

and even the frequency of prayer. Roughly equal numbers of studies show that greater religiosity is associated with more belief in the paranormal (Haraldsson 1981; Irwin 1985; MacDonald 1995) and with less belief in the paranormal (Emmons and Sobal 1981; Donahue 1993; Zinnbauer et al. 1997).

In sum, if religious variables are key to understanding the social basis for paranormal beliefs and experiences, as Wuthnow maintains, the available studies do not point to any clear pattern of results. Most studies have produced results that are meager in size; too many findings are based on student samples; religious variables have usually been examined without controlling for background characteristics that might show the results to be spurious; and it is extremely rare for a study to examine more than a single religious variable at a time. This article uses data from a Canadian national sample to provide a more substantial test of the connection between religion and paranormal beliefs.

### THE DATA

Every five years since 1975, Project Canada, directed by Reginald W. Bibby of the University of Lethbridge, has administered a mailed questionnaire to a representative sample of Canadians. These data (and the methodological details of their collection) are available for downloading (at no cost) through the website of the American Religion Data Archive at the Department of Sociology of the Pennsylvania State University.

This article makes use of the most recent data set available, from 1995, which included 1,765 cases. Roughly half these respondents had participated in prior surveys (including 236 who answered all five surveys) and roughly half (949) were new respondents who were selected randomly from telephone directories in 228 communities that were stratified by province and by community size. The sample is intended to describe the Canadian population within four percentage points.

The 1995 survey was 20 pages in length and focused on social issues, intergroup relations, and religion. It took from one to two and a half hours to complete. After mailing the survey instrument, sending a postcard reminder, and mailing a second copy of the instrument, the return rate was 61 percent.

### MEASURING PARANORMAL AND RELIGIOUS BELIEFS

The 1995 Project Canada survey had 18 items that sought to measure the acceptance of conventional religious teachings and paranormal beliefs. Seventeen of these items were mixed together at the same location on the questionnaire, so that it is fair to say that the paranormal was presented in a religious context. This sometimes makes it difficult to interpret individual items.

One item asked whether the respondent believes in "life after death." Is this a Christian belief or a paranormal belief? This item correlates with a question about extrasensory perception (ESP) at +0.22 but has much stronger relationships with believing in heaven (+0.64) and in God (+0.62). A second item asks whether it is possible "to communicate with the dead." This item is more strongly related to ESP (+0.36) than to either the heaven (+0.15) or God (+0.18) questions. To decide which beliefs are paranormal, their content and correlations with other items were examined, picking those items that have the lowest relationships with conventional religious beliefs.

A paranormal scale (with a Chronbach's alpha of 0.80) was constructed from six items.<sup>1</sup> Each asked: "Do you believe in the following?" Here is the exact wording:

1. ESP
2. That some people have psychic powers
3. That you have experienced an event before it happened
4. Astrology

5. That it's possible to communicate with the dead
6. That you will be reincarnated

The response categories were "Yes, definitely," "Yes, I think so," and two similar "no" responses. Combining the two "yes" categories (and excluding roughly 100 nonrespondents per item), 55.6 percent of the sample report some level of belief in ESP, 54.5 percent in psychic powers, 42.4 percent report personal experience with precognition, 29.6 percent believe in astrology, 17.7 percent in communication with the dead, and 24 percent in reincarnation. About one-third of those who agree to each item do so "definitely." These figures represent a substantial level of acceptance of the paranormal, particularly for the first three items that posit extraordinary human abilities.

A religious belief scale composed of six items (with an alpha of 0.91) was also developed. Respondents were asked if they believe in:

1. Heaven
2. Hell
3. Angels
4. God
5. That you have experienced God's presence
6. Life after death

The high rate of support for these items suggests that the term "conventional religious beliefs" is not a misnomer. Sixty-eight percent reported belief in heaven; 48.4 percent in hell; 57.9 percent in angels; 81.6 percent in God; 43.7 percent have experienced God's presence; and 66.9 percent are believers in life after death. It is important to note, as both Emmons and Sobal (1981) and Goode (2000a) found, that all the paranormal beliefs in the Project Canada survey are positively correlated with all the conventional religious beliefs. Out of 153 correlations involving 18 belief items (about half of them paranormal), only one coefficient had a negative sign and only 14 coefficients with positive signs were below +0.1.<sup>2</sup> It is on the basis of this type of pervasive association that Goode (2000a:31) argues that "having a traditional Christian background lays the foundation for many paranormalisms."

## RESULTS

### Initial Results

Table 1 provides an initial test of the three hypotheses derived from a functional alternatives perspective.

The first three rows compare Protestants, Catholics, and those who answer "none" when asked about their religious preference. The questionnaire included six additional religious categories, such as Hindu and Jewish, but only 63 respondents selected them, too few to analyze separately.

One-hundred-fifty-four respondents (9 percent of those who answered the religious preference question) were "nones." Table 1 shows that 33.1 percent of Catholics score high on the paranormal belief scale (in percentage analyses, all scales are divided into three equal groups as closely as their distributions will allow).<sup>3</sup> Among Protestants and "nones," the figures are lower: 24.9 percent and 25.3 percent, respectively. The difference between these three religious categories is statistically significant beyond the 0.01 level using chi-square. Clearly, however, the data provide no support at all for the hypothesis that "nones" will be more likely to believe in the paranormal, which is the hypothesis being tested.

The second panel of Table 1 tests whether those who hold conventional religious beliefs are less likely or more likely to hold paranormal beliefs. In the first column, 9.7 percent of those who score in the bottom group on the measure of conventional religious belief are high on

TABLE 1  
PERCENT HIGH ON PARANORMAL SCALE BY  
RELIGIOUS VARIABLES

	% High on Paranormal scale	N
A. Preference		
Protestant	24.9	904
Catholic	33.1	577
“None”	25.3	154
B. Religious belief		
Low	9.7	680
Medium	38.8	536
High	39.6	548
C. Church attendance		
Low	27.0	523
Medium	34.6	673
High	20.6	515

paranormal belief; among those who are high in conventional religious belief, 39.6 percent are high in paranormal belief (there is no difference between the middle and high religious belief categories).

In correlation and regression analyses, the full range of the religious belief and the paranormal belief scales (both with scores from 6 to 24) can be used. The correlation between the two scales is +0.35, which is statistically significant beyond the 0.01 level. Clearly, these data side with those studies that show a positive connection between religious and paranormal belief.

The third panel of Table 1 gives data on how often respondents report attendance at religious services. The nine responses, ranging from never to several times a week, have been collapsed into three categories. Those who attend religious services most often (“nearly every week” or more) are least likely to believe in the paranormal; a reversal in the ordering of the other categories weakens the relationship. The correlation between attendance and paranormal belief is small but statistically significant, at −0.10.

To summarize, Table 1 shows that people without a religious preference are no more likely to hold paranormal beliefs, that holding conventional religious beliefs is strongly and positively related to holding paranormal beliefs, and that regular church attendance is related to a reduced acceptance of the paranormal, but this effect is quite small.

Joint Effects

It should not be surprising that people who believe in religious teachings are likely to attend religious services (the correlation is +0.56 in these data). And yet, the last section showed that these two variables work in opposite directions. Conventional religious belief is strongly associated with heightened paranormal belief, while frequent religious attendance is weakly related to lowered paranormal belief. Because of this directional difference, it is possible that each of these religious variables is suppressing the effect of the other.

Table 2 examines the joint effect of religious belief and religious attendance. At each of the three levels of religious belief, higher attendance reduces paranormal belief, an effect that was less consistent and less strong when attendance was examined on its own. As an example, consider those whose views put them in the middle of the religious belief scale: high paranormal belief varies from 54.6 percent among those who rarely attend church to 31.2 percent in the middle



TABLE 2  
PERCENT HIGH PARANORMAL BELIEF BY RELIGIOUS BELIEF  
AND RELIGIOUS ATTENDANCE

	Low Religious Belief	Middle Religious Belief	High Religious Belief
Low church attendance	10.9% (459)	54.6% (216)	78.0% (100)
Middle church attendance	10.2% (128)	31.2% (173)	50.8% (120)
High church attendance	1.6% (63)	22.4% (134)	23.6% (318)

attendance group to 22.4 percent among those who attend church frequently. In other words, with religious belief held constant, there are sizable differences in paranormal belief that are associated with religious attendance.

Table 2 also shows that holding constant religious attendance, greater religious belief is associated with greater paranormal belief. For example, looking at those in the middle of the church attendance scale, 10.2 percent of the low religious belief group, 31.2 percent of the middle group, and 50.8 percent of the high religious belief group display high belief in the paranormal, another sizable result.

These effects can be presented more succinctly using partial correlations. As reported earlier, the zero-order correlation between religious attendance and the paranormal belief scale is  $-0.10$ . A partial correlation was calculated controlling for the religious belief scale. The partial correlation is  $-0.38$ . Measured by the amount of variance explained, this partial correlation is more than 14 times stronger than the original correlation. Similarly, the zero-order correlation between the religious belief scale and the paranormal scale is  $+0.35$ . The partial correlation increases to  $+0.50$  when religious attendance is controlled. This partial correlation explains twice the amount of variance as the original correlation.

Paranormal belief is strongly influenced by both religious belief and religious participation. In fact, these variables appear to be the strongest predictors of paranormal belief that have yet to be identified. However, because these variables operate in different directions, they must be examined together in order to observe their true strength.

Indicators of Religious Participation

If church attendance lowers paranormal belief, as these data demonstrate, this may also be true of other indicators of involvement in formal religious groups. Four additional tests were conducted.

A three-item religious practice scale was constructed based on how often respondents report that they pray, read the Bible, and say grace (each item uses seven responses from “daily” to “never”). Despite the small number of items, Chronbach’s alpha for this scale is 0.81. Religious practice has no correlation (only  $+0.01$ ) with the paranormal belief scale, but this increases to  $-0.33$  when religious belief is controlled. In addition, the correlation between religious belief and paranormal belief increases from  $+0.35$  to  $+0.48$  when religious practice is controlled.

A second scale (with an alpha of 0.77) could be constructed for only those respondents who identify as Protestants or Catholics ( $N = 1,481$ ). After giving their religious preference, the questionnaire asked whether the religious group they named is “important to you,” whether respondents are “deeply committed” to it, and whether they are “very involved right now.” The responses were “yes” and “no.” This measure of involvement in religious organizations has a correlation of  $-0.12$  with the paranormal belief scale. When religious belief is controlled, the

partial correlation increases to  $-0.36$ . The correlation between religious belief and paranormal belief (which is  $+0.30$  for this subsample) increases to  $+0.44$  when religious involvement is controlled.

Finally, two single items were examined. All respondents were asked: "How important is the following to you?—Religion." This is similar to the type of question that is being used by many studies to measure religiosity. This item has a correlation of  $+0.04$  with paranormal beliefs, but a partial correlation of  $-0.26$  when religious belief is controlled. The effect of religious belief increases from  $+0.35$  to  $+0.42$  after controlling for religiosity.

Respondents were also asked whether they are a member of a church or temple, with 36.4 percent indicating that they are. The correlation with paranormal belief is only  $-0.09$  but increases to  $-0.28$  after religious belief is controlled. The correlation of religious and paranormal belief increases from  $+0.35$  to  $+0.43$  after church membership is controlled.

The variables in this section are all indicators of involvement in formal religion. All these variables are strongly correlated with church attendance (these data have not been presented) and all of them show the same pattern. At the zero-order level, they have a small relationship or no relationship with paranormal beliefs. Once religious belief is statistically held constant, their effect is substantial and consistently negative: greater religious involvement or participation, as measured in any of these ways, is associated with lowered belief in the paranormal. Also, controlling for any of these religious involvement variables increases the already-strong positive association between religious belief and paranormal belief, although this increase is smaller in size.

### Organizational Memberships

If different indicators of religious participation all lower paranormal belief, as these data demonstrate, this might also be true of organizational participation in general. The argument would go like this: that the kinds of people who participate in religious activities are likely to also belong to other types of organizations, such as service and fraternal associations, political groups, and sports clubs. In these other groups, they learn the normative beliefs of their community, which are not likely to include support of the paranormal. Thus it may be their organizational involvements in general, and not specifically their religious participation, that is lowering their belief in the paranormal.

The Project Canada survey provides data on memberships in 17 types of organizations, data that do not support the arguments just advanced. First, there is no relationship in these data between number of organizational memberships and either religious belief ( $r = +0.02$ ) or religious attendance ( $r = +0.04$ ). Second, there is no relationship between organizational memberships and paranormal belief: 29.1 percent of people with no memberships and 27.2 percent of those with one or more memberships are high on the paranormal scale; the correlation (using the full range of both variables) is  $-0.01$  and does not increase when religious belief is controlled (the partial correlation is  $+0.001$ ). Third, analyses not being presented show that controlling for organizational memberships does not affect the strength of the negative association between church attendance and paranormal belief. Clearly, it is something specific about religious participation, and not just organizational participation in general, that is associated with lowered paranormal belief.

### Testing for Spuriousness

Table 3 presents a regression equation in which paranormal belief is predicted from whether a respondent is a "none," from conventional religious belief, from church attendance, and from an assortment of background variables—gender, age, a five-level measure of education attainment, whether the respondent has been divorced, and how often he or she has changed residence over the past decade. These sociodemographic characteristics had been shown in preliminary analyses to be related to the paranormal belief scale.



TABLE 3  
REGRESSION EQUATIONS FOR PARANORMAL  
BELIEFS (BETA WEIGHTS)

Regressors		
Religious belief	+0.60***	+0.53***
Church attendance	−0.43***	−0.39***
“Nones”	−0.02	−0.02
Female		+0.18***
Age		−0.07***
Education		−0.05**
Divorced		+0.05***
Moved		+0.07***
N	1,593	1,516
Adjusted R <sup>2</sup>	24.5%	29.8%

Note: Using a two-tailed test, significance levels are: \*\*\* = 1 percent;  
\*\* 5 = percent.

The adjusted variance in paranormal belief explained by the three religious variables is 24.5 percent (Column 1). Since being a religious “none” does not have a statistically significant beta weight, it is religious belief and attendance that are responsible for this strong relationship. The beta weights also show (as did the percentages and partial correlations) that conventional religious belief has a stronger relationship to paranormal belief than does religious attendance (analyses not presented show that even when a scale is formed that includes additional indicators of religious participation in order to improve the measurement of this variable, religious belief continues to have the stronger effect).

All the background variables have significant, though mostly small, beta weights. Gender has the strongest impact: using percentages and without controls, 38 percent of women and 21 percent of men are high on the paranormal belief scale. Divorced people, younger people, and people who are more geographically mobile have a slightly greater belief in the paranormal. Education has the weakest beta weight: in the zero-order data, there are no statistically significant differences between any of the education categories until attendance at graduate or professional school is reached, at which point paranormal belief declines modestly.<sup>4</sup>

Background characteristics reduce the beta weights for the religious variables by a small amount. Column 2 shows that these relationships remain strong: the effects of religious belief and religious attendance are not due to the sociodemographic characteristics of believers and attenders.

DISCUSSION

To summarize the major findings of this research: (1) people who do not report a religious preference are no more likely than others to believe in paranormal phenomena; (2) people who believe in conventional religious teachings are more likely to believe in the paranormal; (3) people who attend church frequently are less likely to believe in paranormal phenomena, although the zero-order relationship is weak; (4) both the positive effect of conventional religious belief and the negative effect of church attendance are increased when the other variable is statistically controlled, with the effect on church attendance being stronger; (5) a variety of measures of religious participation all show the same pattern of effects as church attendance; (6) there appears to be something specific about religious participation, and not organizational participation in general, that is reducing paranormal belief; (7) the positive effect of religious belief and the negative

effect of religious participation remain when other background characteristics are statistically controlled; and (8) religious belief has a stronger association with paranormal belief than does religious participation.

One implication of these results is that paranormal beliefs are profoundly religious in nature. Hardly any of the people who score low on the scale of conventional religious belief are strong supporters of the paranormal (in Table 1, only 9.7 percent). These data come close to the assertion that some amount of religious belief is a necessary condition for paranormal belief.

Much of the paranormal community is eager to demonstrate that thoughts or consciousness can have effects that do not operate through known physical processes (Jahn and Dunne 1987; Blackmore 2001). To the religiously inclined, this sounds very similar to talking about the immortal soul. It should not be surprising that people who have faith in hidden spiritual causes also have faith in hidden paranormal causes that make sense to them because of their religious beliefs.

These data emphasize the importance of religious participation in decreasing paranormal belief. Above all, this finding makes a methodological point. In many studies on paranormal belief, religion has either been represented by a single variable (such as denomination or religiosity) or by two or more variables that are examined one at a time, without any possibility of seeing their joint effect. This is the equivalent of stopping the analysis after finding that the zero-order correlation between religious attendance and paranormal belief is  $-0.10$ . Most studies have reported this type of small association, both positive and negative, while much larger relationships (if these Canadian data are any guide) were there to be found had it been recognized that religion involves a complex nexus of belief and participation and that this needs to be reflected in a more complex data analysis.

These data show that something specific about religious attendance or participation reduces belief in the paranormal, since other types of organizational involvements do not have the same effect. The data are no help in determining how this effect is being produced. It is one thing to argue, as was done earlier, that religious authorities have a vested interest in denying legitimacy to the paranormal. It is another thing to specify how religious participation manages to suppress paranormal belief among people whose religious views would seem to predispose them to these beliefs.

A particularly intriguing comparison in these data is between religious variables and educational attainment. There have been numerous calls for upgrading science education in order to combat paranormal beliefs (Eve 1991; Ede 2000). However, the effects of education are so small that it appears that values and faith rather than rationality are the driving factors in paranormal belief. Moreover, if paranormal beliefs are as closely attached to religious beliefs as these data indicate, were the schools to present a skeptical position regarding the paranormal, they would run the risk of arousing a religiously-based opposition. Some observers suggest that the legitimacy of science itself is under attack by supporters of the paranormal (Kurtz 1992).

These data have relevance to the question of whether the paranormal is a functional alternative to religion. Others have argued that if this is true, then the least religious people should have the greatest need for an alternative (Emmons and Sobal 1981). However, "nones," who profess no religious affiliation are not strong supporters of the paranormal, while it is precisely those people who hold the most traditional religious views who are the strongest supporters. These two results are not compatible with a view of the paranormal as a compensatory mechanism for something missing in the lives of the irreligious.

If interest in the paranormal is not driven by the irreligious, perhaps it needs to be interpreted in the context of contemporary religion. Commentators have pointed to the growth of a highly individualized, voluntary style of religion over the last 30 years, particularly among baby boomers (Roof 1993; Hoge et al. 1994). This style emphasizes personal choice, is ambivalent about religious authority, focuses on experiential practice and personal growth, and mixes together spiritual stimuli from different traditions. It is a style that is affecting many institutions; for example, Siahpush (1998) presents evidence that a similar style, that he calls postmodern, underlies the

use of alternative medicine. The fact that our respondents combine traditional religious teachings and paranormal beliefs and do so outside of the church suggests a type of postmodern spiritual journey. While this journey may ultimately be leading some voyagers away from established religions, the fact that they can retain core religious beliefs makes it easier for the curious to begin and to sustain the journey (Ellwood 1979).

## NOTES

1. An objection to combining different paranormal beliefs or experiences into one scale is that this “may artificially reduce the predictive power of variables that are important predictors of only one or a few of the items in the scale, and may lead to the development of faulty theoretical models” (MacDonald 1995:369). This is an argument that could be applied to many research areas, not just the paranormal. In fact, most available studies have used one or more paranormal beliefs as dependent variables rather than constructing a scale. The result has usually been small differences in the predictors for each belief, none of which the authors could explain. Combining survey items to produce a more valid measure seems fully appropriate.
2. An item on whether “some UFO’s are from other planets” appeared later in the questionnaire in an area removed from the other 17 religious and paranormal items. It produced seven of the low correlations and the only negative correlation. This may be due to either the content or location of this item.
3. Because of the distribution of cases, 42.2 percent of respondents are scored as “low” on the scale of paranormal belief, 29.9 percent are “medium,” and 27.8 percent are “high.” For conventional religious belief, the three groups include 38.6 percent, 31.1 percent, and 30.3 percent of respondents. On both scales, a missing item was given a value at the item’s midpoint (2.5); analyses show that this did not affect the results. On church attendance, 30.6 percent of respondents were scored as “low,” 39.3 percent as “medium,” and 30.1 percent as “high.” Because church attendance is based on a single item, 53 missing cases are excluded from the analysis.
4. Among respondents whose highest level of formal education is grade school, 29.1 percent have high scores on paranormal belief in the zero-order data. For the high school, technical or community college, and undergraduate college groups, the figures are 30.8 percent, 32.6 percent, and 25.3 percent, respectively. There are no statistically significant differences between these educational categories, although the percentage in the college group is a little low. Among those who attended graduate and professional schools, 19.8 percent are high in paranormal belief, which is significantly different than the other categories.

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