

ASSESSING THE IMPACT OF RELIGION: A CRITICAL REVIEW

by Gary D. Bouma

Since Max Weber, one of the major concerns in the scientific study of religion has been the question: How do different religious beliefs and moral codes affect human behavior and social structure? Can various forms of behavior be traced to the impact of religious values? Do some of the differences among various groups in this country and between whole societies stem from differences in religious belief, practice, or ethic? In this brief report, I am going to review the available evidence from American sociology which is pertinent to these questions. I must first specify my criteria for evaluating this research before presenting my assessment of our progress.

THE BASIC PRIOR QUESTION: HOW DOES ONE ASSESS THE IMPACT OF RELIGION ON HUMAN BEHAVIOR?

Determining the impact of religion involves discovering causal relationships from religious variables to other aspects of human behavior and social structure. In order to claim that *X* causes *Y*, at least three things must be known (cf., e.g., Selltiz et al.¹), according to the traditional canons of causal inference:

1. That *X* and *Y* are reliably associated. Usually this is tested by some form of significance testing.
2. That *X* is asymmetrically related to *Y*, that is, that the occurrence of *Y* is dependent on the occurrence of *X*. This is usually operationalized in terms of temporal ordering.
3. That no other known factors are responsible for *Y* when other suspected factors are controlled.

The attribution of cause is very difficult in the social sciences, primarily because the relevant variables are so often entangled and confounded with other factors. Complex situations must be decomposed into their constituent parts, and then the role of each part assessed. This is distinctive of scientific knowledge—the factoring out of the complex, entangled web of factors those which are relevant and then determining

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the contribution of each while controlling for others. Only through the carefully controlled analysis of complex situations can research determine which factors can be considered to act in a causal sense.

For example, public opinion would have it that the Supreme Court ruling against prayer in the public schools has undermined American morality by weakening the influence of religion. The scientific testing of the hypothesis that religion serves to sustain the morality of American schoolchildren demands that some decomposing questions be asked. Does religion influence morality? If so, how? Under what conditions? What kinds of morality are influenced by the type of religious practice in question? If there has been a lessening of the influence of religion on morality, is it due to the lack of public prayer in the public schools, or can it be attributed to other factors, such as the influence of the mass media, the increased level of educational attainment, or the stagnation of the church. Such questions must be asked and answered before cause can be imputed in this case. Causal inference demands that the influence of religion, if any, be detected amid the host of other factors. Unless this is done, the attribution of cause and the assessment of the impact of one variable upon another is logically impossible.

Experimental research designs provide the most dependable evidence on which to base causal inference, since they control the temporal ordering of the variables, and control for extraneous variables more reliably than other methods. Cross-sectional studies provide useful information and are often sources of causal hypotheses, which can then be tested by more reliable techniques. However, they usually fail to determine empirically the temporal ordering of the variables and are often deficient in controls for potentially confounding variables.

Another method of causal analysis using correlational and nonexperimental data is path analysis. Path analysis is a very useful method for estimating the extent of causal influence among a set of variables. However, one of the basic assumptions of the method is the ability to specify in advance a nondebatable causal ordering of the variables in the model. The Blalock-Simon technique does permit the rejection of some causal paths, provided the path coefficients are zero, but path analysis in itself does not provide a test of the validity of the causal ordering postulated by the model.

Lazarsfeld's method of multivariate analysis is very useful for determining spurious, hence noncausal, relations among variables. Again the ordering of the variables is based on temporal ordering. The primary differences between the Lazarsfeld and Blalock-Simon approaches lie in the degree of the quantification of the variables, with Lazarsfeld

focusing on contingent relations among categorical variables and Black-Simon on at least interval level data.

Therefore, given a finite set of variables, if there is a nonspurious relation between X and Y , and X preceded Y in time, then X can be said to influence or to cause Y . Conversely, if any of the above empirical criteria are not met, the claim of a causal relation from X to Y must be rejected as not proven.

A LOOK AT THE RECORD

We will now evaluate the published research of the last decade in terms of the traditional canons for establishing causality mentioned earlier. The data reported in this paper are based on a review of all empirical articles appearing in ten major sociological journals from 1960 to mid-1969 in which religion is treated in some way as an independent variable. The journals covered were: *American Sociological Review*, *American Journal of Sociology*, *Sociometry*, *Journal of Personality and Social Psychology*, *Social Forces*, *Journal of Marriage and Family*, *Public Opinion Quarterly*, *Review of Religious Research*, *Sociological Analysis*, and *Journal for the Scientific Study of Religion*. Every article dealing with religion was read; 185 articles were found which were empirical and treated religion as an independent variable. Each research design was coded according to a version of Campbell and Stanley's² paradigm. In addition, other basic information was gathered concerning the sample, methods of data collection and analysis, independent and dependent variables, propositions tested or suggested, and whether the study answered the three questions basic to causal inference. Although the results of a reliability check on the coding are not yet available, most of the results are sufficiently strong so that it would take a great deal of coding discrepancy to make much of a change in the total picture. This report does not include any monographs, or books. These are being reviewed for the larger study, of which this is a preliminary report. Thus, this report is a reasonably reliable picture of the nature of the research into the question of the sense in which religion can be shown to have been causal of some phenomenon as revealed in articles in ten major journals during the last decade.

How many articles meet the canons of causality and can be said to show the impact of religion? Of the 185 articles, five come close to meeting the criteria. Heiss³ and Kenkel et al.⁴ demonstrate that those with strong attachments to their religious group show a low propensity to religious intermarriage. This is hardly a religious variable. Burchinal and Chancellor⁵ report that religious homogamy produces marital

ZYGON

stability. They also note that this is more true of Roman Catholic than of Protestants. Clark⁶ found that the percentage of Roman Catholics in a city's population was the best predictor of general budgetary expenditures of the city. This relation persisted through all the controls he could muster. Probably the best of the five successful pieces was one by Campbell⁷ on the internalization of moral norms. By means of a semi-projective test, it was determined whether high school seniors had internalized the moral norm against drinking. A year later those students who went on to college were interviewed. It was found that internalizers drank less than noninternalizers and that they tended not to join boozing fraternities. Campbell had a carefully thought out hypothesis and good operationalization of both independent and dependent variables. He took pains to measure the relevant dimension of religion and made sure that the relevant belief was held by the subjects of the study. On the other hand, equally plausible nonreligious explanations for these findings are readily available, for example, differential habit strength between the internalizers and noninternalizers.

What are the common shortcomings of attempts to infer causality? In over half the articles, there was no statistical test of the reliability of the relationship that was claimed to exist among the variables under study. There was much reliance of "eye-ball" techniques of data analysis, that is, viewing percentage differences, or frequency distributions. No more than 10 percent used the more powerful techniques, such as analysis of variance, regression, or even correlational analysis. Unless there is some dependable evidence that the relation is indeed present, there is little point in testing for causal ordering or spuriousness.

Nearly nine out of ten articles were unable to provide any reliable indication of the ordering of the variables. Causal asymmetry is usually operationalized in terms of temporal ordering. Only a few of the studies measured the variables at two points in time; these include several studies which used retrospective reports in order to approximate a panel design. Unless the variables are asymmetrically ordered, either temporally or on some other dimension, there is no way of telling what influences what, and causal inference remains impossible.

Six out of ten research designs contained no controls, or something that could loosely be considered a control. Most that did employ controls used simply age, sex, and at times socioeconomic status. Very few controlled for any potentially relevant variables, the rejection of which would have been a useful contribution. Only rarely were attempts made to rule out alternative explanations of the relationship in question. Without controls, there is no assurance that the relationship found is not spurious. Unless alternative explanations are ruled out, the

explanation offered by the researcher remains only a possible or probable explanation. Causality cannot be inferred because it is not known whether the phenomenon in question is due to the suggested factor or to some other.

Finally, one half of the articles formulated a proposition and tested it. The other half went fishing, or accidentally hit upon a relationship. While unquestionably useful, exploratory studies are not tests of causal hypotheses. Despite this, many authors of exploratory studies jumped to causal inference regarding their findings.

Thus, out of 185 attempts to establish the impact of religion, only five come close to the criteria for causal inference. If the scientific study of religion is to make a contribution to man's knowledge of himself and of himself and of his society, it must begin to be more rigorous in its application of the logic of scientific inquiry to the study of religion. Until we test our hypotheses in accordance with the criteria for valid inference, we have an unsound basis for our statements about the impact of religion on society. What we have at this point is a set of suggested, but largely untested, hypotheses about the influence of religion. For example, we do not know that adherents of ascetic Protestantism have higher achievement motivation, greater academic achievement, higher social-economic status, and greater social mobility than Roman Catholics. Indeed, most of the studies investigating this hypothesis have found that such a relationship does not exist. Nineteen of the twenty-one attempts to establish the Weber thesis during 1960-69 denied the existence of the hypothesized relationship. This, of course, removes the need for an explanation. Until such time as the data are in, we should limit our claims for the impact of religion to the extent of our data.

A SECOND LOOK AT THE RECORD

It is conceivable, of course, that this poor record of the research into the impact of religion reflects the impossibility of meeting ideal design criteria more than it does any real shortcomings of researchers in the sociology of religion. Admittedly, it is very difficult to design and carry out a study which would yield data meeting the criteria of causal inference. It may be that at this stage of its development, the sociology of religion should be less concerned with causal analysis and more interested in simply discovering reliable patterns of relation between religious variables and other phenomena. Perhaps if we retreat from causal analysis for the moment and pull back from the pure, ideal criteria of causality, we may find that a considerable proportion of the studies make real contributions to our understanding of the way re-

ZYGON

ligion and social structure are related. Although there were no experimental designs, there may well have been successional designs, comparative designs, or cross-sectional studies employing adequate controls to yield persuasive conclusions. Such studies usually do not provide a basis for causal analysis because they fail to determine the asymmetry of the variables, or lack sufficient controls to limit alternative explanations. On the other hand, these weaker designs often enable us to establish the invalidity of a claimed relationship. Each study employing one of the above techniques will be examined as to whether it provides reliable data concerning the interrelationship of religion and social structure and behavior.

Ten of the 185 studies used a successional design, that is, the variables were measured at least at two points in time. Of the ten, four were discussed earlier among those studies considered capable of supporting causal inference. They will not be reconsidered here. Of the remaining six studies we will first look at the three which report negative findings. Glenn and Hyland,⁸ in a review of national surveys since 1940, report that any differences between the social status of Protestants and Catholics can best be attributed to the recency of Catholic immigration and the differential rural versus urban distribution of the two groups. This differential distribution is itself partially a result of the time of immigration. Greeley⁹ finds no antisecularism among recent Catholic college graduates as they select careers and graduate school programs. Gannon¹⁰ evaluated the impact of a three-month training program in religious morality given to Catholic inmates of a reformatory for young men. He found that, although there was an increase in religious attitudes and feelings, there was no change in moral attitudes. This suggests that there is no relation between strength of religious feeling and morality. The absence of a control group and substantial case mortality, however, severely threaten the validity of his findings.

The remaining three articles present evidence purporting to show a relation between religion and behavior. Lanphier's¹¹ data from a panel study showed that Catholics tend to vote for Democrats and Protestants for Republicans even when controls for region of the United States and socioeconomic status are introduced. Hamilton¹² reports that, in both 1952 and 1964, Protestants were most supportive of strong military alternatives in Korea and Vietnam, Roman Catholics less so, and Jews least of all. Finally, Lenski,¹³ in a review of a number of studies done over a period of time and in several countries, finds support for the proposition that status inconsistency is related to liberal voting. Of course, no causation can be inferred from these studies since other

explanations are legion and no particular dimension of religion is measured.

Thus, among the ten studies employing successional designs, four provide adequate bases for causal inference, and three report evidence indicating that religious affiliation is correlated with various attitudes or behavior. The remaining three produced negative findings.

Ten of the 185 studies where religious independent variables were reported used a comparative design, that is, similar observations were made on different groups at or near the same point in time. The comparisons were primarily made among western countries, regions of the United States, or between urban and rural communities. One of the eleven studies was reported in the section on successional designs.

Three studies report negative findings. Elder¹⁴ reports that, when place and region of birth, family structure, and social class are controlled, West German Protestants and Catholics are equally likely to reach secondary school, whereas American Catholics are somewhat more likely to reach secondary school than American Protestants. In another report, Elder¹⁵ notes that, in the United States, Catholic parents are more autocratic in their relationships with their children than are Protestant parents. The explanation of this finding—based upon the assumed influence of the autocratic structure and theology of the Roman Catholic church—is rendered questionable since the relation does not hold in Great Britain and West Germany. Hunt,¹⁶ in a very well reasoned article, challenges the religious explanation of Roman Catholic differentials in fertility. Using a large battery of comparative demographic data, he cites many places in the United States where the relation does not hold, and offers secular explanations for those cases where it does.

Six studies report a relation between a religious variable and another variable which held up under comparative analysis. If the four studies by Johnson¹⁷ are pieced together, they form a comparative study of the relation between ascetic Protestantism and conservative political behavior. Johnson reports that the relation holds both in Oregon and in the deep South and among both pastors and parishioners. Janowitz and Segal¹⁸ report that members of minority religious groups in both the United States and West Germany prefer liberal politics, while members of the core religious groups tend to be conservative. It is not surprising that conservative politics and conservative religious belief are associated; the establishment has frequently used religion to justify and bolster the status quo. These studies do not provide the logical base required for the inference that conservative religious beliefs produce conservative political behavior. It is more likely, as Johnson¹⁹ sug-

ZYGON

gests, that conservatism in religion and politics reflects the working of a common factor, rather than the influence of one upon the other.

Two comparative studies²⁰ report that differences in religious belief are a source of social distance. Bullough²¹ found consistent differentials by denominational affiliation in the amount of powerlessness felt by both urban and suburban blacks.

In a comparative study in Indiana, Nevada, and Denmark, Christensen²² reports that couples married in a church ceremony were less likely to have been premaritally pregnant than those married in a civil ceremony. He argues that having a church wedding is an indication of the role of religion in a person's life. It is quite possible, of course, that this relation between type of ceremony and likelihood of being premaritally pregnant can be explained by factors other than the role of religion in the morality of youth. The premaritally pregnant may be anxious to avoid the potentially moralistic clergyman and public exposure of formal weddings.

A few cross-sectional studies are notable for their careful use of controls. They go beyond simple controls for age, sex, and socioeconomic status and often include a more refined measure of the religious factor. There were six such studies. Two of the six report negative findings concerning the relation between Protestant religious affiliation and social mobility or early scientific creativity. The four remaining studies, using extensive statistical controls, report that high religiosity is associated with low militancy among blacks; that the greater the religious commitment, the greater the resistance to allowing induced abortion; and (two studies) that Roman Catholics tend to vote for candidates of the Democratic party. Relationships which survive the controls employed by these studies are reliable as far as they go. Of course, any variable not explicitly controlled remains a potential explanatory factor.

Finally, three studies used precision matching as a means of control. Freedman, Whelpton, and Smit²³ report that the distinctive pattern of Roman Catholic fertility cannot be completely explained by socioeconomic factors. Allen and Sandhu²⁴ found that low strength of religious feeling strongly differentiated a group of imprisoned delinquent boys from a matched group of unimprisoned boys. Heiss²⁵ reports data relating to the effect of intermarriage on marital dissatisfaction scores. As with other studies, anything not explicitly controlled by matching or some other technique remains a potentially explanatory factor.

Thus, by relaxing the demands and lowering the level of inference, sixteen studies were found which report a reliable relation between religion and some other social variable. Earlier, five studies were found

that met the canons of causal inference. The other 164 articles which claim to use religion as an independent or explanatory variable either report negative findings or do not employ sufficient controls of comparisons to produce valid conclusions. Many of these are exploratory studies. The relationships they uncover are useful, in that they may suggest causal hypotheses which can then be tested by the appropriate technique. But it must be remembered that the jump to explanation requires testing well-formulated hypotheses in suitable research designs; little of this research has reached that stage.

This report on the extent and quality of the evidence purporting to demonstrate the impact of religion on social structure and behavior is very disappointing. Less than 12 percent of the articles read report data which reliably relate religion to some other variable. Perhaps the low return is due to the morbidity of formal religion. An extensive and rigorous inquiry into the impact of religion may show religion to be rather more reflective of changes in society than influential in change. The product of all this research on religion suggests that our definition of religion and operationalizations of the religious variable are at best imprecise and may miss the point entirely. This review has uncovered precious little evidence to support the hypothesis that religion is an influential force in American society, or that religious beliefs and values influence behavior. The questions raised at the beginning of this paper cannot now be answered.

NOTES

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ZYGON

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11. Michael C. Lanphier, "Voting of Catholics: The IPP Revisited," *Sociological Analysis* 28 (1967):1-13.
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