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PSYCHOLOGY OF RELIGION

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CONTENTS

Since this is the first review of the psychology of religion to occur in the *Annual Review of Psychology* series, the paper's first section relates the prominence of psychology of religion in early psychology, notes the decline of interest in it, and outlines the rebirth of attention in recent years. Also considered are possible explanations for this set of changes.

Some research on religion has occurred within other areas of psychology, and samples of such areas are noted in the second section. Other research has focused on religion per se, including mysticism, religious development, and the relationship of religion to prejudice, psychopathology, and other vari-

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ables. These studies are reviewed in the third section. The last section of this review suggests how research on religion might be appropriate to the discipline of psychology.[1]

THE SHIFTING FORTUNES OF THE PSYCHOLOGY OF RELIGION

A Brief History

The "founding parents" of American psychology were deeply interested in the psychology of religion. William James's *The Varieties of Religious Experience* (James 1902) was of major importance when it first appeared and as an acknowledged classic is still widely read (Gorsuch & Spilka 1987). G. Stanley Hall was also interested in religious phenomena. In addition to being the first PhD in psychology and the first president of the American Psychological Association, he also established a journal on religious psychology that survived until 1915. Hall's concern with religion can also be seen in such articles as "The moral and religious training of children and adolescents" (Hall 1891).

The era also saw a number of major research studies published. People such as Starbuck (1899) and Leuba (1912) conducted massive studies involving thousands of people to establish such facts as the modal age of religious conversion.

While Hall's journal died in 1915, psychology of religion continued as an active area for another decade. But from 1930 to 1960, psychology of religion was almost extinct.

In 1959 the *Review of Religious Research* was started by the Religious Research Association. This "review" principally publishes empirical research, and the sponsoring society includes people employed by religious organizations to do basic and applied research. In 1961 the Society for the Scientific Study of Religion—composed principally of sociologists but with some psychologists—began publishing the *Journal for the Scientific Study of Religion*, and that journal continues to be the preeminent one for scientific investigations of religion; it functions identically to APA journals (e.g. blind

[1]Here I review studies upon which the current psychology of religion is based—principally studies in English of Protestant Christians. Hence "Christianity" could be substituted for "religion" throughout this discussion. Psychology always hopes that the principles found operating in one population will generalize to other populations, but this is not necessarily so. Being intrinsically committed to Protestant Christianity may produce relationships radically different from those produced by intrinsic commitment to another set of religious norms. Psychologists from other cultures and anthropologists (e.g. Heelas 1985) may be instrumental in distinguishing the psychology of American Protestantism from the psychology of other religions, and in helping us find conclusions that generalize across several religions.

reviews, 80% rejection rate, etc). At the time of the founding of these journals, it was still rare to see articles on the psychology of religion in the major psychological journals—one of the reasons the new societies were founded. With the establishment of Division 36 of APA, Psychologists Interested in Religious Issues, the psychology of religion is considered to have come of age; it now has a home within its parent organization (Sexton 1986).

There is considerable contemporary activity in the psychology of religion. The activity has produced major bibliographies (e.g. Capps et al 1976; Summerlin 1980; Vande Kemp 1984). Major summaries of the literature in the psychology of religion can be found in Argyle & Beit-Hallahmi (1975), Batson & Ventis (1982), and Spilka et al (1985a). More introductory treatments include Meadow & Kahoe (1984) and Paloutzian (1983). It has also led to what seems to be the inevitable book marking continuing activity in a substantive area: *Advances in the Psychology of Religion* (Brown 1985).

The current activity should not, however, be interpreted to mean that the psychology of religion is well integrated within psychology in general. As Ruble (1985) notes, introductory texts for the psychology of religion generally ignore the existence of religion itself. And when religion is considered, treatment is usually brief and seldom bears any relationship to the accumulating empirical studies of religion. As noted below, much material exists that could be included at this level, both about the relationship of religion to other areas of psychology and about the study of religion per se.

Theories Regarding the Decline and Rebirth of Psychology of Religion

American psychology has developed steadily since its founding, but the psychology of religion has not. What is different about this area of psychology? Does its phoenix history have implications for understanding the appropriate study of religion by current psychology?

THE SCHOLARLY DISTANCE HYPOTHESIS This hypothesis was developed principally to explain why people in the social sciences are less religious than those in the physical and natural sciences (e.g. Beit-Hallahmi 1977). Teaching investigators to study people objectively, it suggests, produces both a lack of personal commitment to such things as religion and a lack of interest in studying them. The decline in interest in the study of religion might thus result from a coming to preeminence of psychologists taught to distance themselves from religious phenomena. But while this hypothesis could account for the decline of interest in the psychology of religion, it fails to account for the rebirth of interest in this area.

THE PERSONAL RELEVANCE HYPOTHESIS A hypothesis could start from the fact that psychologists are less likely to be personally involved in a religion than are other academics, including physical scientists (Beit-Hallahmi 1977). Since psychologists find it irrelevant to their own lives, they may be inclined to assume that religion is irrelevant to other people's lives as well. If so, then studying religion would seem a waste of time.

A further development of this hypothesis would suggest that nonreligious people choose to enter psychology as a way of helping others. But religious people with the same concerns would enter theological studies or the ministry, thus leading to their underrepresentation in psychology. Such a process of self-selection could account for the decline in the study of the psychology of religion, and it might explain the initial rebirth in the area, for that occurred after the 1950s, a decade in which religion became more prominent in the United States. But the psychology of religion continued to develop from the 1960s till now even though mainline religious groups suffered a major decline during part of that time.

THE "BACKLASH" HYPOTHESIS Sexton (1986) has documented the interaction between Roman Catholics and psychology. She shows that many Roman Catholic leaders had a negative reaction to psychology. It is probable that such a "backlash" occurred in Protestantism as well. These religious people had deemed human development and interaction to be primarily a matter of religion and saw the new science of psychology as encroaching upon their area. Such a concern would cause the withdrawal of religious people from the area of psychology as suggested in the previous theory. However, as an explanation of the decline and rebirth of the psychology of religion, the backlash hypothesis has an advantage over the previous one. It suggests that some Catholics and Protestants became psychologists themselves and interacted with the religious leadership, causing the leadership to believe that the threat from psychology was not as great as the threat from ignoring it. Hence the rebirth of interest in the psychology of religion might have resulted from a decrease in the backlash as religious leaders came to terms with psychology. This resurgence of acceptance led to establishment of such groups as the Catholic organization that was a precursor of Division 36 of the APA and to the founding of the Graduate School of Psychology at Fuller Theological Seminary.

THE COMING OF AGE OF PSYCHOLOGY HYPOTHESIS A number of similar areas in psychology experienced decline and rebirth at approximately the same time as the psychology of religion. The course of cognitive psychology has parallelled that of the psychology of religion. I have suggested elsewhere (Gorsuch 1986) that both courses are functions of the same general movement, namely, the coming of age of psychology as a separate discipline.

The coming of age hypothesis suggests that psychologists from World War I to World War II turned away from both the psychology of religion and cognitive psychology because these resembled the discipline psychology was leaving: philosophy. During that period the study of anything that resembled philosophy was strongly discouraged in order to help psychology establish its separate identity as a science; hence psychology shifted from the study of mind and spirit to the study of behavior. But by the 1960s, psychologists had generally been trained after psychology was established as a discipline and so did not feel that the boundaries of psychology needed to be defended by eliminating topics resembling philosophy. Considerations of the activities of the mind—including both cognitive psychology and the psychology of religion—again became permissible topics, and both were reborn.

These hypotheses about the changing fortunes of the psychology of religion are based upon the personal concerns of psychologists. For example, the personal relevance theory and the coming of age theory both imply that psychologists have, for reasons unique to them as persons, often overlooked religion. The former posits that psychologists who are not religious themselves are not interested in finding out why others embrace religion, possibly because such discoveries might threaten their own personal noninvolvement. The latter suggests that psychologists may have restricted the area of psychology to prevent being personally misunderstood as philosophers rather than scientists. If such personal dynamics influence the relationship between psychology and religion, some problems in the psychology of religion may arise from psychologists' world views, a point to which I return below.

Is Religion An Important Psychological Variable?

Since psychology has functioned for a number of years without studying religion, it is reasonable to ask whether recent analyses have found evidence that religion is a variable worthy of mainstream research. Reviews that collate information on the relationship of religion to several psychological topics are available (e.g. Argyle & Beit-Hallahmi 1975; Spilka et al 1985a). In keeping with the behaviorist orientation of psychology for the past 50 years, these reviews concern either attitudes deemed directly relevant to behavior or behavior itself. Religion relates consistently to, for example, reductions in use of illegal drugs, in prejudicial attitudes, and in nonmarital sexual behavior. In areas such as these it is now apparent that psychological analysis is incomplete unless it includes information on the religiousness of the people being studied and how that affects the focal behavior.

Granted that religion is an important variable in people's lives, it could be argued that it is a part of sociology rather than psychology. Certainly religious institutions have been and remain a central focus in sociology. But to say that religion is only relevant to sociology would be to deny the impact of the internalized beliefs, attitudes, and values characteristic of religious people.

Such distinctive characteristics must be part of psychological analysis. Of course, sociological analyses may help us understand why particular beliefs, attitudes, values, and practices are found in particular religious people at a particular point in culture and history, but once they are within the life sphere of the individual they are legitimate psychological data.

But perhaps it is not necessary to demonstrate the importance of religion in people's lives. Psychology is a science, and any area within its general domain is legitimate for investigation. The results of such investigation vary in relevance according to the situation, and the relevance of a line of research may not become apparent until years later. Knowledge about religion is as worthwhile as any other addition to the knowledge base of psychology.

RESEARCH ON RELIGION WITHIN OTHER PSYCHOLOGICAL AREAS

While religion may not be the focal point of an investigation, religion as a variable may be included within a study for a variety of reasons. For example, religion may be an easy area in which to collect data to test a basic theory. Or it may be that it is gathered as one of the "background variables," as are age and social class. This section touches upon research in several areas of psychology that have included religion in such a manner. (The current section differs from the next one in that the latter reviews research where religion has been the focal point of the study.)

It is difficult to review the general psychological literature with regard to religion. Studies often include religion as a nonfocal variable without indexing it in abstracting systems. And since religion is nonfocal, studies seldom reference prior studies in the same area or focal studies of religion by which they might be retrieved through a citation search.

The difficulties can be illustrated from a review I conducted (Gorsuch & Butler 1976). Since the review was on substance abuse, we ran the indexing and citation searches accordingly. In examining the resulting articles, the variable most often included was religion, which correlated significantly with substance abuse. But these studies had not been indexed under religion. No one reviewing religion would have found them.

Therefore instead of being definitive, this section is illustrative. It notes the literature I have happened across in social psychology in which religion was included as a variable. It will probably illustrate the major possibilities and problems of other areas as well.

Attitudes and Behavior

Religious variables have been used for basic research on attitudes. Thurstone researched his equal-appearing-intervals method of attitude measurement with religion. Indeed, a set of scales (subsequently ignored) were developed by

Thurstone & Chave (1929) to cover the many facets of religion. This tradition of using religion to investigate basic attitude scaling was followed by Fishbein & Ajzen (1974). This study included religious attitude scales developed by several methods: Thurstone equal-appearing interval, Likert summative scaling, Osgood semantic differential technique, Guttman scaling, and self-rating. All these techniques correlated at the maximum allowed by their reliabilities, and hence the various attitude scales give the same result. One conclusion for the psychology of religion is that we need not be concerned with which of the well-established methods of attitude scaling is employed. A further conclusion, reinforced in the psychology of religion literature noted below, is that a single self-rating item can do as well as a traditional multi-item attitude scale when it comes to measuring religion.

Religion was also used by Fishbein & Ajzen (1974) to document a principle of central importance to social psychology. It has been known at least since Hartshorne & May (1929) that attitudes correlate only .2–.3 with an individual behavior. This has been a continuing embarrassment to a social psychology that defines itself as primarily concerned with behavior.

The study by Fishbein & Ajzen (1974) identified a condition that leads to a strong correlation between religious attitudes and religious behaviors. They had 100 self-reports of religious behaviors as well as religious-attitude scales. When they correlated the religious-attitude scales with any individual behavior, the median correlation was .14; but when they correlated the religious-attitude scale with the sum of 100 religious behaviors, the median correlation was .64, a value almost as high as it could be given the reliability of the scales. Religious-attitude scales are seldom about one behavior in one situation; rather, they measure aggregated attitudes toward aggregated religious behaviors. Hence they will predict aggregated religious behaviors. Fishbein and associates then moved into proving the corollary of this, namely, that to predict individual behavior in a particular situation one needs attitudes that match that behavior in terms of setting, time, and other such variables. While not using religion in these studies, they have nevertheless shown the principle clearly (Fishbein 1980). A literature review (Rushton et al 1983) has documented this *aggregation principle* in numerous areas of psychology. In order to predict a number of behaviors, one needs attitudes or other such scales that cut across the breadth of all of the behaviors to be predicted. To predict an individual behavior in a particular situation, one needs scales as specific as the behavior to be predicted. While we do not yet know how to move from aggregated to specific behavior, it is apparent that this principle must always be taken into account when designing any contemporary study involving a religious attitude or value and behavior.

Rokeach (1973, 1979, 1984) and Scott (1965) have both measured religion as a value. Rokeach subjectively analyzed a wide range of writings and derived his instrumental and terminal values therefrom. One of these is the

item "salvation," which is then used to represent religion (even though it "pulls for" a conservative and personally oriented type of religiousness). Scott utilized an empirical method to determine what values college students held, among which was religion. His scale defines religion more broadly than did Rokeach but also measures values rather than attitudes. In the case of Rokeach, value is defined as that which is important, and in the case of Scott it is defined as that which one finds admirable. Considerable work has been done with Rokeach's scale, and every such study therefore has some data on one aspect of religion, namely, the item salvation.

Social Attitudes and Behavior

Research has considered religion in the context of other social-psychological variables. One fairly long tradition has considered the dimensionality of a number of social attitudes, of which religion is one. Ferguson (1939) was one of the first of that tradition and has been followed by Eysenck (1953, chapter 10), Wilson (1973), and Kerlinger (1984). The conclusion is that religion is often a part of a general second-order "conservative" factor, where conservative is defined as supporting traditional democratic culture and opposing socialist/communist cultures. These studies do not, however, account for either religion or conservatism in terms of the other and, due to their high level of aggregation resulting from such broad factors, can only be expected to predict highly aggregated behavior.

Social psychologists also often include religion as a nonfocal variable when they study sex. They conclude that the frequency of sexual intercourse among married couples is the same for religious and nonreligious people. However, the religious people have been involved in premarital and extramarital sex at a rate approximately half that of the nonreligious people (Spilka et al 1985a:60–264).

In the area of drug abuse and alcohol use, one also finds major differences between the religious and nonreligious. Religion is one of the most consistent correlates of drug noninvolvement (Gorsuch 1980; Spilka et al 1985a:64–270). In alcohol use, differences are also found across denominations, with those traditionally opposed to alcohol using it less; all denominations use less alcohol than the nonreligious. Of those who *do* drink, the religious abuse alcohol *less* than do the nonreligious [a widely quoted finding to the contrary has never been replicated even when a sample was drawn by identical methods by the same organization and analyzed using the same items (Gorsuch 1976)].

Critique

In most of the areas referred to above, religion has been a nonfocal variable and so has been measured at a primitive level despite the Thurstone and

Fishbein uses of religion in attitude scaling research. There has been heavy reliance upon either religious membership or religious preference as a single-item measure of religiousness. The fact that such measures combine the religiously inactive who have behaviorally rejected their faith with the religiously active suggests that they are relatively insensitive. (Research with more differentiated variables underscores that these variables are indeed relatively weak.) Despite mediocre measurement, large differences were still found in areas such as substance abuse and sexual behavior.

Better measurement is available for inclusion in studies when religion is a nonfocal variable. Two or three items, such as church attendance and religious preference, can give considerably more sophisticated measurement at virtually no extra cost in data collection or analysis. (See Gorsuch & McFarland 1972 for examples of such items.)

Another shortcoming of the studies including religions as a nonfocal variable is that the studies themselves have not taken religion seriously. Of course the fact that religion was originally included as a *non*focal variable suggests that the authors had no direct hypothesis regarding it and, thus, before the studies started, no reason to take the variable seriously. Unfortunately, the studies have often not taken religion seriously even after it has been empirically found to be a major variable. For example, when Gorsuch & Butler (1976) reviewed substance abuse, they found religion to be the most consistently replicated correlate of nonabuse. It was not unusual to find religion the most significant predictor in the study and yet have it ignored in both the discussion and the abstract. At that time not a single study had considered religion per se. Certainly any variable found to be a consistent predictor should be a focal point for discussion and new research, and yet religion continues to be ignored in studies of drug abuse (Gorsuch 1980) except for an occasional article in the psychology of religion (cf Perkins 1985).

ACTIVE RESEARCH AREAS

The Nature of Religion

Studies using religion as the focal dependent variable have little problem finding a scale. Instead the problem is of selecting among the many candidates. Chave (1939) extended the work with Thurstone by publishing 52 different measures of aspects of religion. Strommen et al (1972) have published 78 different scales, which represent almost every concept that others had attempted to scale before them, with factor analyses showing their interrelationships. In addition, there are scales particular to certain lines of research, such as analyses of concepts of God. These scales have been found to have reasonable reliabilities and validities (Gorsuch 1984).

There is little pressure in the psychology of religion towards one universal

definition of religion. Instead religion is viewed as multifaceted, with facets that often interrelate. The facet most critical to the line of research being conducted is chosen for measurement. Of course, the reader must not assume that the results apply to other specific definitions of religion.

Generally, religion scales intercorrelate, and some can be considered interchangeable for exploratory purposes. But a scientist may need more specific data, and then particular religious scales, which only correlate moderately with each other, can be used to tap into different aspects of religiousness. Thus there tends to be a factor of religious conservatism/fundamentalism that is distinct from the factor of traditional Christianity. Likewise a separate factor of individualism (as opposed to institutionalism) can be readily found.

The most empirically useful definitions of religion so far are the intrinsic (*I*) and extrinsic (*E*) concepts introduced by Allport. Allport defined intrinsic religion as religion that serves as its own end or goal—i.e. as a terminal value. Extrinsic religion is used in the service of other goals and needs—i.e. as an instrumental value. Operational definitions of these constructs were given by Allport & Ross (1967) and have resulted in a generally useful scale (Gorsuch & Venable 1983; note that item 1 in the appendix is mislabeled as an *E* item, when it is actually scored as an *I* item). Donahue (1985) provides an overview of the research using *I* and *E*.

An approach to measuring religion that has seldom been used is that based on beliefs. Despite the fact that most religions make truth claims, religion itself is generally seen by psychologists as motivational. Cattell (Cattell & Child 1975) sees religion as a sentiment subsidiary to basic drives. Spiro (1966) sees religion as based upon needs which, having little other mode of satisfaction, are satisfied through religious activity. Psychologists of religion have been conceptualizing religion in terms of attitudinal measures, thus implicitly agreeing with such positions. However, it is apparent that many religious leaders see religion as based upon a certain understanding of the world—that is, upon beliefs about the nature of reality. Since beliefs have been critical in the thinking of many religious leaders, it would seem useful to examine beliefs specifically as a further development within the psychology of religion.

Religious Experience and Mysticism

Personal religious experiences involve encountering transcendence, and may also meet the criteria for mystical experiences (i.e. may be noetic, ineffable, holy, positive, and paradoxical) (Hood 1973). Several factors leading to such experiences include personal discontent and its resolution, on the one hand, and situational factors, on the other. The latter might be religious symbols and imagery or an unusual situation that confronts one in a unique way. For example, people report mystical experiences when they find encounters with

nature either unexpectedly easy or unexpectedly difficult. Hood in Spilka et al (1985a, chapters 7 and 8) summarizes this line of research.

Religious Development

Several theories of religious development have continued to be of interest although research based upon any one of them has been sporadic at best. The theoretical approaches include projection theories, socialization theories, and cognitive-development theories.

Projection theories have been principally investigated using concepts of God and concepts of parental figures. This line of research has produced negligible results for two reasons. First, the correlations have been low even when they are significant and, second, they suffer from a methodological problem. Concepts of "good beings" are by definition highly similar. The correlation between the "good parent" concept and a concept of God (also presumably judged as good) is thus artificial. Within a general domain, any two elements that both meet a criterion of good will by definition correlate (Spilka et al 1985a:80–82), a suggestion supported by Schoenfeld (1987). Kirkpatrick (1986a) suggests that projection theories are so loosely defined they provide inadequate theoretical basis for research, and I concur.

The socialization approach to religious development investigates the impact upon the individual of others in the psychological field—namely, parents, teachers, and peers. The research finds correlations between parents' and children's approaches to religion. For example, parents' approach to religion correlates highly with children's attending parochial school, as does parents' religiousness with the religiousness of children's peers. In fact it has been methodologically difficult to establish whether children's religiousness is affected by factors other than religiousness of their parents. The correlation between children's religiousness and parochial school attendance may result from parents' choice of a school, or that between children's religiousness and the religiousness of peers may result from parental pressure to select certain types of peers; hence these correlations may not indicate causation (see Spilka et al 1985a, chapter 4).

Cognitive developmental approaches have been used to understand how children's views of, for example, prayer, God, and historicity change as they grow up. The conclusions are basically in keeping with the Piagetian approach: Young children view religion concretely whereas teenagers approach the materials more abstractly and symbolically. A methodological problem has plagued this developmental research: Studies of religious development have been sporadic and cross-sectional. Few advances will be made in this area until longitudinal and experimental approaches are brought into it.

Religion and Social Behavior

Studies of how religion affects prejudice or pro-social behavior are summarized in Batson & Ventis (1982, chapter 8) and Spilka et al (1985a, chapter 11). The area continues to be an active one, marked by varying interpretations of socially relevant variables.

Research relating religion to social behavior first centered upon prejudice toward minorities. This line of research began shortly after World War II and was the area in which Allport first conceptualized the intrinsic/extrinsic distinction. Gorsuch & Aleshire (1974) summarized that line of research in a metaanalysis. Their conclusions were:

1. Active church members were among the least prejudiced in society, and inactive church members were among the most prejudiced in society.

2. Religious behavior such as church attendance is curvilinearly related to prejudice, with the most prejudiced being those who are peripherally involved in religion and the less prejudiced being those who are heavily involved.

3. Those with an intrinsic orientation towards religion are relatively unprejudiced, whereas those with an extrinsic view are relatively prejudiced.

The Batson et al (1985) summary of the research supports the same conclusions.

Several variations upon relating *I* (i.e. intrinsic) and *E* (i.e. extrinsic) religiousness to prejudice have been noted recently that may be useful in understanding why *E* relates to variables such as prejudice. Kirkpatrick (1986b) shows that the *E* scale consists of two factor-analytically distinct subscales, along with some miscellaneous items. One subscale groups personal items (called here E_p) whereas the other groups items with a social orientation (labeled E_s). A further development is to look more closely at the interaction formed by the intrinsic and extrinsic scales—what Allport & Ross (1967) called the indiscriminately proreligious (high on both scales) versus the indiscriminately antireligious (low on both scales). The current recommendation for measuring the indiscriminately pro- and indiscriminately antireligious attitudes is to rescale the scores on *I* and *E* (dividing by the number of items in each scale) and then multiply the two scores together (i.e. $I \cdot E$). A high score can then only occur if a person is high on both scales, a low score if low on both. Following Kirkpatrick's distinction of E_p from E_s, there would be two such interactions—$I \cdot E_p$ and $I \cdot E_s$. In addition to the $I \cdot E$ approach, Pargament et al (1987) have made substantial progress in developing another direct measure of indiscriminate proreligiousness as well. The usefulness of E_p, E_s, and $I \cdot E$, or of the Pargament measure in further theory and research has yet to be explored, but this is currently considered the cutting edge in the utilization of these scales.

Batson has also suggested that a "quest" dimension be added to the intrinsic and extrinsic ones (e.g. Batson 1976; Batson & Ventis 1982). He has meas-

ured this through factor analysis in which his Interactional Scale loads a separate factor from several measures of *I* and *E* (Batson & Ventis 1982, chapter 5). The quest factor is problematic. Its reliability is low when measured by the Interactional Scale, the factor's only unique defining variable. For example, Snook & Gorsuch (1985) found an internal consistency reliability of .2. The fact that quest occasionally correlates at a low level with some other variable despite the low reliability probably means that one or two of the scale's items relate. Such a correlation should be followed by relating each item of the Interactional Scale to the other variable. However, this has seldom been done. (Batson's scoring of quest as a factor scale does, of course, preclude such subdividing of the items, and so is not recommended.) Until studies accrue that use more reliable measures of quest, such as that recently developed by Kojetin et al (1987), few conclusions can be theoretically meaningful.

With regard to the relationship of religiousness and pro-social behavior, Batson et al (1985) note that the literature consistently shows that (*a*) religious people report more helpfulness towards others (1985, p. 198) and (*b*) more religious people help others, owing to the institutionalized help programs provided by religious organizations (1985, p. 205). Spilka et al (1985a, p. 286) generally agree with this but point out that these studies are all correlational and hence cannot be interpreted causally.

A debate continues over interpretation of the relationships between religion and pro-social behavior. The interpretations have generally used terms from social psychology that have both operational definitions and judgmental overtones. For example, an investigator might borrow from Asch's (1951) conformity research the definition of conformity as one person following the suggestion of another (a confederate of the experimenter) in contradiction of his/her own perceptions. That definition might then be used to interpret a finding in research on religiousness and helping behavior. The finding might be, as Darley & Batson (1973) suggest, that religious people who stopped to help another could be divided into two groups. The first would contain those who, having heard the person they had stopped to help (the experimenter's confederate) suggest that no help was needed, quickly hurried on. The second would comprise those who, despite the confederate's statement, held to their own perception of the situation and persisted in helping. The first group could be interpreted as more "conforming." Such an interpretation accords with the definition of conformity found in the Asch studies and is consistent with the report of Darley & Batson (1973).

Readers familiar with the line of research begun by Darley & Batson's study have probably noted an anomaly: No investigator in this area has utilized an interpretation of conformity. Instead Batson (e.g. Batson & Ventis 1982; Batson et al 1985) has used another term from the social-psychological

literature. He suggests that religious people who try to help a person they perceive to be in need despite a denial of that need are responding in a "socially desirable" manner. The conformity interpretation for the nonhelpers, an equally legitimate one, is not considered by Batson. I suggested it above not because I believe it is the appropriate interpretation but rather to point out how readily multiple value-laden terms such as "socially desirable" can be applied.

Research studies do not answer the kinds of question that some would like psychology to answer, such as whether "religion is on our side." That question can only be answered if one has already theologically or philosophically defined what it means "to be on our side," and then the result is usually tautological. Moving from simple descriptions of results to value-laden interpretive terms moves the discussion from psychology into philosophy.

Batson and associates have continued to test whether the intrinsically motivated religious person is interested in "socially desirable" results (see Batson et al 1985 for an overview of these studies). Intrinsic motivation, *I*, correlates with a set of self-reported helping behaviors but has not been found to correlate with specific helping behavior. Thus, for example, religiousness did not correlate with attempts to help in experiments where subjects had reason to believe a person in a neighboring room might have been injured by a falling ladder (Annis 1975, 1976). Batson heavily weights this *lack* of a statistically significant relationship between aggregated religious scores and a specific behavior. However, given the aggregation principle noted above, we must reconsider those studies. One seldom finds that any aggregated variable relates to an individual behavior, because the level of aggregation is inappropriate. Hence all studies comparing a religiousness scale to an individual behavior must be discounted, and cannot be used to suggest that the intrinsically motivated person says one thing and lives another. Only when those studies are redone with appropriate situationally specific variables or aggregated behaviors [following, for example, models like Fishbein's (1980)] can any conclusions be drawn on this topic.

A second line of evidence suggested by Batson has been the correlation of *I* with scores on a social desirability scale. Watson et al (1986), however, show that such correlations seem to be a unique function of only the Crowne & Marlowe (1964) measure of social desirability, which they hold to be confounded by religiously relevant content. Spilka et al (1985b) found no relationship between *I* and several measures of social desirability.

Batson uses the social desirability data to infer that intrinsically motivated people only appear low on measures of prejudice because this is the "socially desirable" thing to do. However, there is research evidence against this interpretation. Gorsuch & Aleshire (1974) did a metaanalysis of the work on this correlation and found two relevant facts. First, the date of the research—

and the years varied from the late 1940s to the early 1970s—was unrelated to the findings. Second, the region of the country in which each study was done was unrelated to the findings. These facts are important because the social desirability of a nonprejudiced position varied greatly across those years. In the 1940s and early 1950s, prejudice was socially desirable, particularly in the South. Hence if Batson is correct, early studies using church attendance or other such variables should have found that highly religious people were more prejudiced. However, that was not the case: the results in Texas, for example, showed the highly religious to be less prejudiced.[2]

One trouble with the notion of social desirability is that the question "Desirable to whom?" has gone unanswered. For example, is it to be desirable according to the values of anyone with whom one is in contact or according to the values of society at large? Discussions often ignore the technical literature that suggests multiple definitions are appropriate (e.g. Spilka et al 1966; Watson et al 1986) and that Protestants show little social desirability shift even on topics of central importance to them and society (Charters & Newcomb 1958). It should also be noted, in fairness to Batson and his associates, that Batson includes important modifiers of the position, pointing to considerable evidence on the other side of the argument (e.g. Batson et al 1985, pp. 204–5). This dialogue in the literature does suggest, however, that terms such as "conformity" and "social desirability" seem less than helpful in developing scientific understandings of religion. Instead these terms produce discussions in the area of moral philosophy, not empirical questions.

An interpretation that intrinsically religious people (*I*'s) are trying to follow the internalized norms of their group is consistent with the past literature. American Christianity has contained a theme of the equality of all people, and those who are most involved in it–the high attenders and intrinsics–attempt to carry out that theme. But the fact that they primarily adhere to their group's norms is underscored by Snook & Gorsuch (1985), who investigated the relationship of religion to prejudice in South Africa. The Dutch Afrikaans church's documents have long contained strong theological statements supporting segregation of blacks and whites. Afrikaaner *I*'s were found to be more prejudiced than the non-*I*'s, and thus met their group's norms. The norms of the *I*'s have gone unexamined to date because existing studies have treated a relatively homogeneous culture, principally American Protestantism, and so there was no variation in the norms to raise the question.

[2]I feel such an interpretation has lingered on in the journals only because today's young psychologists did not live through that era. For one such as myself who was involved in church work and the civil rights movement during that period, the losses to the church in terms of finances and church membership because of the pro-integration stance of most religious denominations were obvious. Few in the ministry saw favoring integration and being nonprejudiced as socially desirable in the eyes of their congregations until at least the late 1960s or early 1970s (e.g. Thomas 1985).

The problem of interpretation of the relationship of religion to a scale normally seen as undesirable occurs in another area: the positive correlation between religiousness and the MMPI Lie scale. Francis (1985, pp. 179–80) summarizes that literature. The Lie scale consists of a number of peccadillos the authors assume everyone will have engaged in and will report if they are honest. The authors note that people vary on the degree to which they have committed these peccadillos; lying is indicated by a threshold score. But studies relating religion to lying ignore the need to use a threshold score. Such studies generally conclude that religious people lie more because their L-scale scores are higher but do not test if they are above the threshold. Richardson (1985, pp. 214ff) reports that Wolfgang Kuner (who replicated the correlation) concluded that it is appropriate for religious people to have a higher L-scale score because they control their behaviors more than others do. This is, of course, in keeping with the evidence noted previously that religious people report a higher level of personal morality. It seems that most who interpret this correlation assume everyone always commits these peccadillos, and hence the L-scale scores of religious people may be high only because they lie or repress memories of what they have done. Another hypothesis, however, is that they commit fewer peccadillos. Presenting either interpretation as the only one seems premature.

In sum, religiously active and intrinsically religious people are among the least prejudiced in our society and report more helping of others. On the other hand, the extrinsically religious person, who seldom attends religious services, is among the most prejudiced and reports less helping of others. The latter are people to whom the church has little access, and so it cannot be blamed for their attitudes or behaviors. But neither can religious people use these conclusions to take credit. We have so little data on what happens to people who join churches that we do not yet know whether those who are pro-socially oriented join churches or whether people become pro-socially oriented as a result of their church joining.

Physical and Mental Health

A major study (Comstock & Partridge 1972) suggests that religious people are healthier and less suicidal than nonreligious people. Bernard Spilka (personal communication) confirms this result, even after partialling out the fact that religious people smoke and drink less. While there has been little investigation in this area, this finding is consistent with the fact that older people are more religious. Does age produce religiousness or do the religious outlive the nonreligious? Studies showing older people to be more religious are cross-sectional and thus consistent with either interpretation.

With regard to mental health, reviewers (Batson & Ventis 1982, chapter 7; Spilka et al 1985a, chapter 12) agree that the results are mixed owing to a

scarcity of theoretical guidance. Definitions of positive mental health differ. If better health is identified with lower guilt and anxiety, then religious people appear more mentally healthy. But Batson & Ventis (1982) point out that a measure of mental health centered on openness and flexibility finds people highly committed to a particular value—such as the *I*'s—to score lower. Note that the question of ideal mental health is as much philosophical and theological as it is psychological. Psychology as a science cannot determine whether low anxiety is better than openness or vice versa. Bergins' review (1983) is recommended reading in this area as well as Batson & Ventis (1982) and Spilka et al (1985a).

Richardson (1985) summarizes the literature on whether those who enter cults are "maladjusted." He concludes that they are not. Indeed, the frequency with which people who join cults have rejected a life-style involving substance abuse and other behaviors commonly at variance with our cultural norms suggests the contrary conclusion. People who join cults are shifting towards the cultural norm of mental health (although they are often shifting away from the cultural norm of religiousness).

Attribution Research

Attribution research has been suggested as a major direction for movement in the psychology of religion. Articles by Proudfoot & Shaver (1975) and Spilka et al (1985c) lay some foundations for a psychology of religion based upon attribution theory, as does the book by Spilka et al (1985a). Unfortunately, too few studies using attribution approaches have accumulated to be reviewed at present.

Other Research Areas

Several minor areas within the psychology of religion deserve mention. One is the study of the process of conversion. Although cross-sectional studies have established such facts as the normal age of conversion, the factors underlying the process remain poorly understood. A major methodological problem in this area is the difficulty in finding appropriate subjects for longitudinal study. Ideally research in this area would involve designs tracking people across time as they do or do not experience conversion. A set of such studies might ferret out the conditions producing conversion and some of its major effects. However, except for occasional studies such as that by Lovekin & Malony (1977), there has been little longitudinal research. Classical research has established that the average age of conversion is between 12 and 17, that conversion may be either sudden or gradual, and that sudden conversions are typified by a definite emotional crisis (Spilka et al 1985a, chapter 9).

Another line of research has investigated attitudes toward death. The best

research uses a variety of attitudes-toward-death scales and several measures of religiousness. Studies such as Spilka et al (1977) and Cerny & Carter (1977) typically find more concern with death among *E*'s (i.e. extrinsically religious people) and less concern, particularly about death as the unknown or death as failure, among the *I*'s.

In Western culture religiousness is usually expressed through social institutions, but surprisingly little social-psychological research has been done on religious groups. The most famous study of a religious group (Festinger et al 1964) was not replicated in the only known attempt to do so (Weiser 1974). However, Pargament and associates (e.g. Pargament et al 1979) have been investigating the psychological climate of congregations and synagogues and relating that to other psychological factors. One hopes that work will be expanded and replicated.

CONCLUDING COMMENTS

Psychologists generally have strong pro- or antireligious convictions, which they bring with them to their investigations and interpretations. Some of those convictions may have caused the decline of the psychology of religion, and some may influence how the data are interpreted by psychologists. In the worst cases, investigators have ignored or proceeded beyond the data to draw conclusions in keeping with their own philosophical positions.

While this is always a problem for any science, the personal involvement with which people approach religion means that personal distortions must be guarded against more carefully in this area than in most others. For example, Heelas (1985) provides a clear example of the difference between rational and irrational thinking. But to do so, Heelas must use a physical example; when the topic is religion, the area is much more complex, and what is one person's rationality is another's irrationality. Long ago Thomas Aquinas held that the truly rational person must conclude God exists, but Aquinas used his own definition of rational. Psychologists do not escape this problem just because they are psychologists.

As Collins (1986) notes, neutral objectivity towards religion is difficult to achieve (in part because the religious define neutrality as antireligious). The psychology of religion, then, is an example of the difficulty of complete objectivity in science.

Given the difficulties of objectivity, is a psychology of religion impossible? To say yes would claim that science should be carried out only where total objectivity can be achieved. As Kuhn (1970) shows, most natural sciences also have been far from completely objective and would need to be abandoned if science required complete objectivity.

Instead, the purpose of psychological science is to increase objectivity.

This occurs when each psychologist attempts to establish clear decision rules for conclusions before data are collected, and tests theories by those decision rules. The scientist attempts to define variables clearly, objectively, and nontautologically. Better science is typified by clearer definitions, research designs that eliminate more alternative explanations, and a willingness to state cases where data could refute one's theory. These cases must, of course, be as sophisticated as possible (thus, for example, avoiding violations of the aggregation principle). This is scarcely a new plea, for James (1902) also made this point while demonstrating an integration of his contemporary psychology of religion with his philosophy of pragmatism. (James however, gives a *philosophical* defence of his use of pragmatism in evaluating the results of religiousness.) Freud (1927), on the other hand, commits the genetic fallacy even though James had pointed out the need to avoid it some 25 years earlier.

Encouraging objectivity in psychology hardly means that the personal interests and values of the investigator must be left out of psychology as a science. Indeed, such factors determine the area in which a psychologist labors and lead to the development of good theories and hypotheses. All these elements are and should be influenced by what one feels is important and how one views the nature of reality.

Any study involving religion even as a nonfocal variable should use more sophisticated measurement than religious membership or preference. It is easy to include measures of church attendance and to use intrinsic and extrinsic religiousness scales. These should be the minimum standard for measuring religiousness.

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