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RELIGIOSITY AND MENTAL HEALTH: A CRITICAL REEVALUATION AND META-ANALYSIS¹

Allen E. Bergin,* Ph.D.

For many decades, lassitude and malaise have afflicted the relationship between psychology and religion. Interest and activity in this relationship are now being renewed, and old controversies with new terms are resurfacing. This article reviews the extensive empirical literature on the topic and shows that religiosity is a complex phenomenon with numerous correlates and consequences that defy simple interpretations. A meta-analysis of 24 pertinent studies revealed no support for the preconception that religiousness is necessarily correlated with psychopathology; but it also showed only slightly positive correlates of religion. Sociological and psychiatric reports were more favorable to religion. The data's ambiguities compare with those ambiguities that formerly characterized psychotherapy research. Better specification of concepts and methods of measuring religiosity are alleviating this problem, which suggests that ambiguous results reflect a multidimensional phenomenon that has mixed positive and negative aspects. Averaging such diverse factors generally yields unimpressive findings, whereas using specificity promises clearer and more powerful results. Clinical education, practice, and research need revision so that professionals will be better informed of the evidence, more open to the study of such variables, and more efficacious in their work with persons who approach life from a religious perspective.

In a recent article on psychotherapy and religious values, I indicated that a renaissance of psychological interest in religion is occurring (Bergin, 1980a, 1980b). Value assumptions underlying clinical approaches are often considered alien by a large proportion of the population in treatment, who endorse more traditional religious perspectives. I argued that religion should be considered more systematically in personality theories and therapeutic interventions. Responses to these themes were numerous, divergent, and vigorous. The topic is not "dead," as was once lamented (Beit-Hallahmi, 1974), and a new National Institute of Mental Health (NIMH) bibliography on the subject is now available (Summerlin, 1980).

The present review considers the assertion by critics (Ellis, 1980; Walls, 1980) that religiosity is antithetical to emotional health and rationality, a view widely held in the clinical professions. Ellis (1980) stated this position bluntly and honestly:

Religiosity is in many respects equivalent to irrational thinking and emotional disturbance....The elegant therapeutic solution to emotional problems is to be quite unreligious...the less religious they are the more emotionally healthy they will be. (p. 637)

Such assertions (and their opposites) are testable empirically; but before examining the empirical evidence, it is important to consider other aspects of this debate. The issues are not simply empirical; they pertain also to the frame of reference of human sciences and scientists, as illustrated in the following three points.

1. Values and ideology influence theoretical axioms. Conceptions of personality and psychopathology have subjective as well as empirical bases, as do rationales for intervention and goals of outcome. The main assumptions of the dominant theories are naturalistic and humanistic rather than theistic and spiritual. To express such intuitively chosen positions in professional language makes them no less subjective, even though such expressions create an impression that the assumptions are derivatives of objective facts. The nonreligious bias of much psychological literature is thus based on ideological choices that have become dominant via professional usage. These orienting constructs often exclude spiritual phenomena or cast them in negative terms.

2. In addition to this conceptual bias, mental health literature and education are limited by their minimal appreciation for the religious subcultures of our society. Because professionals are usually less involved religiously than most people (Marx & Spray, 1969), they underestimate the significance of religion in people's lives; when they do perceive it as significant, they too often consider it a negative force (cf. Malony, 1977, Section on "The Religion of Psychologists").

Religious noninvolvement of professionals contrasts with the 1980-1981 Gallup survey on *Religion in America* (1981), which reveals substantial investment in religion among the general population: Ninety-three percent state a religious preference; 69% belong to a church or synagogue (down 4% since 1937); 40% had attended a religious service within 7 days prior to the survey (a drop of 1% since 1939); 55% rank religion as very important in their lives; and 31% consider their religious beliefs to be the most important thing in their lives. Despite all of this, training in the clinical professions is almost bereft of content that would engender an appreciation of religious variables in psychological functioning. Race, gender, and ethnic origin now receive deserved attention, but religion is still an orphan in academia.

3. The foregoing conceptual and attitudinal biases have become part of empirical inquiry, so religious factors either are excluded from measurement and manipulation or are included in such a way as to prejudice the results. Instances of the latter occur in devices that measure authoritarianism, ethnocentrism, dogmatism, ego strength, and irrational thinking; these measurements negatively score prorereligious responses

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to some items in the scales. An example of this negative scoring occurs in Barron's Ego Strength Scale (1953), which contains seven possible prereligious responses, five of which count against a person's ego strength. Although it can be argued that the items are empirically keyed to independent criteria, this is misleading because mental health criteria ultimately consist of standards based on subjective values. Thus, many of the "proofs" that religion is a source of disturbance are merely tautologies that only prove that two sets of personality measures constructed by people holding to the same premises are likely to correlate. This circularity is obscured by an empirical posture; but as Stark (1971) and Gorsuch and Aleshire (1974) have shown, some of the reported correlations between religiosity and emotional disturbance and prejudice can be considered artifacts.

For the foregoing reasons, it is possible that some clinical critiques of religion have a limited factual basis. They are not without merit, but too often they are conditioned by ideological bias, stereotyping, or empirical artifacts.

Religiosity studies may thus be limited by scientific designs that have defined religious phenomena in such a way as to axiomatically preempt the possibility of healthy religion.

Overview of Empirical Ambiguities

The literature on religion and mental functioning has been reviewed through the 1960s and middle 1970s by Sanua (1969), Dittes (1971), Becker (1971) Spilka and Werme (1971), Stark (1971), and Argyle and Beit-Hallahmi (1975). These reviews reveal many inadequacies in the data base. An examination of several dozen studies shows the parallels between this situation and psychotherapy research about 20 years ago. Both literatures are laden with deficiencies, but both manifest steady progress as well. Although there are no conclusions, there are a few trends; and the more recent literature makes it possible to present some likely hypotheses. It is hoped that this will help the numerous clinicians who are unfamiliar with this literature, since it is not part of the usual graduate education.

It is not surprising that given the diverse measures of religion and the diverse criteria of mental functioning, results of correlating the two sets of factors yield a mixed picture.

Martin and Nichols (1962) summary of nearly a dozen studies of the 1950s painted a negative picture of the religious believer as being emotionally distressed, conforming, rigid, prejudiced, unintelligent, and defensive. Rokeach (1960) portrayed a similar profile and concluded that believers, compared with nonbelievers, were more tense, anxious, and symptomatic, especially as indicated on the Welsh Anxiety Index. This "sick" portrait is perhaps a measure of how much research results in behavioral science conformed to the intellectual ethos of the time. Believers were being classified as emotional misfits.

A specific anecdote underscores the academic temper of that period. In 1957 I was fortunate enough to take Leon Festinger's social psychology seminar at Stanford

just after his now-famous book, *A Theory of Cognitive Dissonance* (Festinger, 1957), had been published. We devoted an academic quarter to this stimulating treatise. Examples of dissonance and its reduction were frequently taken from contemporary life (e.g., the responses of smokers to lung cancer data). On one occasion, we students were asked to indicate our religious preferences. Among the 18 of us, 11 were agnostics, 5 atheists, and 2 believers. We discussed possible dissonance-reducing methods religious people might use, as we discussed the role of social support in maintaining invalid beliefs. To be religious meant, *ipso facto*, to be defensive.

Since the 1950s, religion has gradually attained a more positive, although beleaguered status, and empirical results have correspondingly been less negative. Perhaps due to a more open culture, the emergence of human potential and transpersonal psychologies, and the growth of empirical work in consciousness and cognition, religious phenomena can now be studied with academic respectability.

In 1962 Martin and Nichols attempted to replicate the negative correlations in the studies they had reviewed by repeating the measures of personality and religiosity on a new sample of 163 Purdue University students. They failed to replicate any of the previous findings. Their attempt to discover findings opposite to the original studies, that is, favorable to religion, by differentiating a subcluster of students high in religious information also failed. The array of critical correlations distributed themselves nicely around a median of zero. They interpreted this replication failure to the fact that prior authors had spuriously reported on a few significant correlations that were probably chance figures from many intercorrelations.

Contradictions in results continued in studies of manifest anxiety and of other Minnesota Multiphasic Personality Inventory (MMPI) scores. Wilson and Miller (1968) reported a positive correlations of .20 between Taylor Manifest Anxiety Scores and religiosity among 100 students and the University of Alabama. But these results were contradicted by Bohrnstedt, Borgatta, and Evans (1968), who compared 3,700 religious and nonreligious University of Wisconsin students on the MMPI. These authors found few differences, and those few favored the religious subjects. Williams and Cole (1968) also found that highly religious subjects were less anxious on MMPI and galvanic skin response indices; although a subgroup of student converts had higher manifest anxiety scores than regular church attenders and nonattenders. A large sample of Mormon students at Brigham Young University also manifested a normal mean MMPI profile (Kelly, Note 1).

Tennison and Snyder (1968) took a different approach by examining patterns of Murray-type needs as a function of religiosity among 299 Protestants at Ohio University. The median correlations between 15 Edwards Personal Preference Schedule (EPPS) "needs" and a mean religiosity index was only .15. Religiosity correlated positively with Deference (.16), Affiliation (.29), Abasement (.27) and Nurturance (.26) but

Table 1: Studies Use in Religiosity and Mental Health Meta-Analysis

Study	Year	N (9,799)	Subjects	Measures	Pearson r
1. Bohrnstedt, Borgatta, & Evans	1968	3,666	Students	Religiosity and MMPI (<i>M</i> of 18 correlations)	.08
2. Broen	1955	140	Students	Religiosity and MMPI (<i>Mdn</i> of > 30 correlations)	0
3. Brown	1962	203	Students	Belief indexes vs. MAS and neuroticism (<i>M</i> of 11 correlations)	.00
4. Brown & Lowe	1951	108	Students	Religious belief and MMPI (<i>Mdn</i> <i>t</i> on subscales)	0
5. Fehr & Heintzelman	1977	120	Students	Religiosity and MAS Religiosity and self-esteem	.05 -.13
6. Funk	1956	255	Students	Orthodoxy and MAS	0
7. Heintzelman & Fehr	1976	82	Students	Orthodoxy and MAS Orthodoxy and hostility Orthodoxy and self-esteem	.07 .29* .06
8. Hood	1974	82	Students	Religious experience and ego strength	-.16
		114	Students	Religious experience and psychic adequacy-inadequacy	.28*
9. Jolish	1978	66	Jewish temple members	Religiosity and Ellis irrational beliefs	0
10. Joubert	1978	137	Students	Church activity and Ellis beliefs	0
11. Keene	1967	250	Urban adults	Religious factors and neuroticism	0
12. Maranell	1974	109	Students (South)	Religiosity and MAS or maladjustment	-.11
		96	Students (Midwest)	Religiosity and MAS or maladjustment	-.05
13. Martin & Nichols	1962	163	Students	Belief inventory and MMPI Paranoia	.12
14. Mayo, Puryear, & Richek	1969	166	Students	Religiosity and MMPI (4/5 <i>Fs</i> favor religion)	+*
15. Moberg	1956	219	Adults > 65	Religious activity and adjustment	.59*
16. Panton	1979	234	Male prisoners	Religious identification and adjustment	.82*
17. Rokeach	1960	202	Students (Michigan)	Catholics and Protestants vs. nonbelievers on anxiety	-.25*
		207	Students (N.Y.)	Catholics, Protestants, and Jews vs. nonbelievers on anxiety	-.32*
18. Smith, Weigert, & Thomas	1979	1,995	Catholic adolescents	Religiosity and self-esteem (<i>M</i> of 12 correlations)	.19
19. Spellman, Baskett, & Byrne	1971	60	Rural adults	Religiosity and MAS	0
20. Swindell & L'Abate	1970	135	Students	Religious attitudes and repression sensitization	.08
21. Weltha	1969	565	Students	Religious attitudes and adjustment	0
22. Williams & Cole	1968	161	Students	Religiosity and insecurity and MMPI anxiety	+*
23. Wilson & Kawamura	1967	164	Students	Religious attendance and participation and neuroticism (<i>M</i> of 4 correlations)	.02
24. Wilson & Miller	1968	100	Students	Religiosity and MAS	-.20

Note. MMPI = Minnesota Multiphasic Personality Inventory; MAS = Manifest Anxiety Scale.

*Statistically significant.

negatively with Achievement (-.20), Autonomy (-.35), Dominance (-.15), and Aggression (-.15). A comparison of EPPS scores for the 25 highest and 25 lowest students on religiosity accentuated these findings.

In a comparable study of students in Japan, Ushio (1972) used the EPPS and found no correlation between religious activity or religious consciousness and measures of dependency and anxiety; but religiosity was positively related to need for Affiliation (.35 and .19), Abasement (.17 and .27), and Nurturance (.52 and .39), whereas Aggression correlated negatively with religious activity (-.18) and positively with religious consciousness (.32). The median correlation was .24.

These two studies on need patterns are the types of data from which broad and severe interpretations of religion are often made. For instance, Tennison and Snyder (1968) aver that their psychodynamic notions are supported by Freud and Fromm, who felt that conventionally religious people adopt an infantile prototype in their perceived relationship to an omnipotent God. Thus, Tennison and Snyder suggest that such persons tend to be dependent, submissive, self-abasing, and intellectually impoverished. Such views may have more to do, however, with the procrustean constructs of researchers than with the phenomena. To make so much of 5% variance overlaps between personality and religiosity is not good theorizing.

To further illustrate, consider the Chambers, Wilson, and Barger study (1968), which used a semiprojective test rather than the EPPS to examine Murray-type needs and religiosity among 2,844 University of Florida students. Correlations contradicted the results of Tennison and Snyder (1968) and of Ushio (1972). Further analysis by Chambers et al. (1968) of ability to accurately judge need appropriateness and to manage needs showed the less religious subjects to be "ineffectual in the expression and satisfaction of needs as a result of inner conflicts caused by the simultaneous arousal of incompatible or opposed needs" (p. 209). The adjustment problems of this group centered around "poor perception of goals, and conflicts over desires to be independent and to avoid responsibility for others" (p. 208).

Such conflicting results are common, partly because of the different views of investigators and partly because of the different personality and religiosity measures used. One researcher views a worshipful life-style positively in terms of reverence, humility, and constructive obedience to universal moral laws, whereas another researcher views the same life-style negatively, as self-abasing, unprogressive, and blindly conforming. The researcher's construct system may then guide the choice of measures and the interpretation of results to confirm his or her predilections. In a field marked by a plethora of inconsistent measures, few common standards, and divergent prejudices, these contradictory results happen all too often.

Fehr and Heintzelman (1977) illustrated the point by deliberately attempting to find contradictory results in the same sample by using two different measures of

religiosity (the Allport-Vernon-Lindzey Study of Values and the Brown Modification of the Thouless Test of Religious Orthodoxy). Neither measure correlated with anxiety or self-esteem; but quite opposite correlations were found with humanitarianism and authoritarianism, depending on the religiosity measure used.

Meta-Analysis of the Pathology Data

One way to reduce the ambiguities in a survey of studies is to quantitatively sum the data across samples by means of meta-analysis (Glass, McGaw, & Smith, 1981). An analysis was therefore done of studies that had at least one religiosity measure and at least one clinical pathology measure, such as the MMPI or comparable scales. Studies of nonclinical traits, such as dominance-submission, altruism, introversion-extroversion, and so forth were omitted, since they will be the topic of a subsequent article on religiosity, personality, and social behavior. Exhaustive computer and manual searches were done to identify all studies through 1979 that met our criteria. This provided us with the surprisingly small number of 24 usable empirical studies out of more than 100 titles pertinent to the topic. These studies are listed in Table 1.

Table 2: Meta-Analysis of Relationship Between Religious Indices and Psychopathology Indices

14 studies¹ (20 outcomes)

Study no. ²	Pearson <i>r</i>	Outcomes	<i>n</i>
16	.82*	Categorical ⁴	10
15	.59*	Positive	2
7	.29*	Zero	8
8	.28*	Negative	0
18	.19		
13	.12	Total ³	30
20	.08	Positive	14
1	.08	Zero	9
7	.07	Negative	7
7	.06		
5	.05		
23	.02	Statistically significant	7
3	.00	Positive	5
12	-.05	Negative	2
12	-.11		
5	-.13		
8	-.16		
24	-.20		
17	-.25*		
17	-.32*		
<i>M</i>	.09		
<i>Mdn</i>	.055		

Note. Studies = 24; subjects = 9,799.

¹Fourteen studies listed by number in meta-analysis references. Original data transformed to *rs*: *rs* transformed to *Zs*, summed, averaged, and transformed to a mean *r*. Signs changed so positive *r* indicates association of higher religiosity with better mental health. When data were presented in terms of *t* values or similar data, these were transformed to *rs*, according to formulae provided by Glass, McGaw, and Smith (1981).

²Multiple results from single studies are included when based on

factorially different measures or on separate subsamples. However, multiple findings based on the same sample using a variety of similar measures were averaged across measures to yield a single figure for that sample.

³P value based on normal approximation of binomial distribution. (Binomial probability of 14 positive and 7 negative results: .05 > p > .09.)

*Ten studies in which data were reported without quantitative details (e.g., $t > 1.0$, or F are not significant). Positive outcome defined as a favorable relationship with religiosity.

*Statistically significant.

Table 2 summarizes the meta-analysis of empirical findings, which are classified as positive, neutral, or negative in relation to religious involvement. The data provide surprising results. Of 30 effects tabulated, only 7, or 23%, manifested the negative relationship between religion and mental health assumed by Ellis and others. Forty-seven percent indicated a positive relationship and 30% a zero relationship. Thus 77% of the obtained results are contrary to the negative effect of religion theory. Although most of the results were not statistically significant, the overall pattern was interesting. Considering statistical significance of results, 23 outcomes showed no significant relationship, 5 showed a positive relationship, and 2 showed a negative relationship.

Although the findings in Table 2 provide no support for an Ellis-type theory, they also do not provide much more than marginal support for a positive effect of religion. The small number of usable studies and the blandness of the overall mean provide little positive information or incentive for further inquiry. Part of the problem is the limitations of measurement and methodology in this domain. These limitations are dealt with in the discussions on sociological, psychiatric, and measurement studies and on possibilities for further study.

Additional Findings

Several additional sources of evidence, mainly from sociology and social psychiatry studies, support and extend the meta-analysis findings.

Lindenthal et al. (1970) at Yale studied nearly 1,000 persons in the New Haven area. Psychiatric evaluations of degree of mental impairment showed a negative relationship between impairment and church affiliation and attendance. Similarly, Stark (1971) gathered data via the Survey Research Center at Berkeley and the National Opinion Research Center at the University of Chicago, which showed that mental illness and religious commitment are negatively related. Two of his most pertinent tables are reproduced here.

Table 3 indicates that on all four measures of religiosity, the mentally ill were less religious than the normal controls. Table 4 shows that persons in a representative national sample who were rated high on psychic inadequacy (e.g., "I worry a lot," "I tend to go to pieces in a crisis") were also less religiously orthodox. For instance, among moderate Protestants high in psychic inadequacy, 13% were religiously orthodox, whereas 23% of those low in psychic inadequacy were orthodox.

Based on these and other analyses, Stark concluded that theories that presume psychopathology to be a

Table 3: Differences in Religious Commitment Between a Sample of Persons Diagnosed as Mentally Ill and a Matched Control Group**

	Mentally ill* (N = 100)	Matched controls (N = 100)	Level of significance
Percent who claim no religious affiliation***	16	3	p < .01
Percent who say religion is "not important at all" to them	16	4	p < .01
Percent who do not belong to a church congregation	54	40	p < .05
Percent who attend church			
Once a month or more	47	57	
At least several times a year	24	32	
Once a year or less	8	6	
Never	21	5	p < .01

Note. From "Psychopathology and Religious Commitment" by R. Stark, *Review of Religious Research*, 1971, 12, 165-176. Copyright 1971 by the Religious Research Association. Reprinted by permission.

*In treatment at an outpatient clinic; 71 had a record of previous hospitalization.

**Randomly selected (stratified) from the same community matched on sex, marital status, education, and age.

***While others claimed to be Protestant, Catholic, Jewish, or other, these responded none.

Table 4: Orthodoxy and Psychic Inadequacy (National Sample, Northern Whites Only) Percent High on Orthodoxy Index

	Psychic inadequacy	
	Low	High
Liberal Protestants	9%	0%
Moderate Protestants	23%	13%
Conservative Protestants	43%	25%
Roman Catholics	28%	19%

Note. N = 1,040. From "Psychopathology and Religious Commitment" by R. Stark, *Review of Religious Research*, 1971, 12, 165-176. Copyright 1971 by the Religious Research Association. Reprinted by permission.

primary source of ordinary religious commitment are false.

There is also considerable empirical evidence that religious involvement is negatively correlated with social problems, such as sexual permissiveness, drug abuse, and alcohol use, and is slightly negatively correlated with deviant or delinquent acts (Burkett & White, 1974; Cardwell, 1969; Gorsuch & Butler, 1976; Rorbaugh & Jessor, 1975).

Another surprising empirical trend is that converts are as functional as or better off than nonconverts, even though the subgroup of sudden converts is sometimes more disturbed than gradual converts or nonconverts (Parker, 1977; Srole, Langer, Michael, Opler & Rennie, 1962; Stanley, 1965; Williams & Cole, 1968). Although some converts may be disturbed, the studies are

consistent in indicating that conversion and related intense religious experiences are therapeutic, since they significantly reduce pathological symptoms.

Such results were found by Galanter, Rabkin, Rabkin, and Deutsch (1979) in a study of changes in neurotic distress in 237 members of the Unification Church; by Galanter and Buckley (1978) in an evaluation of diminished neurotic symptoms and drug and alcohol use in 119 members of the Divine Light Mission, who had religious experiences; by Ness and Wintrob (1980) in a study of decreased emotional stress in 51 members of 43 Pentecostals, who experienced faith healing—"the more frequently people engaged in religious activities, the less likely they were to report symptoms of emotional distress," p. 202; by Pattison and Pattison (1980) in an examination of profound changes in sexual deviation following conversion experiences; and by Womack (Note 2) in an analysis of therapeutic effects of a Pentecostal church on alcohol and drug addicts. In commenting on the puzzling relationship between what appears to be primitive experiences and the dramatic results that sometimes show up in behavior and mental status, Marks (1978) suggested that studying these phenomena objectively is crucial because their potency, compared with psychotherapy's potency, looks like atomic power compared with dynamite.

Of course, it is easy to share the skepticism of behavioral scientists who question the durability of these changes, or the advantage of trading a psychiatric symptom for identification with a fundamentalist subculture. But it has been observed that some of these people have made fundamental changes and enhanced their reality contact, that the gradual converts to more conventional religiosity are sometimes superior in their life adjustment, and that the effects of psychotherapy are not any better by comparison.

Perhaps Marks's objectivity is the key. Examining the mechanisms of change in these situations and not letting prejudices against spiritual language prevent researchers from perceiving potentially beneficial factors could improve therapeutic knowledge. Certainly, as a starting point, Frank's (1973) and Szasz's (1978) interpretations of professional therapeutic change as forms of conversion, faith healing, or thought reform might be taken seriously.

Factoring the Religious Dimension

Another trend in the literature that has improved understanding of the religious dimension is the attempt to subdivide the phenomena into different factors with different characteristics and consequences.

Perhaps the most definitive thing that can be said is that religious phenomena are multidimensional. As many as 21 factors in religiosity have been identified in one study (King & Hunt, 1975). Although an analysis of typologies will be the subject of another article, suffice it to say here that a main trend consists of attempts to define "good" and "bad" religiousness. Allport (Allport & Ross, 1967) called it intrinsic (good) versus extrinsic (bad), somewhat akin to the popular distinction between internal and external control (Phares, 1978). Allen and Spilka (1967) defined it as committed (good) versus

consensual (bad). James (1902) referred to the religion of "healthy-mindedness" versus the "sick soul," although he did not necessarily judge one as better than the other.

In a sense, these measures, and the studies using them, provide a good starting point toward specificity as opposed to global, and necessarily misleading, evaluation of a complex phenomenon. As Spilka and Werme (1971) put it, religion may serve as a means of expressing emotional disturbance, as a haven from stress, as a source of stress, as a means of social acceptance (and conformity), or as a means of growth and fulfillment. Stommen (1971) similarly perceives that religion "attracts, reduces, increases, and heals mental disorder" (p.462).

Results using a simple dichotomy like Allport and Ross's (1967) intrinsic versus extrinsic orientation seem to demonstrate that there are different kinds of religiosity and that their correlations with other criteria differ. The extrinsically religious person "uses" religion as a means of obtaining security or status, whereas the intrinsically oriented person internalizes beliefs and lives by them regardless of external consequences. Kahoe (1974) used 518 college students to show a divergent pattern of correlations with the two orientations. Intrinsic scores correlated positively with responsibility, internal locus of control, intrinsic motivational traits, and grade point average, whereas extrinsic scores correlated positively with dogmatism and authoritarianism but negatively with responsibility, internal control, intrinsic motives, and grade point average. Such differing findings are typical when religion is thus subdivided, which suggests that conflicting results in many studies may be due to the failure to distinguish discrete subgroups whose scores correlate divergently with the same criterion. However, the picture is still not simple. Some people score high on intrinsic and extrinsic dimensions. Whether these people are very good or very strange is still debatable.

Maranell (1974) approached the dimensionality issue by devising measures of eight types of religiosity and correlating them with indices of anxiety and maladjustment among samples of southern and midwestern students. Only two of the eight dimensions correlated consistently with the pathology measures. Averaging sets of four correlations, superstition correlated positively with pathology (.28), as did ritualism (.21). Measures of church orientation, altruism, fundamentalism, theism, idealism, and mysticism did not correlate consistently with the anxiety and adjustment indices. Although Maranell concluded from his results that religious persons are likely to be less well adjusted than nonreligious persons, this was due to selecting from the findings. The data do not support such a conclusion. His set of 32 correlations resulted in a mean of .08, with fluctuations above and below that figure, which approximate a random distribution.

The foregoing findings, along with the factor analyses, indicate that religiosity is unlikely to be simply divisible into healthy and unhealthy types. One of the most appealing reconceptualizations was proffered by

Glock (1962), who redefined religion into five basic factors: Ritual, Experiential (religious emotional experience), Ideological (belief systems), Intellectual (knowledge of tenets and scripture), and Consequential (good works). Debate over this influential conception has centered on whether there are indeed several factors. As many as six have been identified (DeJong, Faulkner, & Warland 1976), although most analyses produce only one or two dimensions. Conceivably, the discrepancies in some of the factor analyses could be cleared up by considering the possibility that religiosity, like intelligence, involves a general (G) factor and several specific (S) factors. Also, although religiosity profiles will vary across the several factored dimensions, some persons will be high on all dimensions and thus represent a different type of religiosity than persons who are uniformly low or who are variable across factors.

The point of the foregoing is that the definition and measurement of religiosity may be as complicated as describing psychopathology, which currently requires a 494-page book, the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed.; Spitzer, 1980). Consequently, generalizations about the psychological causes and consequences of religious involvement need to be tentative and subject to further investigation.¹ The mixed or insignificant results of many studies are conceivably due to the kind of imprecision that once afflicted psychotherapy research. Perhaps positive effects of some kinds of religiosity are being balanced by negative effects of other kinds, which yield unimpressive or ambiguous average effects. As in psychotherapy, greater specificity and precision in defining and measuring the religious factor would likely alleviate this problem.

Implications for Clinical Training, Practice, and Research

Because religious cognitions, emotions, and behaviors, as documented here, are so pervasive, potential clinicians should understand the cultural content of their clients' religious world views rather than deny the importance of these views and coerce clients into alien linguistic and conceptual usages. To achieve this goal, the clinical students and practitioners should be aware of their own religious impulses. Spiritual tendencies are common among us, but they are symbolized and expressed under many aliases.

Although practicing psychologists rate themselves as less religious than the general public, it is surprising that a majority consider themselves to be believers (Marx & Spray, 1969), and 10% of a random sample of American Psychological Association members hold positions in religious organizations (Ragan, Malony, & Beit-Hallahmi, Note 3). One would never know this by

content analyzing professional conversations or publications. This strong level of interest and participation has been compartmentalized because the language of academic training and of personality, psychopathology, and psychotherapy is nonspiritual. Thus, the religious interests of clinicians and researchers are subjected to conceptual shaping in other directions—that is, naturalism, mechanism, and secularism prevail, and degrees and certification are earned by emitting such terminology at the right times and places. Reeducation could begin with a selection of readings from the references in this article. A correlated educational experience would be to encourage more research in this domain among students at predoctoral and dissertation levels. In addition, those teachers, research mentors, and clinical supervisors who have sympathies with and experience in correlating the psychological and the religious need to be involved in student education. This does not require proreligious attitudes but does require openness to alternatives other than the traditional naturalistic ones.

Practitioners generally need to tune into healthy religiosity as well as the unhealthy kind they sometimes encounter (Salzman et al., 1965). When a client's religious values create difficulties for the therapist, consultation or referral may be in order. The practice of attributing pathodynamic origins to values one disagrees with needs to be constrained (Menninger, 1973).

In addition, practice needs to more assiduously include collaboration with the religious leaders and subcultures from which clients come. The opportunity to utilize associated support systems to induce and maintain change is a potentiality that community psychologists appreciate but the clinicians often ignore.

Finally, we need to broaden our horizons so that despite our differences, we can empathize with persons who approach life from a spiritual perspective and thus achieve the mutual respect to which most of us are committed.

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¹ Not discussed in this article is an extensive literature that is addressed to religiosity and its correlates in the areas of life-style, quality of life, social and political attitudes, nonclinical personality dimensions, and clinically related social behaviors, such as addiction, crime, sexual conduct, and so forth. These are considered in a separate article (Donahue & Bergin, in preparation).

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