

Research on Religion-Accommodative Counseling: Review and Meta-Analysis

Michael E. McCullough
National Institute for Healthcare Research

The present meta-analysis examined data from 5 studies ($N = 111$) that compared the efficacy of standard approaches to counseling for depression with religion-accommodative approaches. There was no evidence that the religion-accommodative approaches were more or less efficacious than the standard approaches. Findings suggest that the choice to use religious approaches with religious clients is probably more a matter of client preference than a matter of differential efficacy. However, additional research is needed to examine whether religion-accommodative approaches yield differential treatment satisfaction or differential improvements in spiritual well-being or facilitate relapse prevention. Given the importance of religion to many potential consumers of psychological services, counseling psychologists should devote greater attention to religion-accommodative counseling in future studies.

The United States is a highly religious country; 92% of its population are affiliated with a religion (Kosmin & Lachman, 1993). According to a 1995 survey, 96% of Americans believe in God or a universal spirit, 42% indicate that they attend a religious worship service weekly or almost weekly, 67% indicate that they are members of a church or synagogue, and 60% indicate that religion is "important" or "very important" in their lives (Gallup, 1995).

In addition, many scholars acknowledge that certain forms of religious involvement are associated with better functioning on a variety of measures of mental health. Reviews of this research (e.g., Bergin, 1991; Bergin, Masters, & Richards, 1987; Larson et al., 1992; Pargament, 1997; Schumaker, 1992; Worthington, Kurusu, McCullough, & Sandage, 1996) suggested that several forms of religious involvement (including intrinsic religious motivation, attendance at religious worship, receiving coping support from one's religious faith or religious congregation, and positive religious attributions for life events) are positively associated with a variety of measures of mental health. For example, various measures of religious involvement appear to be related to lower degrees of depressive symptoms in adults (Bienenfeld, Koenig, Larson, & Sherrill, 1997; Ellison, 1995; Kendler, Gardner, & Prescott, 1997) and children (Miller, Warner, Wickramaratne & Weissman, 1997) and less suicide (e.g., Comstock & Partridge, 1972; Kark et al., 1996; Wandrei, 1985).

Koenig, George, and Peterson (1998) reported that depressed people scoring high on measures of intrinsic religiousness were significantly more likely to experience a remission of depression during nearly a 1-year follow-up than were depressed people with lower intrinsic religiousness, even after controlling for 30 potential demographic, psychosocial, and medical confounds. Other studies have

shown that religious involvement, as gauged through single-item measures of frequency of religious worship and private prayer as well as more complex measures of religious coping, is related to positive psychological outcomes after major life events (e.g., Pargament et al., 1990; Pargament et al., 1994; Pargament, Smith, & Brant, 1995). This is the case even though several patterns of religious belief and religious coping (e.g., the belief that one's misfortunes are a punishment from God) are associated with greater psychological distress (Pargament, 1997).

Religion in Counseling and Psychotherapy

Some scholars (e.g., Bergin, 1991; Payne, Bergin, & Loftus, 1992; Richards & Bergin, 1997; Shafranske, 1996; Worthington et al., 1996) posited that considering clients' religiousness while designing treatment plans might have an important effect on the efficacy of treatment. Surveys of psychiatrists (Neeleman & King, 1993), psychologists (Bergin & Jensen, 1988; Shafranske & Malony, 1990), and mental health counselors (Kelly, 1995) also indicate that many mental health professionals believe that religious and spiritual values can and should be thoughtfully addressed in the course of mental health treatment. Moreover, a variety of analogue and clinical studies (e.g., Houts & Graham, 1986; T. A. Kelly & Strupp, 1992; Lewis & Lewis, 1985; McCullough & Worthington, 1995; McCullough, Worthington, Maxey, & Rachal, 1997; Morrow, Worthington, & McCullough, 1993) indicate that clients' religious beliefs can influence both (a) the conclusions of clinicians' structured psychological assessments and (b) the process of psychotherapy (cf. Luborsky et al., 1980).

Evidence From Comparative Efficacy Studies

Given the existing research on religion and mental health, an important question for counseling psychologists is whether supporting clients' religious beliefs and values in a structured treatment package yield clinical benefits that are equal to or greater than standard methods of psychological prac-

Correspondence concerning this article should be addressed to Michael E. McCullough, National Institute for Healthcare Research, 6110 Executive Boulevard, Suite 908, Rockville, Maryland 20852. Electronic mail may be sent to Mike@nih.org.

tice. Several empirical studies have addressed this issue. Although the findings of studies that have examined such questions have been reviewed in narrative fashion elsewhere (e.g., W. B. Johnson, 1993; Matthews et al., 1998; Worthington et al., 1996), no researchers have used meta-analytic methods to estimate quantitatively the differential efficacy of such treatments. Meta-analytic reviews that compare religious approaches to counseling with standard approaches to counseling are one of three meta-analytic strategies that can be used to examine whether a given therapeutic approach has therapeutic efficacy (Wampold, 1997).

In the present article, I review the existing research on such religious approaches to counseling using quantitative methods of research synthesis (e.g., Cooper & Hedges, 1994; Hunter & Schmidt, 1990) to estimate the differential efficacy of religious approaches in comparison to standard forms of counseling for depressed religious clients.

Method

Literature Search

The PsycLIT, PsycINFO, Medline, ERIC, and Dissertation Abstracts electronic databases were searched through August 1998 for published and unpublished studies that examined the differential efficacy of a religion-accommodative approach to counseling in comparison to a standard approach to counseling. The reference sections of relevant articles were searched for other studies that would be relevant to this review. This search process continued until no new studies were revealed. In addition, several experts in the field of religion and mental health were contacted to identify unpublished studies.

Studies had to meet four criteria to be included in the meta-analytic sample: They had to (a) compare a religion-accommodative approach to counseling to a standard approach to counseling; (b) randomly assign patients to treatments; (c) involve patients who were suffering from a specific set of psychological symptoms (e.g., anxiety or depression); and (d) offer equal amounts of treatment to clients in the religion-accommodative and standard treatments. Five published studies and one unpublished dissertation (W. B. Johnson, 1991), which was later reported in W. B. Johnson, DeVries, Ridley, Pettorini, and Peterson (1994), met these inclusion criteria. Several studies that investigated religious approaches to psychological treatment (e.g., Azhar & Varma, 1995a, 1995b; Azhar, Varma, & Dharap, 1994; Carlson, Bacaseta, & Simanton, 1988; Richards, Owen, & Stein, 1993; Rye & Pargament, 1997; Toh & Tan, 1997) were obtained, but these studies failed to meet all four inclusion criteria. Thus, they were omitted from the meta-analytic sample. A single rater determined which studies met

inclusion criteria. This rater's decisions were made without reference to the results or discussion sections of the articles.

The resulting meta-analytic sample included five studies representing data from 111 counseling clients. Descriptions of study populations, measures used, and effect size estimates (with 95% confidence intervals) are given in Table 1.

The Studies

Researchers interested in accommodative forms of religious counseling have taken standard cognitive-behavioral protocols or specific techniques, such as cognitive restructuring (Beck, Rush, Shaw, & Emery, 1979), cognitive coping skills (Meichenbaum, 1985), and appeals to rational thinking (e.g., Ellis & Grieger, 1977), and have developed religion-friendly rationales for and versions of such protocols or techniques (W. B. Johnson & Ridley, 1992b). These adapted protocols or techniques are thought to be theoretically equivalent to standard cognitive-behavioral techniques (Propst, 1996), but more amenable to the religious world view and religious language that religious clients use to understand their lives and their problems. The five studies are described in greater detail next.

Propst (1980). Propst (1980) examined the differential efficacy of a manualized, religion-accommodative approach to cognitive restructuring and imagery modification. Volunteers who scored in the mild or moderate range of depression on the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) and in at least the moderate range on the King and Hunt (1972) religion scales were randomly assigned to one of two treatments. The standard treatment was an integration of Beck's (1976) cognitive therapy for depression and Meichenbaum's (1973) cognitive-behavior modification. During eight 1-hr sessions conducted over 4 weeks, clients were trained to observe their cognitions and imagery during depressed moods. After clients were convinced of the links between their moods, thoughts, and images, they practiced cognitive restructuring skills for modifying their thoughts and images using imagery and positive self-statements (e.g., "I can see myself in the future coping with that particular situation"). Ten of eleven clients assigned to this condition completed it.

In the religion-accommodative treatment, clients completed the same therapeutic protocol as that used in the standard treatment. The only difference is that participants were trained to replace their negative cognitions and imagery with religious images (e.g., "I can visualize Christ going with me into that difficult situation in the future as I try to cope"). Seven of 9 clients assigned to this condition completed the treatment.

Pecheur and Edwards (1984). Pecheur and Edwards (1984) assessed the differential efficacy of Beck et al.'s (1979) cognitive therapy for depression and a religion-accommodative version of the same therapy. Clients were students from a Christian college who met research diagnostic criteria for major depressive disorder.

Table 1
Sample Sizes, Effect Sizes, and 95% Confidence Intervals (CI) for the Studies Included in the Meta-Analysis

Study	Religion-accommodative treatment <i>n</i>	Standard treatment <i>n</i>	Effect size (d+)	95% CI
Propst (1980)	7	10	+0.41	-0.56/+1.39
Pecheur & Edwards (1984)	7	7	+0.53	-0.53/+1.60
Propst et al. (1992)	19	19	+0.51	-0.14/+1.15
W. B. Johnson & Ridley (1992a)	5	5	+0.29	-0.96/+1.53
W. B. Johnson et al. (1994)	16	16	-0.51	-1.22/+0.19

They also scored in the depressed range on the BDI, the Hamilton Rating Scale for Depression (HRSD; Hamilton 1960), and a single-item visual analogue scale. In the standard treatment, clients completed eight 50-min sessions of cognitive behavior modification. All 7 clients who were assigned to this treatment completed it.

In the religion-accommodative treatment, clients completed the standard cognitive therapy tasks specified in Beck et al. (1979); however, challenges to negative cognitions were placed in a religious context. For example, rather than replacing negative views of self with statements such as "Our self-acceptance and self-worth are not lost or lessened when we fail," the religion-accommodative approach trained clients to use self-statements such as, "God loves, accepts, and values us just as we are." This treatment was also administered according to a manual, which appears in Pecheur (1980).

Propst, Ostrom, Watkins, Dean, and Mashburn (1992). Propst et al. (1992) compared the efficacy of Beck et al.'s (1979) cognitive therapy for depression with a manualized, religion-accommodative version of the same therapy (see Propst, 1988). Clients were recruited from the community and scored at least 14 on the 28-item version of the HRSD. They also scored at least in the moderate range on standard measures of religious commitment (e.g., Allport & Ross, 1967; King & Hunt, 1972). Clients in the standard treatment completed 18 sessions of individual cognitive therapy for depression. All 19 clients enrolled in this condition completed it.

In the religion-accommodative treatment, clients completed 18 sessions of cognitive therapy that challenged negative cognitions and images by replacing them with positive thoughts and imagery of a religious nature, as in Propst (1980). All 19 clients enrolled in this condition completed it.

W. B. Johnson & Ridley (1992a). Johnson and Ridley (1992) compared the efficacy of rational-emotive therapy (RET), using Walen, DiGiuseppe, and Wessler's (1980) treatment manual, with a manualized, religion-accommodative version of the same therapy. Clients were theology students and local church members who scored in at least the mildly depressed range on the BDI. They also scored in the "intrinsic" range on a standard measure of religious motivation (Allport & Ross, 1967), suggesting that their religious faith was highly internalized. In the standard RET condition, clients completed six 50-min sessions in 3 weeks, including homework sessions and in-session rehearsal of rational-emotive techniques. All 5 clients assigned to this condition completed it.

In the religion-accommodative treatment, three explicitly Christian treatment components were added. First, clients were directed to dispute irrational beliefs using explicitly Christian beliefs, as in Propst (1980). Second, clients were encouraged to use Christian prayer, thoughts, and imagery in their homework assignments. Third, counselors used brief prayers at the end of each session. All 5 clients assigned to this condition completed it.

W. B. Johnson et al. (1994). W. B. Johnson et al. (1994) compared the efficacy of standard RET and a religion-accommodative form of RET, as in W. B. Johnson and Ridley (1992a). Selection criteria were almost identical to those reported in W. B. Johnson and Ridley (1992a). The standard RET condition was an eight-session protocol delivered over 8 weeks, and was based on two popular RET treatment manuals (Ellis & Dryden, 1987; Walen et al., 1980). All 16 clients assigned to this condition completed it.

The religion-accommodative treatment was based on two treatment manuals discussing Christian versions of RET (Backus, 1985; Thurman, 1989). Although the basic structure of RET was kept intact, clients were encouraged to dispute irrational beliefs based on scriptural beliefs and biblical examples. Homework assignments also used biblical examples and beliefs. All 16 clients assigned to this condition completed it.

Effect Size Estimates

Effect sizes and homogeneity statistics were calculated from means and standard deviations using the DSTAT statistical software, Version 1.10 (B. T. Johnson, 1989), using the formulas prescribed by Hedges and Olkin (1985). Effect sizes were based on the difference between the mean of clients in the standard counseling condition and the mean of clients in the religion-accommodative conditions. This difference was divided by the pooled standard deviation of clients in both conditions. All effect size estimates, expressed as d_+ values, are corrected for the bias that is present in uncorrected g values, as recommended by Hedges and Olkin (1985). Effect sizes can be interpreted as the increased amount of symptom reduction afforded to participants in the religion-accommodative condition, expressed in standard deviation units. In calculating aggregate effect size estimates, individual effect sizes were weighted by the inverse of their sampling error variance, so that studies with larger samples were given greater weight in the calculation of d_+ (Hedges & Olkin, 1985).

The Q statistic was also used to estimate the degree of variability among the effect sizes. The Q statistic is basically a goodness-of-fit statistic with a roughly χ^2 distribution that enables a test of the hypothesis that all observed effect sizes were drawn from the same population. Significant Q values imply a heterogeneous set of effect sizes (Hunter & Schmidt, 1990).

Handling Multiple Dependent Measures

All five studies used the BDI as a dependent measure of depression. Although two of the studies also used the HRSD or a single-item visual analogue measure of depression, or both (Pecheur & Edwards, 1984; Propst et al., 1992), effect size estimates were based exclusively on the BDI for three reasons. First, the BDI has been shown to produce conservative effect size estimates in comparison to rating scales that are completed by clinicians, such as the HRSD (Lambert, Hatch, Kingston, & Edwards, 1986). Second, single-item visual analogue measures of depression (e.g., Aitken, 1969) appear to contain remarkably little true score variance (Faravelli, Albanesi, & Poli, 1986). Third, the aggregation of data across multiple dependent measures requires knowing their intercorrelations, which were not available for all five studies. Thus, the individual and mean effect size estimates reported here can be considered to be somewhat conservative.

Handling Data From Multiple Follow-Up Periods

All five studies collected follow-up data within 1 week of the termination of the trial. Although three of the studies (W. B. Johnson et al., 1994; Pecheur & Edwards, 1984; Propst et al., 1992) also reported follow-up data collected between 1 and 3 months after the termination of the trial, and one study (Propst et al., 1992) reported an effect size for a 24-month follow-up, we based our effect size estimates only on the data from the 1-week follow-up.

Other Problems With Coding Effect Sizes

Some studies reported data on additional experimental conditions, including self-monitoring and therapist contact conditions (Propst, 1980), waiting list control conditions (Pecheur & Edwards, 1984; Propst et al., 1992), and pastoral counseling conditions (Propst et al., 1992). Because none of these conditions were relevant to the central goal of this study, these data were neither coded nor included in the present meta-analytic study.

Two other problems arose in coding effect sizes. First, although Propst (1980) reported posttreatment means on the BDI for both conditions, standard deviations were not reported. On the basis of the assumption that the other four studies in the present meta-analysis would yield similar pooled standard deviations for the BDI, a mean standard deviation for posttest scores on the BDI from these studies (5.81) was used as an imputed standard deviation for Propst (1980). This imputed standard deviation produced a nonsignificant test statistic for the comparison of the religious and standard counseling conditions, as Propst (1980) reported, giving us confidence that our imputed standard deviation was not wholly inaccurate.

Second, Propst et al.'s (1992) results reported treatment effects separately for religious and nonreligious therapists, which was an independent factor in their experimental design. To collapse treatment effects across levels of the therapist religiousness factor, means and standard deviations obtained for religious and nonreligious therapists within each of the two religious counseling conditions were pooled before calculating an effect size for the treatments.

Corrections of Findings for Unreliability in Dependent Measures

Scholars in meta-analysis advise that effect size estimates be corrected for biases (Hunter & Schmidt, 1990, 1994). One of the easiest biases to correct is attenuation resulting from unreliability in the dependent variable. This bias can be corrected by dividing observed effect sizes and standard errors by the square root of the internal consistency of the dependent variable. Because meta-analytic estimates of the BDI's internal consistency were readily available (Beck, Steer, & Garbin, 1988, estimated its internal consistency at $\alpha = .86$), the observed mean effect size and its confidence interval (CI) were divided by the square root of .86, or .927. Corrections for attenuation resulting from unreliability of the dependent variable produce increased effect size estimates but also a proportionate increase in confidence intervals; thus, a nonsignificant effect size will not become significant as a result of this correction (Hunter & Schmidt, 1994).

Estimating Clinical Significance

We were also interested in whether religion-accommodative and standard approaches to counseling yielded clinically significant differences in efficacy (Jacobson & Revenstorf, 1988; Jacobson & Truax, 1991). Thus, we calculated meta-analytic summaries of clinical significance data for two studies that reported clinical significance data (using BDI > 9 as a cutoff for "mild clinical depression"; Kendall, Hollon, Beck, Hammen, & Ingram, 1987).

Results

Observed Mean Effect Size and Attenuation-Corrected Effect Size

The mean effect size for the difference between religious and standard counseling during the 1-week follow-up period (number of effect sizes = 5, $N = 111$) was $d_+ = +0.18$ (95% CI: $-.20/+0.56$), indicating that clients in religion-accommodative counseling had slightly lower BDI scores at 1-week follow-up than did clients in standard counseling conditions. This effect size was not reliably different from zero ($p = .34$). The five effect sizes that contributed to this

mean effect size were homogeneous, $Q(4) = 5.38, p > .10$. The mean effect size after correcting the effects for attenuation resulting from unreliability was $d_+ = +0.20$ (95% CI: $-0.19/+0.61$).

Differences in Clinical Significance

Two studies (W. B. Johnson & C. R. Ridley, 1992a; Propst, 1980) reported the percentage of participants in the religious and standard psychotherapy conditions who manifested evidence of at least mild clinical depression (BDI scores >9) during the 1-week follow-up period. Aggregation of these data indicated that, among the 20 religion-accommodative counseling clients in the two studies, 4 (20%) were still at least mildly depressed at the end of treatment. Among the 26 standard counseling clients in the two studies, 9 (34.6%) were at least mildly depressed when treatment ended. This difference clinical significance was not statistically significant, $\chi^2(1, N = 46) = 1.19, p > .10$.

Discussion

The goal of the present study was to review the existing empirical evidence regarding the comparative efficacy of religion-accommodative approaches to counseling depressed religious clients. These data suggest that, in the immediate period after completion of counseling, religious approaches to counseling do not have any significant superiority to standard approaches to counseling. Given that the differences in efficacy of most bonafide treatments are surprisingly small (e.g., Lambert & Bergin, 1994; Wampold, 1997), the existing literature on psychotherapy outcomes would have portended the present meta-analytic results. These findings corroborate some narrative reviews that claim equal efficacy for religion-accommodative and standard approaches to counseling (e.g., Worthington et al., 1996), and help to resolve the inconsistencies that others have observed among these studies (e.g., W. B. Johnson, 1993; Matthews et al., 1998).

Although it is true that the religious approaches to counseling were no more effective than the standard approaches to counseling, it is equally true that they were no less effective than the standard approaches to counseling. Thus, the decision to use religion-accommodative approaches might be most wisely based not on the results of comparative clinical trials, which tend to find no differences among well-manualized treatments, but rather on the basis of patient choice (see Wampold, 1997). Not every religious client would prefer or respond favorably to a religion-accommodative approach to counseling. Indeed, the available evidence suggests that all but the most highly religious clients would prefer an approach to counseling that deals with religious issues only peripherally rather than focally (Wyatt & Johnson, 1990; see Worthington et al., 1996, for review).

On the other hand, many religious clients—especially very conservative Christian clients—would indeed be attracted to a counseling approach (or counselor) precisely because the counseling approach (or the counselor) main-

tained that the clients' system of religious values were at the core of effective psychological change (Worthington, et al., 1996). The research reviewed herein indicates that no empirical basis exists for withholding such religion-accommodative treatment from depressed religious clients who desire such a treatment approach.

The Last Word?

There is inherent danger in publishing meta-analytic results. Because of their ability to provide precise-looking point estimates and short CIs (especially when the observed effect size estimates are relatively heterogeneous), meta-analytic summaries can be perceived to be the last word in evaluating research questions. It would be unfortunate if the present results were interpreted as the last word in evaluating the efficacy of religious approaches to counseling, however, because interesting and important questions remain.

For example, although religion-accommodative approaches to counseling do not appear to be differentially efficacious in reducing symptoms (at least depressive symptoms), they might produce differential treatment satisfaction among some religious clients. Also, comparative studies of religion-accommodative therapy are needed with longer follow-up periods. It is possible that religion-accommodative approaches might prove to be superior to standard treatments in longer term follow-up periods, particularly in helping clients from relapsing, for example, back into depressive episodes. The differential effects of religion-accommodative and standard approaches to treatment also need to be investigated for a wider variety of disorders, including anxiety, anger, alcohol and drug problems, and marital and family problems. As well, although religion-accommodative and standard approaches to counseling do not appear to influence clients' religiousness or religious values differentially (Worthington et al., 1996), it is possible that religion-accommodative counseling yields differential improvements in religious clients' spiritual well-being.

Finally, on a technical note, it should be noted that the studies in this body of literature currently have been seriously underpowered (i.e., in all cases fewer than 20 clients per treatment). This literature would benefit enormously from as few as three or four very high-quality, large-sample (i.e., 30 or more clients per condition) studies that investigated these questions in greater detail. W. B. Johnson (1993) provided other helpful methodological recommendations to which research on religion-accommodative counseling should adhere.

Limitations

The stability of meta-analytic findings comes from the number of studies included in the meta-analysis as well as the number of participants in the constituent studies. Thus, the findings from meta-analyses with small numbers of studies, such as the present study, are more easily overturned than meta-analyses that include larger numbers of studies. Although meta-analytic methods can be used to synthesize the results of as few as two studies (for examples of small-*k* meta-analyses, see Allison & Faith, 1996; Benschop et al.,

1998; Kirsch, Montgomery, & Sapirstein, 1995; Uchino, Cacioppo, & Kiecolt-Glaser, 1996), our findings would obviously be considered more trustworthy if more studies had been available.

A second limitation of the present findings relates to the nature of the meta-analytic sample. The five studies reviewed herein all investigated religion-accommodative counseling with depressed Christian clients. We can only speculate whether the present pattern of results would generalize to different religious populations or to people with different sets of presenting problems. Obviously, research is needed to fill in such gaps.

Conclusion

A variety of empirical data now suggest that certain forms of religious involvement can help prevent the onset of psychological difficulties and enhance effective coping with stressors. In addition, the majority of mental health professionals and the general public believe that patients' religious beliefs should be adequately assessed and taken into consideration in mental health treatment. Moreover, data indicate that patients' religious commitments can play a substantial role in counseling processes (Worthington et al., 1996). Data from the present study also indicate that religious approaches to counseling can be as effective as standard approaches to counseling depressed persons. Thus, for some clients, particularly very religious Christian clients, religion-accommodative approaches to counseling could be, quite literally, the treatment of choice. It is hoped that the present study will encourage counseling psychologists to examine whether religion-accommodative approaches yield similar or even superior benefits on other important metrics of therapeutic change and with other common difficulties in living.

References

References marked with an asterisk indicate studies included in the meta-analysis.

- Aitken, R. C. B. (1969). Measurement of feeling using visual analogue scales. *Proceedings of the Royal Society of Medicine*, 62, 989-993.
- Allison, D. B., & Faith, M. S. (1996). Hypnosis as an adjunct to cognitive-behavioral psychotherapy for obesity: A meta-analytic reappraisal. *Journal of Consulting and Clinical Psychology*, 64, 513-516.
- Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5, 432-443.
- Azhar, M. Z., & Varma, S. L. (1995a). Religious psychotherapy in depressive patients. *Psychotherapy and Psychosomatics*, 63, 165-168.
- Azhar, M. Z., & Varma, S. L. (1995b). Religious psychotherapy as management of bereavement. *Acta Psychiatrica Scandinavica*, 91, 233-235.
- Azhar, M. Z., Varma, S. L., & Dharap, A. S. (1994). Religious psychotherapy in anxiety disorder patients. *Acta Psychiatrica Scandinavica*, 90, 1-3.
- Backus, W. (1985). *Telling the truth to troubled people*. Minneapolis, MN: Bethany House.
- Beck, A. T. (1976). *Cognitive therapy and the emotional disorders*. New York: International University Press.

- Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review, 8*, 77–100.
- Beck, A. T., Ward, C. H., Mendelson, M., Mock, J. E., & Erbaugh, J. K. (1961). An inventory for measuring depression. *Archives of General Psychiatry, 4*, 561–571.
- Benschop, R. J., Geenen, R., Mills, P. J., Naliboff, B. D., Kiecolt-Glaser, J. K., Herbert, T. B., van der Pompe, G., Miller, G., Matthews, K. A., Godaert, G. L. R., Gilmore, S. L., Glaser, R., Heijnen, C. J., Dopp, J. M., Bijlsma, J. W. J., Solomon, G. F., & Cacioppo, J. T. (1998). Cardiovascular and immune responses to acute psychological stress in young and old women: A meta-analysis. *Psychosomatic Medicine, 60*, 290–296.
- Bergin, A. E. (1991). Values and religious issues in psychotherapy and mental health. *American Psychologist, 46*, 394–403.
- Bergin, A. E., & Jensen, J. P. (1988). Mental health values of professional therapists: A national interdisciplinary survey. *Professional Psychology: Research and Practice, 19*, 290–297.
- Bergin, A. E., Masters, K. S., & Richards, P. S. (1987). Religiousness and mental health reconsidered: A study of an intrinsically religious sample. *Journal of Counseling Psychology, 34*, 197–204.
- Bienenfeld, D., Koenig, H. G., Larson, D. B., & Sherrill, K. A. (1997). Psychosocial predictors of mental health in a population of elderly women. *American Journal of Geriatric Psychiatry, 5*, 43–53.
- Carlson, C. R., Bacaseta, P. E., & Simanton, D. A. (1988). A controlled evaluation of devotional meditation and progressive relaxation. *Journal of Psychology and Theology, 16*, 362–368.
- Comstock, G. W., & Partridge, K. B. (1972). Church attendance and health. *Journal of Chronic Disease, 25*, 665–672.
- Cooper, H., & Hedges, L. V. (1994). *Handbook of research synthesis*. New York: Russell Sage Foundation.
- Ellis, A., & Dryden, W. (1987). *The practice of rational-emotive therapy*. New York: Springer.
- Ellis, A., & Grieger, R. (Eds.). (1977). *Handbook of rational-emotive therapy*. New York: Springer.
- Ellison, C. G. (1995). Race, religious involvement, and depressive symptomatology in a southeastern U.S. community. *Social Science and Medicine, 40*, 1561–1572.
- Faravelli, C., Albanesi, G., & Poli, E. (1986). Assessment of depression: A comparison of rating scales. *Journal of Affective Disorders, 11*, 245–253.
- Gallup, G., Jr. (1995). *The Gallup poll: Public opinion 1995*. Wilmington, DE: Scholarly Resources.
- Hamilton, M. (1960). A rating scale for depression. *Journal of Neurology, Neurosurgery, and Psychiatry, 23*, 56–62.
- Hedges, L. V., & Olkin, I. (1985). *Statistical methods for meta-analysis*. Orlando, FL: Academic Press.
- Houts, A. C., & Graham, K. (1986). Can religion make you crazy? Impact of client and therapist religious values on clinical judgments. *Journal of Consulting and Clinical Psychology, 54*, 267–271.
- Hunter, J. E., & Schmidt, F. L. (1990). *Methods of meta-analysis: Correcting error and bias in research findings*. Newbury Park, CA: Sage.
- Hunter, J. E., & Schmidt, F. L. (1994). Correcting for sources of artificial variation across studies. In H. Cooper & L. V. Hedges (Eds.), *Handbook of research synthesis* (pp. 323–336). New York: Russell Sage Foundation.
- Jacobson, N. S., & Revenstorf, D. (1988). Statistics for assessing the clinical significance of psychotherapy techniques: Issues, problems, and new developments. *Behavioral Assessment, 10*, 133–145.
- Jacobson, N. S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59*, 12–19.
- Johnson, B. T. (1989). *DSTAT: Software for the meta-analytic review of research literatures*. Hillsdale, NJ: Erlbaum.
- Johnson, W. B. (1991). *The comparative efficacy of religious and nonreligious rational-emotive therapy with religious clients*. Unpublished doctoral dissertation, Fuller Graduate School of Psychology, Pasadena, CA.
- Johnson, W. B. (1993). Outcome research and religious psychotherapies: Where are we and where are we going? *Journal of Psychology and Theology, 21*, 297–308.
- *Johnson, W. B., DeVries, R., Ridley, C. R., Pettorini, D., & Peterson, D. R. (1994). The comparative efficacy of Christian and secular rational-emotive therapy with Christian clients. *Journal of Psychology and Theology, 22*, 130–140.
- *Johnson, W. B., & Ridley, C. R. (1992a). Brief Christian and non-Christian rational-emotive therapy with depressed Christian clients: An exploratory study. *Counseling and Values, 36*, 220–229.
- Johnson, W. B., & Ridley, C. R. (1992b). Sources of gain in Christian counseling and psychotherapy. *The Counseling Psychologist, 20*, 159–175.
- Kark, J. D., Shemi, G., Friedlander, Y., Martin, O., Manor, O., & Blondheim, S. H. (1996). Does religious observance promote health? Mortality in secular vs. religious kibbutzim in Israel. *American Journal of Public Health, 86*, 341–346.
- Kelly, E. W., Jr. (1995). Counselor values: A national survey. *Journal of Counseling and Development, 73*, 648–653.
- Kelly, T. A., & Strupp, H. H. (1992). Patient and therapist values in psychotherapy: Perceived changes, assimilation, similarity, and outcome. *Journal of Consulting and Clinical Psychology, 60*, 34–40.
- Kendall, P. C., Hollon, S. D., Beck, A. T., Hammen, C. L., & Ingram, R. E. (1987). Issues and recommendations regarding use of the Beck Depression Inventory. *Cognitive Therapy and Research, 11*, 289–299.
- Kendler, K. S., Gardner, C. O., & Prescott, C. A. (1997). Religion, psychopathology, and substance use and abuse: A multimeasure, genetic-epidemiologic study. *American Journal of Psychiatry, 154*, 322–329.
- King, M. A., & Hunt, R. A. (1972). Measuring the religious variable: A replication. *Journal for the Scientific Study of Religion, 11*, 240–251.
- Kirsch, I., Montgomery, G., & Sapirstein, G. (1995). Hypnosis as an adjunct to cognitive-behavioral psychotherapy: A meta-analysis. *Journal of Consulting and Clinical Psychology, 63*, 214–220.
- Koenig, H. G., George, L. K., & Peterson, B. L. (1998). Religiosity and remission of depression in medically ill older patients. *American Journal of Psychiatry, 155*, 536–542.
- Kosmin, B. A., & Lachman, S. P. (1993). *One nation under God: Religion in contemporary American society*. New York: Harmony.
- Lambert, M. J., & Bergin, A. E. (1994). The effectiveness of psychotherapy. In A. E. Bergin & S. L. Garfield (Eds.), *Handbook of psychotherapy and behavior change* (4th ed., pp. 143–189). New York: Wiley.
- Lambert, M. J., Hatch, D. R., Kingston, M. D., & Edwards, B. C. (1986). Zung, Beck, and Hamilton rating scales as measures of treatment outcome: A meta-analytic comparison. *Journal of Consulting and Clinical Psychology, 54*, 54–59.
- Larson, D. B., Sherrill, K. A., Lyons, J. S., Craigie, F. C., Thielman, S. B., Greenwold, M. A., & Larson, S. S. (1992). Associations between dimensions of religious commitment and mental health

- reported in the *American Journal of Psychiatry* and *Archives of General Psychiatry*: 1978–1989. *American Journal of Psychiatry*, 149, 557–559.
- Lewis, K. N., & Lewis, D. A. (1985). Impact of religious affiliation on therapists' judgments of patients. *Journal of Consulting and Clinical Psychology*, 53, 926–932.
- Luborsky, L., Mintz, J., Auerbach, A., Cristoph, P., Bachrach, H., Todd, T., Johnson, M., Cohen, M., & O'Brien, C. P. (1980). Predicting the outcome of psychotherapy: Findings of the Penn Psychotherapy Project. *Archives of General Psychiatry*, 37, 471–481.
- Matthews, D. A., McCullough, M. E., Larson, D. B., Koenig, H. G., Swyers, J. P., & Milano, M. G. (1998). Religious commitment and health: A review of the research and implications for family medicine. *Archives of Family Medicine*, 7, 118–124.
- McCullough, M. E., & Worthington, E. L., Jr. (1995). College students' perceptions of a psychotherapist's treatment of a religious issue: Partial replication and extension. *Journal of Counseling and Development*, 73, 626–634.
- McCullough, M. E., Worthington, E. L., Jr., Maxey, J., & Rachal, K. C. (1997). Gender in the context of supportive and challenging religious counseling interventions. *Journal of Counseling Psychology*, 44, 80–88.
- Meichenbaum, D. (1973). *Therapist manual for cognitive behavior modification*. Unpublished manuscript, University of Waterloo, Ontario, Canada.
- Meichenbaum, D. (1985). *Stress inoculation training*. New York: Pergamon Press.
- Miller, L., Warner, V., Wickramaratne, P., & Weissman, M. (1997). Religiosity and depression: Ten-year follow-up of depressed mothers and offspring. *Journal of the American Academy of Child and Adolescent Psychiatry*, 36, 1416–1425.
- Morrow, D., Worthington, E. L., Jr., & McCullough, M. E. (1993). Observers' perceptions of a psychotherapist's treatment of a religious issue. *Journal of Counseling and Development*, 71, 452–456.
- Neeleman, J., & King, M. B. (1993). Psychiatrists' religious attitudes in relation to their clinical practice: A survey of 231 psychiatrists. *Acta Psychiatrica Scandinavica*, 88, 420–424.
- Pargament, K. I. (1997). *The psychology of religion and coping*. New York: Guilford Press.
- Pargament, K. I., Ensing, D. S., Falgout, K., Olsen, H., Reilly, B., Van Haitsma, K., & Warren, R. (1990). God help me: I. Religious coping efforts as predictors of the outcomes to significant life events. *American Journal of Community Psychology*, 18, 793–824.
- Pargament, K. I., Ishler, K., Dubow, E., Stanik, P., Rouiller, R., Crowe, P., Cullman, E., Albert, M., & Royster, B. J. (1994). Methods of religious coping with the Gulf War: Cross-sectional and longitudinal analyses. *Journal for the Scientific Study of Religion*, 33, 347–361.
- Pargament, K. I., Smith, B., & Brant, C. (1995, November). *Religious and nonreligious coping methods with the 1993 Midwest flood*. Paper presented at the meeting of the Society for the Scientific Study of Religion, St. Louis, MO.
- Payne, I. R., Bergin, A. E., & Loftus, P. E. (1992). A review of attempts to integrate spiritual and standard psychotherapy techniques. *Journal of Psychotherapy Integration*, 2, 171–192.
- Pecheur, D. (1980). *A comparison of the efficacy of secular and religious cognitive behavior modification in the treatment of depressed Christian college students*. Unpublished doctoral dissertation, Rosemead School of Psychology, La Mirada, CA.
- *Pecheur, D. R., & Edwards, K. J. (1984). A comparison of secular and religious versions of cognitive therapy with depressed Christian college students. *Journal of Psychology and Theology*, 12, 45–54.
- *Propst, R. L. (1980). The comparative efficacy of religious and nonreligious imagery for the treatment of mild depression in religious individuals. *Cognitive Therapy and Research*, 4, 167–178.
- Propst, R. L. (1988). *Psychotherapy in a religious framework*. New York: Human Sciences Press.
- Propst, R. L. (1996). Cognitive-behavioral therapy and the religious person. In E. P. Shafranske (Ed.), *Religion in the clinical practice of psychology* (pp. 391–408). Washington, DC: American Psychological Association.
- *Propst, R. L., Ostrom, R., Watkins, P., Dean, T., & Mashburn, D. (1992). Comparative efficacy of religious and nonreligious cognitive-behavioral therapy for the treatment of clinical depression in religious individuals. *Journal of Consulting and Clinical Psychology*, 60, 94–103.
- Richards, P. S., & Bergin, A. E. (1997). *A spiritual strategy for counseling and psychotherapy*. Washington, DC: American Psychological Association.
- Richards, P. S., Owen, L., & Stein, S. (1993). A religiously oriented group counseling intervention for self-defeating perfectionism: A pilot study. *Counseling and Values*, 37, 96–104.
- Rye, M. S., & Pargament, K. I. (1997, August). *Forgiveness and romantic relationships in college*. Paper presented at the 105th Annual Convention of the American Psychological Association, Chicago.
- Schumaker, J. F. (1992). *Religion and mental health*. New York: Oxford University Press.
- Shafranske, E. P. (1996). *Religion and the clinical practice of psychology*. Washington, DC: American Psychological Association.
- Shafranske, E. P., & Malony, H. N. (1990). Clinical psychologists' religious and spiritual orientations and their practice of psychotherapy. *Psychotherapy*, 27, 72–78.
- Thurman, C. (1989). *The lies we believe*. Nashville, TN: Thomas Nelson.
- Toh, Y., & Tan, S. Y. (1997). The effectiveness of church-based lay counselors: A controlled outcome study. *Journal of Psychology and Christianity*, 16, 260–267.
- Uchino, B. N., Cacioppo, J. T., & Kiecolt-Glaser, J. K. (1996). The relationship between social support and physiological processes: A review with emphasis on underlying mechanisms and implications for health. *Psychological Bulletin*, 119, 488–531.
- Walen, S. R., DiGiuseppe, R., & Wessler, R. (1980). *A practitioner's guide to rational emotive therapy*. New York: Oxford University Press.
- Wampold, B. E. (1997). Methodological problems in identifying efficacious psychotherapies. *Psychotherapy Research*, 7, 21–43.
- Wandrei, K. E. (1985). Identifying potential suicides among high-risk women. *Social Work*, 30, 511–517.
- Worthington, E. L., Jr., Kurusu, T. A., McCullough, M. E., & Sandage, S. J. (1996). Empirical research on religion and psychotherapeutic processes and outcomes: A ten-year review and research prospectus. *Psychological Bulletin*, 119, 448–487.
- Wyatt, S. C., & Johnson, R. W. (1990). The influence of counselors' religious values on clients' perceptions of the counselor. *Journal of Psychology and Theology*, 18, 158–165.

Received April 27, 1998

Revision received September 4, 1998

Accepted September 8, 1998 ■