CHAPTER

20 Religion and Spirituality

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One relationship factor that can potentially affect the outcome of psychotherapy is the match or mismatch between a client's religious or spiritual (R/S) beliefs and the type of psychotherapy. Some R/S clients desire R/S-tailored or accommodated treatment. Others can comfortably accept a secular treatment. Even for those who do not request R/S treatment, some might benefit from the contextualization of treatment in their R/S framework.

There has been an increase in outcome studies examining psychotherapies that incorporate R/S beliefs (Hook et al., 2010; Pargament & Saunders, 2007; Post & Wade, 2009; Smith, Bartz, & Richards, 2007; Worthington & Aten, 2009). At the time of the first edition of *Psychotherapy Relationships That Work* (Norcross, 2002), there were only 11 outcome studies examining an R/S psychotherapy, making conclusions based on this set of studies necessarily tenuous (Worthington & Sandage, 2001). Furthermore, these studies were limited to mainly Christian or Muslim-accommodative cognitive-behavioral interventions. Thus, it was difficult to generalize to other types of R/S psychotherapies. As such, tailoring psychotherapy to the R/S beliefs of clients was judged to have promising empirical support, but it was suggested that more research on this topic was needed (Norcross, 2002). The increase in number, variety, and rigor of outcome studies evaluating R/S psychotherapies allows for a far more rigorous evaluation of the effectiveness of tailoring psychotherapy to a patient's R/S convictions.

In this chapter, we first define R/S and discuss how these constructs are generally measured. Second, we offer clinical examples that illustrate how psychotherapy might be accommodated for one's R/S beliefs. Third, we present data from a meta-analysis examining the effectiveness of R/S psychotherapy. Fourth, we discuss patient contributions to the effectiveness of R/S psychotherapy. Fifth, we note several limitations of the present body of research. Finally, we give recommendations for therapists based on the present research evidence.

Definitions and Measures

Although the terms religion and spirituality have historically been closely linked (Sheldrake, 1992), current conceptualizations make important distinctions between religion and spirituality. *Religion* can be defined as adherence to a belief system and practices associated with a tradition and community in which there is agreement about what is believed and practiced (Hill et al., 2000). *Spirituality,* in contrast, can be defined as a more general feeling of

closeness and connectedness to the sacred. What one views as sacred is often a socially influenced perception of either (a) a divine being or object or (b) a sense of ultimate reality or truth (Hill et al.). Many people experience their spirituality in the context of religion, but not all do.

Four types of spirituality have been identified on the basis of the type of sacred object (Davis, Hook, & Worthington, 2008; Worthington, 2009; Worthington & Aten, 2009). First, *religious spirituality* involves a sense of closeness and connection to the sacred as described by a specific religion (e.g., Christianity, Islam, Buddhism). This type of spirituality fosters a sense of closeness to a particular god or higher power. Second, *humanistic spirituality* involves a sense of closeness and connection to humankind. This type of spirituality develops a sense of connection to a general group of people, often involving feelings of love, altruism, or reflection. Third, *nature spirituality* involves a sense of closeness and connection to the environment or to nature. For example, one might experience wonder by witnessing a sunset or experiencing a natural wonder such as the Grand Canyon. Fourth, *cosmos spirituality* involves a sense of closeness and connection with the whole of creation. This type of spirituality might be experienced by meditating on the magnificence of creation, or by looking into the night sky and contemplating the vastness of the universe.

Psychotherapy has been defined as the "informed and intentional application of clinical methods and interpersonal stances derived from established psychological principles for the purpose of assisting people to modify their behaviors, cognitions, emotions, and/or other personal characteristics in directions which the participants deem desirable" (Norcross, 1990, p. 218). R/S psychotherapy shares many methods and goals as secular psychotherapy but also incorporates methods or goals that are R/S in nature. For example, in addition to using cognitive or behavioral techniques to alleviate depression, a clinician practicing R/S psychotherapy might conceptualize using an R/S framework and, within that framework, use methods such as prayer or religious imagery. Besides pursuing goals that are psychological, a client in R/S psychotherapy might also work toward spiritual goals, such as becoming more like Jesus Christ, or adhering more closely to the teachings of Buddha. R/S outcome variables, such as spiritual well-being, might be important in psychotherapy when clients' reasons for attending therapy and criteria for evaluating therapy include spiritual goals. Accordingly, the outcome measures used in the subsequent review and meta-analysis fall into two categories. First, almost all studies use a psychological outcome variable. A study examining R/S psychotherapy for depression, for example, might use the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961). Second, many studies also use a measure of spirituality. For example, a study examining R/S psychotherapy for unforgiveness might use not only a primary psychological measure of forgiveness but also a secondary measure of spiritual well-being (Ellison, 1983).

The majority of studies in the present review measured R/S beliefs simply by identification (i.e., the participant self-identified as Christian). Some studies used a measure of R/S beliefs or commitments (e.g., Religious Orientations Scale, Allport & Ross, 1967; Religious Commitment Inventory-10, Worthington et al., 2003) and employed a minimum cutoff score as a criterion for inclusion in the study. This ensured that the participants in the study

were at least moderately engaged with their R/S beliefs. A few studies (e.g., Razali, Aminah, & Kahn, 2002) used a measure of R/S beliefs or commitments and also measured the extent to which R/S treatments had different effects for participants who were more (or less) committed.

Clinical Examples

We now provide several case examples of R/S psychotherapy from different theoretical and R/S perspectives.

Case Example 1: Christian-Accommodative Cognitive Therapy for Depression

The cognitive model of depression emphasizes the role of maladaptive cognition in both the causes and treatment of depression (Beck, 1972). Christian-accommodative cognitive therapy for depression retains the main features of the secular theory yet places the psychotherapy in a religious context. For example, the rationale for psychotherapy, the homework assignments, and the challenging of negative automatic thoughts and core beliefs are integrated with and based on biblical teachings regarding the self, world, and future (Pecheur & Edwards, 1984).

Dana (age 31) was a Christian female who presented to psychotherapy with several symptoms of depression, including feelings of sadness, sleeping more than usual, low energy, weight gain, and loss of interest in everyday activities. As psychotherapy progressed, Dana explored negative beliefs about herself. Her most problematic core belief was that she was worthless and no one would ever love and accept her as she was. These beliefs seemed related to a difficult childhood. She had been physically abused by her mother, who eventually abandoned her. Dana was a committed Christian. At intake she stated that she wanted to incorporate R/S issues in her psychotherapy. As Dana and her therapist explored and modified her negative core beliefs, they discussed how Dana thought God viewed her. Several passages of the Bible comforted Dana and helped her realize that, even though she viewed herself negatively, God and other people loved and accepted her as she was.

Case Example 2: Spiritual Self-Schema Therapy for Addiction

Spiritual self-schema therapy integrates cognitive-behavioral techniques with Buddhist psychological principles (Avants & Margolin, 2004). The goal of this psychotherapy is to modify a person's self-schema. When a self-schema is activated, beliefs about the self energize specific behaviors. This psychotherapy attempts to facilitate a shift from an "addict" self-schema to a "spiritual" self-schema that fosters mindfulness, compassion, and doing no harm to self or others (Margolin et al., 2007). Psychotherapy sessions focus on aspects of the Buddhist Noble Eightfold Path, which include training in mindfulness, morality, and wisdom.

Dave (age 47) did not ascribe to a religion. He considered himself to be spiritual. After he lost his job because he failed a drug test due to cocaine use, he checked into a rehabilitation facility. He had been dependent on drugs and alcohol on and off for 30 years. During psychotherapy, Dave was taught about the wandering nature of the mind, and how this contributed to his addict self-schema. If Dave did not work to control his mind, he usually thought of using drugs. Dave practiced a meditation technique called *anapanasati*, which involves sitting silently with eyes closed and focusing on the sensations experienced while breathing naturally. Dave improved

his concentration and mindfulness with practice. Over time, he developed discipline over his maladaptive thoughts.

Case Example 3: Christian-Accommodative Forgiveness Therapy

REACH is a model of promoting forgiveness that involves five steps: recall the hurt, develop empathy toward the offender, give an altruistic gift of forgiveness, commit to forgive, and hold on to the forgiveness (Worthington, 1998). Christian versions of REACH actively encourage clients to access their religious beliefs while moving toward forgiveness (Lampton et al., 2005; Rye et al., 2005). Clients are encouraged to view forgiveness as a collaborative process with God and to consider prayer or use of Scripture in forgiving.

Lisa (age 20) was a Christian female who struggled to forgive her father. Her father had several extramarital affairs when Lisa was younger, which precipitated her parents' divorce when Lisa was 7. Lisa's father was unreliable when Lisa was growing up. He regularly broke promises, such as failing to attend birthday parties or soccer games. Lisa harbored resentment and anger toward her father. During her junior year of college, she concluded that her unforgiveness was a problem. Even though her father was not a part of her life, most days Lisa woke up actively angry, stressed, and upset toward her father. She attended a group psychoeducational workshop for people struggling with forgiveness. During the workshop, the group leader led Lisa and seven other people through the steps to promote forgiveness. Group members shared with each other how they had been hurt and worked toward developing empathy for their offender. The group also discussed God's role in forgiveness, which helped Lisa realize the extent that God and others had forgiven her. Lisa's gratitude to God for forgiving her helped her forgive her father.

Case Example 4: Muslim-Accommodative Cognitive Therapy for Anxiety

Similar to Christian-accommodative cognitive therapy for depression, Muslim-accommodative cognitive therapy for anxiety retains Beck's cognitive model (Beck, Rush, Shaw, & Emery, 1979), augmenting it with spiritual strategies and interventions. For example, psychotherapists work with clients to identify and challenge negative thoughts and beliefs using the Koran and Hadith (sayings and customs of the Prophet) as guidance (Razali, Aminah, & Khan, 2002). Clients are encouraged to cultivate feelings of closeness to Allah, pray regularly, and read the Koran.

Hasan (age 35) was a highly committed Muslim male, diagnosed with generalized anxiety disorder. He became worried every day, and his anxiety interfered with his marriage and job. In psychotherapy, Hasan acknowledged that he did not believe the world was a safe place, and he felt as if he had to worry or else something terrible might happen. The psychotherapist helped Hasan examine the evidence for and against his thoughts. Hasan and his psychotherapist worked together to develop religious coping strategies and discover religious truths to counteract his anxious thoughts. For example, it helped Hasan to remember that he believed that Allah was always in control, and that he could trust in Allah to be with him and comfort him.

Meta-Analytic Review

Past research assessing the efficacy and specificity of R/S psychotherapies has been mixed. McCullough (1999) evaluated the efficacy of Christian-accommodative

psychotherapies for depression and concluded that the R/S psychotherapies worked as well, but not better than established secular therapies. Hook and colleagues (2010) reached a similar conclusion in their review of empirically supported R/S psychotherapies. They found some evidence for the efficacy of R/S psychotherapies. Thus, R/S psychotherapies performed better than control groups and equal to established secular psychotherapies. However, reviewers found little evidence for the specificity of R/S psychotherapies—that R/S psychotherapies consistently outperformed established secular psychotherapies. However, in a recent meta-analysis, Smith and associates (2007) found evidence for the positive effects of R/S psychotherapies even when compared with alternate treatments.

In the present meta-analytic study, we sought to determine the extent to which tailoring the psychotherapy relationship to the client's R/S faith is efficacious. We address this at three levels.

- First we compare outcomes of clients in R/S psychotherapy versus clients in no-treatment control groups. Studies using comparative designs control for possible confounding variables present in less rigorous designs. The use of control groups provides for credible inference concerning the efficacy of R/S psychotherapies.
- Second, we compare outcomes of clients in R/S psychotherapy versus clients in alternate psychotherapies. These types of studies not only control for possible confounding variables but also provide some evidence for the specificity of R/S psychotherapies.
- Third, we compare outcomes of clients in R/S psychotherapy versus clients in alternate psychotherapies that use a dismantling design. In these studies, the R/S psychotherapy and the comparison treatment are equivalent in regard to theoretical orientation and duration of treatment but differ in whether they are accommodated to R/S clients. Comparison conditions may differ in strength, so these studies most rigorously test whether it is helpful to tailor psychotherapy to a client's R/S faith.

Method

Inclusion Criteria. Studies included in the present meta-analysis met a definition of psychotherapy (Norcross, 1990), and all studies explicitly integrated R/S considerations into psychotherapy. All studies included in the present review used random assignment and compared an R/S treatment with either (a) a no-treatment control condition or (b) an alternate treatment. We excluded studies of (a) 12-step groups such as Alcoholics Anonymous, (b) meditation or mindfulness interventions that were not explicitly R/S, (c) R/S interventions such as intercessory prayer that were not contextualized in a psychotherapy, and (d) one-session "workshop-type" interventions.

Literature Search. We conducted our literature search by (a) using two or more computer databases (listed in the next paragraph), (b) manually searching the references of previous meta-analyses and reviews, and (c) contacting relevant researchers for file-drawer studies. We included both published and unpublished studies. Effect sizes from published studies tend to be larger than effect sizes from unpublished studies, so limiting the review to published studies may exacerbate publication bias (Lipsey & Wilson, 2001).

First, we identified studies by searching the *PsychINFO*, *Social Sciences Citation Index*, and *Dissertation Abstracts International* databases up until December 1, 2009. The search used the key terms [*counseling* OR *therapy*] AND [*religio** OR *spiritu**] AND [*outcome*]. Second, we used previous

reviews of the literature (Harris, Thoresen, McCullough, & Larson; Hodge, 2006; Hook et al., 2010; McCullough, 1999; Smith et al., 2007; Worthington, Kurusu, McCullough, & Sandage, 1996; Worthington & Sandage, 2001) to identify relevant studies. Third, we contacted the corresponding author from each study identified to inquire about studies we may have missed, including unpublished file-drawer studies.

Effect Size. The effect size used in this study was the standardized mean difference (*d*). The standardized mean difference is a standard deviation metric with zero indicating no mean group difference. The value of *d* summarizes the posttest difference between the R/S condition and the comparison condition. A positive *d* indicates that the R/S condition performed better, on average, than the comparison; a negative *d* indicates that the comparison condition performed better.

Missing Data. Some studies did not contain sufficient data for the calculation of effect sizes. For each study with insufficient data to calculate the effect size, we requested missing data from the corresponding author. If the necessary data could not be obtained, we excluded the study from the analysis.

Outcome of Search. Overall, a total of 51 samples from 46 separate studies evaluated R/S psychotherapy. Eleven samples employed both a control condition and an alternate treatment, resulting in 62 total comparisons. Of these comparisons, 5 did not have sufficient information to calculate the effect size, and 6 did not come from a study that employed random assignment to condition, leaving 51 valid comparisons for analysis. Of these comparisons, 22 compared R/S psychotherapy to a control condition, and 29 compared R/S psychotherapy to an alternate treatment. Of these 29 comparisons, 11 comparisons were identified that used a dismantling design in which the R/S condition and the comparison condition were identical in theoretical orientation and duration of treatment.

Coding. The coding of studies included sample size, as well as information necessary to calculate the *d* and standard error of the *d* (e.g., means, standard deviations). Also coded were potential moderators including study design characteristics, treatment characteristics, and measurement characteristics. Study design characteristics coded involved source of data (published or unpublished). An effect for source of data would suggest that publication bias could be present, which might limit the conclusions that could be drawn from the meta-analysis. Treatment characteristics included treatment format (e.g., group, individual), problem rated (e.g., depression, anxiety), theoretical orientation (e.g., cognitive, behavioral), and type of R/S faith commitment (e.g., Christian, Muslim, general spirituality). Measurement characteristics involved type of measure (e.g., psychological, spiritual).

Data Analysis. Data analysis was conducted using Comprehensive Meta-Analysis Version 2.2 (Borenstein, Hedges, Higgins, & Rothstein, 2005). Random-effects models were used because we had no reason to believe that the population effect sizes were invariant. Consistent with random-effects models, studies were weighted by the sum of the inverse sampling variance plus tau-squared (Borenstein, Hedges, Higgins, & Rothstein, 2009). Separate analyses were conducted for psychological and spiritual outcomes. For studies that reported more than one effect size, we used the measure that best assessed the goal of the specific psychotherapy. For example, if a study purported to examine R/S cognitive-behavioral therapy for depression, a measure such as the Beck Depression Inventory was chosen and other measures, such as anxiety or general distress, were

ignored. In addition, measures that had been subjected to peer review were chosen over non-peer-reviewed measures.

Results

The total number of participants from the 51 samples was 3,290 (1,524 from R/S psychotherapies, 921 from alternate psychotherapies, and 845 from no-treatment control conditions). Descriptive information for all studies is summarized in Table 20.1. R/S psychotherapies addressed problems in a variety of areas. A wide range of R/S perspectives were represented, although the most common perspectives were Christianity, Islam, and general spirituality. Many theoretical orientations were represented, although the most common theories were cognitive, cognitive-behavioral, and mind-body-spirit.

The meta-analytic results for psychological and spiritual outcomes are summarized in Table 20.2. The first column lists the level of comparison. Columns 2 through 6 list the posttest results. The second and third columns list the number of participants (N) and studies (k). The fourth and fifth columns list the mean d and 95% confidence interval for the observed d. The sixth column lists I^2, the ratio of true heterogeneity to total variation in observed effect sizes. Columns seven through eleven list the follow-up results using the same format.

Our first analysis examined whether patients in R/S psychotherapies showed greater improvement than would patients in no-treatment control conditions on both psychological and spiritual outcomes. This was largely the case (psychological $d = 0.45$; spiritual $d = 0.51$). Participants in R/S psychotherapies outperformed no-treatment control conditions on psychological and spiritual outcomes. These differences in outcomes were maintained at a smaller magnitude at follow-up, although these results should be treated with caution because of the low number of studies reporting such data.

Our second analysis examined whether patients in R/S psychotherapies showed greater improvement than those in alternate psychotherapies on both psychological and spiritual outcomes. This was largely the case (psychological $d = 0.26$; spiritual $d = 0.41$). Participants in R/S psychotherapies outperformed alternate treatments on psychological and spiritual outcomes. These differences in outcomes were largely maintained at follow-up, although these results should be treated with caution because of the small number of studies reporting such data.

Our third analysis was limited to studies that used a dismantling design in which the R/S and alternate treatment had the same theoretical orientation and duration of treatment. For psychological outcomes, there was little difference between conditions ($d = 0.13$). For spiritual outcomes, participants in R/S psychotherapies outperformed participants in alternate psychotherapies at posttest ($d = 0.33$). This difference in outcome was maintained at follow-up, although this result should be treated with caution because of the low number of studies reporting such data.

In summary, the meta-analytic results present clear findings about the effectiveness of religious and spiritual tailoring. Consistent with Smith et al. (2007), there was some evidence that R/S psychotherapies outperformed alternate psychotherapies on both psychological and spiritual outcomes. However, this finding is difficult to interpret because comparison treatments varied in quality. When the analysis was limited to studies that used a dismantling design—studies in which the R/S condition and alternate condition utilized the same

Table 20.1 Descriptive Information for All Studies

Study	Published	Design	Random	*N* RS	*N* Alt	*N* Ctl	Belief	R/S	Problem	Theory	*d* (vs. Alt)	*d* (vs. Ctl)
Azhar & Varma (1995a)	Y	C	Y	15	15	NA	Muslim	R	Depression	Cognitive-behavioral	.75	NA
Azhar & Varma (1995b)	Y	C	Y	32	32	NA	Muslim	R	Depression	Cognitive-behavioral	.27	NA
Azhar et al. (1994)	Y	C	Y	31	31	NA	Muslim	R	Anxiety	Cognitive-behavioral	.28	NA
Baker (2000)	Y	C	Y	47	NA	47	General	S	Depression	Pastoral care	NA	NC
Barron (2007)	N	D	Y	20	19	NA	General	R	Depression	Cognitive-behavioral	.73	NA
Bay et al. (2008)	Y	C	Y	85	NA	85	General	S	Heart disease	Pastoral care	NA	.21
Bowland (2008)	N	C	Y	21	NA	22	General	S	Trauma	Spiritual	NA	.56
Byers et al. (in press)	Y	C	N	20	NA	19	Christian	R	Lack of hope	Installation of hope	NA	.10
Chan, Ho et al. (2006)	Y	C	Y	27	16	17	General	S	Breast cancer	Body-mind-spirit	.69	−.06
Chan, Ng et al. (2006)	Y	C	Y	69	NA	115	General	S	Anxiety	Body-mind-spirit	NA	NC
Cole (2005)	Y	C	Y	9	NA	7	General	S	Cancer	Spiritual	NA	−.52
Combs et al. (2000)	Y	C	Y	30	NA	32	Christian	R	Marital	Cognitive-behavioral	NA	.89
Gibbel (2010)	N	D	Y	24	19	22	General	S	Depression	Cognitive	.56	.61
Hart & Shapiro (2002)	N	C	Y	28	26	NA	General	S	Unforgiveness	12-step	.78	NA
Hawkins et al. (1999)	Y	D	N	18	11	NA	Christian	R	Depression	Cognitive-behavioral	.48	NA
Ho et al. (2009)	Y	C	Y	26	33	NA	General	S	Breast cancer	Body-mind-spirit	.09	NA
Hsiao et al. (2007)	Y	C	Y	14	12	NA	General	S	Depression	Body-mind-spirit	NC	NA

(Continued)

Table 20.1 Continued

Study	Published	Design	Random	*N* RS	*N* Alt	*N* Ctl	Belief	R/S	Problem	Theory	*d* (vs. Alt)	*d* (vs. Ctl)
Iler (2001)	Y	C	Y	25	NA	24	General	S	COPD	Pastoral care	NA	.61
Jackson (1999)	N	C	Y	14	NA	13	Christian	R	Unforgiveness	Promote empathy	NA	.91
Johnson et al. (1994)	Y	D	Y	13	16	NA	Christian	R	Depression	Rational-emotive	−.53	NA
Johnson & Ridley (1992)	Y	D	Y	5	5	NA	Christian	R	Depression	Rational-emotive	.32	NA
Lampton et al. (2005)	Y	C	N	42	NA	23	Christian	R	Unforgiveness	REACH	NA	.95
Lee et al. (2009)	Y	C	Y	69	NA	79	General	S	Colon cancer	Body-mind-spirit	NA	1.23
Liu et al. (2008)	Y	C	Y	12	NA	16	General	S	Breast cancer	Body-mind-spirit	NA	.66
Margolin et al. (2006)	Y	C	Y	30	30	NA	Buddhist	S	Drug use	Spiritual self-schema	.64	NA
Margolin et al. (2007)	Y	C	Y	14	11	NA	Buddhist	S	Drug use	Spiritual self-schema	.27	NA
McCain et al. (2008)	Y	C	Y	68	65	57	General	S	Stress, HIV	Spiritual growth	.24	−1.56
Miller et al. (2008)1	Y	C	Y	27	27	NA	General	S	Substance use	Spiritual guidance	-.41	NA
Miller et al. (2008)2	Y	C	N	31	34	NA	General	S	Substance use	Spiritual guidance	.17	NA
Nohr (2001)	N	D	Y	35	23	14	General	S	Stress	Cognitive-behavioral	.02	.30
Pecheur & Edwards (1984)	Y	D	Y	7	7	7	Christian	R	Depression	Cognitive	.57	2.06
Propst (1980)	Y	D	Y	7	10	11	Christian	R	Depression	Cognitive	NC	.95
Propst et al. (1992)1	Y	D	Y	10	9	11	Christian	R	Depression	Cognitive-behavioral	−.30	.93
Propst et al. (1992)2	Y	D	Y	9	10	11	Christian	R	Depression	Cognitive-behavioral	1.44	1.47
Razali et al. (2002)1	Y	C	Y	45	40	NA	Muslim	R	Anxiety	Cognitive	−.35	NA

(Continued)

Table 20.1 Continued

Study	Published	Design	Random	*N* RS	*N* Alt	*N* Ctl	Belief	R/S	Problem	Theory	*d* (vs. Alt)	*d* (vs. Ctl)
Razali et al. (2002)2	Y	C	Y	42	38	NA	Muslim	R	Anxiety	Cognitive	.13	NA
Razali et al. (1998)1	Y	C	Y	54	49	NA	Muslim	R	Anxiety	Cognitive	.31	NA
Razali et al. (1998)2	Y	C	Y	52	48	NA	Muslim	R	Depression	Cognitive	.32	NA
Richards et al. (2006)	Y	C	Y	43	35	NA	General	S	Eating disorders	Spiritual	.58	NA
Rosmarin et al. (2010)	N	C	Y	36	42	47	Jewish	R	Anxiety	Cognitive-behavioral	.23	.45
Rye & Pargament (2002)	Y	D	Y	19	20	19	Christian	R	Unforgiveness	REACH	.35	1.50
Rye et al. (2005)	Y	D	Y	50	49	50	Christian	R	Unforgiveness	REACH	−.03	.28
Scott (2001)	Y	D	N	15	3	NA	Christian	R	Breast cancer	Cognitive-behavioral	.21	NA
Stratton et al. (2008)	Y	C	N	22	NA	29	Christian	R	Unforgiveness	REACH	NA	.09
Targ & Levine (2002)	Y	C	Y	72	60	NA	General	S	Breast cancer	Body-mind-spirit	.14	NA
Toh & Tan (1997)	Y	C	Y	22	NA	24	Christian	R	Various	Lay counseling	NA	.71
Tonkin (2005)	Y	D	Y	9	9	NA	Christian	R	Eating disorders	Cognitive-behavioral	−2.00	NA
Trathen (1995)1	N	C	Y	23	NA	22	Christian	R	Premarital	PREP	NA	.05
Trathen (1995)2	N	C	Y	23	NA	22	Christian	R	Premarital	PREP	NA	.10
Yang et al. (2009)	Y	C	Y	17	19	NA	General	S	Depression	Body-mind-spirit	NC	NA
Zhang et al. (2002)	Y	C	Y	46	48	NA	Taoist	S	Anxiety	Cognitive	.85	NA

Note: RS = religious or spiritual psychotherapy; Alt = alternate psychotherapy, Ctl = control condition; Y = Yes; N = No; C = comparative design; D = dismantling design; NA = not applicable; R = religious; S = spiritual; NC = not able to calculate effect size.

Table 20.2 Overall Results for Psychological and Spiritual Outcomes

	Posttest					Follow-up				
Comparison	*N*	*k*	*d*	95% CI	I^2	*N*	*k*	*d*	95% CI	I^2
Psychological Outcomes										
Control	1,280	22	.45	0.15 to 0.75	83.84	602	8	.21	−0.43 to 0.86	92.62
Alternate	1,718	29	.26	0.10 to 0.41	57.47	610	13	.25	0.05 to 0.45	28.74
Dismantling	387	11	.13	− 0.26 to 0.52	67.87	277	8	.22	−.09 to 0.52	30.34
Spiritual Outcomes										
Control	600	8	.51	0.19 to 0.84	71.18	317	4	.25	−.03 to 0.52	25.87
Alternate	707	14	.41	0.18 to 0.65	53.95	222	6	.32	−0.10 to 0.74	56.62
Dismantling	235	7	.33	0.07 to 0.59	0	126	4	.38	−0.16 to 0.91	51.96

Note: The symbol *N* is the sample size summed across studies. The *k* is the number of effect sizes summarized. The *d* is the weighted mean d across samples. The *95% CI* is the confidence interval for the mean *d*. The I^2 is the percentage of the observed variance that reflects real differences in effect sizes.

theoretical orientation and duration of psychotherapy—patients in R/S psychotherapies outperformed patients in alternate psychotherapies on spiritual outcomes but not on psychological outcomes. That is, participants in R/S psychotherapies showed similar reductions in psychological symptoms as did participants in similar alternate psychotherapies (e.g., similar reductions in depression) but showed better results on spiritual variables (e.g., greater increases in spiritual well-being).

Publication Bias

We conducted a series of analyses to determine whether our results were affected by publication bias. Publication bias refers to the tendency for studies available to the reviewer to be systematically different from studies that were unavailable such that conclusions may be biased. In our study, published studies had slightly higher effect sizes than unpublished studies (see Table 20.3), although in no case was this difference significant. Additionally, we used the trim and fill procedure (Duval & Tweedie, 2000) to estimate the effects of publication bias. The trim and fill procedure estimates the number of missing studies due to publication bias and statistically imputes these studies, recalculating the overall effect size. The effect sizes were somewhat reduced using this procedure, but the overall conclusions did not change (see Table 20.4). In summary, the results of the

Table 20.3 Comparison of Published and Unpublished Studies

Level of specificity	*k* published	*d* published	95% CI published	*k* unpublished	*d* unpublished	95% CI unpublished
Comparison with control	15	.49	.06 to 0.92	7	.41	.20 to 0.62
Comparison with alternate	23	.26	.10 to 0.41	6	.19	−.34 to 0.71
Comparison with alternate (dismantling)	7	.18	−.24 to 0.60	4	−.06	−.91 to 0.80

Note: The symbol *k* refers to the number of effect sizes summarized. The statistic *d* is the weighted mean standardized mean difference across samples. The *95% CI* is the confidence interval of the weighted mean standardized difference.

Table 20.4 Results for Trim and Fill Analyses

Comparison	Posttest		
	K+	*d* adj	95% CI
Psychological Outcomes			
Control	7	.15	−.13 to 0.44
Alternate	4	.17	.01 to 0.33
Dismantling	1	.03	−.37 to 0.43
Spiritual Outcomes			
Control	0	.51	.19 to 0.84
Alternate	3	.25	.03 to 0.51
Dismantling	1	.26	−.01 to 0.53

Note: The *K*+ is the number of the studies imputed by the trim and fill procedures. The symbol *d* adj is the weighted mean *d* of the distribution of *d* that contains both the observed and the imputed effects.

publication bias analyses indicate that it may be more difficult for studies on R/S psychotherapies with small magnitude or negative results to be published. These results should be taken with caution, as these analyses were conducted with a low number of studies.

Moderators

We tested three moderators of interest—treatment format (individual vs. group), target problem (psychological, forgiveness, or health), and type of R/S faith commitment (religious vs. spiritual). All moderator analyses were conducted on psychological outcomes at posttest. None of the moderators were statistically significant. That is, none of these variables accounted for appreciable variance in the effect size estimates in the reviewed studies.

Patient Contributions

The research reviewed in the present meta-analysis focused on the psychotherapist's contribution to the relationship. That is, analysis has addressed the question of whether it is helpful to tailor the psychotherapy to the client's religious and spiritual proclivities. However, characteristics of individual clients probably also affect tailoring.

One patient characteristic that might be especially pertinent is the client's R/S commitment. In the vast majority of studies, the participants have identified with a particular religion or spirituality under investigation; for instance, a study on Christian accommodative psychotherapy for depression would recruit only Christian participants. However, people differ in their level of R/S commitment. For some, R/S beliefs may be little more than a tradition or demographic characteristic, whereas for others R/S beliefs may be the driving force behind their core values, life goals, and everyday behaviors. Thus, religious commitment is likely more important than beliefs or a religious demographic identification (Worthington, 1988). We suggest that including R/S beliefs into psychotherapy may be more important for clients that are highly R/S committed than for clients who are less R/S committed. There is modest support for this hypothesis in a recent effectiveness—not randomized clinical trial—study (Wade, Worthington, & Vogel, 2007).

Unfortunately, this hypothesis has not been addressed frequently enough to be tested in the present review. The vast majority of studies have simply required that

participants identify with the particular religion that is integrated with the psychotherapy or indicate that they are open to participate in a psychotherapy that includes spirituality. Two studies (Nohr, 2001; Razali, Aminah, & Khan, 2002) assessed the efficacy of R/S psychotherapies using clients with different levels of religious commitment. But their findings were mixed. Thus, there is not sufficient research on this patient factor to make viable conclusions or clinical recommendations.

Limitations of the Research

There are limitations of the research on R/S psychotherapies. First, although the quality of studies has improved in the past several years, some studies still suffered from less rigorous study designs and low power. In particular, there were relatively few comparisons (n = 11 with psychological effect sizes; n = 7 with spiritual effect sizes) that met the criteria for a dismantling design, meaning they compared R/S psychotherapy with an alternate psychotherapy that was the same in theoretical orientation and duration. These types of studies are especially important because they best answer the empirical question of whether it improves efficacy to incorporate R/S beliefs in an existing psychotherapy for R/S clients. Studies that compare R/S psychotherapy with a completely different type of psychotherapy can be rigorous as well. However, if participants in the R/S psychotherapy outperform participants in the alternate psychotherapy, it is difficult to discern whether this occurred because (a) the specific R/S elements caused the differential outcomes or (b) something else that was different between the two psychotherapies caused the differential outcomes.

Many studies with comparative designs used random assignment to conditions, but some did not. Random assignment to conditions is the gold standard of psychotherapy research, but it is sometimes difficult to accomplish in studies of R/S psychotherapy. Religion is an emotionally charged topic for many people, and thus, highly religious people may be less willing to be randomized to a secular treatment, and adamantly nonreligious people may not be willing to be randomized to a religious treatment.

Another limitation of this meta-analysis was publication bias. Our analyses indicated that some studies indicating negative or null findings for R/S psychotherapies may have been unpublished, literally sitting in a file-drawer somewhere. There are several possible reasons for publication bias in this literature. First, much of the research on R/S psychotherapy is conducted by researchers who have religious orientations. Author decisions may be a cause of the apparent publication bias. When the results of a study do not support the efficacy of R/S psychotherapy or yield an estimate of efficacy that is small, it may be that the authors tend not to submit the paper for publication. Second, when the research is published, some of the it has been published in religiously oriented journals. Editors and reviewers for journals with a religious theme may accept papers that are supportive of R/S psychotherapy more frequently than those that are not. Third, editors may be reluctant to publish comparative studies that report null findings because it is difficult to determine whether these results reflect (a) no true difference between conditions or (b) problems in the study design and implementation (e.g., low power).

Therapeutic Practices

To conclude, we offer several concrete applications for clinical practice based on the findings from our meta-analytic review.

- R/S psychotherapy works. The research evidence is consistent that R/S psychotherapies are efficacious at

improving both psychological and spiritual outcomes, and there is some evidence that these gains are maintained at follow-up. Thus, R/S psychotherapies should be viewed as a valid alternative treatment option for R/S clients.

- The addition of R/S beliefs or practices to an established secular psychotherapy does not reliably improve psychological outcomes for R/S clients over and above the effects of the established secular psychotherapy alone. Although there was some evidence that R/S psychotherapies outperformed alternate psychotherapies, that difference was reduced when the analysis was limited to studies that used a dismantling design. Thus, at this time there is no empirical basis to recommend R/S psychotherapies over established secular psychotherapies when the primary or exclusive treatment outcome is symptom remission.
- R/S psychotherapies offer spiritual benefits to clients that are not present in secular psychotherapies. The meta-analytic results indicate that patients in R/S psychotherapies showed more improvement on spiritual outcomes than did patients in alternate psychotherapies, even when this analysis was limited to studies that used a dismantling design. Thus, for those patients and contexts in which spiritual outcomes are highly valued, R/S psychotherapy can be considered a treatment of choice.
- The incorporation of R/S beliefs or practices into psychotherapy should follow the desires and needs of the particular client. Psychotherapists are encouraged to ask about R/S beliefs and commitment as part of the intake process and to incorporate them into psychotherapy (a) as they feel comfortable and (b) in line with the preferences of the particular client. Research summarized elsewhere in this volume demonstrates that accommodating patient preferences modestly enhances treatment outcomes and decreases premature termination by a third (Swift, Callahan, & Vollmer, Chapter 15, this volume).
- We hypothesize that incorporating R/S beliefs or practices into psychotherapy might be more efficacious with clients who are highly religiously or spiritually committed. Few studies have addressed this hypothesis, but there is no research or clinical evidence to suggest that R/S psychotherapies produce *worse* outcomes than secular therapies for these patients. Thus, we recommend that practitioners consider offering R/S treatment to highly religious or spiritual patients.

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An asterisk (*) indicates studies included in the meta-analysis.

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