

## Chapter Twenty-Six

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# But Do They Work? A Meta-Analysis of Group Interventions to Promote Forgiveness

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**W**hen people are seriously hurt by others, they often seek help from professional or friendship helpers to resolve the problems these hurts create. Several models of explicit forgiveness-promoting interventions from a variety of perspectives have been explored experimentally (see Table 26.1). Are such interventions effective at promoting forgiveness? If so, what are the active ingredients of these interventions?

### PERSONAL ASSUMPTIONS ABOUT FORGIVENESS

First, forgiveness can be understood by what it is not. Many in this volume agree that forgiveness is not condoning, forgetting, accepting, justifying, excusing, or overlooking the event. Nor is it reconciling (Worthington & Drinkard, 2000). Furthermore, forgiveness is not merely reducing *unforgiveness*. We have defined *unforgiveness* as a combination of delayed emotions, including resentment, bitterness, hatred, hostility, anger, and fear, that develops after ruminating about a transgression and can motivate desires for retaliation against or avoidance of the offender (Worthington & Wade, 1999). We have shown experimentally that people can lower unforgiveness without reporting they have forgiven (Wade & Worthington, 2003). Instead, we define two types of forgiveness (Exline, Worthington, Jr., Hill, & McCullough, 2003; Worthington, 2003). *Decisional forgiveness* is a behavioral intention statement to forswear one's revenge and avoidance (unless it is unsafe to interact with the offender) and to release

the offender from the social debt incurred by the wrongdoing. *Emotional forgiveness* is the replacement of negative emotions with positive, other-oriented emotions. Thus, emotional forgiveness leads to a reduction in the uncomfortable or negative emotions and motivations associated with unforgiveness and might yield an increase in positive regard toward the offender (although that is usually limited to ongoing close relationships). This definition differs from the practice of some interventionists, who focus solely on reducing unforgiveness. Even when researchers endorse a definition of forgiveness involving both *a reduction in unforgiveness* and an increase in positive, other-oriented emotions, they often measure only reduced unforgiveness and assume that people forgave. Although this assumption is theoretically dubious, when an explicit effort has been made to promote forgiveness, the assumption is more tenable. As a result, because we are reviewing interventions, we consider reductions in unforgiveness and promotion of forgiveness synonymous for this review.

## REVIEW AND META-ANALYSIS OF THE EMPIRICAL LITERATURE

The large majority of studies have investigated the efficacy of interventions provided in group formats. A few studies of forgiveness interventions with individuals exist. We limit our analysis to forgiveness interventions provided in group formats. We focus on the (a) efficacy of interventions to promote forgiveness, (b) shared techniques used by the interventions, and (c) efficacy as a function of the time spent on various shared techniques, or components.

### Method

**Procedure.** Intervention studies seeking to promote forgiveness in a group setting were identified by searching PsycINFO ([www.apa.org/psycinfo](http://www.apa.org/psycinfo)), using keywords such as *forgive* and *forgiveness interventions*. Interventions were also identified from psychology conferences and from Web pages of known forgiveness researchers. Interventions were included if they describe a group program to help people forgive and report analyses of outcome data intended to measure the degree of reduced unforgiveness or increased forgiveness the participants held for the offenders. We included journal articles, conference presentations, unpublished manuscripts, and doctoral dissertations. In several situations, a study investigated two or more types of groups to promote forgiveness. Each unique group was included separately. Two dissertations were omitted because they reported only subscales of the outcome variable (Enright Forgiveness Inventory [EFI]; Subkoviak et al., 1995), not the overall scores. Enright, Rique, and Coyle (2000) urged researchers not to use the subscales as stand-alone measures because the subscales alone can distort the assessment of forgiveness. As of July 2004, 39 forgiveness interventions, 10 alternate treatments, and 16 no-treatment control groups from 27 studies fit the criteria (see Table 26.1).

TABLE 26.1. Means and Standard Deviations with Effect Sizes and Time for Each Intervention Condition

Study	n	Forgiveness measure				Group Type I	Group Type II	Total time
		Mean (SD)		ES I	ES II			
		pre	post					
Al-Mabuk, Enright, & Cardis (1995) S1 treatment	24	—	90.7 (13.1)	— <sup>a</sup>	-.30	FT	P	240
Al-Mabuk, Enright, & Cardis (1995) S2 treatment	24	81.0 (18.1)	101.5 (14.4)	1.21	1.17	FT	F	480
Al-Mabuk, Enright, & Cardis (1995) S2 control	21	82.2 (11.8)	86.6 (9.8)	.39	—	AT	P	480
Freedman & Knupp (2003) treatment	5	121.6 (65.5)	221.6 (44.1)	1.79	.38	FT	F	480
Freedman & Knupp (2003) control	5	167.4 (36.5)	204.2 (47.7)	.87	—	NT	N	0
Hart & Shapiro (2002) secular intervention	31	3.32 (0.7)	2.76 (0.8)	.73	—	FT	F	1200
Hart & Shapiro (2002) spiritual intervention	30	3.75 (.7)	2.67 (.8)	1.4	—	FC	F	1200
Hebl & Enright (1993) treatment	13	—	113.85 (19.1)	— <sup>a</sup>	.70	FT	F	480
Humphrey (1999) treatment	9	166.3 (86.6)	213.7 (73.2)	.53	.40	FT	F	1155
Humphrey (1999) control	11	169.0 (87.0)	177.9 (93.0)	.09	—	NT	N	0
Jackson (1998) treatment	14	39.5 (12.8)	68.5 (18.4)	1.84	.91	FT	F	720
Jackson (1998) control	13	36.4 (13.2)	48.5 (25.2)	.60	—	NT	N	0
Lin (1998) treatment	15	224.8 (39.2)	254.2 (37.5)	1.03	.20	FT	F	1800
Lin (1998) perspective taking	12	237.5 (49.7)	243.5 (69.7)	.10	—	AT	P	780
Lin (2001) treatment	7	174.7 (58.7)	280.1 (33.8)	2.20	2.43	FT	F	720
Lin (2001) support	7	185.5 (18.2)	182.7 (45.6)	-.08	—	AT	F	720
Luskin & Thoresen (1998) treatment	23	24.29 (7.8)	19.65 (7.0)	.60	.12	FT	F	360
Luskin & Thoresen (1998) control	23	24 (7.4)	20.52 (7.8)	.44	—	NT	N	0
Luskin, Thoresen et al. (2001) treatment	101	47.2 (9.6)	57.9 (11.5)	1.00	.61	FT	F	540
Luskin, Thoresen et al. (2001) control	86	46.1 (11.4)	50.6 (12.3)	.38	—	NT	N	0
Luskin & Bland (2000) HOPE 1	5	36.8 (19.2)	52.8 (15.0)	.68	—	FT	F	900

TABLE 26.1. Means and Standard Deviations with Effect Sizes and Time for Each Intervention Condition (continued)

Study	n	Forgiveness measure				ES I	ES II	Group Type I	Group Type II	Total time
		Mean (SD)		Mean (SD)						
		pre	post	pre	post					
Luskin & Bland (2001) HOPE 2	17	47.4 (10.9)	49.6 (12.5)	.18	—	FT	F	900		
McCullough & Worthington (1995) interpersonal	30	23.1 (9.4)	22 (8.1)	.12	.12	FT	P	60		
McCullough & Worthington (1995) self-enhancement	35	23.2 (7.7)	20 (7.1)	.42	.38	FC	P	60		
McCullough & Worthington (1995) control	21	20.2 (9.8)	23 (8.7)	-.29	—	NT	N	0		
McCullough, Worthington, & Rachal (1997) empathy	13	13.4 (4.7)	18.25 (5.5)	.88	.53	FT	F	480		
McCullough, Worthington, & Rachal (1997) self-enhancement	17	13.8 (6.7)	12.3 (8.0)	-.19	-.45	FC	P	480		
McCullough, Worthington, & Rachal (1997) control	40	15.3 (5.4)	15.2 (5.6)	-.02	—	NT	N	0		
Osterndorf (2000) treatment	6	203.2 (36.1)	241.5 (30.4)	1.15	-.08	FT	F	1080		
Osterndorf (2000) conflict resolution	6	208.7 (52.7)	246.7 (84.7)	.54	—	AT	F	1080		
Park (2003) treatment	8	58.4 (15.0)	74.9 (18.2)	.99	1.10	FT	F	720		
Park (2003) skillstream	8	68.8 (13.2)	57.7 (13.5)	-.83	.13	AT	F	720		
Park (2003) control	8	68.3 (14.6)	55.8 (16.6)	-.64	—	NT	N	0		
Ripley & Worthington (2002) FREE	28	14.5 (4.2)	12.9 (4.8)	.34	-.20	FT	F	360		
Ripley & Worthington (2002) HOPE	30	17.5 (6.9)	14.7 (7.2)	.39	-.39	AT	F	360		
Ripley & Worthington (2002) control	28	15.2 (8.1)	11.3 (9.8)	.42	—	NT	N	0		
Rye & Pargament (2002) secular	20	47.4 (8.2)	62.0 (7.9)	1.74	1.18	FT	F	540		
Rye & Pargament (2002) religious	19	50.2 (7.9)	64.8 (7.8)	1.78	1.47	FC	F	540		
Rye & Pargament (2002) control	19	48.6 (11.6)	50.8 (10.6)	.19	—	NT	N	0		
Rye et al. (2004) secular	49	41.5 (3.7)	47.4 (3.1)	1.69	1.09	FT	F	720		
Rye et al. (2004) religious	50	41.6 (4.6)	47.1 (4.0)	1.26	.87	FC	F	720		
Rye et al. (2004) control	50	44.9 (3.6)	43.9 (3.3)	-.27	—	NT	N	0		

Sandage (1997) empathy	30	159.6 (60.1)	192.2 (65.1)	.51	.24	FT	F	360
Sandage (1997) self-enhancement	30	168.4 (68.4)	203.7 (74.9)	.48	.39	FC	P	360
Sandage (1997) control	36	187.6 (61.3)	177.1 (63.0)	-.17	—	NT	N	0
Van Loon (1997) treatment	17	268.3 (36.7)	291.3 (37.6)	.62	.81	FT	F	360
Van Loon (1997) human relations	15	229.2 (62.3)	243.9 (75.2)	.21	—	AT	P	360
Wade (2002) REACH	25	36.6 (9.6)	32.2 (10.0)	.43	-.22	FT	F	360
Wade (2002) REAXX	25	33.5 (12.2)	28.9 (10.4)	.59	.06	FT	P	360
Wade (2002) RXXCH	26	37.4 (12.4)	30.3 (11.0)	.39	-.06	FT	P	360
Wade (2002) RXXXX	24	33.0 (12.6)	30.2 (10.2)	.24	-.05	FT	P	360
Wade (2002) stress reduction	41	31.7 (13.8)	26.8 (13.4)	.37	.22	AT	P	360
Wade (2002) control	26	32.3 (13.4)	29.6 (13.4)	.20	—	NT	N	0
Waltman (2003) treatment	13	187.3 (60.2)	253.5 (70.7)	1.01	.94	FT	F	650
Waltman (2003) support	12	164.1 (55.4)	183.5 (79.0)	.28	—	AT	P	650
Worthington et al. (2000) S1, treatment	80	227.7 (19.5)	233.7 (22.0)	.29	-.12	FT	P	60
Worthington et al. (2000) S1, control	10	235.8 (16.9)	236.4 (14.9)	.03	—	NT	N	0
Worthington et al. (2000) S2, workshop + specific	23	28.8 (11.1)	28.4 (9.8)	.14	.13	FC	P	130
Worthington et al. (2000) S2, workshop + general	19	34.3 (12.3)	32.2 (11.3)	.17	-.22	FC	P	130
Worthington et al. (2000) S2, workshop	13	36.8 (13.2)	31.2 (10.9)	.43	-.14	FT	P	120
Worthington et al. (2000) S2, control	9	31.4 (11.3)	29.7 (10.1)	.14	—	NT	N	0
Worthington et al. (2000) S3, forgiveness	27	34.6 (10.4)	30.4 (10.2)	.40	-.20	FT	P	120
Worthington et al. (2000) S3, public commitment	29	28.8 (10.8)	28.4 (10.9)	.14	-.06	AT	P	120
Worthington et al. (2000) S3, both	23	30.2 (11.4)	28.3 (9.4)	.18	.00	FC	P	120
Worthington et al. (2000) S3, control	26	30.3 (9.6)	28.9 (9.5)	.04	—	NT	N	0

Note: *ES* I (effect size) was measured as a standardized mean gain (Lipsey & Wilson, 2001, p.44), using pre and post scores for each intervention group (including control groups). *ES* II (effect size) was measured with standardized mean difference scores (Lipsey & Wilson, 2001, p. 48), comparing treatments with their control groups at posttest. Group Type I was coded as FT = forgiveness treatment, FC = forgiveness-focused comparison, AT = alternate treatment, and NT = no treatment. Group Type II was coded such that F = full intervention (whether forgiveness or not), P = partial intervention, and N = no treatment. Total time is the duration of the intervention (in minutes).<sup>a</sup>No data were collected at pretest with which to compute *ES* as with others in this column.

Means, standard deviations, and sample sizes for each treatment group were collected from results sections or from the primary authors to calculate effect sizes. The method sections of these articles and the treatment manuals were used to determine what types of materials, exercises, and techniques were used to promote forgiveness. We adopted a theoretical frame to summarize the content of the interventions. The two obvious candidates were Enright's (2001) and Worthington's (2001) models because each was involved in multiple studies. However, neither model incorporated all the observed contents, so we added two categories (i.e., defining forgiveness and overcoming unforgiveness) to Worthington's (2001) five components. This resulted in a seven-component taxonomy plus a generic "other topics" category for analyzing the contents of the interventions (see Table 26.2). This taxonomy was used to categorize all the techniques that were reported in the interventions.

**TABLE 26.2. Summary of Amount of Time Spent on Each Component and Correlations with Overall Effect Sizes for Forgiveness**

	D	R	E	A	C	H	OU	Total
Mean time <sup>a</sup> (SD)	26.2 (32.0)	41.0 (53.6)	39.5 (52.7)	21.0 (29.0)	30.6 (41.7)	12.7 (25.3)	19.1 (38.8)	396.4 (391.9)
$r^b$	.56*	.60*	.64*	.52*	.62*	.44*	.53*	.52*
N	63	63	63	63	63	63	63	63
Mean time <sup>c</sup> (SD)	43.8 (31.1)	73.5 (56.7)	68.2 (54.9)	37.3 (32.9)	50.8 (46.0)	21.7 (30.0)	277 (42.3)	542.3 (388.2)
$r^b$	.37	.43	.51*	.32	.52*	.29	.44*	.43
$n$	37	37	37	37	37	37	37	37

*Note:* D = defining forgiveness, R = recalling the hurt, E = empathizing with the offender, A = acknowledging one's own offenses, C = committing to forgive, H = holding on to forgiveness, OU = overcoming unforgiveness.

<sup>a</sup>Includes all intervention groups, treatment and no-treatment control (analyzed using zero as the time spent). Time is provided in minutes.

<sup>b</sup>Correlation represents the relationship between the before and after effect size of a given study (see Table 26.2) and the amount of time that study spent on a given component.

<sup>c</sup>Includes only treatment and comparison groups that specifically attempted to promote forgiveness (FT and FC groups; see Table 26.1).

\* $p < .006$ , Bonferroni-corrected alpha level for each set of correlation analyses (.05/8).

Once components were identified, the amount of time spent on each was estimated from the available written material. In some cases, time estimates of individual components were not provided by the researchers. In these situations, we estimated the time spent on individual components by dividing the total time of the session by the number of components covered in that session. Because manuals and method sections were not always fully explicit, measurement error for the time dimension

creates some uncertainty about our results. However, we believe that these estimates, if correctly understood, can provide a guideline for understanding the relationship between the time spent intervening with individual components and efficacy.

**Measures.** There was variation of measures used across the different studies. The most popular measures of forgiveness were the EFI (Subkoviak et al., 1995) and the Transgression-Related Interpersonal Motivations Inventory (TRIM; McCullough et al., 1998). The EFI is a 60-item self-report questionnaire. Items are rated on 6-point Likert scales. Scores range from 60 to 360. Higher scores indicate more forgiveness. The TRIM is a 12-item self-report questionnaire. Items are rated on 5-point Likert scales. Scores range from 12 to 60. Higher scores indicate more *unforgiving* motivations (i.e., less forgiveness).

Another measure used was the Rye Forgiveness Scale (RFS; Rye et al., 2001). The RFS is a 15-item, 5-point, Likert-scale self-report questionnaire. Scores range from 15 to 75. Higher scores indicate more forgiveness. The Wade Forgiveness Scale (WFS; Wade, 1989) is an 83-item, 5-point, Likert-scale self-report measure. The WFS has nine subscales with total scores ranging from 83 to 415; higher scores indicate more forgiveness. The last measure of forgiveness was a proxy measure taken from the Estrangement subscale of the Interpersonal Distance Scale (IDS; Luskin & Thoresen, 1998). Although not originally intended to measure forgiveness, the IDS was hypothesized to measure forgiveness that would be associated with interpersonal outcomes such as reconnecting with offenders. Lower scores of estrangement indicate more forgiveness.

## Results and Discussion

**Analyses.** We used meta-analytic techniques to explore the efficacy of the identified interventions and to compare the interventions across the different measures of the outcome variable. Two forms of effect sizes were calculated for each intervention group (if the data were available), using methods outlined by Lipsey and Wilson (2001). The first effect size, which is reported in Table 26.1 but not discussed in the text, compared the differences in the means of the outcome measure at postintervention between the treatment group and its associated control group (a between-group effect size). This effect size represented the difference between the treatment and control groups following the intervention and was calculated by making an adjustment to Cohen's *d* that controls for the bias of sample size. We did not discuss these findings in the text for two reasons. First, the types of control groups differed across studies; some were comparison groups, and others were untreated test-retest controls. This makes the comparisons of effect sizes based on these differences problematic. Second, we wished to avoid the difficulties inherent in postmeasurement-only designs. Without a control for pretest scores, it is impossible to know whether the groups were truly comparable prior to the intervention. This is particularly problematic in designs

using non- or partially random selection or assignment with smaller samples, which was often the case in the studies reviewed.

The second form of effect size (standardized mean gain score) compared the pre-intervention score with the postintervention score for each of the groups, treatment and control (a within-groups effect size). This measure of effect was corrected for the correlation between measurement times, which can unrealistically inflate the effect size. The correlation of the measurement times was calculated from raw data (where available) and estimated from published test-retest reliabilities of the outcome measures. The directions (positive or negative) of the effect sizes have all been modified so that positive effect sizes represent positive changes in forgiveness (increasing forgiveness or decreasing unforgiveness).

**Enright's Group.** Enright and the Human Development Study Group (1991) developed a 17-step model of forgiveness that has been the basis for interventions in 10 separate studies. However, two of these studies did not include measurement of the outcome variable prior to the intervention, due to concerns that a questionnaire about forgiveness might be confounded with the intervention (Al-Mabuk, Enright, & Cardis, 1995; Study 1; Hebl & Enright, 1993). The 17-step model has been used with elderly women (Hebl & Enright, 1993) and with college students who felt that their parents were emotionally neglectful (Al-Mabuk et al., 1995). In Study 1, Al-Mabuk et al. (1995) used only a portion of the full intervention model. They did not find significant differences between the treatment and control groups. However, the interventions that used the full 17-step model reported that the treatment group showed more forgiveness than the control group.

The 17-step model was eventually expanded to a 21-step model and has been applied in a wide variety of adult populations. Van Loon (1997) investigated the Enright et al. (1991) model with clergy struggling with interpersonal issues. Osterndorf (2000) used the model as the basis for an intervention with adult children of alcoholics. Lin (2001) studied the model's effectiveness with individuals in a drug rehabilitation center. Waltman (2003) explored the effects on male veterans with heart problems. These studies found that participants receiving the forgiveness interventions reported more forgiveness than support-based comparison groups. However, in a comparison of an adapted Enright model and a "spiritual" intervention based on the 12-step model of Alcoholics Anonymous for people in recovery from chemical dependency, Hart and Shapiro (2002) reported that the spiritually based intervention resulted in more forgiveness than the adapted Enright intervention. It is not surprising that these participants responded better to an intervention that was connected to something they knew well, a 12-step program.

Enright's forgiveness intervention model has also been used with adolescent populations, with varied degrees of success (Freedman & Knupp 2003; Lin 1998; Park 2003). In applications with older adolescents in Taiwan (Lin, 1998) and adolescent girls in Korea who were victims of aggression (Park, 2003), participants reported more forgiveness following the intervention than the comparison conditions. Freedman

and Knupp (2003), however, did not find differences between treatment and control groups in a sample of Midwestern junior high students. These discrepancies could be due to the length of treatment (longer in the former studies) and limited sample sizes (smaller in the latter study). However, enough evidence has amassed to suggest that this model of intervening has considerable promise in multiple settings.

**Worthington's Group.** A second set of interventions derives from a model developed by McCullough and Worthington (1995; McCullough, Worthington, & Rachal, 1997). The Pyramid Model to REACH Forgiveness delineates five steps toward forgiving a specific harm or offense (for a review of the contents of this model and the others described in this chapter, see Wade & Worthington, 2004). Eight studies have applied this model to help participants forgive a variety of interpersonal offenses. Similar to Al-Mabuk et al. (1995), Worthington's colleagues have investigated their model, attempting to determine which components are most effective.

Four studies have investigated the full REACH model (Jackson, 1998; McCullough et al., 1997; Ripley & Worthington, 2002; Wade, 2002). Each of these four treatments resulted in moderate to strong effects for helping participants overcome their unforgiveness across time and were more effective than no-treatment controls. Still, in several studies, the full model was compared to other conditions. It is unclear whether the full model is *more* effective than the comparison conditions. In McCullough et al. (1997), REACH was more effective than deciding to forgive. But in Ripley and Worthington (2002) and in Wade (2002), REACH did not differ from a communication-based intervention and combination of components, respectively.

Five studies representing nine treatment groups and five control conditions used an early version of the REACH model that focused on only three (REA) of the five steps (McCullough & Worthington, 1995; Sandage, 1997; Worthington et al., 2000). Four versions of the REA psychoeducational groups illustrated that small gains in forgiveness are possible in brief interventions of 1–2 hours. In tests of the full REACH model, effect sizes for pre- to postchange range from .35 to .95. This suggests that 6- to 8-hour psychoeducational interventions produce modest gains in forgiveness that may be more clinically significant than shorter interventions (or than partial treatments), which produce gains between .12 and .40. However, from this research it is still not clear whether the specific forgiveness interventions are more effective than comparison treatments.

**Rye's Group.** Rye and Pargament (2002) examined the differences in efficacy of a secular versus a religiously integrated forgiveness intervention (using religious concepts and terminology to describe forgiveness). The two treatment groups promoted more forgiveness over time than did a wait-list control group. Rye and his colleagues (2004) extended their initial intervention from 9 hours to 12 hours and investigated its efficacy with divorced individuals. Participants in the treatment groups reported greater degrees of forgiveness for their ex-spouses than did participants in the control group. Rye's model shows great promise. The four intervention groups have effect

sizes from before to after that range from 1.28 to 1.86. The distinctive elements of Rye's approach include (a) investigating religiously tailored groups, (b) focusing on failed relationships, and (c) working toward self-forgiveness. Rye's approach also incorporated relaxation and was longer on average than the other intervention programs.

**Luskin's Group.** Luskin and his colleagues have conducted four separate forgiveness intervention studies, although none of them are yet published. In two of the intervention studies, they compared forgiveness interventions that included instruction and practice in relaxation, meditation, and guided imagery, and drew heavily from cognitive behavioral and rational emotive therapy techniques with no-treatment control groups (Luskin & Thoresen, 1998; Luskin et al., 2001). In the first study, Luskin and Thoresen (1998) found no differences between the treatment and control conditions. However, in an investigation of a much larger sample, Luskin et al. (2001) demonstrated that their forgiveness intervention produced more forgiveness than did a no-treatment control group. Besides investigations, Luskin and Bland (2000, 2001) used a similar intervention for participants from Northern Ireland who had lost someone close to them due to murder. The intervention lasted for 15 hours over a 1-week period and took place in California. In the first study, participants reported increases in forgiveness from before to after. On average, participants in the second study did not become more forgiving.

Similar to Luskin's group, Humphrey (1999) incorporated the use of meditation and relaxation to help people deal with interpersonal injuries. Nine people participated in a forgiveness intervention implemented through audiotapes (approximately 18 hours within 8 weeks) that participants listened to at home. Although Humphrey's study did not use a pure group format, participants met together on three occasions for 1 hour each and completed the same intervention protocol. Compared with a wait-list group, participants in the forgiveness group were not significantly more forgiving over time, although the effect size was larger. This may have been a result of low statistical power due to the small sample size.

## Meta-Analyses

**Effect Sizes.** Effect sizes for each intervention, calculated as described above, are listed in Table 26.1. First, we coded the interventions into separate groups for comparison. Interventions were coded as either forgiveness treatment (FT, if the intervention was based on a forgiveness model and explicitly attempted to promote forgiveness); forgiveness comparison treatment (FC, if it used an alternate method to promote forgiveness, such as Hart & Shapiro's (2002) 12-step groups); alternate comparison treatment (AT, if a treatment did not intend to specifically promote forgiveness, such as Ripley & Worthington's (2002) communication-based marriage enrichment group); and no-treatment groups (NT, if the participants were assessed but did not attend an intervention, including wait-list controls). We then calculated mean effect sizes weighted

by the inverse of the variance, as described in Lipsey and Wilson (2001). Forgiveness-oriented treatments, both theoretically-grounded (FT,  $ES = .57$ , 95% confidence interval [CI] = .51 to .63) and those used for comparison purposes, (FC,  $ES = .43$ , CI = .33 to .53), had the highest effect sizes and were not significantly different. Alternate comparison treatments (AT) were significantly less effective than FT at producing forgiveness but not less effective than FC ( $ES = .26$ , CI = .16 to .36). Treatments of any kind (FT, FC, and AT) were more effective than no treatment ( $ES = .10$ , CI = .04 to .16).

Next, we compared full interventions (forgiveness or not) and groups that were partial treatments or used no treatments (see Table 26.1). Interventions were coded as partial if they were a comparison group in a component analyses study, were early (partial) versions of a forgiveness treatment, were alternate comparison groups intended as placebo groups (such as general discussion or support groups), or were one-component interventions. The mean weighted effect size for full interventions was .77 (CI = .70 to .84); for partial interventions, .28 (CI = .22 to .34); and for no treatment, .10 (CI = .04 to .16). All intervention types had a mean  $ES > 0$ . The full interventions had larger effect sizes than did the partial. Both had larger effect sizes than did no treatment.

In both of the above analyses, theoretically grounded, comparison, and full interventions were the most effective. It is important to note that these analyses did not control for the potential confound of time with the forgiveness or full interventions. (These interventions were often longer in duration than were the comparison groups.) Therefore, we conducted two hierarchical weighted (by the inverse variance) regression analyses on the effect sizes to determine whether there was a difference beyond the effects of time (a) between forgiveness, two types of comparison (FC and AT), and no treatment groups; and (b) between full, partial, and no interventions. Because we conducted two analyses, we set the alpha at .025 (.05/2). For each regression, total time spent on the intervention was entered in step 1, and the comparisons were entered in step 2. To determine overall model fit, we used the  $Q_R$  statistic, which is the regression sum-of-squares with degrees of freedom equaling the number of predictors and significance determined from the chi-square table (Lipsey & Wilson, 2001). To determine significance of the change in  $R^2$  from step 1 to step 2, we tested the difference between  $Q_R$  at steps 1 and 2 ( $\Delta Q_R$ ), using the number of predictors at step 2 as the degrees of freedom. Following Lipsey and Wilson (2001), individual predictors were analyzed for significance by correcting the standard errors of the nonstandardized regression coefficients (B), using the mean square residual as a divisor. The corrected standard error was then used to divide B to create a z-test.

In the first regression, time was entered at step 1 and was a significant predictor of effect size,  $R^2 = .33$ ,  $Q_R(1) = 151.92$ ,  $p < .001$ . As expected, the z-test of the corresponding B was significant ( $z = 17.54$ ,  $p < .001$ ). In step 2, type of treatment was dummy coded, with FT used as the reference category. The overall model was significant at step 2, as was the change in  $R^2$ ,  $\Delta R^2 = .06$ ,  $\Delta Q_R(4) = 29.38$ ,  $p < .01$ , indicating that the four group categories (FT, FC, placebo, and no treatment) predicted treatment effectiveness beyond time spent on the intervention. Analyses of the nonstandardized regression

weights supported the results above: Explicit FT promoted more forgiveness than did AT ( $z = 3.57, p < .01$ ) or NT ( $z = 4.48, p < .01$ ); FT was no more effective than FC.

In the second regression, time was entered at step 1. At step 2, the intervention type (full, partial, or none) was dummy coded and entered with full interventions as the reference group. The addition of step 2 again was significant,  $\Delta R^2 = .13, \Delta Q_R(3) = 57.037, p < .001$ . Analyses of the regression coefficients indicated that partial interventions ( $z = -5.26, p < .01$ ) and no-treatment groups ( $z = -5.74, p < .01$ ) had significantly lower effect sizes than did full interventions, even after controlling for the effect of the duration of the intervention.

These regression analyses indicate that even when controlling for the amount of time spent on treatment, explicit forgiveness versus general treatments and full versus partial interventions are more helpful for promoting forgiveness. This might suggest that the contents plus the coherence—fully integrated versus components—make interventions more successful. One note of caution regarding the above regression equations must be cited. Statisticians have argued that in meta-analyses models should be specified (i.e., residual variance of the model should be no more than would be expected from sampling error), and conclusions on unspecified models should be tentative (Lipsey & Wilson, 2001). Each of the regression models above was unspecified, meaning there was more variance in the residuals than was expected by sampling error. Thus, the results should be taken with caution until substantiated by future research.

**Correlations Between Effect Size and Time Spent.** Time spent on the individual component techniques was calculated as described earlier. Many researchers used the same components to promote forgiveness. For example, most interventions defined forgiveness (87%), encouraged recalling the hurt (95%), and helped participants empathize with the offender (89%). Two of the components were used much less frequently—promoting maintenance of (or holding on to) forgiveness (53%) and overcoming unforgiveness (37%). To determine whether the time spent on particular components was related to forgiveness outcomes, bivariate correlations were computed between the amount of time an intervention spent on a given component and effect size (see Table 26.2). Time spent on each component was significantly correlated with effect size.

These results could possibly be an artifact of the inclusion of groups that did not use any of the components and so were coded with zero as the time spent. Such groups had smaller effect sizes, as seen in the previous analyses. Therefore, we computed the same correlations using only those groups that explicitly attempted to promote forgiveness (FT and FC from Table 26.1) to see whether particular components were more strongly related to forgiveness outcomes in explicit forgiveness intervention models. In these analyses, the pattern of results changed substantially. The only components significantly related to effect size were empathizing with the offender, committing to forgive, and overcoming unforgiveness by using strategies such as relaxation or anger management (see Table 26.2). Not even overall time was significantly related to outcome. However, excluding studies

in this way reduced our power. Thus, although some relationships were not statistically significant, they may be clinically significant.

## DIRECTIONS FOR FUTURE RESEARCH

**Are Forgiveness Interventions Stronger Than Placebo or Alternate Treatments?** What seems clear from the research is that the simple passage of time, although mildly effective, is not as effective as an explicit intervention. In each analysis, forgiveness interventions and alternate treatments outperformed no-treatment controls. Although forgiveness interventions may be more powerful than the passage of time, are specific forgiveness-promoting interventions more effective than other, alternate treatments? What roles do common curative factors (e.g., empathic listening, social support, catharsis) play in promoting forgiveness? Is it important to intervene in specific “forgiveness-promoting” ways to help people overcome their hurts? This meta-analysis provides some support for the specific effectiveness of explicit forgiveness interventions for promoting forgiveness. However, many of the studies we reviewed did not use *strong* control groups. Rather, they provided alternate treatments that were more “attention control” than bona fide treatment. Those that did use strong controls did not find a difference (e.g., Hart & Shapiro, 2002; Ripley & Worthington, 2002; Wade, 2002, stress reduction). In addition, this meta-analysis explored only the effects on self-reported forgiveness and not psychological symptoms. It is important that future research compare forgiveness treatments with strong alternatives—not mere placebos—and examine the effects on psychological symptoms in addition to achievement of forgiveness.

**Does Any Particular “Forgiveness-Promoting” Intervention Really Matter?** If using explicit forgiveness interventions is more effective than general treatments, the next logical question would be *which* explicit interventions are the most effective. A few studies reviewed in this chapter compared different methods of promoting forgiveness (e.g., Hart & Shapiro, 2002) and found no differences. Additionally, in the few component analyses that have been conducted, no specific method of intervening appears to be better than another. However, our analyses indicated that perhaps empathizing with offenders, committing to forgiveness, and overcoming feelings of unforgiveness are more effective components (with recalling the offense considered potentially important as well). These conflicting results could be clarified with further studies that examine the effective elements of explicit forgiveness interventions.

## RELEVANCE FOR CLINICAL AND APPLIED INTERVENTIONS

Along with the amount of time spent intervening, specified programs or techniques of forgiving also have a valuable role. First, explicit forgiveness interventions appear

to promote forgiveness more than general treatments. This implies that for therapists to help clients as fully as possible, it may be necessary to introduce forgiveness explicitly. However, clinical caution must be exercised. All the clients in these interventions gave their consent to receive forgiveness interventions *prior to the start of the intervention*. It is uncertain whether these findings will apply to clients already in psychotherapy, some of whom might not value forgiving. Some initial evidence suggests that explicit forgiveness interventions with actual clients may help promote forgiveness and reduce psychological symptoms (Wade, Bailey, & Shaffer, 2004). However, the nuances of how, when, and with whom to intervene to promote forgiveness are still uncertain.

Second, full interventions were more predictive of larger effects than were either partial or no treatments, even when controlling for time. This suggests that providing a coherent treatment, rather than a smattering of disjointed interventions, may lead to better outcomes.

Third, several of the components appeared to be related to larger effects. Clinicians might assist clients the most by promoting an active commitment to forgive. Commitment to forgiveness took on two primary functions in the interventions (see Wade & Worthington, 2004). They attempted to help clients commit to *trying* to forgive (commit to the process of forgiveness) and commit to the forgiveness that they achieved during the intervention. Helping clients to empathize with their offenders also appears to be an effective component, which is supported by previous research on empathy (McCullough et al., 1997). Again, however, caution and sound clinical judgment are needed to determine how and when one seeks to promote empathy for an offender such that the client is not victimized further by a perception of being judged or a misunderstanding that the client should reconcile with the offender.

## CONCLUSION

The data appear to speak clearly: Forgiveness interventions are effective. However, beyond that conclusion, ambiguity and uncertainty exist. Data suggest that specific forgiveness interventions are helpful beyond time spent intervening and beyond common curative factors. However, it is unclear whether forgiveness interventions are helpful in real-life clinical settings, such as adjuncts to traditional therapy, or whether forgiveness interventions can lead to better mental and emotional health over time. The research is promising, but thus far clinical science has not established forgiveness interventions as clearly helpful beyond other modes of bona fide therapy. Other issues—such as cost-effectiveness, effects on relationships, effects on health, and match to type of clientele—still need to be addressed.

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- \*Indicates a study used in the meta-analyses.

