GENDER AND FORGIVENESS: A META-ANALYTIC REVIEW AND RESEARCH AGENDA

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A meta–analysis was conducted with 53 articles reporting 70 studies that addressed gender and forgiveness. The mean d was .28 indicating that females are more forgiving than males. Potential methodological moderators were examined: (a) type of sample, (b) target of forgiveness, (c) trait, state, or familial/marital forgiveness, (d) actual versus hypothetical transgressions, (e) measurement modalities (i.e., questionnaire, experiment, or survey), (f) type of forgiveness measure, (g) published or not published, (h) validated measures versus non–validated measures, and (i) culture. No methodological variables moderated the relationship between gender and forgiveness. However, there were larger gender differences on vengeance than any other forgiveness–related measure. Other potential moderators were suggested as possibly influencing the gender difference including functional differences processing forgiveness, differences in dispositional qualities, and situational cues.

Forgiveness has become a frequent topic of research in the past 20 years (Worthington, 2005). Substantial literature has accumulated. It has been reviewed in edited volumes (McCullough, Pargament, & Thoresen, 2000; Worthington, 2005), original volumes (Enright & Fitzgibbons, 2000; Worthington, 2006), and review papers (Exline, Worthington, Hill, & McCullough, 2003; Freedman, Enright, & Knutson, 2005; Worthington & Scherer, 2004).

Results from research on forgiveness have revealed potential benefits of forgiving. These include benefits to physical health, (for re-

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views see Harris & Thoresen, 2005; Worthington, Witvliet, Pietrini, & Miller, 2007), mental health (for a review see Toussaint & Webb, 2005), and life satisfaction (e.g., Karremans, Van Lange, Ouwerkerk, & Kluwer, 2003). Although conditions for experiencing such benefits are nuanced (see critique by Harris & Thoresen, 2005), forgiving appears to have the potential to produce positive effects.

One issue forgiveness research has acknowledged in passing, but has largely neglected in explicit focus of study, is the relationship between gender and forgiveness. Many people assume women usually are more forgiving than men. Investigators have often tested for gender differences. However, tests are frequently buried in the results, are not discussed, and are limited to simple comparisons of whether differences occur (not why they might or might not occur).

WHY MAY GENDER DIFFERENCES EXIST?

Gender differences in forgiveness might be expected for several reasons. First, gender differences may be an artifact of methodological moderators. For example the way forgiveness is studied, not forgiveness itself, may be causing the gender difference. Second, dispositional qualities may be related to responses that are forgiving (McCullough, Rachal, Sandage, Worthington, Brown, Hight, 1998). Third, there may be gender differences in affective traits that affect responses to situations (Bettencourt & Miller, 1996). Fourth, attachment style may influence tendency to forgive (Bartholomew & Horowitz, 1991). Fifth, men may be more drawn to Kohlberg's (1984) justice-based morality and to responses to transgressions emphasizing fighting, vengeance, or justice. Women may be more drawn to warmth-based virtues, which are more in line with Gilligan's (1994) ethic of care. Sixth, forgiveness may be influenced by individual differences in coping. Seventh, gender differences in forgiveness may also be influenced by situational differences. Despite the clear possibility that individual differences could strongly influence genders to respond differently to transgressions, it is likely that such differences will be manifested by (a) situations that draw attention to individual differences, (b) those that prime thoughts related to gender issues, justice, or care, or (c) those that are likely role-conflicted. Eighth, religion may contribute to tendency to forgive. Overall, women are on average more religious than men (Freese, 2004). Religions tend to value forgiveness (Rye, 2005).

In this present review, we established theoretical reasons for hypothesizing gender differences. Next, we surveyed the literature to determine the frequency with which gender differences, if tested, were found to exist, uncovering 53 articles with 70 codable studies for meta–analysis. Third, we tested for overall gender differences. Fourth, we attempted to rule out methodological confounds. Fifth, to the extent we ruled out potential methodological confounds, we briefly investigated hypothesized, non–methodological reasons for gender differences in forgiving.

We have three main purposes in writing this article. We compile findings, which we culled from many studies that report, but do not highlight, comparisons between men and women. We suggest theoretical reasons for such differences and attempt to put some of these to the meta–analytic test. We also encourage research on forgiveness that directly studies and addresses gender through suggesting a research agenda.

DEFINITIONS OF FORGIVENESS

To provide a theoretical context for understanding the empirical studies of forgiveness and gender, we briefly review some approaches that might link gender and forgiveness with lines of research. This involves addressing definitional differences.

Historically, one of the problems in forgiveness research has been the definition of forgiveness. Worthington (2005) has recently observed that there appears to be a *de facto* consensus about what forgiveness is *not* and emerging consensus on what forgiveness is. Traditionally, definitions have fallen into two camps: forgiving involving (a) reduction of negative experiences (e.g., emotions, motivations, behavior, cognition; i.e., Ashton, Paunonen, Helmes, & Jackson, 1998) or (b) *both* a reduction of negative experience and a resulting positive experience toward the offender (i.e., Fincham, Beach, & Davila, 2004). Worthington (2005) observed that when strangers or people in poor or non–valued relationships offend, the focus is on reducing the negative. In valued, continuing relationships, the focus is on both reducing the negative and then (if possible) increasing the positive.

Forgiveness Theories

Forgiveness has been seen as an interpersonal process or an intrapersonal process and has been conceptualized from a variety of perspectives. Interpersonal models that incorporate forgiveness focus on expression of forgiveness to the offender (Baumeister, Exline, & Sommer, 1998). For instance, interpersonal models that incorporate forgiveness include reconciliation–based models (Sapolsky & Share, 2004), evolutionary–based models (McCullough, 2001), and interdependence theory–based models (for a review see Rusbult & Van Lange, 2003).

Intrapersonal models of forgiveness focus on internal processes of forgiveness. They treat the interpersonal context and discussions about transgressions as important, but as not strictly forgiveness. For instance, intrapersonal models include decision–based models (DiBlasio, 1998), cognitive models (Gordon, Baucom, & Synder, 2000), process models that emphasize cognition, affect, and behavior (Enright & Fitzgibbons, 2000), emotion–focused models (Malcolm & Greenberg, 2000), models that emphasize change over time (McCullough, Fincham, & Tsang, 2003), attributional models (Girard & Mullet, 1997; Kachadourian, Fincham, & Davila, 2005), and stress and coping models (Witvliet, Ludwig, Vander, & Kelly, 2001; Worthington, 2006).

Gender may influence forgiveness in each of the different models of forgiveness listed above. For example, reconciliation-based forgiveness models may be affected by gender differences in the way males and females approach, engage, and respond to reconciliation. In evolutionary-based models, gender differences could influence willingness to forgive. For example, Taylor, Klein, Lewis, Gruenewald, Gurung, & Updegraff (2000) identified fighting and flight as traditionally recognized ways of coping, which are often preferred by men. However, most animals are social, and when threat arises, they may also tend-and-befriend (Taylor et al., 2000), which is often preferred by women. Attributional-focused forgiveness models may be affected by gender differences that have been found in responsibility attributions (Elkins, Phillips, & Konopaske, 2002). Furthermore, different attributional patterns have been found in husbands and wives, suggesting that social roles are linked to the way people attribute cause after transgressions (Kachadourian et al., 2005). As a final example, gender differences in stress and coping can affect forgiveness. For instance, gender differences have been found in the ways people experience stressors, appraise stressors as threatening or challenging, react to appraisals, and cope (Lazarus, 1999). To the extent that transgressions are interpersonal stressors, gender differences are hypothesized along the lines studied in the stress–and–coping literature.

Interface between Theories of Gender and Forgiveness

Structural-Developmental Theories About Reasoning Concerning Moral Dilemmas. Reasoning about injustices is important for whether forgiveness is granted or experienced (Exline et al., 2003) because, to even consider forgiving, a transgression or injustice must have occurred. Thus, a moral wrong is often perceived. Two approaches to injustices have revolved around gender differences. Kohlberg (1984) established a cognitive-developmental stage theory of moral development, which was based on reasoning about justice. In this model, Kohlberg described stage three (desire to preserve relationships and to live up to the expectations of others) as the modal stage for females, and stage four (desire for law and order where the laws have to be upheld to maintain social order) as the modal stage for males. In response, Gilligan (1994) proposed that females are oriented toward an ethic of care distinguished by the motivation to preserve relationships and to respond to the needs of others. Males, she theorized, are oriented toward a need to see justice done through the consideration of fairness and equity.

Jaffee and Hyde (2000) meta–analyzed 113 empirical studies that purported to test this contention. They found a small, but reliable, gender difference in moral reasoning (d = .18). Men and women reasoned differently about transgressions, but Jaffee and Hyde suggested that the differences might be less powerful than Gilligan assumed.

Based on this line of reasoning, gender differences in forgiveness may exist because of gender differences in moral reasoning. First, both Kohlberg and Gilligan theorized that females desire to preserve relationships more than do males. The desire to maintain relationships may encourage females to forgive more instead of to seek justice (through revenge or social mechanisms). Second, both Kohlberg and Gilligan theorize that men are oriented toward justice—seeking more than are women. In the event of a transgression, men may seek

societal or formal justice more or pursue individualized attempts to exact justice, get even, or seek revenge more than women do. Both the theories of Kohlberg and Gilligan have fueled lay and professional opinions that women are expected to forgive more than are men.

Forgiveness-Related Concepts That May Influence Gender and Forgiveness. Several additional variables might affect the relationship between gender and forgiveness. First, societies determine what injustices are. The definition of injustice and its relative negative valance has been shaped by gender politics. These issues include physical abuse, incest, child abuse, abuses of power by the powerful, freedom, and equality. Each is important in determining what are transgressions, their meaning, and how they should be responded to. Therefore, betrayals of roles, especially when they involve the abuse of power are likely particularly offensive to people who embrace feminist psychology and interpret daily events according to their potential political ramifications. Also, sociological accounts, such as symbolic interactionism (Reck, 1964) emphasize that individuals interpret transgressions. However, the final interpretation of the meaning of transgressions is socially negotiated. In relationships, men and women negotiate different understandings of injustice and forgiveness. That negotiated understanding will likely vary within different ongoing micro-sociological structures (e.g., couples, families, work groups) relative to ad hoc relationships or friendships.

Second, religion may impact forgiveness and gender. Within the United States, religious pluralism and patterns of demography surrounding religion influence forgiveness. A Christian majority has eroded. The presence of Judaism has been constant. The impact of Islam, Buddhism, and Hinduism has grown. Religious "nones" and other religions (e.g., New Age, Wican, etc.) have also grown. Religion's manifestations are affected by concern over injustice and by power. Religions reflect different roles of gender. Females have frequently been found to be more religious than men (Freese, 2004; Miller & Hoffman, 1995). This should suggest a gender differences in forgiveness for several reasons. First, forgiveness is often labeled as a religious value (McCullough & Worthington, 1999; Rye, 2005). Thus, because women are more often more religious, they are likely to use that religion to promote personal forgiveness. Second, religion is not

only about personal spirituality, but is also usually associated with a communal orientation and pro–marriage and pro–family values. Together, these societal influences are likely embodied in the way males and females respond to transgressions.

Third, culture may affect gender differences in forgiveness. First, collectivistic forgiveness has been described as being motivated by an attempt to promote and maintain group harmony (Hook, Worthington, & Utsey, 2007). Individualistic forgiveness is motivated more by pursuit of personal peace. It is possible that women, who tend to be more relationally oriented, are influenced by or engage in collectivistic forgiveness more often than do males in predominantly individualistic cultures. Furthermore, in individualistic cultures, evaluations of injustice are heightened. Forgiveness—whether, when, and how to forgive—can be differential depending on the degree to which men or women tend to see themselves as hurt or offended. Men and women, if differentially attuned to relationships, might differ in (a) sensitivity to offense, (b) ways transgressions are labeled, (c) threshold for defining an act as a transgression, (d) interpretation of the importance of the transgression, (e) emotional responses to transgressions, (f) motivations toward transgressors, (g) strength of arousal of the justice motive, or (h) coping mechanisms. Additionally, culture can be a possible confound when looking at gender differences in forgiveness because gender differences in forgiveness could be due to culture differences in forgiveness. Similarly, Gaines, Marelich, Bledsoe, Steers, Henderson, et al. (1997) cautioned researchers regarding the possibility of gender moderating the impact of race/ethnicity on cultural value orientations. Sandage and Williamson (2005) described how forgiveness is similar across many cultures, yet, there are nuanced differences in the way individuals from different cultures conceptualize and experience forgiveness. For instance, Takaku, Weiner, and Ohbuchi (2001) conducted an experimental study with Japanese and American participants. Although both Japanese and American participants forgave more after exposure to a hypocrisy-inducing manipulation, the process by which the hypocrisy induction worked differed. American participants paid more attention to the perceived controllability of the offense while Japanese paid more attention to recidivism and their relationship to the transgressor. Furthermore, most Americans viewed forgiveness as violations of justice while most

Japanese viewed transgressions as violations of norms and roles. In summary, differences in culture and gender differences may be related. Culture and gender may be possible confounds when examining one construct and not the other.

Summary

Forgiveness has been conceptualized within interpersonal and intrapersonal perspectives. Regardless of the forgiveness models, gender has the potential to influence forgiveness. Kohlberg and Gilligan theories of moral reasoning provide support for women being expected to forgive more than are men. Gender differences in forgiveness are also likely influenced by sociological factors, religion, and culture.

METHOD OF THE REVIEW

We reviewed empirical journal articles focusing on forgiveness between 1983 and January of 2007. The empirical search began in 1983 because the scientific study of forgiveness did not being until the mid–1980's (Worthington, 2005). We confined our review to those that empirically tested gender differences.

First, we systematically examined results sections of 173 empirical articles in the possession of the second author. Full articles were read and included if gender was mentioned in any way in relation to forgiveness. Of the 173 articles, 36 tested forgiveness and gender. Second, we searched *PsycINFO* (Psychological Abstracts) pairing the key words associated with forgiveness and gender (pairing gender or sex with forgive, forgiveness, forgiving, and forgivingness). Thus, any article that mentioned gender in the title or the abstract was included. Of 66 previously unidentified empirical articles addressing forgiveness, an additional 27 addressed gender. Third, we searched the Dissertation Abstracts International database. Thus, any article on forgiveness (or related key words above) that mentioned gender or sex in the title or the abstract was included. We found 39 previously unidentified dissertations discussing forgiveness; 8 addressed gender. Fourth, we consulted Social Sciences Citation Index. We searched for the most cited empirical articles dealing with forgiveness from 1983 to 2007. Thus, any article on forgiveness (or related key words above) that mentioned gender or sex in the title or the abstract was included. Of the 25 previously unidentified empirical articles, four addressed gender. Fifth, we then reviewed discussion sections and reference lists of all articles looking for any key forgiveness and gender words (none additional found). Sixth, we searched the table of contents for August 2002 through January 2007 for the top three journals that contained the most frequent sources of articles on forgiveness and gender (*Journal of Personality and Social Psychology, American Journal of Family Therapy*, and *Personality and Social Psychology Bulletin*; three additional found). Seventh, personal correspondence with people publishing in the area revealed five additional. Altogether we found 83 articles studying forgiveness and gender.

We were unable to contact one author to get the full text of his dissertation and therefore dropped that dissertation from the review because the abstract did not provide enough information. One article that addressed gender differences and forgiveness was a meta–analysis of 13 forgiveness intervention studies and was excluded from our meta–analysis. One article addressed societal and group forgiveness regarding the Holocaust and was also excluded because it was conceptually different than forgiveness of other and self. In addition, 27 articles were not included because the findings were conditional interactions and could not be converted to *d* (e.g., responsibility predicted forgiveness in females while empathy predicted forgiveness in males). Thus, we analyzed a total of 53 empirical articles in this present article. Because many articles contained more than one study, there were a total of 70 studies.

Several studies reported more than one gender finding. When this occurred we followed two decision rules. First, if two or more gender findings from the same study were from two validated instruments measuring the same thing (e.g., forgiveness or vengefulness) then the mean *d* was calculated. If the first decision rule did not apply, the second decision rule was followed. The second decision rule involved randomly selecting a single gender finding from each article. All forgiveness scales were coded in the same direction, with higher scores indicating more forgiveness. All vengeance scales were coded in the same direction with high vengeance being reverse coded. Thus, high scores of vengeance were coded into low scores of forgiveness.

Meta–Analysis Procedure. We conducted a meta–analysis of the standardized mean differences on forgiveness between males and females. We conducted the meta–analysis using the Comprehensive

Meta–Analysis (CMA) software (Borenstein, Hedges, Higgins & Rothstein, 2005) which follows procedures associated with Hedges and Olkin (1985). No corrections were made for measurement error in the forgiveness measures. Measurement error causes the observed mean difference to underestimate their population values. Thus, all mean standardized differences are downwardly biased estimates of the mean population differences between the sexes. We used the random effects implementation of the Hedges and Olkin approach.

Twenty studies that reported no gender differences in forgiveness did not include statistics necessary to calculate d. Therefore, data was imputed for 20 studies. The average effect size of all of the studies that reported no gender difference and included necessary statistics was d=.10. Therefore, .10 was imputed for all 20 studies that reported no gender difference and did not provide statistics. Data was analyzed both with and without the imputed data. Nine methodological moderators were coded in order to determine whether there was an interaction with gender and forgiveness (see Table 1).

RESULTS

Question 1: Were There Gender Differences in Forgiveness?

In Table 2 we present the results of the meta–analysis of gender differences in forgiveness. Column 1 presents the distribution of data analyzed. First, all available data were analyzed and then the data were broken down by moderator subgroups. The second column of the table, identifies the number of independent samples (k) while the third column identifies the total sample size across studies. Thus, there are 70 independent samples with a total of 15,731 individuals contributing data. The fourth column is the standardized mean difference (d) between males and females in forgiveness. A positive d indicates that females were more forgiving than males, on average. A negative *d* indicates that males were more forgiving than females. A d expresses the mean difference in standard deviation units. For the distribution of all 70 effect sizes, the mean d is .281 indicating that females are more forgiving than males by a bit more than a 1/4 of a standard deviation. The last two columns of Table 2 are the 95% confidence interval for the mean *d*. Thus, the confidence interval for the mean for all 70 effect sizes ranges from .206 to .356. The lower bound of the confidence interval suggests just how small the mean in the population might be. The upper bound of the confidence interval suggests just how large the mean in the population might be. The 95% confidence interval can be used to judge the statistical significance ($p \le .05$) of the mean differences between moderator subgroups. Consider two moderator subgroups A and B. When the 95% confidence intervals for the two subgroup means do not overlap, there is a statistically significant difference between the means ($p \le .05$ level of significance). We conclude that a significant difference exists in gender responses to forgiveness.

However, we agree with Hunter and Schmidt (2004) who argued that reliance of statistical significance tests in meta–analysis is unwise. Instead, we will focus on the practical (sometimes called "clinical") significance of the difference. We consider a mean difference of .2 standard deviations to be a difference that is practically and meaningfully different. Cohen (1988) offered .2 as the minimum effect size to be considered a "small" magnitude mean difference. Cohen suggested that .4 was the minimum effect size for a "moderate" magnitude difference. To assist readers in interpreting a .2 difference, we note that a standardized mean difference of .2 is approximately equal to a point–biserial correlation of .1 between sex and forgiveness. Thus, overall the gender difference in forgiveness is between small and moderate according to Cohen's criteria.

Question 2: Why Are Differences in Forgiveness Found?

One hypothesis is that differences are detected depending on methodological choices. We examined nine methodological moderators: (a) type of sample (i.e., college, community, adolescent/child, married couples, mixed sample), (b) target of forgiveness (i.e., forgiveness of romantic partner forgiveness of other, forgiveness of self, forgiveness reported from interventions, or forgiveness composite score), (c) type of forgiveness (i.e., trait, state, familial/marital), (d) actual versus hypothetical transgressions (i.e., transgressions that actually occurred or transgressions that participants imagined to occur), (e) measurement modality (i.e., questionnaire, survey, or experiment), (f) type of forgiveness measure (Transgression Related Inventory of Motivations; TRIM, Trait Forgiving; TFS, Trait Narrative Forgiveness Scale; TNTF, Enright Forgiveness Inventory, Vengeance Scales, or other forgiveness scales), (g) published versus

TABLE 1. Sample Characteristics, Effect Size Estimates, and Moderator Variable Codes

	Z	z	Z		Sample	Target	Trait or	Actual or	Type of	Forg.	Forg. Published Validated	Validated	
Study	Male	Female	Total	ρ	Type	Forg.	State	State Hypothetical	Study	Study Measure	or not		Culture
Allan, Allan, et al. (2006)	63	71	134	-0.43	2	2	2	-	2	3	-	-	_
Applegate, Cullan, et al (2000)	373	186	559	1.15	2	2	2	_	3	4	_	2	-
Ashton, Paunonen, et al. (1998)	49	69	118	0.04	-	2	_	2	2	4	_	2	-
Azar & Mullet (2001)	48	48	96	0.02	2	2	2	2	_	4	_	2	2
Azar & Mullet (2002)	120	120	240	0.20	2	2	-	2	4	-	2	2	
Azar, Mullet, & Vinsonneau (1999)	24	24	48	0.08	2	2	2	2	_	4	-	-	-
Barros (2002)		I	387	0.20	-	-	-	_	2	4	-	2	-
Berry, Worthington, Parrott, O'Conner, &													
Wade (2001)	92	371	463	-0.06	-	2	-	2	2	2	-	-	-
Brown (2003) Study 1	47	47	94	0.10	-	2		_	2	4		2	-
Brown (2003) Study 2	21	48	69	0.20	-	2	-	_	2	4	-	-	-
Brown (2003) Study 3	37	32	69	0.26	-	2	-	_	2	2	-	-	-
Brown (2003) Study 4	37	64	101	0.18	-	2	_	_	2	2	_	_	-
Brown (2004)	89	180	248	0.34	_	2		_	2	2		-	-
Carver (2005)	88	193	281	90.0	2	2	_	_	2	3	2	-	
Cohen, Malka, Rozin, & Cherfas (2006)													
Study 1	40	73	113	0.20	-	2	-	_	_	4	2	2	-
Cohen, Malka, Rozin, & Cherías (2006)													
Study 2	51	20	101	0.20	-	2	-	-	_	4	2	2	
Cohen, Malka, Rozin, & Cherfas (2006)													
Study 3	40	26	137	0.20	-	2	2	-	_	4	2	2	-

105	262	367	0.37	2	2	-	2	-	-	2	-
62 120		182	0.16	—	2	_		2	4	2	2
72 58		130	0.20	-	2	-	2	2	2	-	-
52 134		186	-0.41	2	2	2	-	2	4	2	2
58 70		128	0.18	2	4	2	-	2	4	-	2
39 30		97	0.04	Ľ	,	2	c	,	4	-	,
))	1	1	1	1	r	-	1
30 30		09	90.0	2	2	2	2	2	4	-	2
136 134		270	0.32	-	2	2	-	2	-	6	-
91 72		163	0.28	-	2	-	2	-	4	-	-
83 72		155	0.52	-	2	-	-	2	4	-	2
60 140		200	0.20	-	2	-	-	2	4	2	2
22 67		89	0.49	-	2	-	—		4	-	2
50 104		154	-0.56	-	2	2	-	2	4	-	2
18 46		64	0.20	-	2	-	-	-	4	-	2
114 122		236	0.04	2	2	-	2	-	4	-	2
107 107		214	0.20	4	-	3	-	2	4	-	-
67 56		123	2.67	2	2	-	-	2	2	-	-
30 30		09	0.20	2	2	-	-	2	4	2	2
325 470		795	0.20	2	2	-	-	-	4	-	2
119 119		238	0.47	4	-	2	-	2	4	-	2
1		1500	0.12	2	2	-	-	3	4	-	2

TABLE 1. (continued)

	Z	Z	Z		Sample	Target	Trait or	Actual or	Type of	Forg.	Forg. Published Validated	Validated	
Study	Male	Female	Total	p	Type	Forg.	State	State Hypothetical	Study	Study Measure	or not	or not	Culture
Lee & Chard (2003)	17	26	43	0.54	-	2	2	2	-	2	-	2	-
Lim (2000)	l	I	620	0.20	4	-	-	_	2	4	-	2	-
Lukasik (2000)	l	I	485	0.20	3	2	3	_	-	2	-	-	-
Macaskill, Maltby, & Day (2002)	100	224	324	0.20	-	2	-	_	2	4	-	-	-
Mauger et al (1992)		I	237	0.43	2	3	-	_	3	4	-		
McCullough, Bellah, Kilparick & Johnson	36	Ľ	01	0.28	-	,	c	-	,	-	-	-	-
McCullough Fincham & Teans (2003)	2	3	5	9	-	1	1	-	1	-	-	-	-
Study 2	20	69	89	0.20	-	2	2	_	3	-	-	-	2
Neto & Mullet (2004)	102	06	192	0.30	<u></u>	2	-	_	2	4	-	2	-
O'Malley & Greenberg (1983) Study 1	09	09	120	0.45	-	2	2	2	-	4	-	2	2
O'Malley & Greenberg (1983) Study 2	32	32	64	0.56	-	2	2	2	-	4	-	2	-
O'Malley & Greenberg (1983) Study 3	72	72	144	-0.35	-	2	2	2	-	4	-	2	-
McCullough, Rachal, Sandage, et al.		11	338	0.50	+	-	·	-	·	-	-	-	-
(1990) Study 3	-	+	077	0.30	-	-	7	-	7	-	-	-	-
McCullough, Kachal, Sandage, et al. (1998) Study 4	59	128	187	0.28	-	2	2	-	2	-	-	-	-
Mullet, Barros, et al (2003)	303	471	774	0.20	2	2	_	-	2	4	_	2	-
Mullet, Houdbine, Laumonier, & Girard													
(1998)	173	301	474	0.43	2	2	-	2	2	2	<u>—</u>	_	-
Park & Enright (1997)	30	30	09	0.20	2	2	2	-	2	4	-	2	-
Rackley (1993)			240	0.20	4	-	-	-	2	3	2	-	2
Richard, Boivin, & Fratzke (2003)	47	66	146	0.41	-	2	-	-	2	4	2	2	
Roby (1997)	1		236	0.56	2	2	4	-	2	4		2	2
Rvan & Kumar (2005)	45	55	100	0.24	2	2	-	2	2	4	_	2	-

Rye, Pargament, Yingling, Shgren, & Ito													
(2005)	47	66	146	-0.54	2	2	2	-	-	4	-	-	_
Scobie, Scobie, & Kakauoulis (2002)	183	375	558	0.20	-	-	-	-	2	4	-	-	_
Shackelford, Buss, & Bennett (2002)	128	128	256	0.87	-	-	2	2	2	4	-	-	_
Stuckless & Goranson (1992) Study 1	121	267	388	0.32	-	2	-	-	2	2	-	-	
Stuckless & Goranson (1992) Study 2	29	122	151	0.72	-	2	-	_	2	2	-	-	
Tartaro, Luecken, & Gunn (2005)	32	28	26	0.63	-	2	-	-	-	4	-	-	
Toussaint & Webb (2005)	45	82	127	0.04	2	2	2	-	2	3	-	-	
Van Loon (1997)	29	3	32	0.20	2	2	-	2	-	4	-	2	
Vinsonneau & Mullet (2001) Study 2	100	103	203	0.41	3	2	2	2	-	4	-	2	
Wade & Goldman (2006)	38	147	185	0.52	2	2	2	-	-	-	-	-	
Worthington, Kurusu, Collins, et al (2000) Study 1	73	23	96	0.37	-	2	2	-	-	4	-	-	
Worthington, Kurusu, Collins, et al (2000) Study 2	58	9	64	1.15	-	2	2	-	-	4	-	2	
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Note. Type of sample: 1 = college; 2 = community; 3 = adolescent/child; 4 = married couples; 5 = mixed sample. Target of forgiveness: 1 = forgiveness of romantic partner; 2 = forgiveness of other; 3 = forgiveness reported from interventions; 5 = forgiveness composite. Type of forgiveness: 1 = trait; 2 = state; 3 = familial/marital. Actual versus hypothetical transgressions: 1 = transgressions that actually cocurred; 2 = transgressions that participants imagined to occur. Measurement modality: 1 = questionnaire; 2 = survey; 3 = experiment. Type of forgiveness measure: 1 = Transgression Related Inventory of Motivations; 2 = Trait Forgiveness Scale and Trait Narrative Forgiveness Scale 3 = Enright Forgiveness Inventory; 4 = other forgiveness scale; 5 = vengeance scales. Validated or non-validated forgiveness measures: 1 = validated measure; 2 = non-validated measure. Culture: 1 = U.S.; 2 = non-U.S.

TABLE 2. Meta-Analysis of Standardized Mean Differences (d) in Forgiveness by Gender

Distribution	K	N	Standardized Mean Difference (d)	Lower 95% Confidence Value	Upper 95% Confidence Value
All effect sizes	70	15,731	.281	.206	.356
Sample Type		,			
College	38	6,510	.304	.216	.392
Community	18	6,214	.209	.048	.371
Adolescent/Child	2	688	.275	.080	.469
Married Couples	4	1,312	.252	.133	.371
Mixed	8	1,007	.383	086	.853
Type of Forgiveness		,			
Romantic Partner	8	2,747	.319	.174	.464
Other	59	12,527	.270	.182	.358
Self	1	237	.430	.167	.692
Intervention Tech- niques	1	164	.181	129	.491
'	1	56	.629	.065	1.193
Composite Trait or State	1	36	.629	.063	1.193
Trait or state	39	10,645	.301	.226	.375
State	28	4,151	.228	.044	.411
Marital/Familial	3	935	.247	.117	.377
Actual or Hypothetical)	933	.24/	.117	.3//
Actual	51	12,555	.295	.205	.385
Hypothetical	19	3,176	.246	.114	.378
Type of Study	13	3,170	.240	.114	.570
Experiment	23	3,847	.247	.131	.364
Questionnaire	43	9,499	.271	.182	.361
Survey	4	2,385	.482	076	1.041
Forgiveness Measure	7	2,303	.402	07 0	1.041
TRIM	7	1,417	.340	.233	.446
TFS and TNTF	5	1,222	.170	.057	.284
Enright	4	782	.004	247	.255
Vengeance	6	1,453	.831	.428	1.235
Other	48	10,857	.244	.154	.334
Publication or Dissertation	10	10,037	.2.11	.131	.551
Published	59	13,776	.303	.217	.389
Dissertation/		,			
Unpublished	11	1,955	.182	.066	.297
Validated or Not	2.2	7.004	222	210	446
Validated	32	7,004	.332	.218	.446
Non-validated	38	8,727	.238	.136	.339
Culture U.S.	Г 4	10.534	210	210	410
	54	10,524	.319	.219	.418
Non-U.S.	16	5, 207	.198	.124	.271

Note. Positive d indicates females are more forgiving than are males.

non-published/dissertations, (h) validated or non-validated forgiveness measures, and (i) U.S. sample versus non-U.S. sample.

Type of Sample. The college years are often times in which gender issues are salient. Students are in an intellectual environment that sensitizes people to egalitarian gender roles. They are also dealing with intimacy as a major developmental task. Post–college, people are often more traditional in values and hence more likely to engage in gender–stereotypic and gender–role–driven behaviors. We might reasonably hypothesize that gender difference in forgiving might appear merely because of the population differences. Many studies in psychology assay college students. Less frequently, researchers draw from community samples.

Of the 70 studies reviewed, 38 used college samples; 18 community; 2 adolescent/child; 4 married couples; and 8 mixed samples (i.e., two or more of the type of samples listed above). Gender differences (i.e., the 95% confidence interval does not include zero) were found in all subgroups except for the mixed sample subgroup. Confidence intervals in each subgroup of the moderator overlapped (see Table 2). No subgroups within sample type had a mean difference between one another of .2 or more. Thus, type of sample did not moderate forgiveness and gender.

Target of Forgiveness. Gender differences in forgiveness may vary based on whom the victim is potentially forgiving. For instance, perhaps more gender differences exist in romantic partners because they may be more likely to enact in stereotypic gender roles. In contrast, a more general target, forgiveness of others, may cancel out any gender difference that may be present. In addition, forgiveness of self is difficult to study and not much research has looked at gender differences in self–forgiveness. It is possible that the focus on the self may reduce the gender difference in forgiveness with the activation of self–focused thinking overriding the activation of gender stereotypic roles.

Of the 70 studies reviewed, 8 examined forgiveness in romantic partners, 59 in the general term of forgiveness of other, 1 in forgiveness of self, 1 in use of intervention techniques, and 1 in a forgiveness composite score. Gender differences existed in all targets except interventions. Confidence intervals in each subgroup of the moderator did not overlap (see Table 2). However, the two extreme scores were based on single samples. No other subgroups within target of for-

giveness had a mean difference between one another of .2 or more. Thus, we (conservatively) conclude that type of target of forgiveness did not moderate forgiveness and gender; however, further research might yield a moderator effect when self, interventions, and composites are investigated.

Trait or State Forgiveness. Gender differences in forgiveness may exist based on whether participants are being asked about trait forgivingness versus state forgiveness. For instance, there may be no gender difference when asking participants about trait forgivingness because gender differences may cancel one another out across situations over time. However, if participants are being asked about a specific event, more gender differences may show up. Additionally, asking participants to focus on a specific relationship where gender roles tend to be present (i.e., marriage, family) may result in more gender differences than in relationships where gender roles are not as present.

Of the 70 studies reviewed, 39 examined trait forgivingness, 28 examined state forgiveness, and 3 examined marital/familial forgiveness. Gender differences existed in state, trait, and marital/familial forgiveness. Confidence intervals in each subgroup of the moderator overlapped (see Table 2). No subgroups had a mean difference between one another of .2 or more. Thus, type of forgiveness examined (i.e., trait, state, marital/familial) did not moderate forgiveness and gender.

Type of Transgression. Gender differences in forgiveness may also exist based on whether participants are being asked to think about actual transgressions versus imagined (i.e., hypothetical) transgressions. Hypothetical situations may be more likely to elicit gender stereotypical responses than would actual transgressions precisely because they were hypothetical. That is, hypothetical transgressions may be responded to based more on stereotypes or biases that are activated when thinking about how participants would react. In contrast, actual transgressions must be responded to on their own merits, and it might be expected that gender differences would not be as salient because actual behaviors may not be as heavily based on gender stereotypes or biases.

Of the 70 studies reviewed, 51 examined actual transgressions and 19 examined hypothetical transgressions. Gender differences existed for both subgroups. Confidence intervals in each subgroup of the

moderator overlapped (see Table 2). Subgroups within type of transgression differed less than .2. Thus, type of forgiveness examined (i.e., actual versus hypothetical transgressions) did not moderate forgiveness and gender.

Measurement Modality. It is possible that different measurement modalities may be more or less sensitive to detecting gender differences in forgiveness. Questionnaires given to local samples are typically the most frequently used method of assessing forgiveness, probably because they are often the easiest and least time consuming type of study to conduct. Questionnaires are often geographically and demographically restricted. Surveys, which assay more geographically distributed samples often ask only a few straightforward questions. Both questionnaires and surveys are more likely to be subject to social desirability effects. Experiments manipulate situations and measure responses. That methodology often gets around social desirability issues. However, experiments might not be as ecologically valid. Based on the sensitivity to social desirability, which is more present in questionnaires and surveys, larger gender difference may be expected in questionnaires and surveys due to reliance on gender stereotypes and roles. That is, a participant may be less likely to go against the gender stereotype if social desirability is high. For instance, a male who is more forgiving, but thinks it is not socially desirable for him (as a male) to be forgiving may report that he is less forgiving than he really is.

Of the 70 studies reviewed, 23 were experiments, 43 were questionnaires, and 4 were surveys. We found gender differences for questionnaires and in experiments, but not for surveys. Confidence intervals in each subgroup of the moderator did not overlap (see Table 2). The survey (d = .482) differed from both questionnaire and experiment. However, the analysis for surveys had a 95% confidence interval that was exceedingly large (over 1.1) and also included zero. Thus we (conservatively) conclude that measurement modality (i.e., experiment, survey, questionnaire) did not moderate forgiveness and gender. We encourage reconsideration after more surveys have been conducted.

Type of Forgiveness Measure. It is possible that certain measures of forgiveness detect gender differences while others do not. For instance, a measure may contain items that prime gender stereotypes or gender roles while another measure may not.

Of the 70 studies reviewed, seven used the Transgression–Related Interpersonal Motivations Inventory (TRIM; McCullough et al., 1998), five used either Trait Forgivingness Scale (TFS; Berry, Worthington, O'Connor, & Wade, 2005) or Trait Narrative Test of Forgivingness (TNTF; Berry, Worthington, Parrott, O'Connor, & Wade, 2001), four used Enright Forgiveness Scale (EFS; Subkoviak et al., 1995), six used vengeance scales, and 48 used other types of forgiveness scales. All vengeance scales were coded such that high vengeance indicated low scores of forgiveness. Other forgiveness scales were usually single-item measures and scales that were specifically created for a study. All measures except the EFS revealed gender differences. The confidence interval for the subgroup of vengeance measures did not overlap with three of the four forgiveness measure confidence intervals (see Table 2). In addition, vengeance had a standardized mean difference of .5 or higher compared to the other four forgiveness measure subgroups. Thus, type of measure (specifically vengeance) moderated the relationship between gender and forgiveness.

Publication Bias. Oftentimes studies that do not find differences systematically do not get published as often as studies that do find differences. Therefore, it is possible that gender differences may be detected because studies that show gender differences in forgiveness are published more often relative to studies that do not detect gender differences. However, because gender and forgiveness was the main topic of interest in very few studies that were published, we did not expect to find a difference between published versus non–published articles.

Of the 70 studies reviewed, 59 were published articles and 11 were unpublished manuscripts or dissertations. Gender differences were found in both published and unpublished studies. Confidence intervals in each subgroup of the moderator overlapped (see Table 2). Thus, type of publication (published versus not published/dissertation) did not moderate forgiveness and gender.

Validation of measures. Measures that have evidence of validity are assumed to be more accurate and sensitive in measuring a construct. Thus, it seems that measures with evidence of validity will be more likely to detect gender differences if a gender difference exists and less likely to detect gender differences if a gender difference does not exist.

Of the 70 studies reviewed, 32 were validated and 38 measures

were not validated. Gender differences were found in both validated and non–validated measures. Confidence intervals in each subgroup of the moderator overlapped (See Table 2). Also, neither subgroup within validated or not validated measures had a mean difference between one another of .2 or more. Thus, type of measure (validated versus not validated) did not moderate forgiveness and gender.

Culture. Gender differences may be more or less prevalent based on culture. For example, U.S. versus non– U.S. cultures may view forgiveness differently based on differences in power differentials, values, and sociohistoric influences. Thus, what may appear to be gender differences in forgiveness may actually be differences in culture that affect forgiveness.

Of the 70 studies reviewed, 54 were U.S. samples and 16 were non–U.S. samples. Gender differences were found in both validated and invalidated measures. Confidence intervals in each subgroup of the moderator overlapped (see Table 2). Thus, culture (U.S. versus non–U.S.) did not moderate forgiveness and gender.

Imputed Data Analysis

Because the authors imputed data, it is possible that the data imputation may have affected our conclusions regarding moderators. As a sensitivity test of the robustness of the moderator analyses, we reanalyzed the data, excluding the imputed data (these analyses are available from the senior author). No conclusions changed as a result of deleting the imputed data. Thus our moderator conclusions are robust to whether the data were actual or imputed.

DISCUSSION

A gender difference in forgiveness was found, d = .28 (r = .14). The effect size is small to moderate. However, a small effect size can still have a significant impact. To provide context, however, consider that the commonly accepted, almost axiomatic, gender difference showing men to be justice oriented and women to be relationship oriented is only d = .18 (Jaffee & Hyde, 2000). Meyer et al. (2001) compiled 60 correlations between predictors and criterions of common psychological and medical constructs. Effect sizes of the use of aspirin to help reduce heart attacks is r = .02. The effect size of chemotherapy and surviving breast cancer is r = .03. Smoking and the consequent incidence of lung cancer within 25 years is r = .08. The impact of di-

vorce on children's well–being and functioning is r = .09. Antihistamine use and the reduction of symptoms of running nose and sneezing, r = .11. The effect of relapse prevention with individuals abusing substances, r = .14. All of these relationships listed above, although they have small effect sizes, are still believed to be influential. For instance, many individuals are recommended to take aspirin as one way reduce risk of death by heart attack. Individuals who have a runny nose or sneezing are told to take antihistamines. Similarly, although the effect sizes are small for relapse prevention and substance abuse and with divorce and the effects it has on children, these two psychological constructs are frequently studied and considered important areas to intervene psychosocially. Thus, the gender difference in forgiveness, although small to moderate (d = .28; r = .14), may be impactful. For example, perhaps different types of transgressions in different contexts are approached differently by men and women and this may affect their responsiveness to specific techniques used in forgiveness interventions. Thus, optimal promotion of forgiveness in interventions may be achieved differently for men and women.

Nine methodological moderators were examined to determine whether they influenced gender differences in forgiveness. The only significant methodological moderator of which we are confident was the measure of vengeance compared to other forgiveness measures. Because vengeance was scored to indicate low forgiveness, a large effect size was found with vengeance measures indicating that men were much less forgiving than women when responding to vengeance measures (d = .83) This finding is not unusual. Men are typically found to be more vengeful than women (Brown, 2003, 2004; Holbrook, White, & Hutt, 1995; Mullet, Houdbine, Laumonier, & Girard, 1998; Stuckless & Goranson, 1992; cf. McCullough, Bellah, Kilpatrick, & Johnson, 2001). Qualitatively this is perhaps the most reliable, though not completely consistent, finding in the entire review. When a gender difference in vengeance is found, it typically is in the direction of males scoring higher on vengeance relative to females. This finding is also supported in the meta–analytic testing, however it is based only on 6 studies and 1,453 people. For instance, in two studies, Stuckless and Goranson (1992) examined revenge in undergraduates. In both studies, males scored higher than females on trait vengeance. It was hypothesized that this finding may be explained by socialization. Men are often encouraged to be aggressive and take justice into their own hands while women are encouraged to work things out to restore relationship harmony.

However, Kadiangandu, Mullet, and Vinsonneau (2001) showed that culture can play a role in vengeance–seeking. Participants were 322 people from the Kasai region of the Congo and 474 from central France. A questionnaire was used to measure revenge. In France, males scored higher on revenge than did females. In the Congo, males and females scored the same on revenge. Kadiangandu et al. (2001) suggested that the Congoleses men and women were more similar than the French men and women. This study illustrates two points. First, forgiveness differences probably exist from culture to culture (for review, see Sandage & Williamson, 2005). Second, sometimes gender differences in forgiveness could really be due to culture differences in forgiveness. Although, men consistently score higher than women on measures of revenge and vengeance, cultural context must be considered. Even in the United States, not all studies of vengeance find consistent results of men being more vengeful than women (McCullough et al., 2001). However, there is strong support that men usually report more vengeance than women.

Women tend to forgive more than do men. This might be due to personal qualities such as valuing relationships, personality or dispositional qualities such as agreeableness and empathy. Almost certainly, women's orientation toward an ethic of care plays a role, but the nature and strength of the role that ethic of care plays are not well specified.

A variety of moderators related to forgiving were tested for gender differences. Almost regardless of variable, there were gender differences. That is, although the moderators were not supported largely, the mean difference by sex was apparent within each moderator subgroup. Perhaps one reason most moderators were not significant is caused by the way researchers approach studying gender and forgiveness. Researchers have rarely compared men and women directly on more than whether forgiveness is experienced. Some researchers have examined men's experiences and women's experiences in the same study. Although such research reveals different patterns of behavior and different interrelationships among the variables, the researchers have not directly compared men and women.

One possible psychological moderator that may account for the gender difference in forgiveness is that men and women may perceive transgressions differently and respond differently to their perceptions. This has not been studied. In most studies, males and females were compared to show that the genders were similar so samples could be collapsed across gender. Thus, the level of sophistication of measurement of gender differences in forgiveness has not been adequate. Also, when gender differences in forgiveness were found, theoretical reasons for those differences were not discussed in original articles. The only exception was Sani et al. (2007) who studied gender differences in forgiveness using fMRI technology. The goal of the study was to determine whether there were differences in brain patterns between males and females engaging in forgiveness and unforgivenes. Participants imagined several hypothetical offenses. Each scenario included a baseline control, a hurtful event, and an act of either forgiving or grudge-holding. Brain activity in several different brain structures varied in males and females. For example, during pre-hurtful and hurtful conditions, there was more activation in the precuneus, extrastriate visual regions, DL-PFC, and posterior cingulate in females relative to males. Additionally, while imagining forgiving, larger areas in anterior cingulate, STS, and inferior frontal cortex were activated in males than in females. Finally, while imagining grudge-holding, there was more activation in the superior temporal cortex, precuneus and posterior cingulate in males than in females. Sani et al. (2007) concluded that males and females process and react to emotionally hurtful events in functionally different ways. They suggested that males and females may respond to transgressions differently.

Another possible psychological moderator is potential dispositional variables that could be causing the gender difference in forgiveness. These include agreeableness, neuroticism (von Collani & Werner, 2005), dispositional empathy (Trobst, Collins, & Embree, 1994), rumination (Thomsen, Mehlsen, Viidik, Sommerlund, & Zachariae, 2005), and vengefulness, which should be controlled for when studying forgiveness. These dispositional qualities may be related to responses that are forgiving (McCullough et al., 1998), grudge–holding (Berry, Worthington, O'Connor, Parrot, & Wade, 2005), and vengeful (McCullough et al., 2001). There may also be gender differences in affective traits that affect responses to situations

(Bettencourt & Miller, 1996). In addition, attachment style may influence tendency to forgive. Some studies have found gender differences in attachment style (Bartholomew & Horowitz, 1991) while other studies have not found gender differences in attachment style (Shi, 2003). Fourth, men may be more drawn to Kohlberg's (1984) justice-based morality and to responses to transgressions emphasizing fighting, vengeance, or justice. Women may be more drawn to warmth-based virtues, which are more in line with Gilligan's (1994) ethic of care. Forgiveness may also be influenced by individual differences in coping. For example, support for the tend-and-befriend model of Taylor et al. (2000) has been found in diverse contexts (David & Lyons–Ruth, 2005). Given this evidence, women may be more forgiving because the tendency toward utilizing tend-and-befriend coping allows more opportunity for instances of forgiveness than does fight-or-flight coping more often utilized by males. Further, tend-and-befriend coping emphasizes valuing of relationships, which may also influence women's tendency toward forgiving. Furthermore, women's more emotional coping style (Matud, 2004) may prime women to want to forgive more often.

Yet another possible class of reasons for gender differences in forgiveness involves situational differences. Transgressions can occur in many contexts within different relationships. Some transgressions are in stranger dyads such as criminal offenses, medical mistakes, or accidents. Others occur in close, intimate relationships. Males and females may respond differently depending on the type of transgression. Despite the clear possibility that individual differences could strongly influence genders to respond differently to transgressions, it is likely that such differences will be manifested by (a) situations that draw attention to individual differences, (b) those that prime thoughts related to gender issues, justice, or care, or (c) those that are likely role-conflicted. In an example of role-driven behavior, Fincham, Paleari, and Regalia (2002) and Paleari, Regalia, and Fincham (2005) studied married couples. Their results regarding the importance of empathy for forgiveness found empathy was important for men but not for women. This is in contrast to studies of singles—most of which support the importance of empathy for women and men. In addition, situations that have power differentials may be particularly situationally influenced. For example, transgressions involving abuses of power such as male to female aggression, sexual

harassment, rape, father-daughter incest, and priest abuses may draw more attention to individual differences or prime gender related issues resulting in different responses to the transgression by males and females.

As another explanation for gender differences, consider religion. Religion may contribute to tendency to forgive. Overall, women are on average more religious than men (Freese, 2004). Religions tend to value forgiveness (Rye, 2005). Thus, because women are disproportionately attuned to nurture within religious communities, and because women also choose to put themselves in religious situations more often than men do, the interaction of person × situation seems important.

In conclusion, there is a small-to-moderate, but meaningful difference in gender and forgiveness. This difference does not appear to be due to methodological causes such as type of study, sample, or type of forgiveness. Instead, it appears to be consistent difference due to gender. There are many possible psychological moderators that may account for or influence the gender difference in forgiveness. We suggested several including functional differences in the processing of emotional hurts and forgiveness, differences in dispositional qualities, differences in situations may affect genders differentially, and gender differences in religion. Now that methodological moderators have been preliminarily ruled out as accounting for the gender difference in forgiveness, researchers need to directly assess gender differences in forgiveness in order to better determine what affects the gender difference and whether it is important in teaching, therapy, and interventions focused on promoting forgiveness and dealing with unforgiveness. Therefore, we suggest areas that must be examined in order to better determine the role gender differences play in forgiveness.

RESEARCH AGENDA

We offer the following as a list of issues in need of clarification by future research.

 Does the threshold where an act is defined as a transgression vary for females and males? Are there gender differences in forgiveness based on the severity of transgressions, such as minor offenses versus major offenses?

- Are emotional responses to transgressions different for men and women and does this contribute to different forgiveness processes in the brain and physiology?
- Can gender differences in attachment styles affect forgiveness?
- Because there appear to be different processes in the way men and women forgive, we suggest researchers examine and uncover the different forgiveness processes between men and women. More specifically is empathy a key component in the process of forgiveness for males? Are responsibility attributions a key component in the process of forgiveness for females?
- Do men and women utilize different coping mechanisms that affect forgiving?
- Are gender differences partly a reflection of females having a lower status in social power?
- Do gender differences exist in interventions teaching or promoting forgiveness and if so what kinds of interventions would work better for females and males?
- Although difficult to study, self-forgiveness needs to be directly addressed. Are there gender differences present in self-forgiveness?
 What predicts more difficulty in self-forgiveness? Do men or women tend to have more difficulty in forgiving themselves?

Despite the benign neglect by most researchers, differences in forgiveness (and variables affecting forgiveness) due to gender deserve more direct empirical attention—not only for understanding forgiveness as a phenomenon but also in aiding effective intervention.

REFERENCES

- *Allan, A., Allan, M. M., Kaminer, D., & Stein, D. J. (2006). Exploration of the association between apology and forgiveness amongst victims of human rights violations. *Behavioral Sciences and the Law*, 24, 87–102.
- *Applegate, B. K., Cullen, F. T., Fisher, B. S., & Vander Ven, T. (2000). Forgiveness and fundamentalism: Reconsidering the relationship between correctional attitudes and religion. *Criminology*, 38, 719–753.
- *Ashton, M. C., Paunonen, S. V., Helmes, E., & Jackson, D. N. (1998). Kin altruism, reciprocal altruism, and the big five personality factors. *Evolution and Human Behavior*, 19, 243–255.
- *Azar, F., & Mullet, E. (2001). Interpersonal forgiveness among Lebanese: A six–community study. *International Journal of Group Tensions*, 30, 161–181.

*Azar, F., & Mullet, E. (2002). Willingness to forgive: A study of Muslim and Christian Lebanese. *Peace and Conflict: Journal of Peace Psychology*, *8*, 17–30.

- *Azar, F., Mullet, E., & Vinsonneau, G. (1999). The propensity to forgive: Findings from Lebanon. *Journal of Peace Research*, *36*, 169–181.
- *Barros, J. H. (2002). Forgiveness: Concept and evaluation: Presentation of a new scale [Portuguese]. *Psicologia Educaca Cultura*, 6, 303–320.
- Bartholomew, K., & Horowitz, L. M. (1991). Attachment styles among young adults: A test of a four–category model. *Journal of Personality and Social Psychology*, 61, 226–244.
- Baskin, T. W., & Enright, R. D. (2004). Intervention studies on forgiveness: A meta–analysis. *Journal of Counseling and Development*, 82, 79–90.
- Baumeister, R. F., Exline, J. J., & Sommer, K. L. (1998). The victim role, grudge theory, and two dimensions of forgiveness. In E. L. Worthington, Jr. (Ed.), *Dimensions of forgiveness: Psychological research and theological speculations* (pp. 79–104). Philadelphia: The Templeton Foundation Press.
- *Berry, J. W., Worthington, E. L., Jr., O'Connor, L. E., Wade, N. G. (2005). Forgivingness, vengeful rumination, and affective traits. *Journal of Personality*, 73, 183–225.
- Berry, J. W., Worthington, E. L., Jr., Parrott, L. III, O'Connor, L., & Wade, N. G. (2001). Dispositional forgivingness: Development and construct validity of the Transgression Narrative Test of Forgivingness (TNTF). *Personality and Social Psychology Bulletin*, 27, 1277–1290.
- Bettencourt, B. A., & Miller, N. (1996). Gender differences in aggression as a function of provocation: A meta–analysis. *Psychological Bulletin*, 119, 422–447.
- Borenstein, M., Hedges, L., Higgins, J., & Rothstein, H. (2005). *Comprehensive meta–analysis. Version* 2. Englewood, NJ: Biostat.
- *Brown, R. P. (2003). Measuring individual differences in the tendency to forgive: Construct validity and links with depression. *Personality and Social Psychology Bulletin*, 29, 759–771.
- *Brown, R. P. (2004). Vengeance is mine: Narcissism, vengeance, and the tendency to forgive. *Journal of Research in Personality*, 38, 576–584.
- *Carver, K. S. (2005). An analysis of the gender differences in the cognitive, affective, and behavioral domains of forgiveness. *Dissertation Abstracts International*, 65(12B), 6706.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- *Cohen, A. B., Malka, A., Rozin, P., & Cherfas, L. (2006). Religion and unforgivable offenses. *Journal of Personality*, 74, 85–117.
- *Cohen, A. B., Rozin, P., Cherfas, L., & Davidson, A. (2005). *Religion and forgive-ness: Similarities and differences among Catholics, Jews, and Protestants*. Unpublished manuscript, University of California, Berkeley.
- *Cole, B. S., Yali, A. M., & Magyar, G. M. (2006). *He said he was sorry: Predictors of forgiving President Clinton*. Unpublished manuscript, Bowling Green State University, Bowling Green.

- David, D. H., & Lyons–Ruth, K. (2005). Differential attachment responses of male and female infants to frightening maternal behavior: Tend or befriend versus fight or flight. *Infant Mental Health Journal*, 26, 1–18.
- DiBlasio, F. A. (1998). The use of decision–based forgiveness intervention within intergenerational family therapy. *Journal of Family Therapy*, 20, 77–94.
- *DiBlasio, F. A., & Proctor, J. H. (1993). Therapists and the clinical use of forgiveness. *American Journal of Family Therapy*, 21, 175–184.
- Elkins, T. J., Phillips, J. S., & Konopaske, R. (2002). Gender–related biases in evaluations of sex discrimination allegations: Is perceived threat the key? *Journal of Applied Psychology*, 87, 280–292.
- Enright, R. D., & Fitzgibbons, R. P. (2000). *Helping clients forgive: An empirical guide for resolving anger and restoring hope.* Washington, DC: American Psychological Association.
- *Enright, R. D., Santos, M. J., & Al–Mabuk, R. (1989). The adolescent as forgiver. *Journal of Adolescence*, 12, 99–110.
- *Exline, J. J., Baumeister, R. F., Bushman, B. J., Campbell, W. K., & Finkel, E. J. (2004). Too proud to let go: Narcissistic entitlement as a barrier to forgiveness. *Journal of Personality and Social Psychology*, 87, 894–912.
- Exline, J. J., Worthington, E. L., Jr., Hill, P. C., & McCullough, M. E. (2003). Forgiveness and justice: A research agenda for social and personality psychology. *Personality and Social Psychology Review*, 7, 337–348.
- *Exline, J. J., Yali, A. M., & Lobel, M. (1999). When God disappoints: Difficulty forgiving God and its role in negative emotion. *Journal of Health Psychology*, 4, 365–379.
- Fincham, F. D., Beach, S. R. H., & Davila, J. (2004). Forgiveness and conflict resolution in marriage. *Journal of Family Psychology*, 18, 72–81.
- Fincham, F. D., Paleari, F. G., & Regalia, C. (2002). Forgiveness in marriage: The role of relationship quality, attributions, and empathy. *Personal Relationships*, 9, 27–37.
- *Finkel, E. J., Rusbult, C. E., Kumashiro, M., & Hannon, P. A. (2002). Dealing with betrayal in close relationships: Does commitment promote forgiveness? *Journal of Personality and Social Psychology*, 82, 956–974.
- Freedman, S., Enright, R. D., & J. Knutson (2005). A progress report on the process model of forgiveness. In E. L. Worthington (Ed.), *Handbook of forgiveness* (pp. 393–406). New York: Brunner–Routledge.
- Freese, J. (2004). Risk preferences and gender differences in religiousness: Evidence from the world values survey. *Review of Religious Research*, 46, 88–91.
- Gaines, S. O., Jr., Marelich, W. D., Bledsoe, K. L., Steers, W. N., Henderson, M. C., Granros, C. S., et al. (1997). Links between race/ethnicity and cultural values as mediated by racial/ethnic identity and moderated by gender. *Journal of Personality and Social Psychology*, 72, 1460–1476.
- Gilligan, C. (1994). *In a different voice: Women,s conceptions of self and of morality.* New York: Garland Publishing.
- *Girard, M., & Mullet, E. (1997). Forgiveness in adolescents, young, middle–aged, and older adults. *Journal of Adult Development*, 4, 209–220.

*Gordon, K. C., & Baucom, D. H. (2003). Forgiveness and marriage: Preliminary support for a synthesized model of recovery from a marital betrayal. *American Journal of Family Therapy*, 31, 179–199.

- Gordon, K. C., Baucom, D. H., & Synder, D. K. (2000). The use of forgiveness in marital therapy. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 203–227). New York: Guilford Press.
- Harris, A. H. S., & Thoresen, C. E. (2005). Forgiveness, unforgiveness, health, and disease. In E. L. Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 321–333). New York: Brunner–Routledge.
- Hedges, L. V., & Olkin, I. (1985). Statistical methods for meta–analysis. Academic Press.
- *Holbrook, M. I., White, M. H., & Hutt, M. J. (1995). The Vengeance Scale: Comparison of groups and an assessment of external validity. *Psychological Reports*, 77, 224–226.
- Hook, J. N., Worthington, E. L., Jr., & Utsey, S. O. (2008). *Collectivism, social harmone and forgiveness*. Manuscript under review.
- *Huang, S. T. (1990). Cross–cultural and real–life validations of the theory of forgiveness in Taiwan, the Republic of China. *Dissertation Abstracts International*, 51, (5B)2644.
- Hunter, J. E., & Schmidt, F. L. (2004). *Methods of meta–analysis: Correcting error and bias in research findings* (2nd edition). Newbury Park, CA: Sage.
- Jaffee, S., & Hyde, J. S. (2000). Gender differences in moral orientation: A meta-analysis. *Psychological Bulletin*, 126, 703–726.
- Kachadourian, L. K., Fincham, F. D., & Davila, J. (2005). Attitudinal ambivalence, rumination, and forgiveness of partner transgressions in marriage. *Personality and Social Psychology Bulletin*, 31, 334–342.
- *Kadiangandu, J. K., Mullet, E., & Vinsonneau, G. (2001). Forgivingness: A Congo–France comparison. *Journal of Cross–Cultural Psychology*, 32, 504–511.
- *Karremans, J. C., Van Lange, P. A. M., Ouwerkerk, J. W., & Kluwer, E. S. (2003). When forgiving enhances psychological well–being: The role of interpersonal commitment. *Journal of Personality and Social Psychology*, 84, 1011–1026.
- Kohlberg, L. (1984). Essays on moral development: Vol. 2. The psychology of moral development. New York: Harper.
- *Krause, N., & Ellison, C. G. (2003). Forgiveness by God, forgiveness of others, and psychological well-being in late life. *Journal for the Scientific Study of Religion*, 42, 77–93.
- Lazarus, R. S., (1999). Stress and emotion: A new synthesis. New York: Springer Publishing.
- *Lee, S. A., & Chard, K. M. (2003). Variables related to graduate students' willingness to forgive a job–related transgression. *Psychological Reports*, *93*, 955–960.
- *Lim, B. K. (2000). Conflict resolution styles, somatization, and marital satisfac-

- tion in Chinese couples: The moderating effect of forgiveness and willingness to seek professional help. *Dissertation Abstracts International*, 61 (7B), 3902.
- *Lukasik, V. J. (2000). Predictors of the willingness to use forgiveness as a coping strategy in adolescent friendships. *Dissertation Abstracts International*, 61 (10A), 3908.
- *Macaskill, A., Maltby, J., & Day L. (2002). Forgiveness of self and others and emotional empathy. *Journal of Social Psychology*, 142, 663–665.
- Malcolm, W. M., & Greenberg, L. S. (2000). Forgiveness as a process of change in individual psychotherapy. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), Forgiveness: Theory, research, and practice (pp. 179–202). New York: Guilford Press.
- Matud, M. P. (2004). Gender differences in stress and coping styles. *Personality and Individual Differences*, 37, 1401–1415.
- *Mauger, P. A., Freedman, T., McBride, A. G., Perry, J. E., Grove, D. C., & McKinney, K. E. (1992). The measurement of forgiveness: Preliminary research. *Journal of Psychology and Christianity*, 11, 170–180.
- McCullough, M. E. (2001). Forgiveness: Who does it and how do they do it? *Current Directions in Psychological Science*, 10, 194–197.
- *McCullough, M. E., Bellah, G. C., Kilpatrick, S. D., & Johnson, J. L. (2001). Vengefulness: Relationships with forgiveness, rumination, well-being, and the Big Five. *Personality and Social Psychology Bulletin*, 27, 601–610.
- *McCullough, M. E., Fincham, F. D., & Tsang, J. (2003). Forgiveness, forbearance, and time: The temporal unfolding of transgression–related interpersonal motivations. *Journal of Personality and Social Psychology*, 84, 540–557.
- McCullough, M. E., Pargament, K. I., & Thoresen, C. E. (Eds.). (2000). *Forgiveness: Theory, research, and practice*. New York: Guilford Press.
- *McCullough, M. E., Rachal, K. C., Sandage, S. J., Worthington, E. L., Jr., Brown, S. W., & Hight, T. L. (1998). Interpersonal forgiving in close relationships II: Theoretical elaboration and measurement. *Journal of Personality and Social Psychology*, 73, 321–336.
- McCullough, M. E., & Worthington, E. L., Jr. (1999). Religion and the forgiving personality. *Journal of Personality*, 67, 1141–1164.
- Meyer, G. J., Finn, S. E., Eyde, L. D., Kay, G. G., Moreland, K. L., Dies, R. R., et al. (2001). Psychological testing and psychological assessment: A review of evidence and issues. *American Psychologist*, *56*, 128–165.
- Miller, A. S., & Hoffman, J. P. (1995). Risk and religions: An explanation of gender differences in religiosity. *Journal for the Scientific Study of Religion*, 34, 63–75.
- *Mullet, E., Barros, J., Frongia, L., Usaï, V., Neto, F., & Shafighi, S. R. (2003). Religious involvement and the forgiving personality. *Journal of Personality*, 71, 1–19.
- *Mullet, E., Houdbine, A., Laumonier, S., & Girard, M. (1998). "Forgiveness:" Factor structure in a sample of young, middle–aged, and elderly adults. *European Psychologist*, *3*, 289–297.

*Neto, F., & Mullet, E. (2004). Personality, self–esteem, and self–construal as correlates of forgivingness. *European Journal of Personality*, 18, 15–30.

- *O'Malley, M. N., & Greenberg, J. (1983). Sex differences in restoring justice: The down payment effect. *Journal of Research in Personality*, 17, 174–185.
- Paleari, F. G., Regalia, C., & Fincham, F. D. (2005). Marital quality, forgiveness, empathy, and rumination: A longitudinal analysis. *Personality and Social Psychology Bulletin*, 31, 368–378.
- *Park, Y. O., & Enright, R. D. (1997). The development of forgiveness in the context of adolescent friendship conflict in Korea. *Journal of Adolescence*, 20, 393–402.
- *Rackley, J. V. (1993). The relationships of marital satisfaction, forgiveness, and religiosity. *Dissertation Abstracts International*, 54 (4A), 1556.
- Reck, A. (Ed.). (1964). Selected writings: G. H. Mead. Indianapolis: Bobbs–Merrill.
- *Richard, E. R., Boivin, M. J., & Fratzke, B. J. (2003, May). *The neuropsychology of forgiveness*. Poster presented at American Psychological Society, Atlanta, GA.
- *Roby, D. C. (1997). Forgiveness, parental nurturance, and self–esteem (adolescents, high school students). *Dissertation Abstracts International*, 58 (8A), 3024
- Rusbult, C. E., Hannon, P. A., Stocker, S. L., & Finkel, E. J. (2005). Forgiveness and relational repair. In E. L. Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 185–206). New York: Brunner–Routledge.
- Rusbult, C. E., & Van Lange, P. A. M., (2003). Interdependence, interaction and relationships. *Annual Review of Psychology*, 54, 351–375.
- Ryan, R. B., & Kumar, V. K. (2005). Willingness to forgive: Relationships with mood, anxiety, and severity of symptoms. *Mental Health, Religion, and Culture*, *8*, 13–16.
- Rye, M. S. (2005). The religious path toward forgiveness. *Mental Health, Religion and Culture, 8,* 205–215.
- *Rye, M. S., Pargament, K. I., Pan, W., Yingling, D. W., Shogren, K. A., & Ito, M. (2005). Can group interventions facilitate forgiveness of an ex–spouse: A randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 73, 880–892.
- Sandage, S. J., & Williamson, I. (2005). Forgiveness in cultural context. In E. L. Worthington, Jr. (Ed.), *Handbook of forgiveness* (pp. 41–56). New York: Brunner–Routledge.
- Sani, L., Ricciardi, E., Gentili, C., Vanello, N., Landini, L., Guazzelli, M., et al. (2007). *Gender differences in brain activity associated with imaginary elicited forgiving and unforgiving behavior in humans as assed by fMRI*. Poster presented at the 12th International Conference on Functional Mapping of Human Brain Mapping, June 11–15, 2006, Florence, Italy. Available on CD–Rom in NeuroImage, 31 (Suppl 1.), 312 TH–PM.
- Sapolsky, R. M., & Share, L. J. (2004). A pacific culture among wild baboons: Its emergence and transmission. *PloS Biology*, 2, 534–541.
- *Scobie, G. E. W., Scobie, E. D., & Kakavoulis, A. K. (2002). A cross-cultural study

- of the construct of forgiveness: Britain, Greece and Cyprus. *Psychology: Journal of the Hellenic Psychological Society*, *9*, 22–36.
- *Shackelford, T. K., Buss, D. M., & Bennett, K. (2002). Forgiveness or breakup: Sex differences in responses to a partner's infidelity. *Cognition and Emotion*, 16, 299–307.
- Shi, L. (2003). The association between adult attachment styles and conflict resolution in romantic relationships. *American Journal of Family Therapy*, 31, 143–157.
- *Stuckless, N., & Goranson, R. (1992). The Vengeance Scale: Development of a measure of attitudes toward revenge. *Journal of Social Behavior and Personality*, 7, 25–42.
- Subkoviak M. J., Enright R. D., Wu, C. R., Gassin E. A., Freedman S., & Olson L. M. (1995). Measuring interpersonal forgiveness in late adolescence and middle adulthood. *Journal of Adolescence*, *18*, 641–655.
- Takaku, S., Weiner, B., & Ohbuchi, K. (2001). A cross–cultural examination of the effects of apology and perspective taking on forgiveness. *Journal of Language and Social Psychology*, 20, 144–166.
- *Tartaro, J., & Luecken, L. J. (2005). Exploring heart and soul: Effects of religiosity/spirituality and gender on blood pressure and coritsol stress responses. *Journal of Health Psychology*, 10, 753–766.
- Taylor, S. E., Klein, L. C., and Lewis, B. P., Gruenewald, T. L., Gurung, R. A. R., & Updegraff, J. A. (2000). Biobehavioral responses to stress in females: Tend-and-befriend, not fight-or-flight. *Psychological Review*, 107, 411–429.
- Thomsen, D. K., Mehlsen, M. Y., Viidik, A., Sommerlund, B., & Zachariae, R. (2005). Age and gender differences in negative affect—Is there a role for emotion regulation? *Personality and Individual Differences*, 38, 1935–1946.
- *Toussaint, L., & Webb, J. R. (2005). Theoretical and empirical connections between forgiveness, mental health, and well-being. In E. L. Worthington (Ed.), *Handbook of forgiveness* (pp. 349–362). New York: Brunner–Routledge.
- Trobst, K. K., Collins, R. L., & Embree, J. M. (1994). The role of emotion in social support provision: Gender, empathy and expressions of distress. *Journal of Social and Personal Relationships*, 11, 45–62.
- *Van Loon, P. C. (1997). A cognitive development intervention for clergy: Forgiveness education. *Dissertation Abstracts International*, 58 (12A), 4604.
- *Vinsonneau, G., & Mullet, E. (2001). Willingness to forgive among young adolescents: An European–Maghrebi comparison. *International Journal of Group Tensions*, 30, 267–278.
- von Collani, G., & Werner, R. (2005). Self–related and motivational constructs as determinants of aggression. An analysis and validation of a German version of the Buss–Perry Aggression Questionnaire. *Personality and Individual Differences*, 38, 1631–1643.
- *Wade, N. G., & Goldman, D. B. (2006). Sex, group composition, and the efficacy

- of group interventions to promote forgiveness. *Group Dynamics: Theory, Research, and Practice, 10, 297–308.*
- Witvliet, C. V. O., Ludwig, T. E., Vander L., & Kelly, L. (2001). Granting forgiveness or harboring grudges: Implications for emotion, physiology, and health. *Psychological Science*, *12*, 117–123.
- Worthington, E. L., Jr. (Ed.). (2005). *Handbook of forgiveness*. New York: Brunner–Routledge.
- Worthington, E. L., Jr. (2006). *Forgiveness and reconciliation: Theory and application*. New York: Routledge.
- *Worthington, E. L., Kurusu, T. A., Collins, W., Berry, J. W., Ripley, J. S., & Baier, S. N. (2000). Forgiving usually takes time: A lesson learned by studying interventions to promote forgiveness. *Journal of Psychology and Theology*, 28, 3–20.
- Worthington, E. L., Jr., & Scherer, M. (2004). Forgiveness as an emotion–focused coping strategy that can reduce health risks and promote health resilience: Theory, review, and hypotheses. *Psychology and Health*, 19, 385–405.
- Worthington, E. L., Jr., Witvliet, C. V. O., Pietrini, P., &. Miller, A. J. (2007, April). Forgiveness, health, and well–being: A review of evidence for emotional versus decisional forgiveness, dispositional forgivingness, and reduced unforgiveness. *Journal of Behavioral Medicine*, 30. Retrieved May 1, 2007 from http://www.springerlink.com.

^{*}Articles used in the meta-analysis are designated with an asterisk.