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## **FORGIVENESS AS HUMAN STRENGTH: THEORY, MEASUREMENT, AND LINKS TO WELL-BEING**

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Forgiving promotes continuity in interpersonal relationships by mending the inevitable injuries and transgressions that occur in social interaction. This article presents a conceptual model positing that forgiveness is prosocial change in the motivations to avoid or to seek revenge against a transgressor. Social-psychological factors that are correlates and determinants of forgiving are reviewed. Also reviewed is the current measurement technology for assessing forgiveness constructs at the offense-specific level, the relationship-specific level, and the dispositional level. The links between forgiveness and human health and well-being are also explored. The article concludes with recommendations for future research on forgiving.

Despite its long history in traditional views of optimal human functioning (McCullough & Worthington, 1999), the capacity to forgive appears to have been largely unexplored during the first century of scientific psychology. In the past few years, however, the concept of interpersonal forgiving has received explicit empirical attention from the perspectives of developmental psychology (e.g., Enright, Santos, & Al-Mabuk, 1989; Girard & Mullet, 1997), social psychology (McCullough, Worthington, & Rachal, 1997; McCullough et al., 1998), and clinical/counseling psychology (e.g., Coyle & Enright, 1997; Freedman & Enright, 1996; McCullough & Worthington, 1995). These studies, along with the work of several other groups of researchers, indicate that social scientists increasingly are becoming interested in the potential relevance of interpersonal forgiving human relationships, as well as for health and well-being. Nonetheless, much work remains to be done on this interesting and important construct.

The present article consists of five major sections: (a) a description of a motivational conceptualization of interpersonal forgiving (McCullough et al., 1997, 1998); (b) a review of the correlates and de-

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terminants of forgiveness; (c) a review of the instruments for measuring forgiveness; (d) a description of what we know about the links of forgiveness with measures of health and well-being is examined; and (e) suggestions for future research on interpersonal forgiving.

## A MOTIVATIONAL CONCEPTUALIZATION OF FORGIVING

My theoretical and empirical work on forgiving thus far has been based on two conceptual starting points. The first of these is that forgiving is, at its foundation, a motivational construct. The second is that forgiving is prosocial. These assumptions have consequences for how I conceptualize forgiving and its associations with other variables.

### FORGIVENESS IS MOTIVATIONAL

People appear to have a finite number of basic emotional responses to negative interpersonal events. For example, Gottman (1993) reported that couples' ratings of their affect during conflicts with their spouses factored into three kinds of emotional responses. The first affective response is a general positive feeling, which tends to be accompanied by friendly, loving, and relationship-constructive behavior. The second is identified as hurt-perceived attack. This affective response is characterized by internal whining, innocent victimhood, fear, and worry. The third affective response is identified as righteous indignation, which is characterized by anger, contempt, and thoughts of retaliation toward the partner.

My colleagues and I have assumed that the two negative affective states that characterize interpersonal interactions around relationship events correspond to two motivational systems governing people's responses to interpersonal offenses. Specifically, we posit that (a) feelings of hurt-perceived attack correspond to a motivation to avoid personal and psychological contact with the offender (i.e., avoidance); and (b) feelings of righteous indignation correspond to a motivation to seek revenge or see harm come to the offender (i.e., revenge). These distinct motivations, along with a motivation toward benevolence (which typically decreases when someone hurts, insults, or otherwise offends us) work in concert to create the psychological state that people refer to as "forgiveness." When an offended relationship partner reports that he or she has *not* forgiven a close relationship partner for a hurtful action, the offended partner's perception of the offense is posited to stimulate relationship-destructive levels of the two negative motivational states, i.e., high motivation to avoid con-

tact with the offending partner, and high motivation to seek revenge or see harm come to the offending partner. Conversely, when an offended relationship partner indicates that he or she *has* forgiven, his or her perceptions of the offense and offender no longer create motivations to avoid the offender and seek revenge. Rather, the victim experiences relationship-constructive transformations in these motivations. Thus, forgiveness is not a motivation *per se*; but rather, a complex of prosocial *changes* in one's basic interpersonal motivations following a serious interpersonal offense.

### FORGIVING IS PROSOCIAL

Forgiving is similar to other prosocial psychological changes that occur in social life. Empathy-motivated helping is a prime example. Because of empathy, we can come to care for a stranger's welfare, and then intervene to promote his or her welfare in some way (e.g., Batson, 1991). In the psychology of close relationships, such prosocial psychological phenomena include accommodation (Rusbult, Verette, Whitney, Slovik, & Lipkus, 1991), which is the inhibition of destructive responses and the enacting of constructive responses following the destructive interpersonal behavior of a relationship partner. Another prosocial process is willingness to sacrifice (Van Lange et al., 1997), which is "the propensity to forego immediate self-interest to promote the well-being of a partner or relationship" (Van Lange et al., 1997, p. 1374). What forgiving, empathy-motivated helping, accommodation, and willingness to sacrifice have in common is that a person acts in a fashion that (a) might (although not necessarily) be personally costly in order to (b) contribute to the welfare of another person or a relationship. Thus, forgiving promotes relationship harmony. Indeed, because of the innately social nature of human beings, I hypothesize that the motivations to avoid and seek revenge are juxtaposed against a strong motivation to maintain positive relations with others.

### SUMMARY OF THE MOTIVATIONAL CONCEPTUALIZATION

The motivational conceptualization of forgiveness is intentionally simple, but hopefully not simplistic. As a set of motivational changes, forgiveness is expected to energize some interpersonal behaviors (e.g., attempts to reconcile with an offender) and to inhibit others (e.g., retaliatory aggression), but I distinguish the behaviors that forgiveness causes from forgiveness *per se*. The notion that forgiveness could be reduced to a small set of psychological operations has not been uncontroversial

(e.g., see Enright & Coyle, 1998), but I believe that a motivational approach to understanding forgiveness has many desirable properties. First, the motivational conceptualization stimulates falsifiable scientific hypotheses. Second, it is theoretically interesting and interfaces well with other vibrant areas of social-psychological research. Third, a motivational conceptualization does not do too much violence to what laypersons mean when they say, "I have forgiven." Fourth (and most important), it does a good job of accounting for the existing data. Of course, it is conceivable that other conceptualizations of forgiveness might also share these desirable qualities.

## CORRELATES OF FORGIVENESS

Having articulated my approach to understanding forgiveness as motivational change, I now describe the other variables that appear to influence people's capability of forgiving. These include cognitive and emotional processes such as empathy, perspective-taking, rumination, and suppression; relationship qualities such as closeness, commitment, and satisfaction; and situational factors such as apology.

### EMPATHY AND PERSPECTIVE-TAKING

Empathy and perspective-taking facilitate many prosocial qualities such as willingness to help others (e.g., Batson, 1991), and apparently, forgiving. Cross-sectionally, feeling empathic affect toward an offender and understanding the cognitive perspective of the offender are highly correlated with global measures of forgiving (McCullough et al., 1997) and avoidance and revenge motivations in particular (McCullough et al., 1998).

Empathy appears to mediate the well-established effect of apologies on people's willingness to forgive their offenders. That is, people forgive apologetic offenders, in large part, because the apology itself helps people feel more empathic toward the offenders (McCullough et al., 1997, 1998). The link between attributional processes and intentions to retaliate against someone appear to be partially mediated by empathy (Weiner, 1995). Moreover, interventions for encouraging forgiveness appear to work in part through enhancing the offended person's empathy for the offender and an effort to adopt the cognitive perspective of the offender (McCullough et al., 1997). Indeed, empathy is, as far as I am aware, the only psychological variable that has been shown to help people to forgive specific real-life transgressions when manipulated experimentally (McCullough et al., 1997; Sandage & Worthington, 1999).

## RUMINATION AND SUPPRESSION

The more people ruminate about an offense, the more difficulty they appear to have in forgiving the offense. Intrusive rumination about the offense (i.e., being troubled by thoughts, affects, and images about the offense) and attempts to suppress those ruminations are related cross-sectionally to higher levels of avoidance and revenge motivations. Longitudinal change in rumination and suppression are also correlated with longitudinal change in avoidance and revenge motivations, such that people who become less ruminative and suppressive also appear to become more forgiving (McCullough et al., 1998, 1999). Thus, rumination (and suppression of those ruminations) might play an important role in perpetuating interpersonal distress following interpersonal events, just as it appears to perpetuate psychological distress (Greenberg, 1995; Holman & Silver, 1996). This conclusion is consistent with research on rumination as a dispositional variable (e.g., Metts & Cupach, 1998): People who have trouble extinguishing ruminative thoughts in general have a more difficult time forgiving.

## RELATIONAL CLOSENESS, COMMITMENT, AND SATISFACTION

Relational factors—particularly closeness, commitment, and satisfaction—are also important determinants of forgiving. Specifically, people are most likely to forgive in relationships that are characterized by closeness, commitment, and satisfaction. Several studies (Nelson, 1993; Rackley, 1993; Roloff & Janiszewski, 1989; Woodman, 1991) have yielded data suggesting that in general, relationship partners more readily forgive one another for interpersonal offenses in relationships that are characterized by these qualities (but see also Roloff & Janiszewski, 1989, for evidence that people are actually less likely to forgive in intimate relationships if the offense is the refusal of a relatively low-cost favor).

The link between relationship closeness/commitment/satisfaction and forgiveness appears to be robust. We recently studied over 100 couples who reported on the extent to which they had forgiven their partner for two different offenses (the worst thing their partner had ever done to them, and the most recent serious thing that their partner had done to them). Both the forgivers' and their partners' self-reported degree of closeness/commitment/satisfaction were related to forgivers' degree of forgiveness for both offenses. Moreover, in a follow-up study, we found that the closeness-forgiveness relationship was mediated, in part, by a greater willingness of offending relationship partners to apologize, and a greater capacity for offended

relationship partners to empathize with their offenders (McCullough et al., 1998). Therefore, empathy appears to serve as a psychological bridge between closeness and forgiving.

### APOLOGY

Another variable that seems to have great import for forgiveness is the extent to which the offender makes sincere apologies or expressions of remorse (Darby & Schlenker, 1982; McCullough et al., 1998, 1999; Metts & Cupach, 1998; Ohbuchi, Kameda, & Agarie, 1989). This robust link, of course, would probably be predicted by many general theories, including theories of reality negotiation (e.g., Snyder & Higgins, 1997) and attributional theories (e.g., Weiner, 1995). Sincere apologies and expressions of remorse might be the most potent factors under the offender's control for influencing the likelihood that an offended relationship partner will forgive the offender.

### MEASURING FORGIVENESS

Beyond the continuing debate over how forgiveness should be conceptualized (Enright & Coyle, 1998; McCullough, Pargament, & Thoresen, 2000), a second burning issue in forgiveness research today is how best to measure forgiveness. Many tools are available for assessing forgiveness constructs. Bill Hoyt, Chris Rachal, and I (McCullough, Hoyt, & Rachal, 2000) categorized the existent measures of forgiveness along three dimensions. The first dimension refers to the level of *specificity* with which forgiveness is assessed. Offense-specific measures are ratings of the extent to which a person has forgiven a specific offender for a specific offense. Dyadic measures of forgiveness might be used to capture how forgiving a person is within a single dyad across multiple instances. Dispositional measures are ratings of the extent to which a person has the general disposition to forgive other people.

Within these three levels of measurement specificity, measures can be divided into two groups based on their *direction* of measurement. Thus, direction of measurement is the second general dimension upon which forgiveness can be categorized. Most measures assess forgiveness in the direction of granting forgiveness (i.e., from the perspective of the for-giver). A few others also measure forgiveness in the direction of seeking or accepting forgiveness (i.e., from the perspective of the transgressor). Because fairly little research has examined the contours of seeking or accepting forgiveness from others (Gassin, 1998; Meek, Allbright, &

McMinn, 1995; Sandage, Worthington, & Hight, 1996), the measurement of forgiveness from the perspective of the person who seeks or accepts forgiveness is similarly underdeveloped.

A third dimension refers to the method of measurement by which forgiveness is assessed. Offense-specific forgiveness (i.e., both granting forgiveness and receiving forgiveness) could ostensibly be assessed through many methods. First, the offended person can report the extent to which he or she has forgiven the offending partner (or the offender can report the extent to which he or she feels forgiven by the offended partner). Second, the offending relationship partner can report the extent to which the offended relationship partner has granted forgiveness (or the offended relationship partner can report the extent to which the offending partner appears to feel forgiven). Third, an outside observer (e.g., a clinician or other third party) can assess the extent to which forgiveness has been requested or granted). Finally, behavioral measures can be used to infer the extent to which an offended partner has forgiven an offending relationship partner, or to which the offender has accepted the forgiveness of the offended partner. Other methods of measuring forgiveness are possible as well.

To date, the most psychometric work on forgiveness has been in the development of self-report measures of offense-specific interpersonal forgiving. Self-report measures for assessing how much a person has forgiven another person for a specific offense are widely available (e.g., McCullough et al., 1998; Subkoviak et al., 1995; Trainer, 1981; Wade, 1989). For example, we have refined a set of items from Susan Wade's (1989) Forgiveness Scale into a 12-item battery that we call the Transgression-Related Interpersonal Motivations (TRIM) Inventory. It consists of two subscales for assessing the extent to which an offended person is motivated to avoid their offender (avoidance) and to see harm done to their offender (revenge). The scale has manifested a variety of desirable psychometric properties, including good internal consistency, good convergent validity, and good discriminant validity (McCullough et al., 1998, 1999).

There are currently few measures for assessing other dimensions of forgiveness. Little psychometric work has been done to assess forgiveness at the dispositional or dyadic levels. Also, with few exceptions (e.g., Malcom & Greenberg, 2000; Trainer, 1981), few researchers have explored non-self-report or behavioral measures of forgiveness. Although such measures are expensive to use, rating or behavioral measures such as "forgiveness" responses in the Prisoner's Dilemma Game should be included more frequently in studies of forgiving (see Axelrod, 1980a, 1980b; Wu & Axelrod, 1995). As forgiveness research progresses,

mono-method bias is going to become a serious threat to the validity of the entire body of research. Therefore, researchers should begin now to develop measures that assess forgiveness through methods other than self-report (McCullough, Hoyt, & Rachal, 2000).

### **LINKS OF FORGIVENESS WITH HUMAN HEALTH AND WELL-BEING**

One impetus for the increased interest in forgiving in the last 15 years has been curiosity about the potential relationship of forgiveness to health and well-being. Even now, however, the relevant empirical data are limited to a few cross-sectional correlational studies (e.g., Aschleman, 1996; Mauger et al., 1992; Poloma & Gallup, 1991; Strasser, 1984; Subkoviak et al., 1995). Other studies find that psychotherapies that involve forgiveness lead to improvements in many indices of psychological well-being (e.g., Al-Mabuk, Enright, & Cardis, 1995; Coyle & Enright, 1997; Freedman & Enright, 1996; Hebl & Enright, 1993). Without a doubt, this research should continue. To the extent that forgiving is associated with positive health and well-being, such associations are likely to be mediated by at least two mechanisms. First, forgiving one's transgressor leads to the re-establishment and preservation of supportive, caring relationships between victim and offender. Second, enduring forgiveness (i.e., a disposition to forgive) might help modulate people's hostility.

### **FORGIVING AND THE RESTORATION OF POSITIVE RELATIONSHIPS**

Several researchers have found that people tend to forgive close relationship partners more readily than partners in more distant relationships (Nelson, 1993; Rackley, 1993; Woodman, 1991). We (McCullough et al., 1998) found path-analytic evidence that forgiving not only occurs more frequently in the context of satisfactory, committed, and close relationships, but that it actually facilitates the restoration of relational closeness following a transgression.

Thus, people who forgive their transgressors are more likely to restore positive relations with them; in comparison, people who cannot forgive those who hurt them probably exhaust their relationships at a much quicker rate. Because the lack of positive, supportive relationships have been linked to nearly every psychological and physical malaise from suicide to immunosuppression (Baumeister & Leary, 1995), forgiveness might be associated with mental and physical well-being by virtue of its utility in helping to people maintain a set of stable, supportive interpersonal relationships.



## FORGIVING AND THE MODULATION OF HOSTILITY

Forgiving might also involve reductions in hostility (see Kaplan, 1992). Some evidence suggests that thoughts about getting revenge against people in hostility-producing situations are activated with greater intensity by people with chronic hostility than among those who are less hostile (Snyder, Crowson, Houston, Kurylo, & Poirier, 1997).

When we forgive someone who has injured us, by definition this involves reductions in motivations to avoid and harm the other person. As a result, there is one less person in our network of relationships who can elicit such negative feelings and motivations from us. The effect of these positive changes in our motivations on hostility probably can be seen empirically when their effects are cumulated across the many interpersonal relationships in our lives. By experiencing reductions in avoidance and revenge motivations, along with rebounds in benevolent motivations, forgiving persons are, perhaps, at a considerably lower risk for the negative health effects that accompany hostility (Miller, Smith, Turner, Guijarro, & Hallet, 1996).

## FORGIVING AS A RED FLAG

Most psychologists interested in the topic of forgiveness tend to emphasize the positive effects of forgiveness on health and well-being. It is worth noting, however, that forgiving might not universally be positively associated with health and well-being. It is possible that in certain interpersonal situations, people with a willingness to forgive might put their health and well-being at risk.

Some research suggests that forgiveness may be a marker for relational disturbance, for example, in relationships characterized by physical abuse (Katz, Street, & Arias, 1997). To this point, Katz et al.'s study suggested that people who are more willing to forgive their close relationship partners for physical abuse are also more likely to stay in the abusive relationship. By conducting investigations designed to uncover such situations in which forgiving could be a red flag for psychosocial distress, we may help to distinguish the positive effects of forgiveness from its potentially perilous effects.

## DIRECTIONS FOR FUTURE RESEARCH

At several points in this brief article, I have alluded to what I believe to be the major priorities for future research on forgiveness, particularly as it relates to health and well-being. I summarize four major directions for future research here. First, we need better measures, especially alternatives to self-report measures. In turn, the availability of good measures

should propel scientific work (McCullough, Hoyt, & Rachal, 2000). Also, more convergent and discriminant validity data are needed on the existing measures of forgiveness.

Second, the field needs more longitudinal and experimental studies on the precursors of forgiving. We have very little data on how personality, social environment, and relationship-specific factors influence forgiving. Furthermore, most of the presently available insights regarding the precursors and effects of forgiving come from cross-sectional studies which are useful, but are not optimal for testing causal hypotheses.

Third, more stringent examinations of the links between forgiving and human health and well-being are needed. Optimally, these studies should be longitudinal in nature. While I do not doubt that self-report measures of forgiving will be associated cross-sectionally with a wide range of measures of well-being, I do question whether those relationships will be causal ones. For example, in a recent study (McCullough et al., 1999), we found cross-sectional evidence that people who were more forgiving of people who had recently transgressed against them had higher levels of satisfaction with life. We found no evidence, however, that those who forgave their transgressors had better satisfaction with life at an 8-week follow-up after controlling for baseline levels of life satisfaction. Thus, the cross-sectional association between forgiving and satisfaction with life did not appear to be a causal one. Whether this finding will stand up to replications is beside the point. The point is that we cannot take for granted that cross-sectional relationships of forgiving and measures of health and well-being will withstand the scrutiny of prospective and experimental research.

Fourth, specialized research is needed to focus on particular offenses, offenders, or victims. To date, my own research has been with (mostly) normal people in (mostly) normal relationships. However, by focusing on certain clinical (e.g., victims of abuse, see Freedman & Enright, 1996) and nonclinical populations (e.g., nondistressed married couples), future research can help us to understand how the language of forgiveness can be applied to the contours of specific types of relationships and specific problems in living. Accordingly, the scientific understanding of forgiveness will become more complete.

## SUMMARY

Many religions and value systems assume that forgiveness is a source of human strength, yielding interpersonal, mental, or physical benefits. These assumptions can be converted into scientific hypotheses. With recent developments in forgiveness theory and the measurement of forgiveness, psychology is developing the resources necessary to put such

hypotheses to the test. As a result, we may expect exciting increases in our scientific understanding of forgiveness and its links to indices of human health and well-being.

## REFERENCES

- Al-Mabuk, R., Enright, R. D., & Cardis, P. (1995). Forgiveness education with parentally love-deprived late adolescents. *Journal of Moral Education, 24*, 427-444.
- Aschleman, K. A. (1996). *Forgiveness as a resiliency factor in divorced or permanently separated families*. Unpublished Master's thesis, University of Wisconsin-Madison.
- Axelrod, R. (1980a). Effective choice in the prisoner's dilemma. *Journal of Conflict Resolution, 24*(3), 3-25.
- Axelrod, R. (1980b). More effective choice in the Prisoner's dilemma. *Journal of Conflict Resolution, 24*(3), 379-403.
- Batson, C. D. (1991). *The altruism question*. Hillsdale, NJ: Erlbaum.
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497-529.
- Caprara, G. V. (1986). Indicators of aggression: The dissipation-rumination scale. *Personality and Individual Differences, 7*, 763-769.
- Coyle, C. T., & Enright, R. D. (1997). Forgiveness intervention with post-abortion men. *Journal of Consulting and Clinical Psychology, 65*(6), 1042-1046.
- Darby, B. W., & Schlenker, B. R. (1982). Children's reactions to apologies. *Journal of Personality and Social Psychology, 43*, 742-753.
- Enright, R. D., & Coyle, C. T. (1998). Researching the process model of forgiveness within psychological interventions. In E. L. Worthington, Jr. (Ed.), *Dimensions of forgiveness: Psychological research and theological perspectives* (pp. 139-161). Radnor, PA: Templeton Foundation Press.
- Enright, R. D., Santos, M. J., & Al-Mabuk, R. (1989). The adolescent as forgiver. *Journal of Adolescence, 12*, 95-100.
- Freedman, S. R., & Enright, R. D. (1996). Forgiveness as an intervention goal with incest survivors. *Journal of Consulting and Clinical Psychology, 64*, 510-517.
- Gassin, E. A. (1998). Receiving forgiveness as moral education: A theoretical analysis and initial empirical investigation. *Journal of Moral Education, 27*, 71-87.
- Girard, M., & Mullet, E. (1997). Forgiveness in adolescents, young, middle-aged, and older adults. *Journal of Adult Development, 4*, 209-220.
- Gottman, J. M. (1993). A theory of marital dissolution and stability. *Journal of Family Psychology, 7*, 57-75.
- Greenberg, M. A. (1995). Cognitive processing of traumas: The role of intrusive thoughts and reappraisals. *Journal of Applied Social Psychology, 25*, 1262-1296.
- Hebl, J. H., & Enright, R. D. (1993). Forgiveness as a psychotherapeutic goal with elderly females. *Psychotherapy, 30*, 658-667.
- Holman, E. A., & Silver, R. C. (1996). Is it the abuse or the aftermath? A stress and coping approach to understanding responses to incest. *Journal of Social and Clinical Psychology, 15*, 318-339.
- Kaplan, B. H. (1992). Social health and the forgiving heart: The Type B story. *Journal of Behavioral Medicine, 15*, 3-14.
- Katz, J., Street, A., & Arias, I. (1997). Individual differences in self-appraisals and responses to dating violence scenarios. *Violence and Victims, 12*(3), 265-276.
- Malcom, 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.

- Mauger, P. A., Perry, J. E., Freeman, T., Grove, D. C., McBride, A. G., & McKinney, K. E. (1992). The measurement of forgiveness: Preliminary research. *Journal of Psychology and Christianity, 11*(2), 170-180.
- McCullough, M. E., Bellah, C. G., Kilpatrick, S. D., & Johnson, J. L. (1999). *Vengefulness: Relationships with forgiveness, rumination, well-being, and the big five*. Unpublished manuscript, National Institute for Healthcare Research, Rockville, MD.
- McCullough, M. E., Hoyt, W. T., & Rachal, K. C. (2000). What we know (and need to know) about assessing forgiveness constructs. In M.E. McCullough, K. I. Pargament & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 65-88). New York: Guilford.
- McCullough, M. E., Pargament, K. I., & Thoresen, C. E. (2000). The psychology of forgiveness: History, conceptual issues, and overview. In M. E. McCullough, K. I. Pargament, & C. E. Thoresen (Eds.), *Forgiveness: Theory, research, and practice* (pp. 1-14). New York: Guilford.
- 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, 75*, 1586-1603.
- McCullough, M. E., & Worthington, E. L., Jr. (1995). Promoting forgiveness: A comparison of two brief psychoeducational group interventions with a waiting-list control. *Counseling and Values, 40*, 55-68.
- McCullough, M. E., & Worthington, E. L., Jr. (1999). Religion and the forgiving personality. *Journal of Personality, 67*, 1141-1164.
- McCullough, M. E., Worthington, E. L., Jr., & Rachal, K. C. (1997). Interpersonal forgiving in close relationships. *Journal of Personality and Social Psychology, 73*, 321-336.
- Meek, K. R., Albright, J. S., & McMinn, M. R. (1995). Religious orientation, guilt, confession, and forgiveness. *Journal of Psychology and Theology, 23*, 190-197.
- Metts, S., & Cupach, W. R. (1998 June). *Predictors of forgiveness following a relational transgression*. Paper presented at the Ninth International Conference on Personal Relationships, Saratoga Springs, NY.
- Miller, T. Q., Smith, T. W., Turner, C. W., Guijarro, M. L., & Hallet, A. J. (1996). A meta-analytic review of research on hostility and physical health. *Psychological Bulletin, 119*, 322-348.
- Nelson, M. K. (1993). *A new theory of forgiveness*. Unpublished doctoral dissertation, Purdue University, West Lafayette, IN.
- Ohbuchi, K., Kameda, M., & Agarie, N. (1989). Apology as aggression control: Its role in mediating appraisal of and response to harm. *Journal of Personality and Social Psychology, 56*, 219-227.
- Poloma, M. M., & Gallup, G. H. (1991). *Varieties of prayer*. Philadelphia, Trinity Press International.
- Rackley, J. V. (1993). *The relationships of marital satisfaction, forgiveness, and religiosity*. Unpublished Dissertation, Virginia Polytechnic Institute and State University, Blacksburg, VA.
- Roloff, M. E., & Janiszewski, C. A. (1989). Overcoming obstacles to interpersonal compliance: A principle of message construction. *Human Communication Research, 16*, 33-61.
- Rusbult, C. E., Verette, J., Whitney, G. A., Slovik, L. F., & Lipkus, J. (1991). Accommodation processes in close relationships: Theory and preliminary empirical evidence. *Journal of Personality and Social Psychology, 60*, 53-78.
- Sandage, S. J., & Worthington, E. L., Jr. (1999). *An ego-humility model of forgiveness: An empir-*

- ical test of group interventions*. Poster presented at the 107th annual meeting of the American Psychological Association, Boston, MA.
- Sandage, S. J., Worthington, E. L., Jr., & Hight, T. L. (1996). *Using religiosity, developmental level of forgiveness, narcissism, and self-monitoring to predict seeking forgiveness*. Unpublished manuscript, Virginia Commonwealth University, Richmond, VA.
- Snyder, C. R., Crowson, J. J., Jr., Houston, B. K., Kurylo, M., & Poirier, J. (1997). Assessing hostile automatic thoughts: Development and validation of the HAT scale. *Cognitive Therapy and Research*, 4, 477-492.
- Snyder, C. R., & Higgins, R. L. (1997). Reality negotiation: Governing one's self and being governed by others. *Review of General Psychology*, 1, 336-350.
- Strasser, J. A. (1984). *The relation of general forgiveness and forgiveness type to reported health in the elderly*. Unpublished doctoral dissertation, Catholic University of America, Washington, D.C.
- Subkoviak, M. J., Enright, R. D., Wu, C., Gassin, E. A., Freedman, S., Olson, L. M., & Sarinopoulos, I. (1995). Measuring interpersonal forgiveness in late adolescence and middle adulthood. *Journal of Adolescence*, 18, 641-655.
- Trainer, M. F. (1981). *Forgiveness: Intrinsic, role-expected, expedient, in the context of divorce*. Unpublished Dissertation, Boston University, Boston, MA.
- Van Lange, P. A. M., Rusbult, C. E., Drigotas, S. M., Arriaga, X. B., Witcher, B. S., & Cox, C. L. (1997). Willingness to sacrifice in close relationships. *Journal of Personality and Social Psychology*, 72, 1373-1395.
- Wade, S. H. (1989). *The development of a scale to measure forgiveness*. Unpublished dissertation, Fuller Graduate School of Psychology, Pasadena, CA.
- Weiner, B. (1995). *Judgments of responsibility*. New York: Guilford.
- Woodman, T. (1991). *The role of forgiveness in marital adjustment*. Unpublished doctoral dissertation, Fuller Graduate School of Psychology, Pasadena, CA.
- Wu, J., & Axelrod, R. (1995). How to cope with noise in the iterated Prisoner's dilemma. *Journal of Conflict Resolution*, 39(1), 183-189.