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I am submitting herewith a dissertation written by Joy Elizabeth Rogers Drinnon entitled "Assessing Forgiveness: Development and Validation of the Act of Forgiveness Scale." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirement for the degree of Doctor of Philosophy, with a major in Psychology.

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We have read this dissertation
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ASSESSING FORGIVENESS: DEVELOPMENT AND VALIDATION OF THE ACT OF FORGIVENESS SCALE

A Dissertation

Presented for the Doctoral

Degree

The University of Tennessee, Knoxville

Joy Elizabeth Rogers Drinnon

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DEDICATION

This dissertation is dedicated to my family

and to my loving husband, Shannon Drinnon.

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First, I would like to thank my family, especially my husband, for the support and patience they have granted me during my pursuit of this degree. Without their help I don't know when I would have found the time or energy to focus on my research. Second, I would like to express my heartfelt gratitude to Warren Jones. In addition to being a trusted mentor, he has a great sense of humor, and I am grateful to have had the opportunity to work with him these last five years. Finally, I would like to thank the faculty and graduate students who offered so much advice and encouragement, particularly the members of my dissertation committee, Kathleen Lawler, Julia Malia, and Wes Morgan. I would also like to thank Alvin Burstein for his contribution during the preliminary stages of this research.

ABSTRACT

Recently, considerable research attention has been devoted to the process of forgiving interpersonal transgressions. An unresolved issue in this literature concerns the measurement of the construct of forgiveness. The primary purpose of this research project was to develop a valid and reliable measure of state forgiveness, that is, the degree to which a respondent has forgiven a specific person or a specific instance of betrayal or hurt. Three separate phases of research were conducted.

In Phase 1, an initial pool of items were written and subsequently refined using both traditional Likert analyses and itemmetric analyses. Initial estimates of reliability were computed from responses to the items by 397 college students. Subsequently, a 45-item scale, called the Act of Forgiveness Scale (AFS) was shown to be both internally consistent and reliable over time. Furthermore, the factor structure of the AFS was explored and appeared to be consistent with current conceptualizations of forgiveness. In Phase 2, the convergent and discriminant validity of the AFS was assessed in analyses involving data from over 1,000 college students. Specifically, the average correlation between the AFS and other state measures was found to be greater than the average correlation between the AFS and trait measures of forgiveness. In addition, significant correlations were found between forgiveness, as measured by the AFS, and related constructs, such as cynicism and attachment. In Phase 3, non-test validity analyses were undertaken by comparing AFS scores to coded narrative accounts of betrayal by students ($\underline{n} = 311$) and by a semi-structured interview with students ($\underline{n} = 50$) about betrayal and forgiveness. In the narrative study, forgiveness was reliably associated with perceptions of

the severity of the offense and consequences for the relationship and victim, but relatively unrelated to objective characteristics of the betrayal (e.g., type of offense). Several of these findings were replicated in the interview study. For example, participants' AFS scores were related to severity of the offense, apology, and an impressionistic rating of forgiveness. Taken together, results strongly supported the utility of the AFS as a measure of state forgiveness and suggested several hypotheses of relevance to future research.

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CHAPTER 1

INTRODUCTION

Forgiveness is a complex experience with implications for issues of psychological and spiritual significance. In addition to its historical importance in Judeo-Christian religious theology and moral philosophy (cf. Cunningham, 1985), increasingly the concept of forgiveness has been studied by researchers in psychology and related fields (e.g., Al-Mabuk, Enright, & Cardis, 1995; Boon & Sulsky, 1997; McCullough, Worthington, & Rachal, 1997; Rhode, 1990). A central problem in any developing literature in psychology, including this one, is measurement. The primary purpose of the present research was to develop a valid and reliable instrument with which to measure a acts of forgiveness and, in the process of doing so, to explore relevant questions of measurement and conceptualization.

Forgiveness has been defined as a psychological transformation with respect to an injustice such that an offended party responds in a merciful way toward an offender by foregoing hatred, resentment, ill-will, and retaliation even when there is just cause for such antipathy (Enright and the Human Development Study Group, 1991; North, 1987). Moreover, the process of forgiveness has the potential of eventually transforming such negative reactions into positive emotional and interpersonal states, such as increased affection and understanding and, where relevant, reconciliation with the offender. For these reasons, the number of research studies focusing on the origins, correlates, and consequences of forgiveness has increased, as have explorations of the utility of educational and therapeutic intervention programs to facilitate forgiveness (cf.

McCullough & Worthington, 1994). Recent empirical and theoretical work also has explored the relevance of forgiveness within an extensive array of contexts, such as forgiveness of strangers, forgiveness of nation states, and forgiveness of the self (e.g., Mauger et al., 1992).

The importance of forgiveness derives from its potential to alter the common pathway from various kinds of interpersonal transgressions and offenses (e.g., infidelity, physical abuse, deception) to their typical consequences for the offended party (e.g., pain, anger, resentment) and the relationship, if any, between victim and offender. It seems reasonable to assume that all relationships are, to some extent, threatened or disrupted by such transgressions and that virtually everyone is, sooner or later, victimized by acquaintances and strangers to varying degrees and with varying frequencies. In this regard, forgiveness might be thought of as a central component in the maintenance of on-going relationships, as well as a critical mechanism of individual adjustment and well-being. Indeed, initial evidence suggests that genuine forgiveness not only promotes reconciliation within threatened relationships but also is associated with reductions in anxiety, depression, and other forms of distress on the part of offended persons (cf. Freedman & Enright, 1996). Additional research has begun to explore the various interpersonal (e.g., apology) and dispositional (e.g., perspective taking) variables likely to promote forgiveness, as well as to examine the empirical validity of theoretical and anecdotal accounts of the experience of forgiving (cf. McCullough et al., 1998).

Although the empirical study of forgiveness is sufficiently new that further research is warranted with respect to virtually all hypotheses and research questions, there is a

particular need to address the assessment of forgiveness. Several instruments purporting to measure forgiveness and its presumed components have been reported in the literature (e.g., Subkoviak et al., 1995; Trainer, 1981; Wade, 1989). On the other hand, several of these instruments have not been examined extensively with respect to standard criteria of measurement such as validity and reliability. Furthermore, no systematic effort has been undertaken to compare these measures with each other despite their diversity in format, underlying conceptualization, and methods of scaling. Several of the scales appear excessively long (e.g., 60 to 83 items). Although several of the instruments attempt to measure what might be termed *state forgiveness* (i.e., forgiving a specific person or forgiving a specific offense), it is not clear whether the instructions to "think about" or focus on a specific person or event result in responses exclusively related to the person or event in question. As a consequence, no single measure of forgiveness has emerged as the standard in this area, which, in turn, makes comparisons and generalizations across studies and samples difficult.

The purpose of this study was to develop and validate a reliable psychological instrument for assessing the degree to which respondents have forgiven a specific relational partner for a particular transgression or act of betrayal. However, rather than simply generating another self-report instrument to measure forgiveness, I placed the emphasis on assessing and refining the characteristics of the resultant scale more extensively than has been the case for much of the previous research in this area. Following a review of the literature, the development and validation of the Act of Forgiveness Scale (AFS) was pursued in three phases.

In the first phase, an initial pool of items was written and administered to a sample of college students. An attempt was made to capture all relevant aspects of the state or act of forgiving another person as suggested by previous research and theory. Items for the final version of the scale were selected on the basis of both traditional psychometric procedures (e.g., internal reliability, factor analysis), as well as analyses assessing the content and meaning of items.

In the second phase, the validity of the AFS was more thoroughly examined in a sample of over 1000 college students. First, the convergent and discriminant validity of the AFS was explored by comparing the average correlation between the AFS and state measures of forgiveness with the average correlation between the AFS and trait measures of forgiveness. Second, the scores on the AFS were compared to measures of the presumed components of forgiveness, as well as measures of motives associated with apparent instances of forgiveness. Third, AFS scores were compared also to measures of several relevant emotional, personality, and interpersonal constructs (e.g., loneliness, attachment cynicism).

In the third phase, further validity evidence and particularly non-test evidence for the AFS was sought in two analyses. First, comparisons were made between AFS scores and variables reflecting the content of the betrayal narratives elicited from respondents prior to the completion of AFS items. Second, a sample of participants completed the AFS and subsequently were interviewed in detail about the betrayal incident described in their narratives. The interviews yielded self-rated (e.g., anger, trust, relationship satisfaction), as well as categorical variables (e.g., change in the relationship, whether an apology was

given, relationship type). These data were analyzed in order to estimate the validity of the AFS interpretations from the perspective and in the language of the respondent. In addition, I recorded an impression of the participants' apparent level of forgiveness based on their responses to questions in the course of the interview, as well as their demeanor and tone. This rating also was correlated with the AFS to establish the validity of AFS scores.

To summarize, this series of studies sought to develop a useful instrument with which to measure forgiveness of a specific person and/or incident. Toward this end, several advances and innovations to this area of research were undertaken, including (a) an item-generation procedure informed by the developing psychological literature on forgiveness, as well as historical theological and philosophical sources; (b) a diverse set of scaling and reliability procedures and analyses (e.g., Likert analysis, itemmetric analysis, test-retest reliability, factor analysis); and (c) a substantial array of validity assessments. Estimates of validity were based on the following: (a) convergent and discriminant analyses involving extant measures of state and trait forgiveness; (b) comparisons with measures of hypothesized components, types, and motives of forgiveness; (c) comparisons with measures of several relevant constructs indexing emotion, personality, and interpersonal experiences (e.g., cynicism, apology, betrayal); (d) comparisons with variables derived from the narratives used to prime participants for completing the AFS (e.g., type of betrayal, type of relationship); and (e) comparisons with ratings and categorical variables available from interviews regarding betrayal and forgiveness, including my rating assessing the "visibility" of AFS scores.

The structure of this report was determined by its unique features including the large number of samples and measures, the diversity of analyses, and the sequential development of the research strategy. Chapter 2 presents a review of the relevant literature including the definition and importance of forgiveness, forgiveness as a therapeutic process, social and psychological antecedents of forgiveness, and the measurement of forgiveness. The majority of the paper consists of the methods, results, and a discussion of each phase in chapters 3, 4, and 5, respectively. A brief general discussion is presented in chapter 6.

CHAPTER 2

LITERATURE REVIEW

Definition and Importance of Forgiveness

Forgiveness is a relatively new focus of psychological research. Prior to the 1990's there were virtually no empirical studies conducted on forgiveness, though several theological and philosophical commentaries had been presented on the topic. In spite of this, there has been general agreement regarding the conceptual definition of forgiveness. Forgiveness can be defined as a transformation of thoughts, feelings, and behaviors regarding an injustice such that the offended party comes to respond less negatively toward the offender (Cunningham, 1985). It is a merciful response because the victim of the offense chooses not to seek revenge even when they have just cause to do so (North, 1987). Furthermore, it is important to distinguish forgiveness and superficially similar constructs such as condoning, pardoning, reconciliation, and passive acceptance of injustice. Enright and the Human Development Study Group (1991) argue that forgiveness is not an excuse or justification for an offense and does not imply releasing the offender from moral obligation. Similarly, it does not necessarily involve reconciliation with the offender. Instead, forgiveness is an active process that is motivated, not by a desire to be self-righteous or self-deprecating, but by a desire to be free from negativity toward the offender and the betrayal (Cunningham, 1985).

One problem evident when it comes to investigating forgiveness is the difficulty in assessing true forgiveness. How can anyone tell when forgiveness has been achieved or is it ever completely achieved? There are some forms of "pseudo-forgiveness" wherein a

person may offer mercy or seeming forgiveness without having actually faced the pain and self-confrontation necessary for forgiveness (Cunningham, 1985). A person may do so out of some moral edict or because the nature of the relationship demands it (e.g., employee or family relationships). This type of forgiveness is unlikely to reduce negative feelings. Other kinds of forgiveness can be thought of as "immature", because the injured person comes across to the offender as self-righteous, irritating, or smug. According to some writers, if forgiveness results in the victim feeling morally superior, then this is false forgiveness (Gartner, 1988). Finally, individuals may offer forgiveness but still hold onto some of the negative feelings. Signs that someone has not completely forgiven may include recapitulation (i.e., repeatedly bringing the incident up to the offender; Moore, 1997), withholding affection or attention, or mistrust.

Negative feelings or relationship-destructive behaviors (e.g., revenge, hostility) no doubt will affect the individuals and the relationship. A grudge can be very corrosive to a relationship and to the person holding it. Murphy (1982) may have said it best when he said, "The person who cannot forgive is the person who cannot have friends or lovers" (p. 505). A cynical person might say that all relationships are doomed to end in betrayal on the part of one or both persons. While this may seem too pessimistic, it is at least realistic to expect some injury or hurt from those for whom we care most deeply. Because intimate relationships have the power to cause us the most pain, a willingness to forgive is essential to restore those relationships if we are ever betrayed. At the very least, we must be able to leave an irreparable relationship without feeling permanently hurt or mistrustful; such residual feelings would make future relationships difficult. Without a willingness to

forgive, negative feelings, such as resentment, would persist and make recovery or reconciliation impossible.

Todd (1985) argued that there is a universal human need to be reconciled with others whom we have wronged or who have wronged us. Although reconciliation is not a necessary part of forgiveness, forgiveness may be a necessary part of reconciliation. According to Cunningham (1985), forgiveness makes it possible to continue in relationships, while at the same time reducing the need for relationship destructive behaviors (e.g., revenge). Forgiveness also enables us to leave relationships that are beyond repair while making the breakup more meaningful and bearable. Forgiveness can not restore innocence and trust entirely, but it can restore integrity to relationships and to oneself. Presumably, true forgiveness can do this because it gives the betrayal meaning beyond the pain it caused and provides an opportunity to learn about oneself and others. However, empirical research is needed to assess the accuracy of these and other theoretical assumptions regarding forgiveness.

A review of the literature reveals several promising lines of research on the phenomenon of forgiveness. First, counselors and psychotherapists have investigated the utility of forgiveness as a therapeutic goal and have found that it is related to better therapeutic outcomes. Second, several social and cognitive factors have been shown to predict a willingness to forgive. Finally, a number of current research programs are directed toward developing valid and reliable instruments with which to measure forgiveness and its various manifestations.

Forgiveness as a Psychotherapeutic Process

Because forgiveness has the potential to resolve psychological and interpersonal turmoil, it has been recognized as a useful tool by therapists and counselors. Much of the discourse on forgiveness has centered on its utility as an educational and therapeutic intervention for individuals seeking relief from anger and resentment incurred by some personal injury. However, forgiveness has been endorsed cautiously, at best, within the applied community. Numerous articles have been devoted to debates about the merits and risks involved in encouraging patients to forgive (for a review, see Enright, Eastin, Golden, Sarinopoulos, & Freedman, 1992). Enright, Gassin, and Wu (1992) responded to objections made about forgiveness as a form of therapy. Among those concerns expressed were that forgiveness would promote the following: (a) weakness in the injured person; (b) reversal of social justice (i.e., more criminal activity); (c) reconciliation in spite of continued abuse; (d) viewing the offender as inferior; and (e) hypersensitivity to future interpersonal betrayals. When forgiveness is mistaken for mercy, condoning, justifying, or controlling, it is not surprising that many are hesitant to encourage it. However, the conclusion reached by several authors is that, if forgiveness is properly defined, these concerns are no longer relevant (Enright, Eastin et al., 1992; Enright, Gassin, & Wu, 1992). Forgiveness must be understood as a voluntary release of negative emotions toward an undeserving offender. Presumably, the person who willingly attempts any or all of the forgiveness processes, as outlined by Enright and the Human Development Study Group (1996) and others, should experience positive outcomes (e.g., reduced anger,

better adjustment). Indeed, there is mounting evidence that forgiveness should be considered a useful intervention for clients who desire such an outcome.

The forgiveness model proposed by Enright and the Human Development Study Group (1991; 1996) has been used as the basis for a number of forgiveness interventions. According to Enright and the Human Development Study Group (1996) the process of forgiving another person includes up to 20 steps that are divided into four phases. The first phase is called the uncovering phase because it involves recognizing the emotional pain resulting from a betrayal. It includes acknowledging a variety of negative thoughts and emotions. The second phase is referred to as the decision phase and includes a willingness and commitment to forgive. The third phase is called the working phase and includes changes in one's thoughts about the betrayal or injury. The final outcome phase involves a reevaluation of the injury and self. Al-Mabuk et al. (1995) used this 20-step forgiveness process as a therapeutic intervention with some success for late adolescents who felt their parents did not love them. Furthermore, Freedman and Enright (1996) demonstrated the utility of forgiveness in therapy for female incest survivors. The forgiveness process model proposed by Enright and the Human Development Study Group (1996) was used in individual therapy sessions once a week for up to 14 months. Compared to a wait-listed control group, the experimental group showed significant increases in forgiveness and hope following the intervention. Furthermore, the experimental group showed decreases in anxiety and depression. After going through the same therapy, the control group showed a similar pattern of changes.

Additional evidence regarding the therapeutic efficacy of forgiveness comes from McCullough and Worthington (1995). Eighty-six college students, who reported a desire but an inability to forgive an interpersonal hurt, took part in a 1-hour forgiveness group therapy session. Two experimental groups were distinguished on the basis of the rationale given to participants for why they should forgive. Participants were either in a forgiveness session where the rationale behind forgiveness was to (a) restore or improve the damaged relationship or (b) reduce their own negative personal consequences (i.e., reduce anger and bitterness). A control group consisted of individuals who were wait-listed for the intervention. Both experimental groups showed significant improvements over the control group in the endorsement of positive feelings toward the offender (e.g., compassion, acceptance, respect), more desire for reconciliation, and less desire for revenge. However, the group that was motivated to forgive for personal reasons showed greater affirming feelings (e.g., understanding, love) toward the offender when compared to the group motivated to improve the relationship. It seems that a motivation to forgive out of a desire to restore personal well-being works better than forgiveness motivated by a desire to restore relationships. This study seems to support the assumption that forgiveness is best understood as a personal process with interpersonal implications.

Drigotas, Whitney, and Rusbult (1995) reached a similar conclusion. Their diary study of dating partners' responses to dissatisfying incidents showed that the constructive response of voicing one's concerns resulted in more constructive relationship outcomes, whereas, the other constructive response--referred to as loyalty--was less effective, presumably because it involved more private commitments to stand by one's partner or

forgive the other's wrongdoing. These results suggest that forgiveness alone cannot be expected to restore a relationship. Instead, constructive behaviors, like forgiveness, should be encouraged primarily for the benefit that it provides to the dissatisfied partner. If a partner admits to her or his wrongdoing and concedes that the betrayal has changed a relationship, then the other person's willingness to forgive might have the desired impact of restoring the relationship. In other cases, where the partner does not acknowledge his or her wrongdoing or is unaware of the pain they have caused, then the act of privately forgiving the person serves only to provide relief to the person who was betrayed.

These initial findings support the utility of encouraging forgiveness in others, but a word of caution is needed. Forgiveness may not be an appropriate or viable option for all clients. McCullough and Worthington (1994) have suggested that forgiveness therapy may be ineffective or inappropriate for clients with some personality disorders. For example, clients with Antisocial Personality disorder, Dependent Personality disorder, and Schizophrenia might not respond to or benefit from encouragement to forgive. Even for clients with no major adjustment problems, forgiveness interventions should be introduced delicately. Forgiveness must be presented to clients in such a way that it becomes a desired goal and not one that is forced. If clients are coerced into forgiveness, the result may be a pseudo-forgiveness that ends in greater resentment and pain (Enright, Eastin et al., 1992). Although there is good reason to be cautious about incorporating forgiveness into therapy, the potential benefits of genuine forgiveness make it worthy of additional clinical and experimental attention.

Social and Psychological Antecedents of Forgiveness

Given the positive consequences of forgiveness, it is important to understand the social and cognitive variables most likely to encourage or impede the process of forgiveness. A review of the literature indicated that while numerous social and personality variables have been investigated along with forgiveness, only a handful have been reliably shown to predict forgiveness thus far. The following four variables appear to be particularly important determinants of forgiveness: (a) perceptions of the severity of the offense, (b) attributions about the intentions of the offender, (c) mitigating information or apologies, and (d) empathy.

Severity

The initial response to a betrayal or any personal offense will likely depend on the severity of consequences for the victim. A relatively minor offense, such as an off-handed comment or breach of etiquette, is more likely to be forgiven because the consequences of such an offense are short-lived and mild compared to transgressions resulting in extreme emotional or physical distress, such as abuse or infidelity. Research indicates that the perceived severity of the offense is related to, not only attributions about the offense and reactions to apologies, but also to forgiveness and retaliation.

First, research has shown that the severity of the offense is related to attributions made about the blameworthiness of offenders. However inappropriate, people tend to link the severity of the outcome with their assessments of the perpetrators' motives. For example, Lysak, Rule, and Dobbs (1989) found that scenarios involving severe offenses were judged to be more blameworthy, intentional, and unacceptable. In a similar study,

Boon and Sulsky (1997) reported that although the intentions of the offender were more predictive of blame than severity, the seriousness of the offense was inversely related to a willingness to forgive.

Second, research indicates that apologies and acts of contrition can mediate the effects of severity on forgiveness. However, in some extreme cases, the consequences of the transgression outweigh any attempts on the part of the offender to account for their actions. For example, one scenario-based experiment varied the severity of the harm and the presence of an apology. Participants who read accounts involving severe physical injury were not as assuaged by an apology compared to those who read accounts involving mild harm. Specifically, the ability of apology to reduce verbal aggression and negative affect was lessened under conditions of severe harm (Ohbuchi, Kameda, & Agarie, 1989). Another experiment by Zillmann, Bryant, Cantor, and Day (1975) found that the effect of mitigating information on retaliation was affected by the level of physiological arousal. Participants were insulted by an experimenter either while engaging in a high-excitation or moderate-excitation activity (riding a bike or threading a disc) and were either given mitigating information or not. Results indicated that there was an interaction; mitigating information reduced negative and retaliatory ratings only under conditions of moderate excitement, whereas there was no effect under conditions of high arousal. These findings are interesting because they suggest that forgiveness is unlikely to occur immediately, especially when the offense is severe. More likely, victims will need time to calm down or even recover from any emotional and physical distress before they can reflect upon the causes of the injury and their inclination to forgive.

Attributions

Several theorists have noted the importance of attributions to the process of forgiving (cf., Al-Mabuk, Dedrick, & Vanderah, 1998; Droll, 1984; Fitzgibbons, 1986). Specifically, the ability to forgive or to refrain from taking revenge is believed to be related to the attributions made about the intentions and accountability of the offender. Attributions consist of beliefs about the actions of other people, such as the intentions of the offender and the blameworthiness of the offender. Attributions can be assessed in a variety of ways and include a number of different dimensions. For example, the actions may be attributed to internal (personality) or external (situational) causes, as well as stable or unstable causes (Bradbury & Fincham, 1990). Presumably, the more positive the attributions are, the more likely it is that the perpetrator will be forgiven or, at the very least, escape retaliation. Indeed, there is considerable evidence to support this assertion.

In one of the first empirical investigations of the process of forgiveness, Droll (1984) interviewed individuals about their responses to their romantic partner's most serious transgression. Droll found those individuals who made positive attributions also were more likely to report a decision to forgive. Furthermore, those who made more external attributions also were more likely to view forgiveness as a process rather than an instantaneous or unplanned outcome. Finally, positive attributions were related to having forgiven the transgression based on offender's accounts and apologies. In a follow-up experiment, Droll had participants read hypothetical accounts of transgressions in which the accounts or apologies offered by the offender were varied. As expected, those who heard more adequate apologies and accounts were more likely to try and understand the

offender and to forgive the transgression, whereas those who heard poor apologies and unbelievable accounts rated the transgression as more serious, felt more resentment, and reported a greater desire for revenge. These findings supported the expected influence of initial attributions on forgiveness and the power of apologies to bolster more positive evaluations.

Bies and Tripp (1996) surveyed 90 MBA students about instances when they thought about getting even with someone at work. Qualitative analyses of their responses indicated that when the respondents gave external attributions for the perpetrator's actions they did not engage in any vengeful acts. However, when respondents attributed the offense to the internal characteristics (e.g., selfishness) of the perpetrator then the motive for revenge was more clearly evident. Furthermore, when the respondents perceived that the perpetrator intended to hurt them, they reported more rumination and negative cognition.

Boon and Sulsky (1997) also found that the perceived intentions of perpetrators were relevant to forgiveness. They conducted an experiment using vignettes about a betrayal within a romantic relationship in which the severity, avoidability, and intentionality of the offense were varied. College students responded to the accounts by indicating the degree to which they believed the perpetrator was responsible for the offense and the likelihood that they would forgive their partner if he or she had behaved the same way. Results indicated that the intent of the perpetrator was given more weight than the severity or avoidability of the offense when making judgements of

blameworthiness. However, when deciding whether or not to forgive, participants considered both the severity of the offense and the intentions of the offender.

Apologies and Accounts

Not surprisingly, when victims of betrayal are able to make more positive attributions they also are more likely to forgive. However, research indicates that victims and offenders differ greatly in their accounts of the causes and consequences of betrayals. Baumeister, Stillwell, and Wotman (1990) found that offenders were more likely than victims to explain their behavior in terms of external and mitigating circumstances. In contrast, the more limited perspective of the victims led them to describe the motives of the offenders as senseless, unjustified, and deliberately cruel. These findings, which were based on self-reported descriptions, have since been replicated in three scenario-based experiments (see Stillwell & Baumeister, 1997). Given the wide discrepancy between the accounts of victims and perpetrators, communication can go a long way to changing attributions and encouraging forgiveness. Several studies have shown apologies, explanations, and contrition to be inversely related to revenge and positively related to forgiveness.

First, attempts to explain one's offensive behavior can significantly reduce the perception of severity and negative attributions. In addition to the studies described above (cf. Droll, 1984; Ohbuchi et al., 1989; Zillmann et al., 1975), a number of experiments have confirmed the reparative power of apologies. Weiner, Graham, Peter, and Zmuidinas (1991) reported a series of studies that systematically examined the role of confession and its relationship to attributions and forgiveness. Specifically, four scenario-based

experiments were conducted in which the degree of confession was manipulated, and its effects on related judgements were examined. One of the most consistent findings was that the type of confession was related to attributions; positive attributions were more often made about the actions of fictitious characters that accepted responsibility and were more repentant, particularly when the reasons for the offense were ambiguous. Furthermore, forgiveness was greater for those who confessed than for those who denied or said nothing.

In another experiment, the level of blameworthiness was varied along with the kind of account (acceptance of responsibility, excuses, justifications, or denial). When the offenders were described as trying to justify or deny their actions they were judged more harshly than if they conceded or gave excuses (Gonzales, Haugen, & Manning, 1994). Furthermore, Darby and Schlenker (1982) found that grade-school children were equally sensitive to apologies. Specifically, scenarios containing apologies yielded less blame and greater forgiveness. Furthermore, older children were more responsive to the subtle differences in apologies; elaborate apologies led to greater forgiveness, especially when the transgression was accidental.

Second, apologies and other forms of impression management appear to be effective at forestalling retaliation. In the survey conducted by Bies and Tripp (1996), respondents who had not received an explanation or apology were more inclined to take revenge against their co-worker or organization for the perceived harm. Furthermore, there is experimental evidence to support similar consequences. In one study, Japanese college students were evaluated poorly by an experimenter and were then randomly

assigned to one of four conditions in a 2 X 2 manipulation of apology (either received an apology or not) and removal of harm (withdrew the negative evaluation or not). Participants who received an apology rated the experimenter more favorably. A second study using scenarios indicated that participants who read accounts of offenses followed by apologies were less likely to say that the victim would respond with verbal aggression (Ohbuchi et al., 1989).

The timing of apologies also appears to be important. In two experiments, college students were intentionally offended, and then the timing of mitigating information was varied. In the first study, participants who heard plausible explanations for the rude behavior immediately afterward were less likely to retaliate when given the opportunity to do so compared with those who heard no mitigating information or heard it much later (Kremer & Stephens, 1983). In a second study, participants who heard mitigating information prior to being offended responded with substantially less retaliation and hostility than those who received mitigating information after the offense (Zillmann & Cantor, 1976).

Finally, apologies appear to be positively related to forgiveness. In a study of betrayal narratives, Moore (1997) found that forgiveness was almost twice as likely to be offered when an apology was given than when it was not. However, the effect of apology on forgiveness appears to be largely mediated by empathy. Two studies have shown that the relationship between receiving an apology and forgiveness was mediated by empathy (McCullough et al., 1997; McCullough et al., 1998). Presumably, apologies increase the

likelihood that victims of offenses will take the perspective of the offender and that it is the resulting cognitive and affective empathy that promotes forgiveness.

Empathy

Several theoretical models of forgiveness include either direct reference to the process of empathy or to its interpersonal outcomes (Enright & the Human Development Study Group, 1991; 1996; Fow, 1996; McCullough & Worthington, 1994). For example, Enright and the Human Development Study Group (1991) included such psychological variables as empathy, role taking, and compassion in their description of the forgiveness process. In a review of the literature regarding the convergence of empathy and forgiveness, Drinnon (2000) found that the majority of the evidence indicated that empathy was related to forgiveness. Drinnon examined over 100 separate tests of the relationship between empathy and forgiveness. The findings were organized by the conceptualization of empathy. Specifically, three primary types of empathy were identified and distinguished: (a) cognitive empathy for a specific person and offense (i.e., partner perspective taking); (b) dispositional tendency to take the perspective of others (i.e., general perspective taking); and (c) compassion or sympathetic responses to the plight of someone else (i.e., affective empathy). The findings from this review indicated that empathy was consistently related to forgiveness. Furthermore, the pattern of results suggested that the type of empathy was particularly important.

Perspective taking was found to be the most strongly related empathy-related response. In both correlational and experimental tests, the ability to take the perspective of one's partner proved to be a significant predictor of forgiveness towards that person.

Furthermore, partner perspective taking mediated the relationship between general perspective taking and forgiveness. General perspective taking was more strongly related to dispositional forgiveness, suggesting that the tendency to take the perspective of others may also lead to more forgiving tendencies. Affective empathy (e.g., compassion) also was found to be a significant predictor of forgiveness, particularly when it was conceptualized as emotional responses toward a particular offender.

Measuring Forgiveness

As forgiveness has increasingly become the focus of empirical investigation, the need for valid and reliable research instruments with which to measure forgiveness has been acknowledged. To date, several measures have been developed that purport to measure forgiveness. Generally, these measures either assess the propensity to forgive routinely (i.e., trait measures) or the extent of forgiveness for a specific offender and offense (i.e., state measures). The majority of measures developed thus far assess state forgiveness. This is not surprising since most studies have sought to identify the antecedents and consequences of forgiveness for a specific offense. However, to date there has been no comparison among these measures and no single scale has been thoroughly evaluated in terms of reliability and validity.

State Measures of Forgiveness

Trainer's Forgiveness Scale

The first self-report scale to measure forgiveness was developed by Trainer (1981). Trainer developed a 43-item measure based on a review of the literature. The measure was composed of four scales. The first scale was a general measure of

forgiveness, whereas the other three represented types of forgiveness. The three types of forgiveness included intrinsic, role-expected, and expedient forgiveness.

General forgiveness (9 items) was conceptualized as a behavior consisting of the following five elements: (a) behavioral gestures of forgiveness, (b) cessation of hostile behavioral responses, (c) managing hostile impulses, (d) positive attitudes and feelings toward the offender, and (e) gestures of good will. Intrinsic Forgiveness (14 items) included all five elements, as well as, benevolent behavior and a change of attitude and feelings toward the offender. Trainer considered intrinsic forgiveness to be the result of personal values and a genuine desire to let go of resentment, as is illustrated by the following item, "I felt called to enter into the difficult struggle to forgive in order to be true to my faith values." Role-Expected Forgiveness (10 items) consisted of behavioral gestures of forgiveness and a cessation of hostility but fear, anxiety, and resentment accompanied it. According to Trainer, role-expected forgiveness was a perfunctory response to perceived expectations from self or others. An example item is "I feared others would look down on me as bitter and resentful if I didn't forgive." Expedient Forgiveness (10 items) represented a kind of false forgiveness wherein the person refrains from taking revenge but does so only to appear superior and magnanimous. Trainer believed that expedient forgiveness would be used primarily as a means of gaining power or even taking revenge through condescension, as can be seen in the following example item, "I am a much bigger person than him/her and can afford to forgive him/her."

Trainer used her scales in a sample of divorced men and women and reported correlations among scales to be consistent with her expectations. Specifically, general

forgiveness was positively associated with intrinsic forgiveness and negatively related to expedient forgiveness. She also found that higher scores on both general and intrinsic forgiveness were associated with more positive coping behaviors during the divorce or separation. Moreover, Trainer's scale has been used with some success in other samples.

Strasser (1984) found a significant relationship between Trainer's General Forgiveness Scale and self-reported physical health in a sample of elderly people. However, there were no differences in health in comparisons between intrinsic forgiveness and either of the other two types of forgiveness. Bucello (1991) used Trainer's General Forgiveness Scale to investigate the relationship between the capacity for forgiveness and personality traits and family of origin behaviors. In a sample of married couples, Bucello hypothesized that the capacity to forgive would be related to four personality traits. It was found that general forgiveness was positively related to ego strength ($r = .26$, $p < .01$) and negatively related to suspiciousness ($r = -.32$, $p < .001$), as measured by the 16 PF. The other two personality traits (warmth and self-sufficiency) were not significantly correlated with the General Forgiveness Scale. Finally, general forgiveness was positively related to respondents' perceptions that their family promoted independence while also fostering intimacy ($r = .22$, $p < .05$). In spite of these promising outcomes, Trainer's scales have not been used in many subsequent studies. One reason for this may have been the development of more comprehensive scales, which have been shown to have better reliability and validity.

Wade's Forgiveness Scale

A more widely used scale was developed by Wade (1989). Wade started with over 600 items encompassing behavioral, cognitive, and affective aspects of forgiveness. Within these three facets, Wade wrote items to match her definitions of subcategories for both forgiveness and unforgiveness. The subcategories of cognitive forgiveness were: (a) understanding, (b) freedom from obsession, (c) personal responsibility, (d) refusal of influence, (e) balanced view, and (f) taking it seriously. Affective forgiveness consisted of the following subcategories: (a) within self, (b) toward others, and (c) negation of feelings. Finally, behavioral forgiveness subcategories included: (a) movement toward, (b) letting go, (c) toward God, (d) personal benefit, and (e) acceptance. Subcategories of cognitive unforgiveness were: (a) accusation, (b) obsession, (c) revenge, and (d) victimization. Affective unforgiveness was represented by the following subcategories: (a) within self, and (b) toward other. Finally, behavioral unforgiveness was represented in the subcategories: (a) movement away, (b) movement against, and (c) holding a grudge.

The final items for each subcategory were selected after a lengthy process involving several groups of raters. First, items were eliminated based on agreement among 10 raters about whether or not an item reflected forgiveness, unforgiveness, or neither. Subsequently, two groups of Sunday school classes were given definitions of the subcategories and were asked to sort items into the subcategories. Finally, 282 college students were asked to respond to the items while thinking about a time in their life when they were seriously offended and either forgave or did not forgive the person. All of the items significantly distinguished between forgiveness and unforgiveness. Following this

process, Wade conducted a factor analysis to determine the number of factors within each of the categories (cognition, affect, and behavior). From this analysis, Wade identified 11 factors roughly corresponding to her initial subcategories. However, two of these factors were eventually eliminated.

The resulting scale was composed of 83 items falling into one of nine subscales based on factor loadings. Each subscale can be illustrated with the following items from Wade's scale: (a) Revenge (10 items, "I want to see them hurt and miserable"); (b) Freedom from Obsession (4 items, "I have stopped blaming"); (c) Affirmation (9 items "I'm glad to be around them"); (d) Victimization (5 items, "It's not fair"); (e) Feelings (26 items, "Comfortable with them"); (f) Avoidance (8 items, "I live as if they don't exist, aren't around"); (g) Toward God (5 items, "I asked God for forgiveness for them"); (h) Conciliation (12 items, "I gave them back a new start, a renewed relationship"); and (i) Holding a Grudge (4 items, "I'm not letting go of the offense").

Wade did not offer any additional validity evidence but other researchers have used Wade's measure and have reported adequate reliability and validity. Woodman (1992) reported reliability (alpha) for each of Wade's subscales ranging from .65 to .95 and reported a significant correlation between Wade's measure and measures of dyadic adjustment among spouses. In addition, McCullough and Worthington (1995) found four of the subscales (revenge, affirmation, positive feelings, and conciliation) were significantly influenced by an intervention designed to increase forgiveness among college students.

Wade's scale is not often used in its entirety. Reasons for this include the fact that the scale is long and that there is relatively little evidence for the utility of maintaining nine separate subscales. Wade's scale has more recently been shortened and modified (McCullough et al, 1998; McCullough et al., 1997). For example, the 18 items comprising the avoidance and revenge subscales have since been refined and reduced by McCullough et al. (1998) to create another measure known as the Transgression-Related Interpersonal Motivations (TRIM) Inventory.

Enright Forgiveness Inventory

Like Wade's scale, the Enright Forgiveness Inventory (EFI) was developed with a focus on the behavioral, cognitive, and affective aspects of forgiveness (Subkoviak et al., 1995). The 60-item scale was created to assess the following six domains of forgiveness: absence of negative affect (NA), presence of positive affect (PA), absence of negative cognition (NC), presence of positive cognition (PC), absence of negative behavior (NB), and presence of positive behavior (PB). Each item was to be answered while considering the most recent experience of being hurt deeply and unfairly. From the initial pool of items, ten items were kept for each of the six areas. The word "forgiveness" was not included anywhere in the scale. Each item that was included in the final version correlated above + .65 with its respective subscale score and below + .17 with the Crown-Marlowe Social Desirability Scale. Cronbach alpha coefficients for the six scales ranged from .93 to .98. Cronbach's alpha for the total 60-item EFI was .98. Validity for the scale was supported by a significant correlation in the expected direction with the following criterion self-labeling item, "To what extent have you forgiven the person rated on the attitude

scale". Test-retest correlations ranged from .67 to .90 for each of the subscales over a four-week interval.

Numerous studies have utilized the EFI, and its relationship to several related constructs has been investigated. The EFI has been found to be negatively related to both anxiety (Coyle & Enright, 1997; Subkoviak et al., 1995; Wilson, 1994) and anger (Coyle, & Enright, 1997). The EFI does not appear to be related, however, to religiosity (Subkoviak et al., 1995; Wilson, 1994). The results for other constructs have not been so consistent. For example, Holeman (1994) did not find a significant positive relationship between marital adjustment and forgiveness, but both Rackley (1993) and Walker (1993) did. Furthermore, Wilson (1994) found a negative relationship between forgiveness and depression but neither McKenzie (1997), nor Subkoviak et al. (1995) were able to replicate this finding. In spite of this, the majority of the data supports the construct validity of the EFI. Furthermore, several researchers reported mean scores for the EFI, which contributed to normative data for the scale (cf. Coyle & Enright, 1997; Jackson, 1997; McKenzie, 1997; Wilson, 1994).

Based on these reports, the EFI appears to be a useful measure of forgiveness with respect to a particular person. However, the scale is somewhat long and may be impractical to use with a larger battery of instruments. Furthermore, there is little evidence thus far, that the subcategory scores delineated by Subkoviak et al. (1995) yield unique information regarding forgiveness.

Interpersonal Relationships Resolution Scale

Hargrave and Sells (1997) developed the Interpersonal Relationships Resolution Scale (IRRS) to test Hargrave's (1994) theoretical framework regarding forgiveness. Hargrave assumed that relationships within families require relational ethics. According to Hargrave, relational ethics involve the perception of justice, trustworthiness, loyalty, merit, and entitlement among members of a relationship. Presumably, individuals will feel satisfied, and trust will be established, when there is equal give and take in a relationship. Pain results when one person in the relationship violates this relational ethic. Hargrave believed that if family injustice were not dealt with properly the result would be destructive behaviors and feelings on the part of all members of the relationship. Specifically, the feelings would consist of either rage at the injustice or shame for being unlovable. Destructive behavior would consist of either over controlling future relationships or chaotic behaviors due to a belief that little can be done to prevent hurt in the future. Forgiveness was seen as a way to restore love and trustworthiness to the relationship.

Hargrave and Sells used a very specific definition of forgiveness, "effort in restoring love and trustworthiness to relationships so that victims and victimizers can put an end to destructive entitlement" (Hargrave & Sells, 1997, pg. 43). They argued that the work or process of forgiveness consists of two broad categories. The first category, called exonerating, is achieved through the processes of insight and understanding. The second category is forgiving and it involves giving the offender the opportunity to compensate (i.e., restore trust) and an overt act of forgiveness (i.e., discussing the relational violation

openly and agreeing on a solution). Exonerating was considered a more intrapersonal process because it requires that the victim see the betrayal in a new way. Forgiveness, on the other hand, is interpersonal because it requires interaction between the relational partners.

The initial IRRS (Hargrave & Sells, 1997) consisted of 162 items. A factor analysis and internal consistency analysis were conducted to determine which items would be retained. The final version contained 44 items that were divided into two scales: the Forgiveness Scale and the Pain Scale. Instructions for responding to the items indicated that some of the items were to be rated while thinking of a specific offender while other items referred to more general behaviors and situations. Although both the forgiveness items and pain items were presented together as one scale, the scales overwhelmingly differed in this respect. The Forgiveness Scale was a state measure of forgiveness, whereas the Pain Scale consisted mostly of items referring to dispositional qualities, such as rage and over-controlling behavior.

The Forgiveness Scale, included the following subscales and illustrative items: (a) Insight (5 items, "I have difficulty stopping this person from causing me harm"), (b) Understanding (5 items, "This person has pain that has nothing to do with me"), (c) Giving the Opportunity for Compensation (7 items, "I believe we are on the road to restoring our relationship"), and (d) Overt Act of Forgiving (5 items, "This person has taken responsibility for causing me pain". All of the items in this scale were worded such that the respondent was directed to think of a specific betrayal and offender.

The Cronbach's alpha for the Forgiveness Scale was reported to be .92 and reliability for each of the subscales was between .63 and .86 (Hargrave & Sells, 1997). Several constructs (e.g., Shame, Insight) measured by the IRRS were related in the expected direction with other family instruments, such as the Personal Authority in the Family System Questionnaire and the Relational Ethics Scale. Furthermore, the IRRS was related as expected with an instrument measuring interpersonal orientation (FIRO-B) and a measure of depression. In addition, Hargrave and Sells (1997) demonstrated evidence of predictive validity when the IRRS successfully discriminated between clinical and nonclinical groups.

Trait Measures of Forgiveness

Although it is important to measure forgiveness in the context of a specific offense, it is also important to assess individual differences in the propensity to forgive across situations. A number of scales have been developed to measure a general tendency to respond in a forgiving or non-retaliatory manner without reference to a specific personal injury. These include the Forgiving Personality Scale (Drinnon, Jones, & Lawler, 2000), the Forgiveness/Non-Retaliation Scale (Ashton, Paunonen, Helmes, & Jackson, 1998), the Forgiveness of Others Scale (Mauger et al., 1992), and the Vengeance Scale (Stuckless & Goranson, 1992).

The Forgiving Personality Scale is a 33-item scale that was developed specifically for the purpose of measuring dispositional forgiveness. The Forgiveness/Non-Retaliation Scale is composed of 8 items that assess the tendency to retaliate against or hesitate to forgive other people. The Forgiveness of Others Scale, is made up of 15 items, which

were taken from a larger scale, the Behavior Assessment System I. Finally, the Vengeance Scale is a 20-item scale developed to measure the tendency to seek revenge or sustain a negative attitude toward others following an injustice. Arguably, this construct represents behaviors, thoughts, and feelings that are diametrically opposed to forgiveness.

Summary

Until recently, forgiveness has been primarily a domain of philosophical and theological debate (for a review, see Enright, Gassin, & Wu, 1992). More recently, it has drawn research attention due to its promising psychotherapeutic benefits and because of its importance within interpersonal relationships. Given the personal and social significance of forgiveness, more efforts have been made to understand the social and psychological variables contributing to the forgiveness process. Thus far, there is reason to believe that both initial responses to the offense (e.g., perceived severity) and subsequent acts of contrition on the part of the offender (e.g., apology) are related to cognitive processes (e.g., empathy, attributions) necessary for forgiveness. However, additional research is warranted at this time.

An important step towards this goal is the development of reliable and valid instruments with which to measure forgiveness. Currently a small number of inventories are being used to measure forgiveness. Among these measures there is considerable divergence in purpose and structure. For example, some scales were designed to measure forgiveness of a specific offense, whereas other scales were designed to measure vengeance or a general tendency to forgive in all situations. Furthermore, there is much variety in the scope and content of items used to measure the forgiveness construct. For

example, most of the scales mentioned above include some reference to revenge and negative feelings toward the offending person. However, some scales do not include any items reflecting important components of forgiveness, such as empathy or other changes in thoughts about the offender. On the other hand, some scales have items reflecting features of forgiveness that are not included in any other scales, such as Wade's inclusion of prayer and appeals to God for help in granting forgiveness. In light of the fact that forgiveness is a relatively new topic, the lack of convergence is neither surprising nor discouraging. Nevertheless, a greater effort could be made to demonstrate adequate reliability and validity of existing measures. To date, there has been no published comparison made between the psychometric properties of the scales mentioned above. In fact, relatively few psychometric analyses have been reported for these scales at all. Although several measures have reported evidence of reliability and validity, additional measures would be helpful at this early stage in the study of forgiveness.

CHAPTER 3

PHASE 1: DEVELOPMENT OF THE AFS SCALE

Item Generation

Items for the Act of Forgiveness Scale (AFS) were generated by considering multiple sources, including (a) narrative descriptions of acts of forgiveness contained in previous studies of betrayal and interpersonal transgressions (e.g., Moore, 1997); (b) religious and philosophical accounts of the nature of forgiveness and its social, psychological, and spiritual characteristics; (c) the extant literature (both qualitative and quantitative) on forgiveness; and (d) the research literature on psychological phenomena of relevance to forgiveness (e.g., apology, trust, betrayal, guilt). Subsequently, 70 items were written to reflect the kinds of feelings, behaviors, and thoughts that might be experienced in the process of forgiving someone for a betrayal or other offense. Appendix A presents the initial item pool. Items were worded such that they reflected current feelings toward a specific partner and a specific offense. Thirty-seven of the items were reversed such that agreement indicated less forgiveness. Illustrative items were as follows: "I have revenge fantasies about the person in question" (reverse scored); "I would trust the person in question again;" and "Just thinking about what happened makes me fume" (reverse scored).

Item Selection

Participants

Three hundred and ninety-seven undergraduate students (273 women and 108 men) recruited from psychology classes completed a questionnaire containing the initial

item pool in exchange for nominal course credit. The majority of the respondents were unmarried (92.7%), and the mean age was 20.6 years (range 17 to 46; SD = 3.58).

Procedure

Participants first were asked to describe an instance in which someone close and important to them had betrayed their relationship or hurt them deeply. Respondents were asked to describe the incident and the circumstances surrounding it, including (a) their relationship to the person who betrayed them, (b) when the betrayal took place, (c) their opinion of the other person's motives, (d) how it made them feel, and (e) how the betrayal changed their relationship with the person, if at all. This procedure helped to ensure that each respondent was thinking about an actual person and an actual offense.

Next, participants were asked to respond to the 70 AFS items with respect to the incident and person described using a 5-point, Likert-type response format verbally anchored by the following terms: *strongly agree, agree, undecided, disagree, and strongly disagree*. Responses were weighted such that *strongly agree* counted as five, *agree* as four, etc. Reversed items were recoded such that higher AFS scores reflected greater forgiveness.

Likert Analyses

Items were initially retained for subsequent versions of the scale based on two criteria: (a) corrected item-total correlation (i.e., the correlation of each item with the total score with the item in question removed); and (b) an initial estimate of validity reflected in correlations between each item and a criterion validity item (i.e., "I have forgiven the person in question"). Using both criteria simultaneously maximized internal reliability and

validity in the subsequent versions of the scale. Table 1 presents items retained in each iteration along with a summary of the scale operating characteristics for each of the analyses. Appendix B presents a synopsis version of all 70 items along with item operating characteristics at each iteration of the analyses.

Analyses of the initial pool of 70 AFS items yielded a Cronbach's alpha coefficient of .96 and a mean inter-item correlation of .24, as indicated in Table 1. For the second iteration, items were retained if they had item-total correlations of $\geq .40$ and item-criterion correlations of $\geq .25$. Twenty items were eliminated because they did not meet these criteria, and this resulted in a 50-item scale with an alpha of .97 and a mean inter-item correlation of .36. Table 1 also reflects that one additional item was eliminated based on its subsequent item-total correlation at the third iteration. The resulting 49-item version of the scale had an alpha coefficient of .97 and a mean inter-item correlation of .37. The fourth iteration was derived from the itemmetric analyses described below and resulted in the elimination of 4 items. The final scale, clearly meeting conventional standards of measurement, consisted of 45 items with an alpha coefficient of .96 and a mean inter-item correlation of .37. Furthermore, the correlation between the final version of the scale and the criterion item noted above was $r\ (390) = .70$, $p < .001$.

Itemmetric Analyses

In contrast to psychometric analyses, which emphasize item-operating characteristics independent of item content, itemmetric analyses consider the meaning and language characteristics of items as estimates of utility (Angleitner, John, & Lohr, 1986). Angleitner et al. described three types of itemmetric considerations. First, they

Table 1

Psychometric Characteristics of AFS Iterations

Iteration	No. Items	TRT	M	SD	α	M I r	Hi	Lo
AFS1	70	.91*	235.5	40.48	.96	.24	.75	.03
AFS2	50	.91*	168.6	36.19	.97	.36	.78	.38
AFS3	49	.91*	165.2	35.79	.97	.37	.78	.41
AFS4	45	.91*	149.9	33.35	.96	.37	.78	.42

Note(s): N = 392 (107 men and 274 women), except for test-retest, which was 55. TRT = Test-retest correlation; M I r = Mean inter-item correlation; Hi = highest corrected item-total correlation; Lo = lowest corrected item-total correlation.

*$p < .01$.

proposed five response characteristics of relevance to item utility: (a) comprehensibility (e.g., degree of difficulty understanding item content); (b) ambiguity (i.e., plural vs. singular meaning); (c) abstractness (i.e., specific behaviors vs. abstract dispositions); (d) self-reference (i.e., whether or not the item refers to personal experiences, beliefs, feelings), and (e) social desirability (i.e., extent to which the item describes a socially acceptable or unacceptable behavior or characteristic). Thus, if items are, for example, abstract or ambiguous, it likely will be more difficult for the respondent to give interpretable and consistent responses based on his or her experience than for items without these characteristics. Second, syntactic structure, including reading difficulty and item length, may be used to assess item utility.

Third, Angleitner et al. (1986) described seven types of item content: (a) reactions (i.e., items assessing either overt or covert responses, such as "I think a lot about myself"); (b) trait attributions (i.e., items referring to dispositions of the respondent, such as "I am outgoing"); (c) wishes and interests (i.e., items referring to intentions, rather than behaviors actually manifested, such as "Sometimes I would really like to curse"); (d) biographical facts; (e) attitudes and beliefs (i.e., items referring to political, social, economical, and religious values and ideas, such as "I think the law should be strictly enforced"); (f) others' reactions (any item describing the behavior of others toward the respondent, such as "At parties, I am seldom the center of attention"); and (g) bizarre experiences (e.g., "Somebody is trying to poison me"). According to Angleitner et al., the content and types of items can influence the utility of a scale. They argue that a scale should be as homogeneous and as clear and easy to read as possible.

Consequently, the initial pool of items of the AFS was examined according to the variables reflecting all three domains of itemmetric considerations described above. Six psychology students independently rated the items on each of the five response characteristics (e.g., comprehensibility) using a 5-point rating scale in which lower scores indicated more acceptable qualities (e.g., lower social desirability, greater comprehensibility). In addition, a second panel of five raters was asked to classify independently each item into one of the 7 categories of item types (e.g., reactions, bizarre). When at least 3 of the 5 raters agreed on a classification, the item was assigned to the category in question. If fewer than 3 raters agreed on the classification for a particular item, then it was designated as unclassified. Finally, each of the 70 items was assigned a reading difficulty level using the Flesch reading ease score available in Microsoft Word. This feature rates text on a 100-point scale based on the average number of syllables per word and the number of words per sentence. Table 2 presents a summary of mean itemmetric characteristics associated with each iteration of the scaling process, and Appendix C contains itemmetric values for each item.

Itemmetric characteristics were examined to determine if any additional items should be dropped from the scale. The most compelling case for doing so concerned item categories. It was expected that the majority of items would be classified as covert reactions, given the purpose of the scale. The following item classifications were obtained for all 70 items: 43 reactions, 5 traits, 2 wishes, 5 attitudes, and 1 others' reactions. The remaining 14 items were not classified due to inconsistency among raters. Not surprisingly, there were no bizarre items or biographical items in the scale.

Table 2

Itemmetric Characteristics of AF Iterations

Iteration	No. Items	Item Types					Mean Rater Agreement on Item Type	Mean Response Characteristic Score	Average Number of Words Per Item	Reading Ease
		A	B	C	D	E				
AF1	70	45	5	5	14	3	64%	6.6	11.31	77.2
AF2	50	33	3	4	8	2	66%	6.6	11.38	77.1
AF3	49	33	3	3	8	2	67%	6.6	11.45	77.7
AF4	45	33	1	3	8	0	65%	6.5	11.38	76.8

Note(s): Item type labels are as follows: (A) overt and covert reactions, (B) traits, (C) attitudes, (D) unclassified, and (E) miscellaneous categories. The mean rater agreement was based on the average percentage of agreement among raters on the type of item for all the items included in that iteration. A response characteristic score was created by summing the ratings for each of the five response characteristics (e.g., comprehensibility, social desirability) for each item. Ratings for the response characteristics were all worded such that a lower score was more favorable and thus, the lower the mean score the better. Reading ease is based on the Flesch reading difficulty scale ranging from 0 to 100. A higher score indicates greater reading ease.

These analyses were used to eliminate four additional items from the scale. Item 17 (see Appendix A for content) was eliminated because it was the only item to be classified as others' reactions. Item 23 (see Appendix A for content) was dropped because, after eliminating items on the basis of psychometrics, this was the only item that was classified as a wish. Items 35 and 55 (see Appendix A for content) were eliminated because they were both classified as trait items. The classifications of the resulting 45-item scale were as follows: 33 reactions, 1 trait, 3 attitudes, and 8 unclassified. Although the final scale was not entirely homogeneous, it appeared that the remaining trait and attitude items were consistent with the purpose of the AFS. For example, the single item rated as a trait ("I am bitter about what happened.") is arguably not a disposition in spite of its assigned rating and was therefore included in the final version.

In addition to examining the item classifications, several other itemmetric characteristics were considered. As may be seen in Appendix C, there were no response characteristic ratings above 2.83, which suggested that all items were rated as adequate in terms of each of the five response characteristics. A total score was derived by summing the ratings for each of the five response characteristics for each item. For all 70 items, the average total score was 6.6 (ranging from 5.3 to 8.0 among items), which was comparatively low, and therefore, no items were eliminated solely on the basis of these analyses.

Second, the mean reading ease scores were examined. For the 70-item scale, the average reading score was 77.2 (range 46.6 to 100 among items). The higher the score the easier the item is to read. According to Microsoft Word, the ideal range is between 60 and

70. Given the fact that most of the 70 items were within or above the acceptable range, no items were eliminated based on this analysis.

Factor Analysis

A principal components factor analysis with varimax rotation was performed to explore the structure underlying responses to the final pool of AFS items. Table 3 presents factor labels, eigenvalues, and percentages of variance accounted for along with factor loadings. Five factors were extracted, accounting for 59.3% of the total variance before rotation. The first three factors accounted for 40%, 10%, and 4% of the variance, respectively. The last two factors accounted for less than 3%. However, an application of the scree test indicated that there were four primary factors.

An examination of the patterns of factor loadings indicated that the first factor consisted of 16 items that generally refer to a sense of trust and respect for the offender. Furthermore, this factor included many items assessing the quality of the relationship (e.g., "Our relationship has changed for the better"). The second factor consisted of 14 items each reflecting a tendency to avoid ruminating or negative thinking about the offender and betrayal. The third factor consisted of 9 items that represent antipathy for the offender. In addition, all of the items that actually contained the word *forgiveness* loaded most strongly on this factor. The fourth factor consisted of just 5 items that represent empathy for the offender. The resulting pattern of factor loadings was quite consistent with the conceptualization of forgiveness. Many theorists have argued that forgiveness is characterized by a change in feelings, thoughts, and behaviors with respect to both the offender and the betrayal (cf. Cunningham, 1985; Enright & the Human

Table 3

AFS Factor Analysis

	Factor Label			
	1 Trust/Respect	2 Anti- Rumination	3 Antipathy	4 Empathy
Eigenvalue	17.88	4.30	1.87	1.54
Variance Accounted For	39.73%	9.54%	4.17%	3.43%
Item & Loadings	(21) .82 (03) .80 (34) .80 (07) .78 (38) .77 (11) .75 (27) .72 (42) .69 (30) .68 (31) .64 (02) .60 (23) .59 (40) .55 (41) .54 (29) .51 (36) .47 (17) .46	(33) .80 (04) .74 (13) .71 (37) .69 (14) .69 (06) .64 (24) .60 (26) .59 (43) .56 (18) .55 (09) .54 (28) .54 (45) .51 (01) .48	(25) .71 (10) .66 (16) .64 (32) .60 (19) .58 (05) .56 (15) .53 (44) .42 (20) .41	(12) .77 (08) .74 (22) .51 (39) .51 (35) .44

Note: Based on a principal components factor analysis with varimax rotation.

Development Study Group, 1996). Therefore, it was not surprising that the primary factors would consist of changes in feelings toward the person (e.g., respect, trust, better relationship), fewer negative thoughts or ruminations, and less hostility toward the offender (e.g., forgiving, showing compassion). Furthermore, there is both theoretical and empirical support for the role of perspective taking or empathy in the forgiveness process (Drinnon, 2000).

Test-Retest Reliability

Eighty-two of the participants from the original sample were asked to complete the questionnaire a second time 8 weeks later. Participants were specifically asked to complete the questionnaire with respect to the same betrayal they had written about previously. The two descriptions of the same betrayal were compared to ensure that participants had in fact described the same incident. Sixty-eight questionnaires were returned, but 13 of the questionnaires were eliminated from this analysis because the two betrayal descriptions were discrepant or were inconclusive. AFS scores for both administrations for the remaining 55 participants then were correlated. The test-retest correlation for the final version of the AFS was r (53) = .91, $p < .01$, as is indicated in Table 1. Also, Appendix B shows the temporal reliability for all 70 of the original AFS items.

Discussion

Analyses undertaken in Phase 1 supported the utility of the AFS as a measure of state forgiveness. A pool of 70 items was generated and subsequently refined by several procedures. Items were retained for subsequent versions of the scale on the basis of Likert analyses (i.e., corrected item-total correlations) and an initial estimate of validity (i.e.,

item-criterion item correlations). Itemmetric analyses were used to exclude items that were not consistent with the types of items one would expect to find in a state measure of forgiveness (e.g., biographical facts, other's reactions, bizarre experiences) resulting in an item pool primarily assessing overt and covert reactions. Furthermore, the items were examined for problems likely to result in response bias, such as social desirability and ambiguity, which could ultimately compromise the reliability of the AFS. However, examination of such indicators did not result in the elimination of any items, suggesting adequate item content and structure with respect to these itemmetric characteristics. The scale was refined in this manner through four iterations resulting in the current 45-item AFS.

The final scale demonstrated a high level of internal consistency as indicated by the Coefficient alpha of .96 and the mean inter-item correlation ($\underline{r} = .37$). Test-retest reliability also was determined in a sample of 55 students who completed the AFS twice separated by an interval of 8 weeks. Although it seems reasonable to expect differential changes in a construct such as state forgiveness, the temporal stability of the AFS was notably high ($\underline{r} = .91$). In addition to their implications for test utility, these results suggest that aspects of state forgiveness are judged consistently despite the passage of time and apart from the unique thematic content and wording of an item.

The itemmetric analyses suggested the clarity of the specific AFS items, as well as of the reactions, thoughts, and emotions associated with state forgiveness. Furthermore, the fact that the overall itemmetric characteristics did not change dramatically across the four scaling iterations attests to the adequacy of the initial pool and may be interpreted as

evidence that meaning and structure were not lessened by item selections based on internal reliability and criterion-based validity.

Results of an exploratory factor analysis suggested a robust and interpretable factor structure with four primary factors underlying responses to the AFS items. The content of items comprising these factors were examined and were judged to be consistent with conceptual themes often included in the definition of forgiveness, namely trust and respect, avoidance of rumination, lack of antipathy, and empathy.

Initial estimates of validity met conventional standards of measurement as indicated by the substantial correlation observed between total AFS scores and the criterion item, "Basically, I have forgiven this person" ($\underline{r} = .70$).

To summarize, the final version of the AFS appeared to be an internally reliable measure that yielded stable scores over time. Furthermore, the AFS item pool was generally homogeneous and largely free of response bias and other threats to useful measurement. Although this initial evidence of validity was encouraging, it was insufficient to support the validity of AFS interpretations.

CHAPTER 4

PHASE 2: VALIDATION OF THE AFS

In Phase 1, the AFS was found to be both internally reliable and reliable over time. Furthermore, an initial estimate of validity involving the convergence between a criterion item and the AFS total scores was well beyond the threshold for adequate measurement. However, the issue of validity is complex and requires evidence from diverse perspectives and procedures. Therefore, the purpose of this phase of research was to more thoroughly examine the validity of AFS interpretations. This process was pursued using the following analytic strategies: (a) convergent and discriminant validity comparisons between the AFS and the primary extant measures of forgiveness, (b) convergent validity comparisons with miscellaneous measures of forgiveness, and (c) construct validity analyses involving self-report measures of related constructs.

Participants and Procedure

The AFS was administered routinely to college students ($\underline{N}$ = 1113; 781 women and 348 men) over the course of several semesters. The mean age was 21.5. In addition to completing the AFS, the students were asked to complete questionnaires containing a variety of relevant measures. Consequently, subsets of the respondents completed one or more measures of state forgiveness and trait forgiveness, as well as measures of related constructs (e.g., loneliness, cynicism).

Convergent and Discriminant Validity

In general, existing measures of forgiveness can be categorized on the basis of whether or not they refer to forgiveness as a current affective/cognitive state or as a

personality disposition (i.e., trait). As one means of assessing the validity of AFS interpretations, AFS scores were compared to scores on existing alternative measures of forgiveness. Because the AFS was designed as a state measure, it was expected that AFS scores would be more highly correlated with scores on state forgiveness measures than with those of trait forgiveness measures. Such a pattern of convergence and discrimination would support the validity of AFS scores.

State Measures of Forgiveness

Trainer's General Forgiveness Scale

Trainer's (1981) 43-item measure of forgiveness consists of four scales. General Forgiveness contains nine items assessing the extent to which a respondent engages in behaviors consistent with the act of forgiving a specific offense. An example item is "To what extent do you bear a grudge now?" The other three scales represent underlying motives for forgiveness or types of forgiveness, specifically intrinsic forgiveness, role-expected forgiveness, and expedient forgiveness. These latter scales were not included in the convergent and discriminant validity analyses but are compared to AFS scores below. All items in the general forgiveness measure were presented in an 8-point format verbally anchored at the end points by *not at all* (0) and *a very great extent* (7).

Trainer tested the reliability and validity of her scales in a sample of divorced men and women. She reported a split-half reliability coefficient, corrected for attenuation, of .77. The primary validity evidence presented by Trainer (1981) were part-whole correlations and correlations among subscales. These kinds of analyses confound validity and reliability. Nevertheless, she found general forgiveness to be positively associated with

intrinsic forgiveness and negatively related to expedient forgiveness. A factor analysis provided some supportive evidence regarding the validity of general forgiveness. Virtually all of the items from general forgiveness and intrinsic forgiveness loaded on the same factor, and the majority of items from the other two scales loaded as expected on two additional factors. Additional evidence of validity is available from other researchers. For example, in one study (Strasser, 1984), general forgiveness was shown to predict self-reported physical health in a sample of elderly respondents.

Wade's Forgiveness Scale

Wade's Forgiveness Scale (1989) is an 83-item scale that purports to measure forgiveness of a specific offense as a process involving behavioral, affective, and cognitive components (Wade, 1989). Items were selected for the scale on the basis of whether or not they discriminated between ratings made by respondents of persons whom they had forgiven versus ratings made by other respondents who completed the scale with respect to persons whom they had not forgiven. Each of these items was rated by participants using a 5-point format verbally anchored at the end points with *strongly disagree* (1) and *strongly agree* (5). The scale also includes nine subscales that were derived from a factor analysis of the items.

Although Wade did not present validity evidence beyond the item-selection procedure, others have successfully used Wade's measure and have reported adequate estimates of reliability and validity. For example, McCullough and Worthington (1995) reported alpha reliabilities for each of Wade's subscales ranging from .68 to .92, and Wood (1991) found a positive relationship between Wade's measure and marital

satisfaction. For the convergent-discriminant validity analyses, Wade's total score was used rather than the subscale scores, which are reported in a subsequent section.

Enright Forgiveness Inventory (EFI)

The EFI (Subkoviak et al., 1995) is a 60-item measure of interpersonal forgiveness in which items are equally divided among six subscales: positive and negative affect, positive and negative behavior, and positive and negative cognition. Items of the EFI are presented in a 5-point Likert-type format with verbal anchors (e.g., *strongly agree*; *agree*). Subkoviak et al. reported a Cronbach's alpha of .98 for the total scale, and alpha coefficients for the six subscales ranging from .93 to .98. Test-retest correlations ranged from .67 to .90 for each of the subscales over a 4-week interval. Additional evidence regarding the reliability and validity of this scale comes from several studies that have utilized the EFI (cf. Holeman, 1994; Jackson, 1997; McKenzie, 1997; Wilson, 1994). For example, Coyle and Enright (1997) found that EFI scores were significantly higher following a forgiveness intervention.

Although analyses using the EFI often report results separately for the subscales, there is little justification for doing so based on the findings reported thus far. The relatively high correlations reported among the subscales and the very high alpha for the total score (Subkoviak et al., 1992) indicates that these subscales probably do not represent unique components of forgiveness. Therefore, I based the following analyses were on the total EFI scores.

IRRS Forgiveness Scale

This scale was developed concurrently with the Pain Scale and together they comprise the Interpersonal Relationships Resolution Scale (IRRS; Hargrave & Sells, 1997). The Forgiveness Scale contains 22-items developed to measure forgiveness following a betrayal between family members. Hargrave and Sells conceptualized forgiveness as a process involving four aspects, from which they derived the following subscales: (a) Insight (e.g., how one feels and avoids painful feelings); (b) Understanding (e.g., considering the offender's view); (c) Giving the Opportunity for Compensation (e.g., interacting with the offender in a non-threatening way); and (d) Overt Act of Forgiving (e.g., conflict resolution). All items of the Forgiveness Scale are worded such that respondents were directed to think of a specific betrayal and offender. Items are presented in a 2-point forced-choice format. For example, scale items (e.g., "The only way I can deal with this relationship is to keep my distance from this person") are followed by two response options: (a) "Yes, this is mostly true" and (b) "No, this is mostly false."

Cronbach's alpha for the Forgiveness total score was reported to be .92, whereas alpha for the subscales varied from .74 to .87 (Hargrave & Sells, 1997). Hargrave and Sells reported that the Forgiveness Scale and the Pain Scale were not significantly related. Several of the Forgiveness subscales were significantly correlated with measures of related constructs, such as fear, independence, intimacy, control over others, and depression, thus supporting the validity of the scale.

Trait Measures of Forgiveness

Forgiving Personality

The Forgiving Personality Scale (FP; Drinnon, Jones, & Lawler, 2000) is a 33-item measure of the tendency to forgive another person for an offense, for example, "Basically, I am a forgiving person," as well as the tendency to not take offense in the first place as illustrated by "I am quick to take offense," (reversed scored). Items for the scale were selected from an original pool assessing both attitudes toward forgiveness specifically, as well as related traits such as apology, grudge holding, and revenge. Drinnon et al. reported an alpha coefficient of .93 for the scale and a mean inter-item correlation of .30. The scale also has been demonstrated to have temporal reliability with a test-retest correlation of .79 over a two-month interval in a sample of 69 college students (Schratter, 2000). Furthermore, there is evidence of the construct validity of interpretations based on the scale. For example, the Forgiving Personality was positively related to a dispositional measure of willingness to give and accept apologies (Jones, 2000).

Forgiveness of Others Scale

This measure was developed as part of an inventory to sample personality disorders (Mauger et al., 1992). The 15 items that comprise the scale were taken from a larger inventory called the Behavior Assessment System I (Mauger et al., 1992). These items assess deficits in forgiveness and include items similar in content to the Vengeance Scale. For example, ten of the items refer to seeking revenge, such as "If another person hurts you first it is all right to get back at him or her." Mauger et al. reported a coefficient alpha of .79 for the scale and a test-retest reliability of .94 over a 2-week interval. Validation for

the Forgiveness of Others Scale comes from a sample of 237 outpatient counseling clients. The scale was related as expected to indices of psychopathology measured by the MMPI, as well as ratings by therapists and peers. For example, deficits in forgiveness were related to increased depression, anxiety, and schizophrenia (Mauger et al.).

Forgiveness-Non-Retaliation Scale (F-NR)

Ashton et al. (1998) created an eight-item scale to measure forgiveness/non-retaliation. It includes items such as "My attitude toward people who have tried to harm me is 'forgive and forget'" and "Occasionally, people take advantage of the fact that I hardly ever get angry." The alpha coefficient of internal consistency for the FNR was .75 (Ashton et al.). There is evidence for the validity of FNR interpretations. The FNR was significantly and positively related to measures of agreeableness, emotional stability, and altruism (Ashton et al.).

Vengeance Scale

The Vengeance Scale (Stuckless & Goranson, 1992) is a 20-item measure of attitudes toward revenge. Despite the fact that this scale was not intentionally developed to measure forgiveness, it was included because its content represents dispositions (i.e., attitudes, emotions, reactions) that are diametrically opposed to forgiveness. For example, it includes items such as "There's nothing wrong with getting back at someone who has hurt you." Stuckless and Goranson reported a Cronbach alpha of .92 and a mean inter-item correlation of .38. A significant test-retest correlation (.90) was found after a 5-week interval. A negative correlation with a measure of dispositional empathy and a positive correlation with trait anger (Stuckless & Goranson) supported the validity of the

Vengeance Scale.

Results

Descriptions of the psychometric characteristics of the major state and trait forgiveness measures were calculated and are presented in Table 4. All of the state scales were comparable in terms of internal consistency, as reflected by Cronbach's alpha. The alpha coefficients varied from a low of .65 for Trainer's General Forgiveness Scale to a high of .98 for the Enright Forgiveness Inventory. Among the trait measures, the Forgiving Personality Scale and the Vengeance Scale had the highest alphas (.92 and .91, respectively). However, alpha is related to the number of items in a measure; therefore, a better index of item homogeneity is the mean inter-item correlation. The mean inter-item correlations for the state scales varied considerably, with a low of .15 for Wade's Forgiveness Scale and a high of .50 for the Enright Forgiveness Inventory. As can be seen in Table 4, the psychometric characteristics of the AFS replicated those found in the initial phase of item selection. Furthermore, the AFS was comparable and, in some cases, superior to alternative measures of forgiveness with respect to operating characteristics (e.g., alpha, mean inter-item correlation).

In order to test its convergent and discriminant validity, AFS scores were correlated with the state and trait measures of forgiveness described above. Specifically, the mean correlation was computed for each of these categories after converting each Pearson product-moment correlation to Fisher's z, calculating the mean, and reconverting to r. The results are presented in Table 5. As expected, the AFS was more strongly related to other state measures of forgiveness than it was to trait measures. The average

Table 4

Descriptive Statistics for Measures of Forgiveness

Scale	n	Number of items	M	SD	α	Inter-item Correlation M	Low	High
AFS	305	45	143.9	32.3	.96	.32	-.10	.77
Trainer	306	9	33.4	9.6	.65	.17	-.19	.74
Wade	298	83	268.6	38.8	.94	.15	.02	.87
EFI	276	60	237.9	62.1	.98	.50	.17	.90
IRRS	295	22	34.9	4.8	.82	.16	-.22	.74
FP	172	33	127.8	15.2	.93	.28	.02	.77
FOO	180	15	25.2	3.2	.77	.18	-.05	.46
F-NR	113	8	26.7	4.4	.65	.19	-.09	.47
Vengeance	151	20	58.7	17.8	.91	.34	.10	.68

Note(s): Trainer = Trainer's (1981) General Forgiveness Scale; Wade = Wade's (1989) Forgiveness Scale; EFI = Enright Forgiveness Inventory (Subkoviak et al., 1995); IRRS (Hargrave & Sells, 1997); FOO = Forgiveness of Others (Mauger et al., 1992); F-NR = Forgiveness/Non-Retaliation (Aston et al., 1998); and Vengeance Scale (Stuckless & Goranson, 1992).

Table 5

Correlations Between the AFS and Forgiveness Measures

State Forgiveness		Trait Forgiveness	
Measure	r	Measure	r
Wade's Total	.82	Forgiving Personality	.34
Trainer's General	.53	Forgiveness of Others	.15
EFI Total	.76	Forgiveness/Non-Retaliation	.19*
IRRS Forgiveness	.63	Vengeance Scale	- .22
Mean =	.70	Mean =	.14

Note(s): Ns = 145-669. Wade's Forgiveness Scale (Wade, 1989); Trainer's General (Trainer, 1981); EFI = Enright Forgiveness Inventory (correlation based on total scale; Subkoviak et al.,1995); IRRS Forgiveness = Forgiveness Scale from the Interpersonal Relationship Resolution Scale (Hargrave & Sells, 1997); Forgiving Personality (Drinnon et al., 2000); Forgiveness of Others (Mauger et al., 1992). All correlations were significant, $p < .01$, unless otherwise indicated.

* $p < .05$.

correlation between the AFS and relevant state forgiveness measures was significantly higher than the average correlation between the AFS and trait measures ($z = 10.22$, $p < .001$). Also, the pattern of pairwise correlations indicated that the category assignments were accurate. The AFS was strongly related to all four of the extant state measures, and the correlations with Wade's Forgiveness Scale and the EFI were especially strong. The magnitude of these correlations would suggest that these three scales were measuring essentially the same construct. The results were not as clear with respect to the IRRS Forgiveness Scale and Trainer's General Forgiveness Scale. On the other hand, the relatively low correlations with all four of the trait measures clearly indicated that the AFS was measuring a construct beyond a general tendency to simply forgive. However, these results suggest that the two constructs are related, regardless of the instrument used to operationalize trait forgiveness.

Construct Validity

In order to assess the construct validity of the AFS, its convergence with measures of related psychological dimensions was explored. Specifically, the AFS was correlated with measures of forgiveness that did not fit into the state/trait analyses presented above. In addition, the AFS was correlated with a number of relevant personality and interpersonal constructs, such as cynicism and loneliness.

Miscellaneous Measures of Forgiveness

Measures

Trainer's Types of Forgiveness. Trainer's measure includes a general measure of forgiveness and three additional scales, each of which assesses a different motivation for

forgiving. Intrinsic Forgiveness (14 items) represents a more sincere and genuine type of forgiveness than either Role-Expected (10 items) or Expedient Forgiveness (10 items), both of which imply extrinsically motivated forms of forgiveness (Trainer, 1991).

These three concepts do not apply to someone who has not forgiven. Consequently, they were completed only by participants who indicated almost complete forgiveness as assessed by the following question: "To what extent have you forgiven the person you rated in the survey?" This question was rated on a 5-point Likert format, which included the following verbal anchors: *not at all* (1), *in progress* (3), and *completely* (5). Participants were instructed to continue answering the remaining items (i.e., the intrinsic, role-expected, and expedient forgiveness scales) only if they responded to this question with either a 4 or 5. The items comprising each of the types of forgiveness scales were rated using an 8-point Likert-type format verbally anchored at the end points by *not relevant* (0) and *completely true of me* (7).

Wade's Subscales. Wade's 83-item Forgiveness Scale is composed of nine subscales purporting to measure different domains of forgiveness. Woodman (1992) reported the following coefficient alphas for each of the subscales, which are illustrated by an example item: (a) Revenge (.72: "I want to see them hurt and miserable"); (b) Freedom from Obsession (.65: "I have stopped blaming"); (c) Affirmation (.79: "I'm glad to be around them"); (d) Victimization (.83: "It's not fair"); (e) Feelings (.95: "Comfortable with them"); (f) Avoidance (.91: "I live as if they don't exist"); (g) Toward God (.90: " I asked God for forgiveness for them"); (h) Conciliation (.81: "I gave them back a new start"); and (i) Holding a Grudge (.79: "I'm not letting go of the offense").

In an analysis reported above, AFS was shown to be significantly related to the total Wade score (i.e., the sum of all 83 items after recoding responses in a positive direction). However, it remained unclear as to whether AFS would be differentially related to the diverse set of subscales. Therefore, the items comprising each of these subscales were recoded, when necessary, in the direction of the construct they were intended to measure. For example, the items comprising revenge were scored so that a high score reflected greater vengeance.

Transgression-Related Interpersonal Motivations Inventory (TRIM). This is a modified version of Wade's Forgiveness Scale. Specifically, the 18 items comprising the Avoidance and Revenge subscales were refined and reduced by McCullough et al. (1998). According to McCullough et al., the immediate reactions to an interpersonal offense is to avoid the offender and to seek revenge unless forgiveness has occurred. TRIM consists of seven avoidance and five revenge statements that were shown to be internally reliable (alphas of .86 and .90, respectively) and inverse markers of forgiveness (McCullough et al.).

Results

Forgiveness scores from the AFS were correlated with each of the measures described above, and the results of these analyses are presented in Table 6. Because the pattern and magnitude of correlations did not differ significantly by gender, Table 6 presents results for men and women combined. As expected, the AFS was positively related to Intrinsic Forgiveness, and it was negatively related to Expedient Forgiveness, which is extrinsic and ingenuine and presumably affords an advantage over the person

Table 6

Correlations Between the AFS and Miscellaneous Forgiveness Measures

Measure	n	r
Trainer's Subscales	251-254	
Intrinsic Forgiveness		.48**
Role Expected Forgiveness		.04
Expedient Forgiveness		-.26**
Wade's Subscales	402-415	
Revenge		-.63**
Freedom From Obsession		.63**
Affirmation		.69**
Victimization		-.57**
Feelings		.80**
Avoidance		-.73**
Toward God		.27**
Conciliation		.60**
Holding a Grudge		-.77**
TRIM Subscales	413	
Revenge		-.42**
Avoidance		-.72**

*$p < .01$. **$p < .0001$.

who is "forgiven." However, scores on the AFS were not related to Trainer's Role-Expected Forgiveness, which refers to forgiveness offered due to pressure of abiding by the expectations of oneself or others. With respect to Wade's nine subscales, all but one comparison yielded a robust relationship (-.57 to .80) with the AFS. The subscale referring to God was only modestly related to the AFS. The avoidance subscale of the TRIM was strongly and inversely related to the AFS, whereas the revenge subscale was less strongly correlated.

Emotional and Interpersonal Correlates of AFS

Another procedure for assessing construct validity is to determine whether a measure is related, as one would expect, to a network of relevant dimensions such as emotional and interpersonal constructs. It was expected that forgiveness of a specific partner would be inversely related to instruments measuring negative attitudes (e.g., cynicism, revenge), as well as dissatisfaction with current interpersonal relationships (e.g., loneliness). The correlation between the AFS and measures of betrayal also were examined. To the extent that individuals have demonstrated the capacity to forgive, as reflected by their AFS scores, they might be expected to report having been betrayed and betraying others less frequently in the past. For example, it might be easier to forgive when one has been betrayed less, and forgiveness may encourage sensitivity about offending others. By contrast, it was expected that the AFS would be positively related to indices of secure attachment with both parents and peers because forgiveness should promote such positive relationships, and presumably it would be easier to forgive someone with whom a close attachment has been formed. Finally, a comparison was made between the AFS and

attitudes toward apology. In this case, a positive relationship was anticipated because of the commitment to reconciliation inherent in the ideas of both forgiveness and apology.

Measures

Scale of Interpersonal Cynicism. This 36-item scale (Moore, 1999) measures four facets of cynicism: cynicism as justification for behavior (12 items), cynicism toward relationships (8 items), cynicism toward human nature (8 items), and cynicism toward love (8 items). There is support for the construct validity of these subscales, and they have been shown to be both internally and temporally reliable (Moore).

Beliefs About Revenge Questionnaire (BARQ). This questionnaire (Emmons, 1992) measures individual attitudes toward revenge-seeking. The BARQ contains 15 true/false statements referring to past vengeful behavior and related attitudes (e.g., "I can think of a time when I wanted to get back at people who hurt me"). The mean inter-item correlation was reported to be .17 and a test-retest correlation was .60. The BARQ was positively related to anger, ruminative thinking, favorable attitudes toward the death penalty, and feelings of entitlement.

UCLA Loneliness Scale, Version 3. This 20-item scale measures the experience of feeling lonely (Russell, 1996). It is a widely used instrument, and its reliability has been established across a variety of adult samples with reported coefficient alphas ranging from .89 to .94. Furthermore, validity for the scale has been presented in reports of numerous studies. For example, not only was the scale related to other measures of loneliness, but it also was predictive of both social support and self-ratings of health status in a sample of adults over the age of 65 (Russell, 1996).

Differential Loneliness Scale. The Differential Loneliness Scale (Schmidt & Sermat, 1983) is a 60-item measure of dissatisfaction within four kinds of relationships: romantic-sexual relationships (12 items), friendships (22 items), family relationships (18 items), and community and group relationships (8 items). This measure does not assess subjective feelings of loneliness, but rather deficiencies in various relationships. Evidence supportive of reliability and validity for the DLS has been reported (Schmidt & Sermat).

Interpersonal Betrayal Scale. This instrument (Jones & Burdette, 1994) was used to assess individual differences in both the tendency to betray relationship partners (Betrayal of Others; 15 items) and the experience of having been betrayed by others (Betrayal by Others; 15 items). Estimates of reliability and evidence of validity for the Interpersonal Betrayal Scale met conventional standards of measurement (cf. Couch, Jones, & Moore, 1999; Jones & Burdette, 1994).

Inventory of Parent and Peer Attachment. This 53-item inventory (Armsden & Greenberg, 1987) was designed to assess security of attachment in adolescents. It contains two separate subscales measuring current relationships with parents and peers. Available evidence regarding reliability and validity regarding the two subscales met conventional standards of measurement.

Empathy/Attachment. This is an 8-item measure of empathy/attachment that was created along with the Forgiveness/Non-Retaliation Scale by Ashton et al. (1998). It includes items such as "I don't worry very much about other people's well-being" and "I think it must be very sad to grow old without having any grandchildren to visit with." Acceptable estimates of reliability and validity have been presented (Ashton et al.).

Apology Scale. This 21-item scale (Jones, 2000) assesses attitudes and behaviors regarding apology, with higher scores indicative of a more favorable view of delivering and receiving apologies, as well as more frequent use of apology following a transgression. The apology scale has been shown to be internally reliable, stable over time, and inversely related to measures of retaliation and vengeance.

Results

Given the importance of forgiveness for restoring relationships and reducing hostility towards those who have betrayed a relationship, it was expected that the AFS would co-vary with measures of current relationships. Correlations were computed between the AFS and related constructs, and these results may be seen in Table 7. Correlations were computed separately for men and women, but the direction and magnitude of the resulting correlations were not found to be significantly different. Thus, the reported correlations are combined for men and women.

As expected, the AFS was inversely related to cynical behavior justification and cynicism regarding both relationships in general and human nature. It was not, however, significantly related to cynicism toward love. Scores on the AFS were negatively correlated with not only general feelings of loneliness, but also with loneliness within family relationships, friendships, groups, and romantic-sexual relationships. The covariation between the AFS and attitudes toward revenge-seeking was not statistically significant. As expected, the AFS was positively related to both parent and peer attachment, as well as the measure of empathy/attachment. The prediction that the AFS would be inversely related to the self-reported experience of having been betrayed was

Table 7

Emotional and Interpersonal Correlates of the AFS

Construct	Measure	r
Cynicism	Cynicism/Behavioral Justification	-.33**
	Cynicism/Relationships	-.35**
	Cynicism/Love	-.18
	Cynicism/Human Nature	-.33**
Revenge-Seeking	Beliefs About Revenge	-.02
Loneliness	UCLA Loneliness	-.22**
	Family Loneliness	-.22**
	Friend Loneliness	-.25**
	Group Loneliness	-.28**
	Romantic Loneliness	-.20*
Attachment	Parent Attachment	.31**
	Peer Attachment	.19*
	Empathy/Attachment	.14*
Interpersonal Betrayal	Betrayal of Others	-.02
	Betrayal by Others	-.25*
Apology	Apology Scale	.18**

Note(s): Ns vary from 92 to 415. Scale of Interpersonal Cynicism (Moore, 1999); Beliefs About Revenge Questionnaire (Emmons, 1992); UCLA Loneliness Scale: Version 3 (Russell, 1996); Differential Loneliness Scale (Schmidt & Sermat, 1983); Inventory of Parent and Peer Attachment (Armsden & Greenberg, 1987); Empathy/Attachment (Ashton et al., 1998); Interpersonal Betrayal Scale (Jones & Burdette, 1994); and Apology Scale (Jones, 2000).

*$p < .05$. **$p < .01$.

supported, but not the prediction that the AFS would be related to betraying others. However, it was modestly correlated with favorable attitudes toward apology.

Discussion

The results of Phase 2 strongly supported the interpretation that the AFS measures state forgiveness. Although the AFS was significantly related to each of the trait measures of forgiveness, it was more highly correlated with each of the state measures. This represented a conservative test of discriminant validity, and the results clearly indicated that such convergence is not attributable to overlap between the AFS and any randomly selected measure of forgiveness. Such convergent-discriminant validity analyses typically contrast associations between a target measure and putative measures of the same construct versus correlations between the target and measures of constructs with differing labels (e.g., guilt vs. shame). Moreover, the analyses presented above show clearer convergence and discrimination than is often the case even when divergent constructs are used (cf. Kugler & Jones, 1992). Thus, these analyses provided strong support both for the validity of the AFS as a state measure of forgiveness and for the distinction between the state and trait conceptualizations of forgiveness.

Furthermore, an examination of the psychometric characteristics of the state measures indicated that, with the possible exception of Trainer's General Forgiveness Scale, the current measures were comparable and for the most part interchangeable. However, the Enright Forgiveness Inventory and the AFS showed higher levels of internal consistency as indicated by the higher mean inter-item correlations.

In comparisons with miscellaneous and component measures of forgiveness, results indicated that the AFS was consistently and strongly related to Wade's subscales; especially, revenge, freedom from obsession, affirmation, victimization, feelings, avoidance, conciliation, and grudge holding. This pattern of findings supported the construct validity of the AFS. The magnitude of these correlations suggested that both Wade's Forgiveness Scale and the AFS were measuring essentially the same construct. Further, the pattern of correlations among subscales indicated that, with the possible exception of the subscale Toward God, the constructs were not differentially related to the AFS.

AFS scores were positively related to Trainer's index of intrinsic forgiveness, whereas it was negatively related to an extrinsic form of forgiveness. These results suggest that AFS scores reflect the genuine cognitive/emotional transformation envisioned in definitions and conceptualizations of forgiveness found in the literature rather than the various forms of "false forgiveness." Such results again supported the validity of interpretations of AFS scores as indicating genuine forgiveness of a specific person for a specific offense.

TRIM was created from a subset of items from Wade's revenge and avoidance subscales. Therefore, one would expect a similar pattern of correlations between the AFS and these subscales. Although the avoidance subscale of the TRIM was similarly related to the AFS, the revenge subscale of the TRIM was not as strongly related to the AFS as was Wade's revenge subscale. Because the items contained in each of the respective measures are identical, these results suggest that the reason for the discrepancy among comparisons

with the AFS is the loss of reliability due to attenuating Wade's avoidance and revenge scales (by 1 and 5 items, respectively). Interestingly, the magnitude of the correlations between the AFS and the TRIM subscales was almost identical to those reported between the subscales and a single-item measure of state forgiveness reported by McCullough et al. (1998).

Scores from the AFS also were related in a generally predictable pattern to measures of a network of interpersonal and emotional variables. As expected, forgiveness was inversely related to multiple measures of cynicism (except cynicism toward love) and loneliness. As expected, both parent and peer attachment were positively related to forgiveness, as was attitude toward apology. Furthermore, forgiveness was inversely related to self-reported experiences of having been betrayed in the past, but not to betrayal of others or beliefs about revenge. In general, this pattern of correlations supported the construct validity of the AFS.

The finding that the correlation between the AFS and cynicism toward love was unreliable may have been due to the fact that AFS scores represent levels of forgiveness with respect to a wide variety of interpersonal transgressions and not just betrayals committed by romantic partners. The non-significant relationship between forgiveness and BARQ diverges from the correlation between the AFS and the Vengeance Scale presented in the section on convergent/discriminant validity. However, the relationship between these two measures of revenge also was not significant, indicating that at least one of these scales is measuring something other than attitudes toward revenge. Further research is needed to resolve these inconsistent findings.

Taken together, the results of these studies provide strong support for the validity of the AFS. Not only does the AFS show clear convergent and discriminant validity when compared to alternative measures of forgiveness and hypothesized components of forgiveness, but also it shows systematic and interpretable convergence with relevant but distinct constructs. Evidence of the validity of the AFS, in turn, yields information about forgiveness as operationalized by the AFS. For example, these results suggest that forgiveness is related to interpersonal variables likely to promote forgiveness in the first place, such as secure attachments and favorable attitudes toward apology. Furthermore, forgiveness appeared to be negatively related to attitudes and emotions, such as loneliness and cynicism, which are likely to result from painful and unresolved interpersonal experiences.

CHAPTER 5

PHASE 3: NON-TEST VALIDITY

An important part of validating any measure is determining whether its scores predict relevant construct indicators other than psychological tests. Doing so controls for method variance. For example, do AFS scores predict the severity of the offense from the perspective of an observer or can they be used to discriminate between individuals who have experienced one type of betrayal as compared to another type of betrayal? Similarly, to what extent can someone perceive an individual's level of forgiveness--and hence his or her AFS score--based on an interview? Thus, an examination of non-test validity comprised Phase 3 and was pursued in two separate analyses by comparing AFS scores with (a) variables derived from the betrayal narratives obtained with the AFS and (b) responses and ratings from a semi-structured interview on an instance of betrayal and the subsequent forgiveness/non-forgiveness of the respondent.

Betrayal Narratives

Method

Participants and Procedure

The narratives from one sample of college students ($n = 311$; 215 women and 96 men) who completed the AFS and measures of related constructs (described above) were used for these analyses. Consistent with all administrations of the AFS, each participant was instructed to describe a betrayal experience including features of the incident--specifically, who betrayed them, when and why the person did so, how it made them feel, and how it changed the relationship. Two female students independently read the narrative

accounts and coded responses using categories developed by Couch (1999) in her previous research on betrayal.

Narrative Coding

The following features of the narratives (with illustrative examples) were coded by the raters: (a) type of betrayal (e.g., cheated, broke a promise); (b) relationship type, (e.g., mother, romantic partner, friend); (c) change in the relationship (e.g., no change, relationship got worse); (d) why the betrayal occurred (e.g., betrayer was selfish, was intoxicated); and (f) change in the victim as a result (e.g., less trusting, more independent). The same two judges rated the degree to which the betrayal had affected the respondent using the following scale: *no effect* (0), *slight effect* (1), *moderate effect* (2), and *great effect* (3). In addition, these judges and up to three additional students each rated the severity of the offense using a 5-point Likert-type scale verbally anchored at the end points with *not serious* (1) and *very serious* (5).

Classification revisions. After responses to each question were classified into a discrete category, categories were combined to increase cell frequencies for the purpose of subsequent statistical analyses. The original coding system and resultant category combinations are presented in Appendix D.

With respect to betrayal type, the different offenses available as codes were combined to form the following five types of betrayal: (a) romantic-sexual betrayal (e.g., kissing another person, infidelity); (b) rejection/avoidance (i.e., a combination of offenses such as avoiding contact and breaking up); (c) critical/confrontation (e.g., arguing, criticizing); (d) abuse (i.e., physical, psychological, and sexual abuse); and (e) disappoint/disrespect (e.g.,

breaking promises, revealing confidences).

The relationship types described in the betrayal narratives were combined to form the following categories: (a) romantic-sexual partner (e.g., boyfriend, ex-girlfriend, spouse); (b) parent or caregiver; (c) friend; (d) relatives other than parent (e.g., brother, aunt); and (d) other (e.g., coach, God).

Change in the relationship codes were combined to form three categories: (a) eventually the same or no change, (b) better, or (c) worse. Similarly, the reported changes in the victim were combined to form the categories: (a) no change, (b) better, or (c) worse.

Finally, reasons given for the betrayal were coded as either internal or external attributions. Internal attributions included attributions blaming some characteristic of the offender or the offender's behavior, such as insensitivity, insecurity, and poor social skill. External attributions included explanations invoking situational constraints and pressures, such as being with the "wrong crowd," not returning to college, or financial problems.

Interrater reliability. The consistency of the ratings was estimated by the percentage of agreement between the two judges. This was calculated for combined categories rather than the discrete categories because of the large number of codes for some variables (e.g., betrayal type) and coding uncertainty based on the brevity of the narratives. For example, some brief descriptions of the betrayal (e.g., "My friend promised not to tell my secret, but did anyway") might be interpreted as either a broken promise or a revealed confidence. However, both of these classifications were combined later into the disappoint/disrespect category. Therefore, the combined classifications were considered more appropriate

indices of rater agreement. The following estimates of rater reliability were observed: (a) betrayal type (80.2%), (b) relationship type (98.7%), (c) relationship change (99.5%), (d) motivation (94.4%), and (f) change in victim (89.8%). Given the relatively high inter-rater agreement, the classifications made by the first rater were arbitrarily selected for subsequent analyses.

Results

The mean AFS score for this sample was 143.7 (range = 62 - 214) with a standard deviation of 32.5. These values are quite similar to the descriptive statistics for all cases of the current version of the AFS suggesting that this sample was representative of other college student samples tested thus far.

Categorical Variables

Gender. A t-test comparing men and women participants indicated that the gender differences in AFS scores was not significant, t (309) = .91, ns. Furthermore, there were no significant differences in the AFS based on the gender of the offender described in the narratives, t (298) = .01, ns.

Analyses of narrative categories. A statistical test of the differences in AFS scores between categories within each of the four narrative questions was conducted, and the results of these are presented in Table 8.

The most common category of betrayal was disappointment/disrespect (33.2%), followed by reject/avoid (27.6%), romantic-sexual betrayal (18.8%), critical/confrontational (17.8%), and abuse (2.6%). As may be seen in Table 8, romantic-sexual betrayals were forgiven less than both betrayals involving rejection/avoidance and

Table 8

Comparisons Between the AFS and Narrative Categories

Construct	Category	n	M	Test Value	df	p-value <
Betrayal Type	Sexual	57	134.2[a]	F = 2.97	(4, 298)	.05
	Reject/Avoid	84	149.4[b]			
	Critical	54	161.6[b]			
	Abuse	8	134.0[ab]			
	Disappoint	101	142.5[ab]			
Relationship Type	Romantic	146	142.9	F = 1.49	(4, 303)	ns
	Parent	44	154.4			
	Relative	15	141.6			
	Friend	98	142.1			
	Other	6	132.0			
Relationship Change	No Change	102	162.7[a]	F = 43.9	(2, 270)	.001
	Better	12	172.3[a]			
	Worse	159	131.6[b]			
Attributions	Internal	215	144.4	t = -1.0	(232)	ns
	External	19	152.4			
Change in Victim	Better	21	153.2	t = -2.48	(147)	.01
	Worse	128	135.6			

Note: Within constructs, categories with different superscripts are significantly different.

those involving criticism/confrontation. No other betrayal types were significantly different from one another on associated AFS scores.

The type of relationship described in the narratives was most often romantic-sexual (47.2%), followed by friends (31.7%), parents (14.2%), relatives (4.9%), and others (1.9%). However, there were no significant differences in AFS scores based on the type of relational partner, as noted in Table 8.

A One-Way ANOVA was computed to determine if there were significant differences in AFS scores associated with the direction of relationship change. As indicated in Table 8, narrative responses that implied a change in the relationship for the worse had significantly lower scores than both those who indicated that the relationship had not changed and those who said that it had become better. The difference in AFS scores between those who said that the relationship was the same and those who said that it was better was not significant.

Finally, the reasons given by respondents for why they believed the betrayal occurred were classified as indicating either an internal or external locus of control. A t-test indicated that the difference in AFS scores between the two groups was not significant. However, most narratives (92%) were classified as reflecting internal attributions.

Direction of change in victim. Although respondents were not specifically asked about how the betrayal had changed them personally, 149 of the narratives included descriptions of changes either for the better or worse ($n = 21$ and 128, respectively). A t-test was computed to test the difference in AFS scores, and the results were consistent with the expectation that AFS scores would be significantly higher among those who reported

positive changes than those who reported changing for the worse.

Continuous Variables

Time. The mean number of months since the incident described varied from less than 1 month to over 15 years ($M = 27.3$, $SD = 30.1$). The relationship, however, between the amount of time since the betrayal and AFS scores was not significantly different from zero; $r\ (238) = -.03$, ns.

Effect on victim. Two judges rated the extent to which the betrayal seemed to have affected the victim (*not at all* to *a very great extent*) based on what was written in response to that question. The average of these ratings was significantly correlated with AFS scores, $r\ (271) = -.35$, $p < .001$. Those who were rated as being more affected were scored as less forgiving.

Severity of the offense. As many as five judges rated the severity of the offense, based on the narrative descriptions. The average rating then was correlated with AFS scores. Not surprisingly, the more severe offenses also were forgiven less by respondents, $r\ (306) = -.37$, $p < .001$.

Betrayal Interviews

The betrayal narratives examined above contain only limited information about the betrayal and subsequent process of forgiveness. Originally they were included for the purpose of ensuring that the respondent answered AFS items with a particular person and incident in mind. Thus, of necessity, the information they yield is brief and somewhat superficial. In order to overcome this limitation, and in order to further consider the convergence of AFS scores with both self-reported and non-test indicators of forgiveness

of betrayers, semi-structured interviews were conducted. In particular, this study was expected to yield more detailed information about betrayal and the thoughts and feelings experienced by respondents as the process of forgiveness unfolded or failed to do so. Also, this study afforded the opportunity to determine the "visibility" of forgiveness based on the respondent's words, tone, and demeanor.

The value of the interview in this regard is illustrated by the availability of less direct, subtler, and presumably less reactive indicators of having forgiven an offender. For example, a person who has forgiven someone to a lesser extent or not at all would be more likely to report negative emotions, such as anxiety and mistrust, while thinking of the person who offended them as compared to someone who felt greater forgiveness. Furthermore, if valid, the AFS should be related to at least some of the circumstances or events that might influence one's willingness to forgive. For example, having received an apology from the offender should be related to the degree of forgiveness reported by the person who was betrayed. Another index of validity is the extent to which AFS scores can be predicted on the basis of one's overall impression of the interview itself. This allows for the assessment of more complex judgments, such as concluding that someone has not really forgiven the offender in question despite a verbal claim of having done so. For example, a respondent may say he or she has forgiven but qualify the statement to an extent that belies his or her direct statement, or someone may express forgiveness but covertly suggest attitudes and feelings at variance with their overt assertions.

Method

Participants and Procedure

College students (N = 113) enrolled in psychology courses were asked to complete a questionnaire containing the AFS and several related measures in exchange for extra course credit. At the same time, participants were invited to take part in a brief interview regarding the incident they had described in the AFS betrayal narrative. Interested participants then were contacted to arrange a time for the interview.

Fifty (31 women and 19 men) students agreed to participate and completed both components of the study. The mean age of the participants was 23.8 years. The majority of the sample were Caucasian (80%). Upon arrival for the interview, participants were informed of the purpose of the interview, and their informed consent was solicited. Following a few introductory questions (e.g., sex of the person who offended them, their relationship to that person), participants were asked to describe the betrayal they had written about in their own words. Subsequently, the participants were asked more specific questions designed to assess their feelings, beliefs, and behaviors regarding the offense and the offender. Each interview followed the same protocol, consisting of questions about the details of the betrayal and the participant's perception of the incident and his or her relationship to the offender. A copy of the interview protocol can be found in Appendix E.

Variables

Self-report instruments. Participants completed the State Anxiety Scale (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) as part of the questionnaire, and they were instructed to think of the emotions they felt at the time of the betrayal (i.e., recalled state

anxiety). During the interview, participants were asked to complete the State Anxiety Scale reflecting on their current feelings regarding the betrayal (i.e., current state anxiety).

Also, during the interview, each participant was asked to indicate the extent to which he or she believed the betrayal was (a) their fault, (b) caused by the offender, and (c) caused by a situation beyond anyone's control. Participants indicated their agreement or disagreement with these statements using a 5-point Likert-type scale verbally anchored at the end points by *do not believe* (1) and *completely believe* (5). These three ratings then were used to assess the participant's perceptions of blame.

A similar procedure also was used to assess the severity of the betrayal as perceived by the participant. Three statements concerning the severity of the betrayal were rated by participants using a 5-point Likert-type scale anchored at the end points by *minor offense* (1) and *extremely severe* (5). These statements assessed the severity of the betrayal generally, relative to other betrayals experienced by the participant, and with respect to participant's opinions about severity of the betrayal from the perspective of others (i.e., the rating other people might give).

Finally, participants were asked to indicate their agreement with ten statements reflecting single-item measures of a variety of constructs, such as trust ("I can trust him/her as much now as I could before the betrayal") and emotional closeness ("I am not as emotionally close to him/her as I was before the betrayal"). Each of these statements was rated using a 5-point Likert-type scale verbally anchored at the end points by *strongly disagree* (1) and *strongly agree* (5). These items are presented in the interview protocol found in Appendix E.

Open-ended questions. With the exception of the self-report ratings described above, the remainder of the interview consisted of open-ended questions. The participants were asked about a variety of behaviors, thoughts, and feelings likely to occur before and after becoming aware of a betrayal. For example, participants were asked whether or not they sought revenge, received an apology, forgave the other person, and how the offense changed their feelings toward the person. The exact wording and order of questions is included in the interview protocol found in Appendix E. A brief account of the participant's responses to each question was recorded discretely during the interview. Responses were coded during the interview as either "yes" or "no," or according to categories predetermined for later statistical analyses. For example, questions about how the betrayal changed the person or the relationship were coded as one of the following based on the responses of the participant: (a) better, (b) same, or (c) worse.

Impressionistic rating. Immediately following the interview, I made a subjective rating of the extent to which the participant appeared to have forgiven the offender he or she described in the interview. I made this single forgiveness rating using a 5-point scale with the following verbal anchors: *no forgiveness* (1), *in progress* (3), and *complete forgiveness* (5). While making this rating, I was not aware of the participant's AFS scores. Instead, I based my impression only on what the participant said in the interview and the manner in which it was said.

Results

A series of analyses were conducted to assess the degree to which scores on the AFS were related to the variables obtained from the interview and questionnaire.

Specifically, correlations were computed between the AFS and all continuous variables (e.g., ratings of resentment anger, relationship satisfaction, length of time in the relationship, etc.). In addition, a series of t-tests and analyses of variance were computed with AFS scores as the dependent variable. The grouping variable for each of these analyses was derived from the interview, such as whether or not the person received an apology (yes/no) and how the relationship changed as a result of the betrayal (better/same/worse).

The mean AFS score was 141.7 (range = 71 to 206), and the standard deviation was 35.6. Again these values are similar to other samples. The mean AFS scores were not significantly different for men and women, and thus all analyses involving AFS scores were computed for the combined data of men and women.

Betrayal Characteristics

Table 9 presents frequencies for type of betrayal by type of relational partner described. Each betrayal was categorized by the interviewer as one of the five types outlined above (i.e., Romantic-Sexual Betrayal; Rejection/Avoidance; Critical/Confrontation; Abuse; and Disappoint/Disrespect). Five types of relationship were categorized based on participant's descriptions the relationships including: (a) romantic or dating, (b) spouse, (c) friend, (d) parent, and (e) relatives other than parents (e.g., step-sister, brother). These categories differed somewhat from those presented above because of the differences in relationships cited. As may be seen in Table 9, the most common categories of betrayal were Romantic-Sexual, Rejection/Avoidance, and Disappoint/Disrespect, which when combined accounted for 78% of the incidents

Table 9

Frequencies for Betrayal Categories by Types of Relationships

	Relationship Types					
Betrayal Category	Romantic	Spouse	Friend	Parent	Relative	Total
Romantic-Sexual	9	1	0	0	0	10
Rejection/Avoidance	4	0	4	2	0	10
Critical/Confrontational	2	0	1	1	4	8
Abusive	1	1	0	1	0	3
Disappoint/Disrespect	6	1	9	3	0	19
Total	22	3	14	7	4	50

described. Critical/confrontational betrayals (16%) and Abuse (3%) were less common. A One-Way ANOVA was computed and indicated that none of the mean AFS scores for the five types were significantly different from any of the others. Table 10 presents this analysis and the results of all subsequent factorial comparisons of AFS scores between responses to interview questions.

Romantic partners accounted for almost half of the reported offenses, followed by friends (27%). Fourteen participants described betrayals involving spouses, parents or other relatives. A t-test was computed to test for differences in AFS scores between participants who cited betrayals by partners from whom it might be easier (e.g., friends, dating partners) or more difficult (e.g., parents, spouse) to disengage. As may be seen in Table 10, the difference in AFS scores between these groups was not significant.

Self-Reported Variables

Anxiety. Current state anxiety was significantly and inversely related to the AFS (r (48) = -.57, $p < .001$), but recalled state anxiety was only marginally related (r (46) = -.24, $p = .10$). The current and recalled state anxiety scores were, however, positively correlated (r (46) = .37, $p < .05$).

Attributions of blame. With respect to the three ratings of blame, the AFS was inversely related to attributing more blame to the other person, r (48) = -.37, $p < .005$. It was not related, however, to blaming oneself for the betrayal nor to attributions to circumstances beyond anyone's control, r (48) = .12, ns; and r (48) = .23, ns, respectively.

Severity. As expected, AFS scores were negatively correlated with both the participants' ratings of the severity of the offense, r (48) = -.45, $p < .001$, and to their

Table 10

Comparisons Between the AFS and Interview Variables

Construct/Question	Category	n	M	Test Value	df	p-value <
Betrayal Type	Sexual	10	162.9	F = 1.46	(3, 43)	ns
	Reject/Avoid	10	133.8			
	Critical/Abuse	8	142.8			
	Disappoint	19	138.1			
Relationship Type	Voluntary	36	142.7	t = .33	(48)	ns
	Non-Vol.	14	139.0			
Change to Type Of Relationship	Same	14	166.8[a]	F = 11.06	(2, 37)	.001
	Diminished	12	142.5[a]			
	Ended	14	117.5[c]			
Change in Quality of Relationship	Better/Same	13	179.4	t = 5.67	(48)	.001
	Worse	37	128.4			
Change in Victim	Same/None	12	153.9[a]	F = 4.89	(2, 47)	.01
	Better	17	154.3[a]			
	Worse	21	124.5[b]			
Apology	Yes	23	154.8	t = 2.54	(48)	.05
	No	27	130.5			
Timing of Apology	Immediately	15	150.9	t = .74	(21)	ns
	Later	8	162.3			
Reasons Given?	Yes	21	148.5	t = 1.15	(48)	ns
	No	29	136.8			
How did you become aware?	Offender	9	157.1	t = 1.19	(18)	ns
	Other	11	140.3			
Did the offender seek forgiveness?	Yes	22	142.5	t = .36	(47)	ns
	No	27	138.8			

Note: Within constructs, categories with different superscripts are significantly different.

Table 10 (continued)

Construct/Question	Category	n	M	Test Value	df	p-value <
Intend to hurt you?	Yes	12	135.8	t = .80	(46)	ns
	No	36	145.4			
Attributions	Internal	26	144.4	t = .60	(232)	ns
	External	20	152.4			
Seek Revenge?	No	31	146.0	F = 1.04	(2, 47)	ns
	Thoughts	14	139.2			
	Yes	5	121.8			
Bring it up?	No	35	138.3	t = 1.02	(48)	ns
	Yes	15	149.5			
Did you tell him/her you forgave?	Yes	15	152.9	t = 1.69	(47)	ns
	No	34	134.9			
Did you forgive?	Yes	36	150.2	t = 3.63	(47)	.001
	No	13	113.5			
Forgiveness Timing	Soon	8	171.6	F = 2.15	(2, 26)	ns
	Later	16	156.7			
	Much later	5	140.4			

Note: Within constructs, categories with different superscripts are significantly different.

estimations of presumed ratings of severity by others, r (48) = -.35, p < .05. However, AFS and severity in relation to other hurtful experiences was only marginally and inversely correlated, r (48) = -.26, p = .07.

Interpersonal correlates. During the interview, participants rated ten statements concerning a variety of interpersonal feelings and behaviors reflective of betrayal and forgiveness. AFS scores were significantly related to all but one of these statements. Table 11 presents these statements and their associated correlation with the AFS. The strongest correlation coefficients were observed for ratings of resentment (-.73), affection (.71), satisfaction with the relationship (.69), anger (-.68), avoidance (-.65), and trust (.60).

Open-Ended Questions

Time. The amount of time the participant had been in a relationship with the offender prior to the betrayal and the amount of time since were both converted to months. Mean relationship time before the betrayal was 79.4 months (SD = 10.17; Range = 1 - 480), and the time since the betrayal occurred was 37.9 months (SD = 37.9; Range = 1 - 144). AFS scores were not significantly related to either index of time, r (48) = .02, ns and r (47) = .14, ns, respectively.

Relationship change. Two open-ended questions assessed change in the relationship as a result of the betrayal. The question regarding the kind of relationship was asked only of participants who indicated they were in a romantic, marital, or friendship relationship with the offender. Differences in AFS scores between those who said the relationship had remained the same, been diminished, or ended were significant, as may be seen in Table 10. Post hoc tests indicated that those who said the relationship had stayed

Table 11

Correlations Between the AFS and Interview Statements

Statement	r
"I am satisfied with the way I acted toward him/her."	.22
"I still feel resentment toward him/her."	-.73**
"I am angry with him/her."	-.68**
"I tried to make peace with him/her."	.43**
"I avoid speaking or interacting with him/her."	-.65**
"I am less trusting of people in general because of this betrayal."	-.42**
"I am satisfied with the overall quality of this relationship."	.69**
"I can trust him/her as much now as I could before the betrayal."	.60**
"I am not as emotionally close to him/her as I was before the betrayal."	-.53**
"I feel affection for him/her."	.71**

Note(s): N = 50. All statements were rated on a 5-point Likert-type scale verbally anchored at the end points by *strongly disagree* (1) and *strongly agree* (5).

**p < .001.

the same had higher mean AFS scores than both those who reported a diminished relationship and those who reported no relationship. Furthermore, even those who reported relationships that had diminished reported greater forgiveness than those who reported the relationship ended.

The second question assessed the direction of change in the relationship, if any, that resulted from the betrayal. Responses to this question were classified as one of the following: (a) better, (b) same, or (c) worse. Only three individuals indicated that the relationship had remained the same so their scores were included in the group that reported change for the better. As may be seen in Table 10, the groups were significantly different; those who described changes for the worse had significantly lower AFS scores than those who reported that the relationship was unchanged or better than before.

Personal change. A similar question and procedure was used to assess whether or not participants believed that the betrayal changed them as a person. A One-Way ANOVA was computed, and the overall F-test was found to be significant, as may be seen in Table 10. Post-hoc tests indicated that those who said the betrayal had changed them for the worse had significantly lower forgiveness scores than those who said they were unchanged or were a better person because of it, whereas the difference between the latter two groups was unreliable.

Acts of contrition. Participants were asked about whether the offender apologized, gave reasons for the betrayal, confessed to the betrayal, or asked for forgiveness. Comparisons of AFS scores for each of these dichotomous variables (yes/no) were computed with t-tests, and these results are presented in Table 10. Although there was a

significant difference between the AFS scores of those who reported receiving an apology and those who did not, the additional analyses regarding acts of contrition were not significant.

Attributions of intent. Attributions about why the offender betrayed them were coded as either internal or external, as described above. Also, participants were asked if they thought the betrayal was intentional or not intentional. Analyses of AFS scores in conjunction with both variables failed to yield significant results, as indicated in Table 10.

Responses to betrayal. Participants were asked if they attempted to retaliate or ever thought about getting revenge after the betrayal. As may be seen in Table 10, these variables did not yield significant differences in AFS scores. Participants also were asked whether or not they ever mentioned the betrayal to the offender. The difference in AFS scores between those who mentioned it again later and those who never brought it up was not significant, as reflected in Table 10.

Finally, participants were asked directly about forgiveness. First, they were asked whether or not they had told the offender he or she was forgiven. Second, they were asked whether or not they had privately forgiven the offender, regardless of whether or not they told the offender. Surprisingly, the difference in the AFS scores of those who reported telling the offender he or she was forgiven and those who did not was not significant (see Table 10). There was, however, a significant difference with respect to private forgiveness. As may be seen in Table 10, those who had privately forgiven the offender yielded significantly higher AFS scores than those who had not. Interestingly, two participants indicated that, although they had told the other person he or she was forgiven,

they had not, in fact, done so.

Participants who said that they had forgiven the offender were asked to estimate how long it took them to forgive. Responses were classified into three categories: (a) soon (i.e., immediately after or within the week); (b) later (i.e., within the year); and (c) much later (i.e., years later). A One-Way ANOVA indicated no significant differences in AFS scores among these three temporal groups (see Table 10).

Finally, participants who said that they had forgiven the offender were asked whether or not forgiving had changed their feelings toward the person who betrayed them. Unfortunately, many participants responded in ways suggesting they did not understand the question, which resulted in too few cases for statistical analyses.

Impression of Forgiveness

I made a single impressionistic rating regarding the degree to which the participant appeared to have completely forgiven the person who betrayed him or her. This subjective evaluation was made immediately after the interview and was based on both the stated responses of the participant and the manner in which they were communicated. For example, some participants reported more positive outcomes (e.g., forgiving and feeling better) but their tone and demeanor did not convey the same emotional tone. Consequently the rating was never based exclusively on whether or not the person reported reconciling with or forgiving the offender. In any case, this impressionistic rating was strongly and positively related to AFS scores, $r\ (48) = .72$, $p < .001$.

Secondary Analyses

The relationship between blameworthiness and each of the acts of contrition was examined. Table 12 shows that blaming oneself was not reliably related to any of the three acts of contrition (apology, explanations, or confession), nor were they related to blaming the offender. There was, however a significant relationship between learning of the betrayal from the offender and attributing the cause of the betrayal to the situation. As may be seen in Table 12, those who heard about the betrayal from the offender (confession) were more likely to believe that the betrayal was caused by a situation beyond anyone's control than those who became aware of the betrayal in some other way.

Discussion

Comparisons were made between variables derived from narrative accounts of betrayal and AFS scores. The rationale for these analyses rested on the assumption that the non-test, predictive validity of the AFS would be demonstrated to the extent that independent judges categorized and rated variables from the written accounts in such a way as to subsume significant proportions of the variance of AFS scores. On the whole, these analyses indicated several systematic differences in AFS scores associated with characteristics of the betrayal narratives, which, in turn, supported the validity of the AFS. Although results did indicate some differences in forgiveness among betrayal types, not all of the categories were statistically different. Also, perceptions of changes in both the victim and relationship were related to the degree of forgiveness as indicated by AFS scores. Moreover, judges' ratings of the severity of the offense and its effect on the victim were significantly and inversely related to forgiveness. On the other hand, AFS scores

Table 12

Comparisons Between Attributions of Blame and Acts of Contrition

Attribution	Act of Contrition	M		t	df	p
		Yes	No			
Blaming the Offender	Apology	4.21	4.29	.37	48	ns
	Reason	4.33	4.21	.58	48	ns
	Confessed	4.33	4.63	.98	18	ns
Blaming Oneself	Apology	1.52	1.66	.49	48	ns
	Reason	1.57	1.17	.17	48	ns
	Confessed	1.55	1.54	.02	18	ns
Blaming Situation	Apology	2.34	2.15	.56	48	ns
	Reason	2.35	2.16	.56	48	ns
	Confessed	2.50	1.36	2.56	18	.02

Note: The mean ratings were based on three statements rated on a Likert-type scale verbally anchored at the end points by *do not blame* (1) and *completely blame* (5).

were unrelated to several of the variables including gender of the respondent and the victim, time since the betrayal, and the type of relational partner.

Alternatively, this pattern of both significant and non-significant results may indicate that the nature of the betrayal and the perpetrator are less important than the respondents' perceptions about the consequences of the betrayal. Final conclusions with respect to these issues await further research and cannot be determined, of course, on the basis of these data. Even so, analyses of narrative accounts of betrayal lend further support to the accumulating body of evidence regarding the validity of the AFS.

Analyses of the interview data also provided general support for the validity of AFS scores. Results indicated that AFS scores were significantly related to change in relationship quality and type, change in the victim, apology, and (private) forgiveness. In addition, AFS scores were associated in predictable ways with resentment, anger, trust, emotional closeness, and affection toward the offender, efforts at making peace or avoiding the offender, the overall quality of the relationship with the offender, and trust in people generally. Current anxiety and attributions of blame toward the offender were inversely correlated with the AFS, as were respondents' ratings of betrayal severity and estimations of ratings by others regarding severity. These findings ranged from moderate to highly robust in magnitude, and each is consistent with the definition and conceptualization of the AFS. On the other hand, AFS scores were not significantly related to several interview variables including time before and since the betrayal, gender of the respondent and the offender, betrayal and relationship type, attributions of intentionality and locus of causality, revenge seeking, and so on.

By contrast, forgiveness, as measured by the AFS, was generally unrelated to acts of contrition. The one exception was participants who indicated that they had received an apology were more forgiving. However, the timing of the apology and whether or not it was accompanied by an explanation did not yield significant differences in reported forgiveness. Confessing to the betrayal and seeking forgiveness also were not related to forgiveness. These findings were somewhat surprising because several studies have demonstrated a relationship between offender accounts (e.g., confession and explanations) and forgiveness (cf., Weiner et al., 1991; Bies & Tripp, 1996). However, the majority of these studies were experiments involving hypothetical scenarios rather than accounts of actual betrayals. Therefore, it is perhaps premature to conclude that forgiveness is or is not related to attempts on the part of the offender to account for his or her actions, especially since some studies have also shown that apologies and accounts affect forgiveness largely through their relationship to attributions (cf. Droll, 1984).

Attributions for the offense were assessed in the interview in three ways. First, attributions of blame were made through ratings of the blameworthiness of the offender, victim, and situation. Second, attributions of intent were assessed. Third, the locus of cause was attributed to either internal or external reasons based on participants' responses. Results indicated that forgiveness was inversely related to blaming the offender, but the relationships found between forgiveness and the other indices of attribution were not significantly different from zero. Additional studies are likely needed in this area. It is possible that the present assessments of attribution were incomplete. There are numerous dimensions that can be assessed to index attributions, but there is continuing debate as to

which dimensions should be used in interpersonal contexts (for a discussion of this issue, see Bradbury and Fincham, 1990).

Finally, despite the apparent inability of offenders to bring about forgiveness according to the interview participants, many of their victims apparently did manage to forgive them, and this psychological transformation appeared to be associated with more positive feelings toward the offender and the relationship overall. Forgiveness was inversely related to negative emotions and behaviors (e.g., anxiety, resentment, avoidance), whereas it was positively related to efforts at reconciliation, trust, satisfaction, affection, and the like.

The reason for the mix of significant and non-significant findings in both the narrative and interview studies is not clear. In empirical science, choices among alternative explanations require the rejection of the null hypothesis, whereas suspension of judgment often emerges from non-significant findings. On the other hand, the partial overlap of variables in the narrative and interview studies means that the latter is a replication and extension of the former and, viewed in this way, the pattern of both significant and non-significant results is somewhat more easily interpreted. For example, results of the interview study replicate many of the conclusions drawn from the analyses of narrative accounts. Specifically, the objective characteristics of the betrayal were found to be generally unrelated to forgiveness as measured by the AFS, whereas the perceptions of the betrayal and its consequences were more predictive of forgiveness. Relationship type, time in the relationship before the betrayal and time since the betrayal, gender of the respondent and gender of the offender, were all unrelated to forgiveness in both studies. Similarly,

changes in both the relationship and the victim were significantly related to forgiveness in both studies. Specifically, participants who reported reconciling or maintaining the relationship were more forgiving, as were those who reported positive changes in the relationship and/or themselves. Finally, the perceived severity of the offense was inversely related to forgiveness in both instances. Interestingly, the participants' perceptions about how others might rate the severity of the offense also were inversely related to forgiveness, and this correlation was highly similar to the one reported in Phase 2 comparing average ratings of severity by judges and AFS scores (-.35 and -.37, respectively).

To summarize, these results generally support the validity of AFS interpretations. The extent to which they do not may be attributable to the complexities of the process of forgiveness. These data are consistent with the conceptualization of forgiveness, which emphasizes the amelioration of painful feelings and the promotion of healthy relationships. On the other hand, these data may be interpreted as suggesting that its origins and development do not reduce to any simple formula involving contrition, attributions, types of betrayal, or types of relationships. Interesting in this regard was the finding that telling the offender that he or she was forgiven was not always linked to actual, private forgiveness.

CHAPTER 6

GENERAL DISCUSSION

The primary purpose of this research was to develop and validate a state measure of forgiveness, the Act of Forgiveness Scale. A secondary goal was to examine the definition and conceptualization of forgiveness. A series of studies involving over 1000 college student participants suggest four general conclusions regarding the measurement and conceptualization of forgiveness.

First, the Act of Forgiveness Scale proved to be both a valid and reliable measure of forgiveness toward a specific offense and offender. Evidence of internal consistency and temporal stability exceeded conventional standards of measurement. Furthermore, the use of itemmetric analyses maximized response stability and demonstrated that the AFS was relatively uncontaminated by undesirable characteristics such as ambiguity, reading difficulty, and social desirability. The factor structure of the AFS was robust and interpretable and appeared consistent with conceptual definitions of forgiveness. Finally, the validity of the AFS--whether it measures what it purports to measure--was demonstrated in a variety of ways, including both convergent and discriminant validity (state vs. trait), construct validity (e.g., correlates with related self-report measures), and non-test validity (e.g., narrative and interview variables, impressionistic rating). Thus, ample evidence supported the interpretation that variation in AFS scores reflects real differences in the degree of state forgiveness and evidence also that these scores are internally reliable and stable over time.

Second, the AFS appeared to be highly related to other measures of state forgiveness, particularly the EFI and Wade's scale. Indeed, the degree of convergence suggested that these three instruments might be more or less interchangeable. Most measures of forgiveness were developed without regard to alternative measures, whereas the AFS has been extensively compared to similar instruments. At the very least, the present results indicate that findings from studies using one of these three scales should be comparable to results using the remaining scales.

Third, comparisons between the AFS and existing measures of forgiveness indirectly supported the utility of the distinction between state and trait forgiveness. Although, there did not appear to be much difference in the psychometric properties among state and trait measures, the convergent and discriminant analysis clearly indicated that the trait scales were measuring something different from state forgiveness. The mean correlation between the AFS and other state forgiveness measures was significantly higher than its average correlation with trait forgiveness measures even though the correlations were significant in every instance. These results, therefore, supported the conceptual distinction underlying these alternative types of measures.

Fourth, although final conclusions would require additional research, these results yielded only modest support for measuring types or components of state forgiveness. Whereas some differentiation emerged with respect to TRIM and Trainer's subscales, the AFS was similarly related to eight of the nine subscales calculated from Wade's measure of forgiveness.

The line between scale development and theory building is inexact. Consequently, although designed to address issues of conceptualization and measurement, these studies suggest some conclusions with respect to the phenomenon of forgiveness. Although preliminary, these ideas might be useful as hypotheses for future research.

First, not only were the respondents' accounts of betrayal and its consequences related to forgiveness, but also uninvolved observers were able to evaluate its characteristics in such a way as to predict forgiveness. Analyses of the betrayal narratives were based on independent ratings and classifications based on brief written accounts. The judged severity of the betrayal and the impact it had on the victim, as perceived by these raters, was related to respondents' assessed level of forgiveness. Furthermore, the judges' perceptions about changes in the relationship and changes in the victim were related in the same manner to forgiveness as the classifications made during the interview based on more extensive and thorough verbal descriptions. Finally, there is some evidence of the "visibility' of state forgiveness based on the impressionistic rating made during the interviews. Consequently, the content of both written narratives and interview responses are predictive of forgiveness. One possible direction for future research might be the investigation of the degree to which level of forgiveness is discernible from the perspective of the offender or others who are aware of the betrayal but not directly involved, such as family and friends.

Second, the actions of the offender following a betrayal appeared to be of lesser consequence for forgiveness than might have been expected. The only act of contrition that was related to forgiveness was receiving an apology from the offender. This finding

supported the conclusions reached by others regarding the importance of apology (cf. Bies & Tripp, 1996; Darby & Schlenker 1982; Moore, 1997). However, forgiveness was not significantly related to several indices of offender behavior, at least as they were operationalized in this research. Examples here include the timing of apologies, previously shown to make a difference in retaliation (Kremer & Stephens, 1983; Zillmann & Cantor, 1976), the process by which the victim learned of the betrayal (e.g., confession), and whether or not the offender asked for forgiveness or gave reasons for the betrayal. Considerable research indicates that apologies or other accounts affect attributions (cf. Droll, 1984; Ohbuchi et al., 1989; Zillmann et al., 1975), however receiving an apology was unrelated to attributions of blame in this study. Forgiveness was inversely related to attributing more blame to the offender, but perceptions of the offender's intentions (internal/external and intentional/unintentional) were not.

These results may be due to methodological limitations (e.g., the fact that forgiveness scores and the written or oral accounts of the betrayals were assessed exclusively from the perspective of the victim of the betrayal). Alternatively, these results may suggest that the fate of the offender is often in the hands of the victim rather than the product of interpersonal remediation. In either case, additional research examining the interplay among attributions, apologies, empathy and forgiveness would be useful.

Third, forgiveness was more consistently related to perceptions of the betrayal and its consequences than to objective qualities of the betrayal itself (e.g., type of betrayal, time, gender). Specifically, forgiveness was related to victims' perceptions of the severity of the offense, their feelings toward the offender following the betrayal, and the consequences

for both the relationship and them personally. On the other hand, relatively few of the descriptive variables were related to forgiveness. Neither the narrative ratings nor interview accounts indicated a significant relationship between forgiveness and the type of relational partner accused of committing the betrayal. Although some types of betrayal were differentially related to forgiveness in the betrayal narratives, this finding was not replicated in the analyses of the interviews. Moreover, despite the conventional wisdom that "time heals all wounds" the amount of time since the betrayal was unrelated to forgiveness in both the narratives and interviews. Finally, neither the gender of the victim, nor gender of the perpetrator were related to forgiveness. This general pattern of findings is consistent with previous research (e.g., Boon & Sulsky, 1997), but additional research is again warranted, especially studies in which this question comprises the central focus.

Fourth, the results of these studies are consistent with many of the assumptions regarding the restorative power of forgiveness. Not only was forgiveness associated with the self-report of positive changes in the relationship, it also was associated with perceived change on the part of the victim. Specifically, forgiveness was inversely related to feeling angry, resentful, and avoiding the offender. More importantly, forgiveness was positively related to affection, trust, and emotional closeness with regard to the offender. Furthermore, forgiveness of a specific person was inversely related to general feelings of loneliness and cynicism.

On the other hand, conclusions should be generalized cautiously with an appreciation of limitations and other potential sources of error. For example, although not unusual for this kind of research, most of the present data are exclusively based on self-report, which

may be subject to several extraneous factors and confounds. Also, the familiar "bootstrap" problem of psychometrics pertains to these analyses, meaning that the validity of one measure of a construct is based in part on other measures whose validity is also often at issue. As frequently noted, the exclusive use of college students as participants to some degree limits the generalizability of even robust and replicable findings. Inevitably, a number of potentially important variables were not accessed in this study. For example, spirituality and the role of faith in promoting forgiveness were not included in any of the questionnaires or in the interview, despite the fact that these factors may play an important role in the process of forgiveness.

Despite these limitations, this research clearly demonstrated the measurement characteristics and capabilities of AFS and the conceptual utility of the concept of state forgiveness. Moreover, these conclusions are supported by divergent methods, involving many participants and numerous analytical procedures. This research not only contributes to the body of literature regarding the measurement of forgiveness by providing an instrument with which to measure it, but may also stimulate further research on the various hypotheses suggested by these findings.

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APPENDICES

APPENDIX A

ORIGINAL 70-ITEM ACT OF FORGIVENESS SCALE

Item	Content
1	Just thinking about what happened makes me fume.
2	My relationship with the person in question has changed for the worse.
3	When I think about it, I still feel sad.
4	I can never trust the person in question again.
5	Even though it hurt at the time, this event has helped me to grow.
6	I very much wish this had never happened.
7	Sometimes I find myself thinking about this for no apparent reason.
8	I don't think I can ever fully forgive the person in question.
9	When I think about it, I still feel vulnerable.
10	The person in question is as important to me as ever.
11	Even though it hurt me, I think I can relate to what he/she did.
12	I will never forget what happened as long as I live.
13	I hate the person in question.
14	I have respect for the person in question.
15	I understand why the person in question did what he/she did.
16	I still have an emotional reaction when I think about it.
17	The person in question has little or no respect for me.
18	When I think about what the person did to me, I no longer feel hurt.
19	I would not want it to happen again, but I have forgiven the person in question.
20	I have revenge fantasies about the person in question.
21	My relationship with the person in question has changed for the better.
22	Sometimes I find myself "brooding" about it.
23	I feel like hurting him/her the same way he/she hurt me.
24	I still hold a grudge against the person in question.
25	I do not resent the person in question.
26	I would trust the person in question again.
27	I would not take revenge against the person in question, even if I were certain I could get away with it.
28	I have been able to put this event into perspective.
29	Given what happened, I am very suspicious of the person in question.
30	I don't know if I will ever get over it.
31	I have tried to reconcile with the person in question.
32	I will never forgive the person in question for what happened.
33	I genuinely feel that I have managed "to get past" the event.
34	I have tried to understand why the person in question did what he/she did.
35	I have a lot of faith in people, including the person who did this to me.
36	I don't see how my relationship with the person in question can ever be restored.
37	I am bitter about what happened.
38	I am stronger because of what happened.
39	There are no hard feelings between myself and the person in question.

Item	Content
40	I bring the event up in conversations with the person.
41	From now on, I will be on my guard with this person.
42	The person in question will never get a second chance with me.
43	Regarding what happened, what's done is done.
44	If I forgive the person for what happened, it will just invite them to do it again.
45	I rarely think about this event.
46	I am (was) unable to accept an apology from this person.
47	I like and respect the person in question as much as ever.
48	The only sensible thing to do when something like this happens is to talk it out with the other person and get on with life.
49	Even though it bothered me at the time, I am at peace with what happened and the person in question.
50	I had forgotten all about the event until filling out this questionnaire.
51	I do not trust the person in question.
52	Although I did not like it, I can accept what happened.
53	I would have been more inclined to forgive if the person in question had apologized sincerely.
54	I have forgiven the person in question, but it better not ever happen again.
55	I have too much pride to forgive the person in question.
56	I still have some difficulty dealing with the person in question.
57	I don't care why the person in question did what he/she did.
58	I could never hurt someone the way that this person hurt me.
59	I am a better person because of what happened.
60	I regret the time and energy I wasted being upset about this.
61	I may have judged the person too harshly.
62	I will always expect the worst from the person in question.
63	I have accepted responsibility for my feelings about it and him/her.
64	This has not been an entirely negative experience.
65	I avoid the person in question as much as I can.
66	I am trying to put this incident behind me.
67	Sometimes I complain to others about what the person in question did to me.
68	I showed compassion to the person in question.
69	I have experienced a change of heart toward him/her.
70	It is obvious to the person in question that I am still upset about what happened

APPENDIX B

Act of Forgiveness Scaling

#	AF	Content	TR	M	SD	I/W1	I/W2	I/W3	IM	I/W4	I/C
01	1	Thinking about it makes me fume	.66	3.08	1.23	.64	.63	.63		.63	.54
02	2	Relationship with person has changed for worse	.83	3.14	1.36	.62	.64	.64		.64	.46
03	--	When I think about it I still feel sad	.45	2.49	1.17	.36	--	--		--	.18
04	3	I can never trust/person again	.75	3.29	1.25	.69	.71	.71		.70	.52
05	--	Even though it hurt/ has helped me to grow	.54	4.01	.95	.25	--	--		--	.20
06	--	I wish this had never happened	.45	2.39	1.32	.27	--	--		--	.18
07	4	Sometimes think about his for no reason	.48	2.76	1.33	.44	.44	.44		.45	.31
08	5	I can't ever fully forgive the person	.77	3.57	1.28	.72	.72	.72		.72	.70
09	6	When I think/I still feel vulnerable	.62	3.10	1.25	.42	.42	.42		.43	.28
10	7	Person/important to me as ever	.67	3.13	1.47	.48	.50	.50		.49	.37
11	8	Even though it hurt/I can relate	.64	2.70	1.30	.66	.54	.54		.54	.41
12	9	I will never forget as long as I live	.51	2.79	1.28	.46	.46	.47		.48	.36
13	10	I hate the person	.59	4.42	.89	.59	.60	.60		.59	.63
14	11	I have respect for the person	.66	3.10	1.28	.65	.67	.67		.67	.49
15	12	I understand why the person did	.70	2.61	1.21	.56	.53	.54		.54	.37
16	13	I still have emotional reaction when I think	.44	2.88	1.18	.44	.45	.45		.46	.34
17	--	Person in question has no respect for me	.73	3.53	1.19	.65	.65	.65	+	--	.48
18	14	When I think/I no longer feel hurt	.49	2.75	1.19	.51	.50	.50		.51	.35
19	15	Would not want again/but I have forgiven person	.67	3.70	1.08	.70	.71	.71		.71	.90
20	16	I have revenge fantasies about the person	.68	4.18	.97	.51	.51	.51		.49	.52
21	17	Relationship with the person has change for better	.60	2.80	1.30	.50	.50	.50		.50	.32
22	18	Sometimes I find myself brooding about it	.55	3.58	1.00	.48	.48	.48		.48	.42
23	--	I feel like hurting him/her the way he/she did	.41	4.06	.99	.52	.51	.51	+	--	.46
24	19	I still hold a grudge about the person	.58	3.60	1.18	.74	.74	.74		.74	.69
25	20	I do not resent the person	.50	3.44	1.15	.65	.64	.64		.64	.56
26	21	I would trust the person again	.71	3.16	1.30	.68	.70	.70		.69	.51
27	--	I would not take revenge/even if I could get away	.39	3.86	1.19	.30	--	--		--	.24
28	22	I have been able to put into perspective	.44	3.67	.93	.56	.52	.52		.52	.43

Act of Forgiveness Scaling

#	AF	Content	TR	M	SD	I/W1	I/W2	I/W3	IM	I/W4	I/C
29	23	Given what happened, I am very suspicious of person	.29	3.21	1.19	.66	.69	.69		.69	.48
30	24	Don't know if I will ever get over it	.71	3.79	1.15	.54	.55	.55		.55	.48
31	--	I have tried to reconcile with the person	.63	3.61	1.10	.38	--	--		--	.34
32	25	I will never forgive the person	.81	4.04	.98	.67	.66	.66		.66	.88
33	26	I genuinely feel I have managed to get past it	.37	3.79	1.12	.61	.59	.58		.59	.51
34	--	I have tried to understand why they did it	.67	3.97	.83	.26	--	--		--	.21
35	--	I have faith in people/including the person	.70	3.40	1.12	.67	.68	.68	+	--	.55
36	27	I don't see how the relationships can be restored	.65	3.34	1.29	.68	.70	.71		.69	.54
37	28	I am bitter about what happened	.67	3.40	1.20	.73	.73	.73		.73	.62
38	--	I am stronger because of what happened	.48	3.99	.88	.19	--	--		--	.20
39	29	There are no hard feeling between me and him/her	.72	3.19	1.24	.72	.73	.73		.73	.58
40	--	I bring the event up in conversations with the person	.46	3.66	1.24	.06	--	--		--	.06
41	30	I will be on my guard with this person	.58	3.03	1.27	.75	.76	.77		.76	.56
42	31	The person will never get a second chance with me	.74	3.68	1.22	.55	.58	.58		.57	.49
43	--	Regarding what happened, what's done is done	.45	3.90	.91	.23	--	--		--	.26
44	32	If I forgive/will invite them to do it again	.43	3.83	1.06	.56	.56	.56		.55	.52
45	33	I rarely think about this	.61	3.10	1.23	.48	.48	.48		.49	.34
46	--	I am Unable to accept an apology from person	.01	3.62	1.16	.29	--	--		--	.28
47	34	I like and respect the person/as much as ever	.74	2.96	1.37	.71	.74	.74		.74	.54
48	35	Only sensible thing/talk it out with person	.51	3.96	.86	.46	.44	.44		.44	.41
49	36	Even though it bothered/I am at peace with person	.69	3.43	1.17	.79	.78	.78		.78	.62
50	37	I had forgotten until this questionnaire	.51	2.49	1.18	.39	.40	.41		.42	.27
51	38	I do not trust person	.66	3.38	1.23	.71	.73	.73		.72	.55
52	39	Although I did not like it, I can accept what happened	.33	3.69	1.00	.47	.44	.43		.44	.36
53	--	I would have forgiven/if person had apologized sincerely	.59	2.65	1.12	.20	--	--		--	.16
54	--	I have forgiven/better not happend again	.62	2.75	1.14	-.28	--	--		--	-.44
55	--	I have too much pride to forgive the person	.15	4.10	.86	.50	.50	.50	+	--	.51

Act of Forgiveness Scaling

#	AF	Content	TR	M	SD	I/W1	I/W2	I/W3	IM	I/W4	I/C
56	40	I still have difficulty dealing with person	.59	3.17	1.31	.72	.75	.75		.76	.57
57	--	I don't care why the person did what he/she did	.45	3.56	1.13	.19	--	--		--	.17
58	--	I could never hurt someone/way person hurt me	.40	2.32	1.08	.30	--	--		--	.14
59	--	I am better person because/what happened	.52	3.74	1.01	.30	--	--		--	.28
60	--	I regret time and energy wasted being upset	.47	3.10	1.13	-.16	--	--		--	-.16
61	--	I may have judged person too harshly	.46	2.34	1.05	.21	--	--		--	.18
62	41	I always expect the worst from person	.67	3.62	1.11	.70	.71	.71		.70	.60
63	--	I have accepted responsibility for my feelings	.49	3.79	.76	.30	--	--		--	.25
64	--	This has not been entirely negative	.58	3.45	1.10	.42	.38	--		--	.33
65	42	I avoid the person	.82	3.64	1.29	.62	.65	.65		.64	.50
66	--	I am trying to put this behind me	.19	3.94	.89	.03	--	--		--	.06
67	43	Sometimes I complain to others/what person did	.47	3.17	1.33	.48	.48	.49		.50	.34
68	44	I showed compassion toward the person	.53	3.38	1.15	.50	.47	.47		.46	.44
69	--	I have had change of heart toward him/her	.35	3.11	1.13	.12	--	--		--	.14
70	45	Obvious to person that I am still upset	.32	3.43	1.24	.68	.68	.68		.68	.56

N = 398, except for Test-retest (TR), where N = 55. I/W = Item-whole correlation with respect to each of four iterations.

+ = Items dropped due to itemmetric considerations. On Item/criteria correlations (IC) all are significant (p. < .01) except #40 & #66. Criteria = AF019.

APPENDIX C

Act of Forgiveness Itemmetric Summary

Item	Content	Cate	%	Eval	Abstc	Ambig	Self	Comp	#Words	Reading Diff
1	Thinking about it makes me fume	1b	80%	1.50	1.17	1.17	1.17	1.17	8	82.4
2	Relationship/changed for worse	1a/b	60%	2.00	1.17	1.33	1.83	1.17	12	74.8
3	Think about it/feel sad	1b	80%	1.50	1.00	1.00	1.00	1.00	9	100.0
4	Can never trust/person again	1b	60%	2.33	1.00	1.00	1.00	1.00	9	75.5
5	It hurt/has helped me to grow	U	40%	2.33	1.67	1.33	1.17	1.00	14	95.9
6	I wish this had never happened	3	60%	1.67	1.00	1.00	1.17	1.17	8	82.4
7	Sometimes think about this for no reason	1b	100%	1.50	1.17	1.17	1.00	1.17	11	57.2
8	Can't ever fully forgive the person	U	40%	2.00	1.00	1.00	1.17	1.00	12	74.8
9	When I think/still feel vulnerable	1b	100%	2.00	1.33	1.33	1.00	1.00	9	75.5
10	Person/important to me as ever	1b	60%	1.85	1.33	1.17	1.17	1.17	11	72.6
11	Even though it hurt/I can relate	1b	60%	2.00	1.33	1.33	1.00	1.00	14	95.9
12	I will never forget as long as I live	U	40%	1.83	1.17	1.17	1.17	1.00	11	88.0
13	I hate the person	1a/b	80%	2.67	1.00	1.17	1.00	1.00	6	87.9
14	I respect the person	1b	60%	2.00	1.00	1.17	1.00	1.00	8	82.4
15	I understand why the person did	1b	60%	2.00	1.17	1.33	1.00	1.00	11	80.3
16	I still have emotional reaction when I think	1b	60%	1.83	1.83	1.33	1.17	1.00	11	64.9
17	Person in question has no respect for me	6	80%	2.33	1.33	1.00	1.83	1.17	11	80.3
18	When I think/I no longer feel hurt	1b	100%	2.00	1.50	1.17	1.17	1.17	15	90.1
19	Would not want again/but have forgiven person	1b	60%	2.00	1.17	1.17	1.17	1.00	16	74.3
20	I have revenge fantasies about the person	1b	60%	1.50	1.33	1.67	1.00	1.00	9	56.7
21	Relationship with the person has changed/better	1a/b	80%	2.00	1.33	1.50	1.17	1.00	12	67.8
22	Sometimes I find myself brooding about it	1b	80%	1.50	1.67	1.50	1.17	1.17	7	66.8
23	I feel like hurting him/her the way he/she did	3	80%	2.17	1.17	1.17	1.17	1.17	11	95.7
24	I still hold a grudge about the person	1b	60%	2.33	1.00	1.00	1.17	1.00	10	86.7
25	I do not resent the person	1b	80%	2.17	1.17	1.17	1.00	1.00	8	82.4
26	I would trust the person again	U	0%	2.83	1.00	1.17	1.00	1.00	8	82.4
27	I would not take revenge/even if get away	U	40%	2.67	1.17	1.33	1.00	1.17	21	72.7
28	I have been able/put in perspective	1b	80%	2.17	1.67	1.33	1.17	1.00	10	69.8
29	Given what happened/very suspicious of person	1b	100%	1.67	1.17	1.33	1.17	1.17	12	60.7
30	Don't know if I will ever get over it	1b	60%	1.50	1.83	1.33	1.00	1.00	10	95.2

Act of Forgiveness Itemmetric Summary

Item	Content	Cate	%	Eval	Abstc	Ambig	Self	Comp	#Words	Reading Diff
31	Have tried to reconcile with person	1a	60%	2.17	1.00	1.17	1.17	1.17	10	78.2
32	I will never forgive the person	5	60%	2.83	1.00	1.00	1.00	1.00	11	72.6
33	I have managed to get past it	1b	60%	2.17	1.67	1.50	1.00	1.00	12	81.8
34	Tried to understand why they did it	1b	80%	1.67	1.17	1.17	1.33	1.00	14	84.4
35	Faith in people/including the person	2	80%	2.50	1.17	1.33	1.00	1.17	16	84.8
36	Don't see how/relationship can be restored	U	40%	1.50	1.17	1.33	1.00	1.17	15	67.5
37	I am bitter	2	60%	2.17	1.00	1.33	1.00	1.00	6	73.8
38	I am stronger because of what happened	2	80%	1.83	1.33	1.17	1.00	1.00	7	78.8
39	There are not hard feelings	1a/b	60%	1.50	1.33	1.33	1.33	1.00	12	74.8
40	I bring the event up in conversations	1a	80%	1.67	1.00	1.00	1.00	1.00	10	69.7
41	I will be on my guard	1b	60%	1.50	1.33	1.33	1.00	1.00	12	100.0
42	Person will never get a second chance with me	U	40%	1.67	1.67	1.67	1.33	1.00	12	81.8
43	What's done is done	U	40%	2.00	1.17	1.17	1.67	1.00	7	78.8
44	If I forgive/will invite them to do it again	5	60%	1..83	1.17	1.33	1.33	1.00	17	80.0
45	I rarely think about this	1b	100%	1.33	1.00	1.00	1.00	1.00	6	73.8
46	I am unable to accept an apology from person	U	0%	1.50	1.33	1.33	1.00	1.00	11	57.2
47	Like and respect/as much as ever	1b	60%	1.83	1.00	1.33	2.83	1.00	12	81.8
48	Only sensible thing/talk it out with person	5	100%	2.17	1.33	1.17	1.83	1.17	25	69.7
49	Even though it bothered/I am at peace with person	U	40%	1.50	1.33	1.33	1.00	1.17	20	80.7
50	I had forgotten until this questionnaire	U	40%	1.33	1.00	1.17	1.00	1.00	12	53.6
51	I do not trust person	1b	60%	2.33	1.00	1.00	1.00	1.00	8	92.9
52	I did not like it but I can accept what happened	1a/b	60%	1.50	1.33	1.00	1.00	1.00	11	87.9
53	I would have forgiven/if person had apologized	U	40%	2.00	1.67	1.33	1.17	1.67	16	58.4
54	I have forgiven/better not happen again	5	60%	2.00	1.33	1.00	1.00	1.50	14	59.6
55	I have too much pride to forgive the person	2	100%	1.67	1.17	1.17	1.17	1.00	11	87.9
56	I still have difficulty dealing with person	1b	60%	1.50	1.33	1.33	1.00	1.17	11	64.9
57	I don't care why the person did what he/she did	1b	80%	1.83	1.17	1.33	1.17	1.00	12	96.0
58	I could never hurt someone/way person hurt me	U	40%	2.67	1.17	1.00	1.00	1.00	12	83.0
59	I am better person because/what happened	2	60%	2.00	1.67	1.33	1.00	1.00	9	75.5
60	I regret time and energy wasted being upset	1b	60%	2.33	1.00	1.00	1.00	1.00	12	67.7

Act of Forgiveness Itemmetric Summary

Item	Content	Cate	%	Eval	Abstc	Ambig	Self	Comp	#Words	Reading Diff
61	I may have judged person too harshly	1b	60%	1.50	1.17	1.17	1.00	1.17	8	92.9
62	I always expect the worst from person	U	40%	1.67	1.33	1.33	1.00	1.00	11	80.3
63	I have accepted responsibility for my feelings	1b	60%	1.50	1.33	1.17	1.00	1.33	11	46.6
64	This has not been entirely negative	5	60%	2.00	1.17	1.17	1.33	1.00	8	50.6
65	I avoid the person	1a	80%	1.33	1.00	1.17	1.17	1.00	11	87.9
66	I am trying to put this behind me	1b	60%	1.50	1.50	1.17	1.00	1.00	9	84.9
67	Sometimes I complain to others/what person did	1a	80%	1.33	1.33	1.17	1.17	1.00	14	65.7
68	I showed compassion toward the person	1a	80%	1.67	1.67	1.33	1.00	1.00	8	71.8
69	I have had change of heart toward him/her	1b	80%	1.83	1.83	1.00	1.00	1.00	9	86.7
70	Obvious to person that I am still upset	1a	80%	1.33	1.33	1.00	1.17	1.17	16	68.9

Categories: 1a = overt reactions, 1b = covert reactions, 2 = trait, 3 = wishes, 4 = biographical, 5 = attitude, 6 = others' reactions, U = unclassified.

% = Percentage of agreement among 5 raters. Eval = Evaluation (i.e., social desirability), Abstc = Abstractness, Ambig = Ambiguity, Comp = Comprehensibility. Lower scores indicate better quality (e.g., lower social desirability and greater comprehensibility).

APPENDIX D

Narrative Coding Guide

I. Type of Betrayal

1 = ended the relationship/left/abandoned
2 = cheated (romantic relationship)
3 = cheated with friend or family member
4 = became involved with ex-romantic partner
5 = advised my/other's partner to end relationship
6 = became sexually involved with my partner (or attempted to)
7 = withheld affection/distanced themselves
8 = broke promise
9 = revealed a confidence
10 = lied
11 = didn't tell something important
12 = took advantage of kindness/good will
13 = didn't respect feelings/wishes about the situation
14 = broke date/cancelled plans/didn't call
15 = jealous
16 = failed to meet responsibility
17 = disagreement
18 = cheated on test
19 = stole from the person/broke into house
20 = threatened/hurt (physically or mentally)
21 = turned against/didn't stand up for person
22 = embarrassed
23 = told bad things about person/spread rumors/gossiped
24 = tricked
25 = personality change
26 = chose another over the person
27 = sexually took advantage of person (raped)
28 = set up my/other's partner with someone else
29 = falsely accused
30 = alienated friendship circle from person
31 = racial discrimination
32 = constant manipulation
33 = sexual harassment
34 = invaded privacy
35 = insulted
36 = broken trust
37 = stole job
38 = didn't try to reconcile the relationship
39 = criticized
40 = other

Recode Instructions for Betrayal Type

1 = Infidelity = 2, 3, and 4
2 = Rejection/abandonment = 1, 7, 14, 21, 26, 30, and 38
3 = Critical/confrontational = 15, 17, 22, 23, 32, 33, 35, and 39
4 = Abuse = 20 and 27
5 = Disappointment/disrespect = 5, 6, 8, 9, 10, 11, 12, 13, 16, 18, 19, 24, 25, 28, 29, 31, 34, 36, and 37.
System missing = 40

II. Type of Relationship (between the victim and the perpetrator)

1 = boyfriend/girlfriend
2 = husband/wife
3 = friend
4 = roommate
5 = co-worker
6 = boss/coach/powerful other
7 = mother
8 = father
9 = sister
10 = brother
11 = aunt
12 = uncle
13 = grandmother
14 = grandfather
15 = cousin
16 = stepmother
17 = stepfather
18 = niece
19 = nephew
20 = son
21 = daughter
22 = other family member
23 = religious figure (priest, preacher, pastor)
24 = acquaintance
25 = ex-boyfriend/ex-girlfriend
26 = best friend
27 = fiancé
28 = ex-spouse
29 = God/other deity
30 = 'Other'

Recode Instruction for Relationship Type

1 = Romantic = 1, 2, 25, 27, and 28
2 = Parent = 7 and 8
3 = Other Relative = 9 to 22
4 = Friend/Acquaintance = 3, 4, 5, 24, and 26
5 = Other = 6, 23, 29, and 30

III. Relationship Change (How did the betrayal affect the relationship?)

1 = no change
2 = broke up/ended relationship/don't speak/moved from area
3 = distant/never got close again
4 = lowered respect or trust for the perpetrator/ no longer confide in
5 = hatred/didn't like
6 = hard for awhile, but ok now
7 = friends now
8 = try harder/closer/stronger relationship
9 = no answer/answer unclear
10 = weaker/not as strong, but still involved in relationship
11 = allowed betrayal to continue

Recode Instructions for Relationship Change

0 = no change/eventually the same = 1, 6, 7, and 11
1 = got worse = 2, 3, 4, 5, and 10
2 = improved the relationship = 8

IV. Attributions (Why did the betrayal occur?)

1 = alcohol/drugs
2 = chose another opportunity
3 = indirect retaliation
4 = resources
5 = affiliation (wrong crowd)
6 = self-protection (mental or physical)
7 = conflict avoidance
8 = protection of someone else
9 = manipulation (not retaliation)
10 = obligation avoidance
11 = joke
12 = temptation/excitement/curious
13 = direct retaliation (revenge)
14 = lack of communication
15 = promiscuity
16 = personality characteristics/change in behavior
17 = hormones

18 = stress
19 = didn't return to college
20 = unhappy with marriage/relationship
21 = mid-life crisis
22 = racism
23 = felt incident was "normal" behavior
24 = not giving and/growing apart
25 = don't know
26 = I let it happen
27 = wasn't getting attention
28 = jealous
29 = low sel-esteem/insecure
30 = unaware of consequences
31 = to inflict pain or hurt
32 = spending too much time together
33 = didn't care about person or respect person/inconsistent
34 = selfish/immature
35 = not fulfilling needs/took victim (person) for granted
36 = got too close too fast/got scared
37 = mental problems
38 = unresolved feelings/resentment
39 = need space/wanted to break up
40 = to gain acceptance
41 = forgetfulness
42 = to prove something to himself/herself
43 = didn't think I would find out
99 = no answer/unclear

Recode Instructions for Why Betrayal Occurred

1 = Internal Causes = all but the ones below
2 = External Causes = 4, 5, 14, 19, 26, 27, and 32
System Missing = 24, 25, and 99

V. Effect on Victim (How did the betrayal make the participant (victim) feel?)

0 = no effect
1 = slight effect
2 = moderate effect
3 = great effect
System missing = no response or indication from participant is unclear

VI. How long ago did the betrayal occur? (in number of months)

"###" = number of months up to 999.
"001" = 1 month or less
System Missing = no response or indication from the participant is unclear

VII. Victim Change (How has the betrayal changed the victim as a person?)

1 = made them suspicious or non-trusting
2 = changed their personality
3 = made them more likely to betray another person (in the future)
4 = made them less likely to betray another person (in the future)
5 = less closeness in the relationship (distanced themselves from other)
6 = bitterness/cold/resentment (toward the other)
7 = realized that no one is perfect
8 = difficulty in developing other relationships
9 = sense of loss (still longs for other)
10 = feel "wiser" now/learned a lesson
11 = past appears different now
12 = loss of self-esteem (feel bad about themselves)
13 = more independent
14 = more insecure
15 = toughed up
16 = more attentive to actions/words now
17 = more cautious about new relationships
System missing = no response/unclear

Recode Instructions for Effect on Victim

1 = Negative = 1, 3, 5, 6, 8, 9, 12, 14, 15, and 17
2 = Positive = 4, 7, 10, 13, and 16
System Missing = 2, and 11

APPENDIX E

FORGIVENESS INTERVIEW PROTOCOL

SURVEY DESCRIPTION AND INFORMED CONSENT

The purpose of the following interview is to learn more about how relationships are affected by betrayal. In addition to receiving extra course credit, we hope that your participation in the interview will be significant or meaningful to you in some way.

If you choose to participate in the following interview, you will be asked to discuss an incident where someone betrayed you. In addition, you will be asked more specific questions about your behavior and feelings toward the person after the betrayal. The entire interview will take approximately 20-30 minutes to complete.

Q1 Do you understand the purpose of the study as I have described it to you?
1 YES
0 NO → **"What are you unclear about?"**

I want to emphasize that your participation is completely voluntary. Furthermore, you may end the interview at any time and you may skip over any questions that you prefer not to answer. Discussing a betrayal may be painful and you might find yourself getting upset during the interview. This is perfectly acceptable, and I want to make sure that you are comfortable. Therefore, if you need to stop the interview briefly or altogether, feel free to do so.

Q2 Are you still interested in participating in the study?
1 YES → **[Hand them the informed consent to read and sign.]**
0 NO → **"Thank you for your time." [Give extra credit]**

Q3 Are you ready to begin the interview?

INTERPERSONAL BETRAYAL DESCRIPTION

Recently, you filled out a survey that asked you to describe an event in your life when someone important to you did or said something that betrayed you or hurt your feelings deeply. You also indicated that you were willing to be interviewed in more detail about this hurtful event. During this interview I will be asking you to tell me more about this particular betrayal.

Q4 Do you remember what you wrote about on that survey?
1 YES
0 NO → **[Hand the participant the narrative that he/she wrote and let them read it.]**

Q5 Was the person who betrayed you a man or a woman?

Q6 What was your relationship with this person at the time of the betrayal? For example, was this person a parent, romantic partner, sister, friend, etc.

Q7 What is your relationship with this person now?

[Only ask this question if the relationship was voluntary (e.g., friend, romantic) and phrase it appropriately (e.g., "Are you still friends, dating, etc."]

Q8 How long were you in this relationship before the betrayal occurred. Be as specific as you can.

Q9 When did the betrayal occur? Again, try to be as specific as you can.

Now, I would like to get your perspective on what happened.

Q10 First, I would like for you to describe what happened in your own words. You can tell me anything that you feel would help me to understand what happened.

[Allow participants to speak as long as they need to, but prompt them for more details if they are vague. If the participant seems to be repeating themselves and more than 10 minutes has passed begin to signal (e.g., nonverbal cues) that this question has been answered sufficiently.]

Next, I would like to ask you some specific questions about the betrayal and your relationship with the person who betrayed you.

[Some of these questions could be skipped altogether if they were clearly answered in the description just given.]

Q11 Does (he/she) know that they betrayed you?

Q12 Does (he/she) know that you are aware of the betrayal?

Q13 How did you become aware of the betrayal (e.g., offender or other)?

Q14 Had this person done anything like this to you before?

Q15 In your opinion, did this person hurt you on purpose or intend to hurt you?

Q16 Why do you think the person betrayed you?

INTENTIONALITY AND SEVERITY SCALES

At this time, I am going to give you a card with a scale from 1-5, which I want you to use to answer the next set of questions. ***[Hand participant the card]*** *For each statement that I read to you please use the following scale to respond. Answering a "1" indicates that you do not believe the statement reflects the nature of the betrayal, while answering a "5" indicates that you completely believe the statement as it refers to the nature of the betrayal.*

Do not believe 1 2 3 4 5 Completely believe

Q17 The betrayal was caused by you **(point or indicate that this refers to the participant)**?

Q18 The betrayal was caused by the other person?

Q19 The betrayal was caused by a situation beyond anyone's control?

[Take back the card and thank the participant for answering that series of questions.]

Please use this scale to answer the next set of questions ***[Hand participant the card].*** *Answering a "1" indicates that you believe this is an extremely severe offense, while answering a "5" indicates that you believe this is a rather minor offense.*

Minor offense 1 2 3 4 5 Extremely severe

Q20 As you think about the specific actions of the other person, rate the severity of what this person did.

Q21 Please rate this particular betrayal as it compares to other hurtful events in your life. (For example, is it more serious than most of the offenses you have experienced or is it relatively minor in comparison?)

Q22 Think about how other people might rate the severity of the person's actions and indicate what rating the average person might give this betrayal.

RETALIATION, EXPLANATION, AND FORGIVENESS

People respond in a variety of ways toward persons who have betrayed them. The next set of questions that I will ask you will be about what happened after the betrayal.

Q23 Are you ready to continue?
1 YES
0 NO → **[Give participant the chance to take a break if necessary.]**

Q24 Did you ever attempt to retaliate or "get even" in any way and if not, did you ever think about it?
0 NO
1 NO BUT THOUGHT ABOUT IT.
2 YES → Please describe how you tried to "get even".

Q25 Did the person give you any reasons for why they betrayed you?
0 NO
1 YES → Please describe the reasons.

Q26 Did (he/she) ever apologize?
0 NO
1 YES → Q27 How long after the betrayal did (he/she) apologize?

Q28 Do you ever mention what happened (i.e., the betrayal) to the person who betrayed you?
0 NO
1 YES → Q29 How frequently do you mention the betrayal?

Q30 Did the person seek your forgiveness?
0 NO
1 YES → Please describe how the person sought your forgiveness.

Q31 Did you ever tell (him/her) that you forgave (him/her)?
1 YES → Q32 How long after the betrayal did you tell (him/her) you forgave (him/her)?

0 NO **[Skip to Q33]**

→ Q33 Even though you never told the person your forgave (him/her), did you ever privately forgive the person?
0 NO → **Skip to question 36.**

1 YES → Q34 How long after the betrayal did you finally forgive the person?

EMOTIONAL INDICES

Q35 Did forgiving the person change your feelings toward the the person who betrayed you?
0 NO → So, your feelings stayed the same? **[Get confirmation.]**
1 YES → Please describe.

"Now, I want you to think about how you feel right now concerning this betrayal and the person who hurt you. **[Hand over clipboard with the state anxiety scale and a pen.]** Please use this form to help you describe your feelings in response to this question.

Q36 When you think about the betrayal now what emotions do you feel?

RELATIONSHIP QUALITY

Q37 Do you think the betrayal changed you in any way?
0 NO
1 YES → Please describe in what way you changed.

Q38 Do you think the relationship changed as a result of the betrayal?
0 NO
1 YES → Please describe how the relationship changed.

"Now, I would like for you to use the following scale when responding to the set of statements that I will give to you to read. ***[Hand participant the form with the following statements].*** *Answering a one indicates that you* ***strongly disagree*** *with the statement, while answering a five indicates that you* ***strongly agree****. Please think about the person who betrayed you when responding to the statements.*

Strongly Disagree 1 2 3 4 5 Strongly Agree

Q39 I am satisfied with the way I acted toward (him/her).

Q40 I still feel resentment toward (him/her).

Q41 I am angry with (him/her).

Q42 I tried to make peace with (him/her).

Q43 I avoid speaking or interacting with (him/her).

Q44 I am less trusting of people in general because of this betrayal.

Q45 I am satisfied with the overall quality of this relationship.

Q46 I can trust (him/her) as much now as I could before the betrayal.

Q47 I am not as emotionally close to (him/her) as I was before the betrayal.

Q48 I feel affection for (him/her).

[Take back form and thank participant for answering that series of questions.]

FOLLOWUP DEBRIEFING

So far, I have asked you about specific aspects of betrayal. However, there may be other important consequences of betrayal that you were not asked to describe.

Q49 Is there anything else that you would like to say or tell me?
1 YES
0 NO

Thank you again for your participation. At this time I would be happy to answer any questions you might have about the study.

Q50 Do you have any questions?
1 YES
0 NO

Again, thank you for participating.

[Give them their extra credit]

VITA

Joy Drinnon was born on December 27, 1973, in Knoxville, Tennessee. She is married to Shannon Drinnon, and they have a son, Collin. She received a Bachelor of Social Science degree in Psychology from East Tennessee State University in 1995. She graduated from The University of Tennessee, Knoxville in 1998 with a Master of Arts degree in Experimental Psychology. She received the Doctor of Philosophy degree, with a major in Psychology, in December 2000 also at the University of Tennessee. She is presently an assistant professor at Milligan College in east Tennessee.