

Maladaptive Correlates of the Failure to Forgive Self and Others: Further Evidence for a Two-Component Model of Forgiveness

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Maladaptive Correlates of the Failure to Forgive Self and Others: Further Evidence for a Two-Component Model of Forgiveness

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In a sample composed of 162 young adults, we examined the generalizability of an orthogonal, 2-component model of forgiveness previously reported by Ross, Kendall, Matters, Rye, and Wrobel (2004). Furthermore, we examined the relationship of these two components with maladaptive personality characteristics as measured by the Schedule for Nonadaptive and Adaptive Personality (SNAP; Clark, 1993), with an emphasis on Five-factor model markers of personality. Using multiple measures of forgiveness, principal components analysis supported a 2-component model representing self-forgiveness and other forgiveness. Despite the independence of self-forgiveness and other forgiveness, zero order correlations with SNAP scales supported convergent more than discriminant validity. In contrast, hierarchical multiple regression analyses emphasized the discriminant validity of self-forgiveness and other forgiveness. Among indexes of Neuroticism, Extraversion, and Agreeableness, Negative Temperament (+) was the sole predictor of self-forgiveness. In contrast, Positive Temperament (+), Aggression (–), and Histrionic PD (–) were most associated with other forgiveness. Overall, these findings support the validity of these factors and highlight the importance of self-forgiveness in clinical assessment.

Forgiveness is a construct that has been the focus of considerable research over the past decade, most of which has centered on intervention and treatment (Al-Mabuk & Downs, 1996; Cerney, 1989; Human Development Study Group, 1991; Worthington & DiBlasio, 1990). Although theorists have been careful to delineate forgiveness from other, related constructs such as reconciliation, pardon, and empathy (Enright & the Human Development Study Group, 1994; Human Development Study Group, 1991; McCullough, Worthington, & Rachal, 1997), the exact definition of what constitutes *forgiveness* and how to measure it remain open issues. For instance, some have suggested that the absence of negative affect is necessary and largely sufficient for forgiveness (e.g., the Human Development Study Group, 1991); others felt this is incomplete and also emphasized the experience of positive affect toward the transgressor as a critical part of complete forgiveness (Edwards et al., 2002). Despite the controversy, a number of investigations have provided empirical support for forgiveness as a psychological

construct (Freedman & Enright, 1996; McCullough, Rye, & Pargamant, 2002; Neto & Mullet, 2004), even if the nature and consensual operationalization of this construct remains unresolved. In light of such controversies, this study represents a parsing of the forgiveness construct into empirically derived components consistent with recent findings by Ross, Kendall, Matters, Rye, and Wrobel (2004). In addition to replicating earlier findings for two components, self-forgiveness and other forgiveness, we give further evidence for the criterion validity of these constructs in the context of adaptive and maladaptive characteristics as measured by the Schedule for Nonadaptive and Adaptive Personality (SNAP; Clark, 1993), with an emphasis on the Five-factor model (FFM; Costa & McCrae, 1992) markers of trait disposition.

Recently, investigators have examined forgiveness in terms of two distinct facets. Neto and Mullet (2004) emphasized the “independence” of what they referred to as the “double aspect of forgiveness” (p. 15). Neto and Mullet separated intraindividual facets from interpersonal features of

forgiveness. In support of Neto and Mullet's distinction, they reported that intrapersonal or strictly self-referential aspects (e.g., self-esteem and loneliness) were unrelated or negatively related, whereas interpersonal aspects (e.g., shyness, embarrassment, and interpersonal dependence) were positively related to forgiveness of others. Even earlier, Mauger et al. (1992) focused on the differences in self-forgiveness and other forgiveness as representing two primary constructs within the broader rubric of forgiveness. Although this distinction has rarely been the focus of forgiveness studies, it has sparked original research in the area. Inspired by Mauger et al.'s distinction, Maltby, Macaskill, and Day (2001) suggested that lack of self-forgiveness reflects an intropunitive style, whereas lack of other forgiveness represents an extrapunitive style. An *intropunitive* style is one in which the person often sees himself or herself as damaged, unworthy of acceptance, and with a tendency to internalize blame. In contrast, an *extrapunitive* style is one in which the person seeks revenge, holds grudges, and blames others for apparent transgressions. Items on the Mauger et al. Self-Forgiveness Scale reflect this content—guilt proneness, regret, self-deprecation, and otherwise internalization of blame. Those on the Mauger et al. Other-Forgiveness Scale similarly reflect extrapunitive content—a tendency toward vengeance, criticism, and externalization of blame. Conceptually, these constructs seem to represent forgiveness-specific forms of internality and externality of blame.

In a recent attempt to identify key components of forgiveness, Ross et al. (2004) found evidence for a two-component model representing largely independent dimensions reflecting self-forgiveness and other forgiveness. Ross et al. (2004) examined the latent structure of a set of forgiveness self-report scales. The Forgiveness Scale (FS; Rye, 2001); Forgiveness Likelihood (Rye et al., 2001), Heartland Other-Forgiveness (AUTHORS, YEAR), Mauger Other-Forgiveness Scales; and Transgression Narrative Test of Forgivingness (TNTF; Berry, Worthington, Parrott, O'Connor, & Wade, 2001) loaded on a single factor representing other forgiveness. Similarly, the Heartland Self-Forgiveness and Situational Forgiveness Scales (Edwards et al., 2002) and the Mauger et al. (1992) Self-Forgiveness scale comprised a second factor representing self-forgiveness. Similar to results for the Mauger Self-Forgiveness and Other-Forgiveness scales alone (see Leach & Lark, 2004; Mauger et al., 1992), Ross et al. (2004) found that these two components were only modestly related to each other. When these components were examined in the context of the FFM of personality, the results highlighted rather stark differences between the two dimensions. Specifically, Neuroticism (but not Agreeableness) negatively predicted self-forgiveness, whereas Agreeableness (but not Neuroticism) positively predicted other forgiveness.

Highly similar to Ross et al. (2004), Leach and Lark (2004) found a similar pattern of results when examining self-forgiveness and other forgiveness vis-à-vis the FFM. Neu-

roticism was the best predictor of self-forgiveness, whereas Agreeableness was the best predictor of other forgiveness using only the Mauger et al. (1992) subscales to measure forgiveness components (Leach & Lark, 2004). According to Leach and Lark, they found evidence for a "double dissociation" (see Teuber, 1955, for a review of this phenomenon in construct measurement) between self-forgiveness and other forgiveness in the FFM. Neuroticism (but not Agreeableness) was negatively associated with self-forgiveness, whereas Agreeableness (but not Neuroticism) was positively associated with other forgiveness. Taken together, findings by Leach and Lark and Ross et al. (2004) provide robust evidence for a largely orthogonal model of self-forgiveness and other forgiveness and highlight differences between these constructs in the FFM. In addition, Ross et al. (2004) found some evidence for convergence of self-forgiveness and other forgiveness in the FFM at the facet level of analysis. Both were positively related to Extraversion facets of warmth and positive emotions as well as the Agreeableness facet of trust and negatively related to the Conscientiousness facet of order.

In this study, we examined the generalizability of this two-component model of forgiveness reported by Ross et al. (2004). We used the SNAP (Clark, 1993) to examine maladaptive styles and characteristics associated with the failure to forgive self and others, with an emphasis on FFM markers in the SNAP. We believed that using a different measure of traits relevant to the FFM would increase the generalizability of previous results reported by Ross et al. (2004). We expected to find (a) two components of forgiveness reflecting the constructs of self-forgiveness and other forgiveness, (b) convergent and discriminant validity for these components in the context of maladaptive personality characteristics, and (c) further evidence for an extrapunitive style in difficulties with other forgiveness and an intropunitive style in difficulties with self-forgiveness (Maltby et al., 2001). In Ross et al. (2004), self-forgiveness was most highly associated with Neuroticism, whereas other forgiveness was most associated with Agreeableness. In this study, we employed indexes from the SNAP to determine the generalizability of these findings across instruments. Although the SNAP Trait and Temperament scales (TNT) were developed to measure a three-factor model of personality (e.g., Negative Temperament, Positive Temperament, and Disinhibition), these scales can be used as markers of FFM traits (Clark, 1993). For instance, factor analyses of the TNT scales with the NEO–Personality Five-factor Inventory domain scales suggest that manipulateness, aggression, eccentric perceptions, and entitlement are markers of Agreeableness.

Similarly, dependency, self-harm, and mistrust are reliable TNT indicators of Neuroticism. Consequently, we hypothesized that indicators of low Agreeableness and externalization (e.g., aggression and manipulateness) would best predict other forgiveness, whereas indicators of Neuroticism (e.g., negative temperament, self-harm, and dependency) would best predict self-forgiveness. In addition, we

hypothesized that indicators of Extraversion (e.g., high positive temperament, exhibitionism, and detachment) would demonstrate modest to moderate relationships with both forgiveness components. In light of findings for high Agreeableness in other forgiveness and low Neuroticism in self-forgiveness, we hypothesized that the latter would be more closely related to the anxious and internalizing Cluster C Personality Disorder (PD) scales (e.g., Avoidant, Dependent), whereas other forgiveness should be more related to the erratic and externalizing Cluster B (e.g., Antisocial, Borderline, Narcissistic). Given the use of forgiveness in the treatment of certain problems, such as recovery from physical abuse, we believe that it may be useful to identify those clinically relevant qualities that may be most relevant to the use of forgiveness in therapy. To this end, an examination of the Axis II disorder symptoms most closely associated with different forgiveness components may advance the matching of forgiveness therapies to those patients who are likely to have the greatest obstacles to forgiving.

METHOD

Participants

We recruited 162 undergraduate students enrolled in Psychology courses at two universities who were given extra credit for their participation. We had screened all protocols for response invalidity. We had eliminated 5 participants for extreme scores (>3 *SDs*) on the Variable Response Inconsistency ($n = 2$) and Deviant Response scales ($n = 4$) of the SNAP. The mean age for the group was 19.6 years and ranged from 18 to 22 years; 69.3% of the participants were women, and 85.9% were White. Participants also indicated the following religious affiliations: Protestant (44.2%), Catholic (35.6%), and Other (22.2%). Participants rated their level of activity in organized religious activities on a 5-point Likert scale ranging from 1 (*not at all active*) to 5 (*extremely active*); the mean was 2.37 ($SD = 0.94$), which indicated that most were “rarely active.”

Measures

Heartland Forgiveness Scale (HFS). This scale measures forgiveness of self, others, and situations as separate constructs (Edwards et al., 2002) and is comprised of 18 true–false statements (6 for each subscale). The Self-Forgiveness subscale has items such as “It is really hard to accept myself after I have messed up.” In contrast, a typical item for Other-Forgiveness scale is “When someone disappoints me, I can eventually move past it.” On a 3-week follow-up, test–retest reliability for the total scale was .83 and ranged from .72 to .77 for subscales; Cronbach’s alphas ranged between .84 and .87 for the total scale score and .71 to .83 for the subscales (Thompson & Snyder, 2003). We only

examined Self-Forgiveness and Other-Forgiveness subscales in this study.

Mauger et al. (1992) Forgiveness Scale. This scale measures forgiveness of self and forgiveness of others. The Forgiveness of Self scale consists of 15 true/false statements including “I often feel like I have failed to live the right kind of life.” For the Forgiveness of Self scale, test–retest reliability over 1 week has been reported at .67, with a Cronbach’s alpha of .82 (Mauger et al., 1992). The Forgiveness of Others scale is composed of 15 true/false statements including “If another person hurts you first, it is all right to get back at him or her.” Test–retest reliability over 1 week has been reported at .94, with a Cronbach’s alpha of .79 (Mauger et al., 1992).

Forgiveness Likelihood Scale (FLS). This scale assesses participants’ likelihood to forgive others across various situations (Rye et al., 2001). It contains 10 brief descriptions of hypothetical offenses using a Likert-type format, with responses ranging from 1 (*not at all likely*) to 5 (*extremely likely*). A sample question is the following: “A friend breaks a promise to you and tells other people about your situation. What is the likelihood that you would choose to forgive your friend?” Rye et al. (2001) reported a test–retest reliability of .81 over a 2-week interval and Cronbach’s alpha of .85.

FS. This scale measures forgiveness as defined by both the absence of negative affect, cognition, and behavior and the presence of positive affect, cognition, and behavior (Rye et al., 2001). Participants are asked to refer to a person who has wronged them and answer 15 Likert-type items, with responses varying from 1 (*strongly disagree*) to 5 (*strongly agree*). Sample items include “I can’t stop thinking about how I was wronged by this person.” Rye et al. (2001) reported a test–retest correlation of .80 over a 2-week interval and Cronbach’s alpha of .87.

TNTF. Similar to the FLS, this scale was also developed to measure forgiveness as a cross-situational disposition (Berry et al., 2001). It consists of five hypothetical narratives in which participants are to indicate how likely they would be to forgive, also using a Likert-type scale ranging from 1 (*definitely not forgive*) to 5 (*definitely forgive*). Sample scenarios include the following: “A friend asks to borrow a paper you have written for class to get an idea of what to write about, you agree. They simply copy your paper and turn it in to the professor. The professor accuses you both of cheating. How likely are you to forgive the person?” Cronbach’s alpha has been reported at .73 and the test–retest reliability for the scale at .95 over an 8-week interval (Berry et al., 2001).

SNAP. The SNAP is a 375-item, true–false response inventory designed to measure various traits deemed relevant to the description of PDs. It includes 5 Validity scales, 13

Diagnostic scales for PD based on the *Diagnostic and Statistical Manual of Mental Disorders* (third edition, revised; American Psychiatric Association, 1987) PD criteria, and 15 TNT scales deemed clinically relevant to personality assessment. The TNT scales were developed to comprehensively assess trait characteristics underlying personality pathology. In contrast to the FFM, factor analyses of the TNT scales repeatedly revealed a three-factor solution marked by Negative Temperament, Positive Temperament, or Disinhibition (Clark, 1993). Other SNAP TNT scales load on one or more of the three factors. For instance, Impulsivity, Propriety, and Workaholism load on the Disinhibition factor (Clark, 1993). Test-retest reliability is available for the TNT scales. Median *r*s in college students is .81 for a 1-month and .79 for a 2-month interval. A 1-week interval between testings yielded an median *r* of .81 in inpatient psychiatric patients. Median coefficient alphas have been reported at .76 to .84 for the TNT scales and .72 to .82 for the PD scales (Clark, 1993). In this study, coefficient alphas for the PD scales ranged from .83 for Paranoid to .52 for Obsessive-Compulsive (Median [Mdn] $\alpha = .77$). Similarly, coefficient alphas for the TNT scales ranged from .91 for Negative Temperament to .69 for Disinhibition (nonoverlapping scale; Mdn $\alpha = .82$). Although the SNAP allows for determining the presence of a particular PD using a categorical scoring profile, we only used dimensional scoring of PD scales in this study.

Procedure

Students anonymously completed the previously mentioned measures in small-group sessions of 5 to 20 persons. After completing a demographics sheet, we asked participants to think about a time when someone wronged them and write a brief paragraph describing the upset. This instructional method was necessary to complete the FS (Rye, 2001), which requires participants to respond to a particular transgressor. Participants also rated their opinion of the severity of the offense on a scale from 1 (*Not at all severe*) to 4 (*Very severe*). The mean of all participants was 2.84 (*SD* = .90), which indicated recall of a moderately severe wrongdoing. Participants then completed forgiveness measures followed by the SNAP. Study protocol was approved by a local institutional review board and adhered to American Psychological Association guidelines for the ethical treatment of human participants in research.

Data Analysis

To confirm the factor structure reported in Ross et al. (2004), we performed a principal components analysis (PCA) of forgiveness scales followed by oblique rotation, with factor loadings greater than .5 considered notable to best approximate simple structure (Thurstone, 1940). For primary analyses, we standardized forgiveness scales that loaded notably on

a given factor using a *z* transformation and summed them to yield factor scores. We then correlated these factors with PD and TNT scales of the SNAP to determine their relationships to maladaptive personality dimensions. We also entered the SNAP PD scales into multiple regressions designed to predict self-forgiveness and other-forgiveness factor scores. Finally, we used hierarchical multiple regression to determine the replicability of the findings for the differential relationship of low Neuroticism and Agreeableness, as measured by the SNAP PD and TNT scales, with self-forgiveness and other forgiveness.

RESULTS

Means, standard deviations, and Cronbach's alphas for forgiveness scales are reported in Table 1. To replicate the two-factor structure of self-forgiveness and other forgiveness reported by Ross et al. (2004), we performed a PCA of forgiveness scales. Examination of the scree plot and eigenvalues clearly indicated a two-component solution. The first factor had an eigenvalue of 3.13 and accounted for 44.8% of the variance. The second factor had an eigenvalue of 1.52 and accounted for an additional 21.6% of the variance. Third and fourth components had eigenvalues of .84 and .51, respectively. Although the correlation between the first and second components was significant, the association was modest (*r* = .21) as found by Ross et al. (2004). Nonetheless, we rotated components using an oblique method (promax) consistent with the Ross et al. (2004) study. The resultant factor loadings for forgiveness variables are presented in Table 2. All forgiveness scales loaded on their predicted factors. Consistent with Ross et al. (2004), the following measures loaded on Factor 1: Mauger et al. (1992) Other-Forgiveness scale, Heartland Other-Forgiveness scale, FS, FLS, and the TNTF. Only the Mauger et al. (1992) Self-Forgiveness and Heart-

TABLE 1
Means, Standard Deviations, and Alpha
Estimates of Reliability for Forgiveness
Measures

<i>Scale</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's α</i>
Heartland Forgiveness Scale (FS)	91.3	13.6	.85
Heartland FS: Self	30.0	5.8	.78
Heartland FS: Other	30.4	5.5	.76
Heartland FS: Situational	30.8	6.3	.82
Mauger FS	18.7	5.0	.80
Mauger FS: Other Forgiveness	9.6	2.8	.67
Mauger FS: Self-Forgiveness	9.1	3.2	.72
Forgiveness Likelihood Scale	27.3	6.9	.84
FS	48.1	9.2	.83
Transgression Narrative Test of Forgivingness	14.6	3.4	.72

land Self-Forgiveness scales loaded on Factor 2.¹ For further analyses, we standardized each variable and summed the z scores for all variables loading on a factor to determine its factor score. This procedure resulted in high correlations for regression-based factor scores and summed factor scores for self-forgiveness ($r = .97, p \ll .001$) and other forgiveness ($r = .99, p \ll .001$). In addition, this method for determining factor scores will allow for easier comparison of this study's findings with those from future investigations.

To assess the convergent and discriminant validity of these factors in the context of maladaptive personality characteristics, we examined the correlations for summed factor scores representing self-forgiveness and other forgiveness with SNAP PD and TNT scales (see Table 3). We determined T scores using the gender-based college student normative data as reported in the SNAP manual (AUTHORS, YEAR). The means and standard deviations for our college sample were slightly smaller but closely resembled those reported by Clark (1993). Overall, the pattern of correlations varied between factors, more so for TNT (9 of 16 comparisons) than PD (2 of 13 comparisons) scales. Self-forgiveness was negatively related to all PD scales representing the Anxious Cluster C, whereas other forgiveness was negatively related to scales representing the Erratic, Emotional Cluster B. Tests of differences between correlations indicated that for PD scales, only Avoidant from anxious Cluster C and Self-Defeating from the Appendix scales were significantly more related to self-forgiveness compared to other forgiveness. In contrast, greater differences were found between components across TNT scales. TNT indexes of neuroticism (e.g., Negative Temperament, Low Self-Esteem, Suicide Potential, Dependency) were more related to self-forgiveness compared to other forgiveness. In addition, Entitlement and Detachment under Positive Temperament and Workaholism under Disinhibition also significantly varied by factor when the magnitude of correlations between components was compared.

Although treatment outcome forgiveness studies have focused on populations subjected to a wrongdoing (e.g., divorce, sexual assault), little attention has been directed to-

¹As in Ross et al. (2004), when the Heartland Situational Forgiveness scale was included, a highly similar two-component model emerged. Factor loadings for the Heartland Self-Forgiveness and Mauger Self-Forgiveness scales were highly consistent for the self-forgiveness component across solutions, with (.93 and .79, respectively) and without (.90 and .83, respectively) the Situational Forgiveness scale. Again, when included, this scale demonstrated a significant loading on the self-forgiveness (.66) but not the other-forgiveness (.23) component. However, we did not include the Situational Forgiveness subscale in this study's final analyses because of the lack of theoretical underpinning for including it as a marker of self-forgiveness. Nonetheless, the correlation between self-forgiveness components, with and without Situational Forgiveness, approached identity ($r = .96$). Consequently, differences in the variables included on the self-forgiveness component between the two studies posed no apparent threat to internal validity or generalizability.

TABLE 2
Results of Principal Components Analysis
With Promax Rotation

Forgiveness Measure	Forgiveness	
	Other	Self
Heartland Self-Forgiveness Scale	-.07	<u>.90</u>
Mauger Self-Forgiveness Scale	.07	<u>.83</u>
Heartland Other Forgiveness Scale	<u>.77</u>	.18
Mauger Other-Forgiveness Scale	<u>.72</u>	.13
Forgiveness Likelihood Scale	<u>.85</u>	-.24
Forgiveness Scale	<u>.66</u>	.19
Transgression Narrative Test of Forgiveness	<u>.83</u>	-.16

Note. Factor loadings greater than .5 are underlined.

TABLE 3
Correlations Between Forgiveness Factors
and SNAP Personality Disorder and Trait
and Temperament Scales

SNAP Scale	T Scores		Other Forgiveness	Self- Forgiveness
	M	SD		
Personality Disorder				
Cluster A				
Paranoid	46.2	9.2	-.33**	-.37**
Schizoid	49.4	10.6	-.10	-.13
Schizotypal	46.8	9.8	-.20*	-.37**
Cluster B				
Antisocial	47.1	8.9	-.26*	-.13
Borderline	47.9	9.0	-.38**	-.47**
Histrionic	48.9	10.3	-.21*	-.07
Narcissistic	47.2	9.7	-.27**	-.25*
Cluster C				
Avoidant	47.6	9.6	-.19	-.41**
Dependent	48.3	9.5	-.15	-.32**
Obsessive-Compulsive	48.8	9.4	-.12	-.30**
Traits and Temperament				
Negative Temperament				
Mistrust	46.7	8.9	-.27**	-.56**
Manipulativeness	48.7	10.3	-.21*	-.24
Aggression	47.4	9.2	-.34**	-.42**
Self-Harm – Low Self-Esteem	49.2	9.7	-.20*	-.50**
Self-Harm – Suicide Potential	49.6	9.7	-.14	-.45**
Eccentric Perceptions	47.5	10.0	-.03	-.32**
Dependency	49.6	9.3	-.05	-.31**
Positive Temperament				
Exhibitionism	49.3	10.2	-.12	.05
Entitlement	47.6	9.2	-.27**	-.08
Detachment	49.2	10.2	-.18	-.41**
Disinhibition (non-overlapping)				
Impulsivity	47.8	10.2	-.22*	-.16
Propriety	48.3	10.3	.14	-.04
Workaholism	51.0	9.5	<u>.21*</u>	-.01

Note. SNAP = Schedule for Nonadaptive and Adaptive Personality. For all pairwise comparisons between self-forgiveness and other-forgiveness, t tests for the difference between dependent correlations (Steiger, 1980) were determined. Coefficients that differed significantly from one another (all $p < .05$) are underlined.

* $p < .01$. ** $p < .001$.

TABLE 4
Stepwise Multiple Regression With SNAP PD
scales Predicting Self-Forgiveness and
Other Forgiveness

<i>Forgiveness Factor</i>	<i>SNAP PD Scale</i>	β	<i>t</i>	<i>p</i>
Self-Forgiveness	Borderline	-.54	-5.74	<.001
	Avoidant	-.22	-2.99	.003
	Antisocial	.26	2.95	.004
Other Forgiveness	Borderline	-.38	-5.19	<.001

Note. SNAP = Schedule for Nonadaptive and Adaptive Personality; PD = personality disorder.

ward determining the types of disorders associated with the greatest difficulties engaging in forgiveness and consequently may represent patients who have the most to gain from forgiveness interventions. To more closely examine the clinical import of self-forgiveness and other forgiveness, we attempted to determine the best set of SNAP PD predictors of self-forgiveness and other forgiveness. To this end, we conducted multiple regression analyses in which we entered PD scales to predict either self-forgiveness or other forgiveness. When we entered SNAP PD scales in stepwise fashion to predict self-forgiveness, the resulting equation was significant, $F(3, 159) = 23.42, p \ll .001$, and accounted for 31% of the variance ($R = .56$) in factor scores. Borderline and Avoidant were negative predictors, whereas Antisocial was a positive predictor of self-forgiveness (see Table 4). Comparison of the zero order correlation and beta weight for Antisocial PD indicated it was acting as a suppressor variable in this multiple regression equation. A suppressor variable is identified by a change in direction (in this case, from negative to positive) from the zero order correlation to the regression (beta) weight when included with another variable to predict some criterion (Tabachnick & Fidell, 1996). However, determining the effect of a suppressor variable requires including it with an individual predictor to determine where the suppressor is working (Tabachnick & Fidell, 1996). We conducted follow-up multiple regression analyses in which Antisocial was included with either Borderline or Avoidant PD to predict self-forgiveness. Change in relationship (i.e., direction of r to β) indicated that Antisocial ($\beta = .27, p \ll .005$) was acting to suppress variance in Borderline ($\beta = -.63, p \ll .001$), but that Antisocial ($\beta = -.08, p = .29$) was not in Avoidant PD ($\beta = -.38, p \ll .001$). Similarly, when we entered SNAP PD scales to predict other forgiveness, the resulting equation was likewise significant, $F(1, 161) = 25.91, p \ll .001$, but accounted for appreciably less variance ($R^2 = .14$) in other forgiveness. Of the PD scales, Borderline remained the sole predictor of other forgiveness.²

²Investigators could use a single scale as a fairly close proxy for self-forgiveness or other forgiveness as measured in this study. For instance, the correlation (r) of the Mauger et al. (1992) and Heartland Self-Forgiveness Scales with regression-based factor scores was .89 for both scales. Addi-

To examine our primary hypotheses for the differential prediction of low Neuroticism for self-forgiveness and Agreeableness for other-forgiveness, we conducted hierarchical multiple regression analyses. To represent Neuroticism, we entered PD scales from the Anxious Cluster C of Avoidant, Dependent, and Obsessive-Compulsive with TNT scales of Negative Temperament, Self-Harm-Low Self-Esteem, and Self-Harm-Suicide Potential in one block. Because of the shared facet scale relationships of self-forgiveness and other forgiveness with Extraversion (Ross et al., 2004), we entered the TNT scale of Positive Temperament alone in a separate block.³ Finally, a third block representing Agreeableness was comprised of PD scales from the Erratic Cluster B of Antisocial, Borderline, Histrionic, and Narcissistic with TNT scales of Manipulativeness, Aggression, and Entitlement per Clark (1993) for factor loadings on FFM markers of Agreeableness.

To test the importance of Neuroticism (and lack of importance of Agreeableness) in self-forgiveness, we entered Neuroticism indexes in Block 1 followed by Extraversion indexes in Block 2, with Agreeableness indexes in the final Block 3. We included Extraversion in a middle block because of the shared relationships at the facet level noted for both self-forgiveness and other forgiveness (see Ross et al., 2004). The final model was significant, $F(14, 147) = 7.31, p < .0001$, where Neuroticism indexes accounted for 37.0% of the variance ($R = .61; p < .0001$) in the first block, followed by Extraversion indexes ($R^2 = .00; R = .00, p = .99$), and then Agreeableness indexes in the final block ($R^2 = .04; R = .20, p = .19$; see Table 5). In this model, only Negative Temperament ($\beta = -.30, p < .005$) retained significance as an individual predictor. When we reversed

tionally, the Mauger et al. Other-Forgiveness ($r = .76$) and Heartland ($r = .82$) Other-Forgiveness Scales could be used as proxy indicators of the other-forgiveness component in this study. The TNT, FS, and FLS were all comparable in measuring other forgiveness, which ranged from .72 to .77.

³Although the parent temperament scale (i.e., Positive Temperament) might be expected to produce multicollinearity in multiple regression equations with traits subsumed under this temperament scale (e.g., detachment, exhibitionism) in Clark's (1993) three-factor model, this was not the case. Positive Temperament exhibited no higher correlation than .51 with any trait scale. Instead, we excluded TNT scales of Detachment and Exhibitionism because of multicollinearity concerns with other, more theoretically meaningful variables. Specifically, we excluded Detachment because it was highly correlated ($r = .78$) with the Avoidant PD scale from Cluster C. Similarly, Exhibitionism was highly correlated ($r = .83$) with Histrionic PD from Cluster B. Under Negative Temperament, this scale was correlated most highly with Dependency at .50. However, because of multicollinearity concerns between the Dependency PD scale and Dependency TNT scale ($r = .80$), we only included the PD scale in hierarchical multiple-regression equations. In the final model, the relationship between any two variables ($k = 14$) did not exceed .70. Additionally, we excluded Mistrust from these analyses because of dual loadings on both Neuroticism and Agreeableness (see Clark, 1993). Although its name suggests that it is a marker of Agreeableness, it also has a high loading on Neuroticism. We did not include any variables with dual loadings across FFM factors, as reported by Clark, in hierarchical models.

TABLE 5
Hierarchical Multiple Regression With SNAP
PD and TNT Markers of Neuroticism,
Extraversion, and Agreeableness Predicting
Self-Forgiveness

Block Number	FFM Domain	SNAP Scale	β	<i>t</i>	<i>p</i>
1	Neuroticism	Avoidant PD	-.01	-.13	.90
		Dependent PD	-.07	-.87	.39
		Obsessive-Compulsive PD	-.14	-1.65	.10
		Negative Temperament	-.30	-3.03	.003
		Self-Harm-Low Self-Esteem	-.11	-1.33	.19
		Self-Harm-Suicide Potential	-.15	-1.75	.08
		Positive Temperament	-.05	-.55	.58
2	Extraversion	Positive Temperament	-.05	-.55	.58
		Agreeableness	.17	1.46	.15
3	Agreeableness	Antisocial PD	.17	1.46	.15
		Borderline PD	-.08	-.57	.57
		Histrionic PD	.14	1.39	.17
		Narcissistic PD	-.12	-.84	.41
		Manipulativeness	-.08	-.73	.47
		Aggression	-.16	-1.76	.08
		Entitlement	.15	1.34	.18

Note. SNAP = Schedule for Nonadaptive and Adaptive Personality; PD = personality disorder; FFM = Five-factor model.

TABLE 6
Hierarchical Multiple Regression With SNAP
PD and TNT Markers of Agreeableness,
Extraversion, and Neuroticism Predicting
Other Forgiveness

Block Number	FFM Domain	SNAP Scale	β	<i>t</i>	<i>p</i>		
1	Agreeableness	Antisocial PD	.03	0.23	.82		
		Borderline PD	.00	-0.01	.99		
		Histrionic PD	-.36	-3.42	.001		
		Narcissistic PD	.00	-0.02	.99		
		Manipulativeness	.00	-0.01	.99		
		Aggression	-.27	-2.90	.004		
		Entitlement	-.09	-0.76	.45		
		Positive Temperament	.49	5.04	<.001		
		2	Extraversion	Positive Temperament	.49	5.04	<.001
				Neuroticism	-.08	-0.83	.41
3	Neuroticism	Avoidant PD	.02	0.22	.83		
		Dependent PD	.02	0.22	.83		
		Obsessive-Compulsive PD	.01	0.07	.94		
		Negative Temperament	.01	0.11	.91		
		Self-Harm-Low Self-Esteem	.16	1.92	.06		
		Self-Harm-Suicide Potential	-.08	-0.96	.34		

Note. SNAP = Schedule for Nonadaptive and Adaptive Personality; PD = personality disorder; FFM = Five-factor model.

the order to test the importance of Agreeableness (and lack of importance of Neuroticism) in other forgiveness, the final model was significant, $F(14, 147) = 6.17, p \ll .001$. Here, Agreeableness indexes accounted for 23% of the variance ($R = .48; p \ll .0001$) in the first block, followed by Extraversion indexes ($R^2 = .12; R = .35, p \ll .0001$), and then Neuroticism indexes in the final block ($R^2 = .02; R = .14, p = .58$). In this model, Histrionic PD, Aggression, and Positive Temperament remained significant predictors (see Table 6). Follow-up diagnostics indicated no notable points of influence, multivariate outliers, or inflated variance tolerances in any multiple regression equation.

DISCUSSION

Using multiple measures of forgiveness, these findings further support a two-component model of forgiveness. Consistent with Ross et al. (2004), these two factors were marked by self-forgiveness and other-forgiveness measures, respectively; represented more than 65% of the variance in scores; and were largely independent of each other. Furthermore, associations of self-forgiveness with Negative Temperament and other forgiveness with Histrionic PD, Aggression, and Positive Emotions highlighted the discriminant validity, whereas common relationships with Borderline PD emphasized the convergence of these two forgiveness dimensions. In their original study, Ross et al. (2004) emphasized the relationship between self-forgiveness and Neuroticism (but not Agreeableness) and other forgiveness and Agreeableness (but not Neuroticism). Despite lack of discriminant validity of Neuroticism and Agreeableness indicators in analyses

based on zero order correlations, forgiveness components exhibited a pattern of convergent and discriminant relationships with these traits that is generally consistent with Ross et al. (2004), especially when we applied multivariate methods. More specifically, self-forgiveness was negatively related to indicators of Neuroticism for both PD and TNT scales on the SNAP. PD scales from Cluster C were most consistently negatively related to self-forgiveness. Although Borderline demonstrated an even stronger relationship, a statistical suppressor effect for Antisocial vis-à-vis Borderline PD suggested that the association of Borderline with self-forgiveness was driven by Neuroticism rather than Agreeableness. Previous studies have shown that Neuroticism and Agreeableness are the major FFM components of borderline PD (Pukrop, 2002; Trull, Widiger, Lynam, & Costa, 2003). In contrast, Antisocial is the *DSM-III-R* PD most closely representing Antagonism (reverse of Agreeableness) in the FFM (Axelrod, Widiger, Trull, & Corbitt, 1997). Consequently, what is important about Borderline in predicting self-forgiveness appears to be the Neuroticism engendered in Borderline PD, more so than low levels of Agreeableness that also accompany manifestations of this PD.

Relationships with SNAP PD and TNT scales emphasized the role of Agreeableness, more so than Neuroticism, in the depiction of other forgiveness. However, results for the zero order correlations were not so nearly clear-cut as those from multiple regression. If other forgiveness is characterized by low Agreeableness and an extrapunitive style, then it should demonstrate substantive relationships with externalizing Cluster B PD scales. Although other forgiveness was robustly associated with Cluster B, these relationships were not significantly stronger for other forgiveness com-

pared to self-forgiveness when we examined differences in magnitude of the correlations with forgiveness components. One reason for not finding stronger results for Cluster B is the heterogeneous nature of PDs (Ross, Lutz, & Bailey, 2002). In addition to low Agreeableness, Cluster B disorders also reflect substantial amounts of Neuroticism (e.g., Borderline) and Extraversion (e.g., Histrionic) in the FFM. In contrast, hierarchical multiple regression analyses provided a more direct test of the differential effects of Neuroticism and Agreeableness vis-à-vis forgiveness. These results more clearly supported the role of Agreeableness in other forgiveness and Neuroticism in self-forgiveness. When indicators of Neuroticism, Extraversion, and Agreeableness were all included to predict self-forgiveness, only Negative Temperament remained a significant ($p \ll .05$), individual predictor. In converse, for other forgiveness, Histrionic PD, Aggression, and Positive Temperament remained significant predictors. These results seem to further emphasize the role of Extraversion in other forgiveness rather than self-forgiveness. Of interest was that SNAP PD scales accounted for 60% more variance in self-forgiveness compared to other forgiveness. If Agreeableness is the primary FFM marker of other forgiveness, then an overrepresentation of Neuroticism compared to Agreeableness in SNAP PD scales may have contributed to somewhat weaker effect sizes for other forgiveness in zero order correlational analyses. This feature may not necessarily represent a limitation of the SNAP so much as reflect the broad and pervasive role of Neuroticism in PDs (Pukrop, 2002).

These findings further support Maltby et al. (2001) link of forgiveness to intropunitive and extrapunitive styles. If those low in self-forgiveness have an intropunitive disposition, as indicated by high Neuroticism (e.g., Negative Temperament and Suicide Potential), those low in self-forgiveness likely focus on internal causes as well as stable consequences of the wrongdoing as an attributional style. Such an attentional focus may help explain their guilt proneness and rumination about wrongdoings (McCullough, Bellah, Kilpatrick, & Johnson, 2001). Conversely, if those low in other forgiveness have an extrapunitive style, indicated by low Agreeableness (high Aggression), their focus is likely on external causes (including stable and internal consequences) of wrongdoings and the subsequent assignment of moral responsibility for a misdeed (especially if perceived as intentional, controllable, and avoidable; see Zechmeister, Garcia, Romero, & Vas, 2004). Instead of focusing on what they did wrong, those low in other forgiveness tend to assign causation to an external agent, judge that agent as morally responsible, and consequently assign blame to that person for a wrongdoing.

Although this distinction between intropunitive and extrapunitive styles emphasizes differences between self-forgiveness and other forgiveness, the tendency to blame is likely an important factor common to both types of forgiveness. What seems to distinguish between self-forgiveness and other forgiveness and to be reflected in divergent relationships for

these components in Neuroticism and Agreeableness is the directionality of blame assignment following wrongdoing or more broadly, traumatic events.⁴ Depending on the measure used, studies have variously reported negative relationships to Neuroticism and positive relationships to Agreeableness (Ashton, Paunonen, Helmes, & Jackson, 1998; Berry et al., 2001; Brose et al., in press; Brown & Phillips, 2005). If failure to forgive oneself largely reflects high Neuroticism (as blame internalization), whereas the failure to forgive others reflects low Agreeableness (as blame externalization), then these findings might help to resolve mixed findings in the literature surrounding the relationship between personality and forgiveness.

Similarly, self-forgiveness and other forgiveness seem to represent distinct components under a superordinate forgiveness construct. Although some might argue that a single construct should be comprised of related dimensions, independent dimensions may more purely represent key components of forgiveness. Despite appearing counterintuitive, similar orthogonal models are not without precedent in the literature. For example, findings by Clark, Watson, and Tellegen (1988) supported a two-factor model of affectivity in which positive and negative mood dimensions also represent orthogonal factors rather than ends of a singular, bipolar continuum. Likewise, the two orthogonal dimensions of self-forgiveness and other forgiveness we examined in this study appear to represent two similarly differing dimensions. Apparent differences in self-forgiveness and other forgiveness notwithstanding, orthogonal components may help to cleave the intrapersonal facet from the interpersonal facet in forgiveness and provide greater integrity to the nomological network entailing forgiveness (see Meehl, 1990).

Clinical Implications

Despite numerous intervention studies, little is known about the types of persons or PDs who are in the greatest need of treatments designed to increase forgiveness or otherwise promote mental health by means of forgiveness techniques. In contrast, this study clearly points to persons who might be targeted for forgiveness interventions. Across both forgiveness dimensions, Borderline was the PD scale that was most reliably related to impaired forgiveness. Given the high prevalence of Borderline (relative to other PDs) in the general populace as well as the severest manifestations of psychopathology (Gunderson, 2001), this may not be surprising. If Borderline characteristics represent more serious maladaptations, global disruption of functioning may curtail the ability to forgive. Alternatively, this lack of forgiveness in

⁴According to Shaver's (1985) theory of blame attribution, judgments of responsibility and blame are made after the occurrence of events with negative consequences. Consequently, events that otherwise do not represent an apparent misdeed or wrongdoing may presumably still elicit blame assignment in otherwise "blame-prone" individuals.

625 those with Borderline features may more specifically reflect
 a greater lifetime experience of trauma, which is consistent
 with proposals to reconceptualize Borderline PD as chronic
 posttraumatic stress disorder (Zanarini et al., 1998). Fur-
 630 thermore, the tendency for victimized persons to internal-
 ize feelings of guilt following a misdeed against them is
 well documented and further highlights the connection of
 self-forgiveness and other forgiveness in the PD type most
 often associated with early childhood trauma—Borderline
 (Zanarini et al., 2002). Researchers such as Gunderson (2001)
 635 have emphasized feelings of victimization as a core com-
 ponent of this disorder. Moreover, addressing the issue of
 self-forgiveness may be especially important in survivors of
 domestic violence, child abuse, and those who may experi-
 640 ence survivors' guilt (Turnage, Jacinto, & Kirven, 2003), all
 of which are conditions endemic to Borderline PD (Gunder-
 son, 2001).

Limitations and Future Directions

In this study, we pointed to the promise of delineating be-
 tween self-forgiveness and other forgiveness, but we were
 645 limited not only by the homogeneity of the sample employed
 but by the use of a single method (e.g., self-report) to as-
 sess self-forgiveness and other forgiveness. Although results
 for the PCA and SNAP correlates were generally consistent
 with our expectations, inclusion of clinical patients would
 650 better represent personality at the extremes. Consequently,
 our findings for maladaptive characteristics and forgiveness
 may be attenuated due to a restriction of range with regard to
 SNAP predictors—especially PD scales. To mitigate this ef-
 655 fect, we did score PD scales using a dimensional summing of
 items rather than employing a categorical scoring method for
 individual's responses on the SNAP. Nonetheless, the gen-
 eralizability of these results needs to be assessed in clinical
 populations who evidence the more serious manifestations
 of personality pathology.

660 Although it may seem unusual to use a procedure that
 may prime a construct when asking participants to complete
 trait measures, one of the measures of forgiveness that we in-
 cluded (i.e., the FS; Rye et al., 2001) requires the participant
 to respond to a target wrongdoer and misdeed. This method
 665 provided a contextual frame and a misdeed for reference
 when completing the FS. To this end, we asked participants
 to identify such a misdeed early on in group-administered
 sessions. If it did act as a prime, it could have emphasized
 differences between self and others, and recalling an event
 670 in which one may have been victimized may increase the
 salience of a self versus other dichotomy—especially as it
 relates to misdeeds—and so promote differences rather than
 similarities between cognitive representations of these for-
 giveness constructs. Thus, this method may have artificially
 675 increased observed differences between self-forgiveness and
 other forgiveness as measured in this study. However, we

believe that the overall effect on the generalizability of our
 results is likely minimal.

As of yet, studies have not given way to a gold stan-
 dard in the area of forgiveness assessment. In an effort to 680
 account for the lack of standardized measurement, we in-
 cluded multiple measures in this study to assess the constructs
 of self-forgiveness and other forgiveness. As we noted ear-
 685 lier, however, individual scales make good proxies for factor
 components identified in this study. Although we included a
 number of forgiveness scales, our sample of measures was
 likely underinclusive. Consequently, other dimensional mod-
 els of forgiveness might be warranted. For instance, in an
 examination of the relationship among coping style, person-
 690 ality traits, and forgiveness, Maltby, Day, and Barber (2004)
 found that when the FLS (Rye et al., 2001) was separated into
 two components of presence of positive and absence of nega-
 tive forgiveness features, the presence of positive forgiveness
 variable forced an additional factor to emerge. Future studies
 695 including similar analyses using a larger, more comprehen-
 sive set of forgiveness measures may offer alternative views
 of forgiveness.

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Received October 20, 2004
Revised February 17, 2006