Gratitude and forgiveness: Convergence and divergence on self-report and informant ratings

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ABSTRACT

Gratitude and forgiveness are theoretically linked character strengths that tend to be studied in isolation from other strengths. We examined gratitude and forgiveness in the same sample using self and confidant reports to better understand how strengths converge and diverge with personality factors, emotional vulnerabilities, and positive psychological processes. Data suggest that gratitude and forgiveness uniquely relate to personality factors, emotional vulnerabilities, and positive psychological processes with forgiveness evidencing stronger relations than gratitude. Forgiveness also appears to be more robust than gratitude due to the unique effects of forgiveness diminishing correlations between gratitude and other variables. Confidant data demonstrated that strengths were observable by others and related to observer perceptions of well-being. Results are discussed with an emphasis on the benefits of studying character strength profiles.

1. Introduction

Character strengths have captured the interest of scientists in recent years (Peterson & Seligman, 2004). However, most research tends to examine strengths in isolation from other strengths. This approach increases scientific precision but limits knowledge by failing to acknowledge the presence and influence of other character strengths on human functioning. The purpose of this study was to examine gratitude and forgiveness within the same sample to better understand conceptual links with other personality traits, psychological variables, and well-being.

Conceptual clarity is essential to advance understanding of character strengths. Thus, we briefly consider how researchers conceptualize gratitude and forgiveness. Gratitude has been described as a moral virtue, attitude, emotion, habit, personality trait, and coping response (Emmons, McCullough, & Tsang, 2003). Perhaps the most common view defines gratitude as "the recognition and appreciation of an altruistic gift" (Emmons, 2004, p. 9). Central to the concept of forgiveness is the idea of a freely chosen, pro-social, motivation in which the desire to seek revenge and avoid contact with a transgressor is overcome and an increase in positive thoughts, feelings and behaviors occurs (Fincham, 2000; Worthington & Scherer, 2004). Both definitions highlight the social,

or interpersonal, nature of gratitude and forgiveness and offer an initial conceptual link between these character strengths.

Gratitude and forgiveness are interpersonal strengths that produce well-being through a combination of reflection, positive emotions, and adaptive social behaviors and relationships that facilitate well-being (Fredrickson, 2004; Kashdan, Mishra, Breen, & Froh, 2009; Watkins, 2004). Empirical data suggests that gratitude and forgiveness are associated with pro-social behavior (Bartlett & DeSteno, 2006; McCullough, 2000), positive psychological outcomes such as optimistic appraisals of life, positive memory biases, and relationship satisfaction (Emmons & McCullough, 2003; Fincham, Paleari, & Regalia, 2002; Watkins, Grimm, & Kolts, 2004), physical health benefits (McCraty, Atkinson, Tiller, Rein, & Watkins, 1995; Witvliet, Ludwig, & Vander Laan, 2001; Worthington & Scherer, 2004), and well-being (Bono, McCullough, & Root, 2008; Emmons & McCullough, 2003; Karremans, Van Lange, Ouwerkerk, & Kluwer, 2003; Maltby, Day, & Barber, 2005; McCullough, Emmons, & Tsang, 2002; Toussaint & Friedman, 2008). Gratitude and forgiveness require distinct attributions (Fincham et al., 2002; McCullough et al., 2002) but share a common, fundamental component of empathy (Farrow et al., 2001; Lazarus, 1991; Macaskill, Maltby, & Day, 2002; McCullough, Kilpatrick, Emmons, & Larson, 2001). Thus, gratitude and forgiveness are conceptually linked as positively valenced, pro-social, empathy-based character strengths associated with psychological and physical health.

Gratitude and forgiveness also evidence similar relations with Big Five personality traits (John & Srivastava, 1999). Forgiveness tends to be positively correlated with agreeableness and negatively

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correlated with neuroticism (Brose, Rye, Lutz-Zois, & Ross, 2005; McCullough & Hoyt, 2002). A similar profile exists for gratitude (McCullough et al., 2002). More recent work redefining extraversion suggests that it too, may be correlated with gratitude and forgiveness (Ashton, Lee, & Paunonen, 2002; Lucas, Diener, Grob, Suh, & Shao, 2000). We sought to extend prior findings by examining each character strength in relation to the Big Five while controlling for the unique influence of the other character strength.

The unique qualities of gratitude and forgiveness may be most pronounced in how they relate to emotional vulnerabilities and positive psychological processes. In general, empathic emotions tend to increase positive and decrease negative affect (Batson, 1990). Consistent with this theory, grateful people are less likely to respond with anger after being hurt by others (McCullough et al., 2002). Abandoning angry feelings also appears to be fundamental to forgiveness (Berry, Worthington, O'Connor, Parrott, & Wade, 2005; Enright, 2001; McCullough, 2000). As with anger, character strengths also show inverse relations with depressive symptoms (Brown, 2003; Watkins, Woodward, Stone, & Kolts, 2003). Indirect evidence also suggests that forgiving people may be less lonely. For example, forgiveness creates closeness in romantic relationships (Tsang, McCullough, & Fincham, 2006) and promotes social connections in general (Karremans, Van Lange, & Holland, 2005). Thus, character strengths are expected to negatively correlate with emotional vulnerabilities.

In contrast, character strengths are expected to positively correlate with positive psychological processes including empathy, self-compassion, and acceptance. Research with college students suggests that gratitude positively correlates with both cognitive (i.e., perspective taking) and affective (i.e., warm feelings) aspects of empathy (McCullough et al., 2002). Several studies support a similar correlation between forgiveness and empathy (Brown, 2003; Fincham et al., 2002; Macaskill et al., 2002). Yet, warmth and perspective taking are not unique to empathy and are crucial aspects of self-compassion as well. Self-compassion reflects the ability to hold a kind and non-judgmental view of oneself and recognize similarities between oneself and others (Neff, 2003). Experimental results link self-compassion with forgiveness. That is, people asked to purposefully look for similarities between themselves and transgressors were more likely to be forgiving than others who did not do so (Exline, Baumeister, Zell, Kraft, & Witvliet, 2008). No known study has examined self-compassion and gratitude.

Similarly, indirect evidence supports relations between character strengths and acceptance. Acceptance refers to the willingness to openly experience thoughts, feelings, physical sensations, and life events. Acceptance allows individuals to experience events fully and respond according to situational demands (Hayes, Strosahl, & Wilson, 1999). The ability to embrace negative events while responding with intention and flexibility is an inherent part of forgiveness. Thus, we would expect these constructs to be related. Prior work with college students provides initial support in that people reporting low levels of trait forgiveness reported a greater tendency to engage in avoidance based coping strategies (Maltby, Macaskill, & Gillett., 2007). Other studies suggest that trait vengefulness (or the tendency to be unforgiving) is associated with an increase in maladaptive, avoidance-based relationship behaviors (McCullough, Worthington, & Rachal, 1997; McCullough et al., 1998).

1.1. Current study

We wished to extend prior findings by investigating conceptually linked character strengths within the same sample. We sought to identify shared and unique features of gratitude and forgiveness by examining correlations between character strengths and personality factors, emotional vulnerabilities, and positive psychological processes. More specifically, we tested whether or not gratitude and forgiveness evidenced significantly different correlations with these variables and if correlations between one strength (e.g., gratitude) and a variable would change if the effects of the other strength (e.g., forgiveness) were controlled. In addition, we collected confidant data to learn if gratitude and forgiveness were observable by others. Confidant data is a practical source of information to augment self-reports (Vazire, 2006).

We hypothesized that character strengths would negatively correlate with emotional vulnerabilities and positively correlate with positive psychological processes. Our primary hypothesis was that gratitude and forgiveness would offer unique qualities evidenced by distinct correlations with personality factors, emotions vulnerabilities, and positive psychological processes. We also expected character strengths to be observable by others and correlate positively with confidant perceptions of a person's well-being.

2. Method

2.1. Participants

Participants were 140 undergraduate students enrolled in introductory psychology courses at a large, public university. The sample included 113 females (80.7%) and 27 males (19.3%) with ethnicity as follows: 67 (47.9%) Caucasian, 26 (18.6%) Asian/Asian-American, 14 (10.0%) Hispanic, 8 (5.7%) Middle Eastern, 7 (6.5%) African-American, and 15 (10.7%) "Other." Mean age was 21.91 years (SD = 5.74).

2.2. Procedure

Methods and procedure were approved by the university institutional review board. Participants received research credit for undergraduate psychology courses. Participants completed a 60 min web-based survey in the research laboratory (Part One). Next, participants left the laboratory with materials (Part Two) to ask a confidant (i.e., "someone who is close to you and who knows how you think and feel") to complete paper and pencil questionnaires. Participants were given envelopes for confidants that contained an instruction sheet, informed consent, and a questionnaire packet Instruction sheets asked confidants to complete questionnaires according to their perception of the participant. For example, confidants completed a measure of gratitude according to the degree to which they perceived the participant to be thankful or grateful. Confidants were instructed to refrain from sharing responses with the participant. Completed materials were returned to the laboratory using a sealed envelope. Compliance was exceptional: 137 of 140 (97.9%) packets were returned. Our high compliance rate may be explained by several factors including researchers verbalizing the importance of observer data to participants, email prompts for delinquent packets, and the decision to assign full credit only to participants who returned completed confidant packets (partial credit was assigned for missing packets). Credit incentives were described to participants in detail during informed consent.

2.3. Measures

2.3.1. Demographic information

Participants provided data on age, sex, and ethnicity.

2.3.2. Character strengths

The 6-item *Gratitude Questionnaire* (GQ-6; McCullough et al., 2002) measured a general tendency to feel grateful and thankful

towards perceived benefactors. Responses were provided using a 7-point scale; rated from 1 (strongly disagree) to 7 (strongly agree). The GQ-6 demonstrated excellent reliability (αs < .90) in prior studies (McCullough et al., 2002).

The 18-item *Heartland Forgiveness Scale* (HFS; Thompson et al., 2005) measured aspects of dispositional forgiveness. The HFS is comprised of three subscales: Forgiveness of Self (e.g., "It is really hard for me to accept myself once I've messed up."), Forgiveness of Others (e.g., "When someone disappoints me, I can eventually move past it."), and Forgiveness of Situations (e.g., "I eventually make peace with bad situations in my life"). Responses were provided using a 7-point scale; rated from 1 (almost always *not* true of me) to 7 (almost always *true* of me).

2.3.3. Personality

The 44-item *Big Five Inventory* (BFI; John, Donahue, & Kentle, 1991) measured dimensions of the five-factor personality model (John & Srivastava, 1999). The BFI is a widely used measure of personality and includes five subscales: neuroticism, extraversion, agreeableness, conscientiousness, and openness to experience. Responses were provided using a 5-point scale; rated from 1 (disagree strongly) to 5 (agree strongly).

2.3.4. Emotional vulnerabilities

The 21-item *Beck Depression Inventory-2nd Edition* (BDI-II; Beck, Steer, & Brown, 1996) assessed severity of depressive symptoms. Responses were provided using a 4-point scale with higher scores representing more severe depressive symptoms. The 38-item *Multidimensional Anger Inventory* (MAI; Siegel, 1986) measured the frequency, intensity, and magnitude of dispositional anger as well as different aspects of anger expression (e.g., anger suppression, etc.). Responses were provided using a 5-point scale; rated from 1 (completely undescriptive of me) to 5 (completely descriptive of me). The 8-item *UCLA Loneliness Scale* (UCLA-8; Russell, 1996) assessed subjective feelings of loneliness and lack of social connection. Responses were provided using a 4-point scale; rated from 1 (I often feel this way) to 4 (I never feel this way).

2.3.5. Positive psychological processes

The 28-item *Interpersonal Reactivity Index* (IRI; Davis, 1980) assessed cognitive and affective components of empathy. Four subscales measure: (1) Perspective Taking, (2) Fantasy, (3) Empathic Concern, and (4) Personal Distress. The Fantasy subscale was not examined due to absence of theoretical rationale. Responses were provided using a 5-point scale; rated from 0 (does not describe me well) to 4 (describes me very well). The 10-item *Acceptance and Action Questionnaire-2* (AAQ-2; Bond et al., submitted for publication) assessed the degree to which an individual is willing to accept negatively evaluated experiences including thoughts, feelings, and external events. Responses were provided using a 5-point scale; rated from 1 (never true) to 5 (always true). The 26-item *Self Compassion Scale* (SCS; Neff, 2003) measured a general tendency to be kind, compassionate, and non-judgmental towards one self and to recognize elements of a common human experience in personal events. Responses were provided using a 5-point scale; rated from 1 (almost never) to 5 (almost always).

2.3.6. Well-being

The 5-item *Satisfaction With Life Scale* (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) measured global life satisfaction, or subjective well-being. Responses were provided using a 7-point scale; rated from 1 (strongly disagree) to 7 (strongly agree).

2.3.7. Informant reports

Confidants were asked to rate their perception of the participant's gratitude, forgiveness, personality, and well-being. To do so, confidants completed the following measures: (1) *GQ-6*; (2) *HFS*; (3) *BFI*; and (4) *SWLS*. Measures were re-worded in the third-person and altered to reflect sex specific information (e.g., *he* vs. *she*) to assist confidants with ratings.

4. Results

4.1. Descriptive statistics and correlations between variables

Means, standard deviations, and alpha reliability coefficients for all measures are presented in Table 1. Correlations between variables are presented in Table 2 (constructed to ease comparisons between character strengths). Results were broadly consistent with theoretical expectations. The range of correlation magnitudes suggest that strengths relate uniquely to Big Five, emotional vulnerabilities, and positive psychological processes.

4.2. Character strengths and Big Five

Character strengths were positively correlated with Agreeableness (rs = .32 to .58), Extraversion (rs = .17 to .22), and Conscientiousness (rs = .27 to .39), and negatively correlated with Neuroticism (rs = −.27 to −.59). Openness to Experience was only positively correlated with the Forgiveness of Self subscale (r = .19).

4.3. Character strengths, emotional vulnerabilities, and positive psychological processes

Character strengths were negatively correlated with emotional vulnerabilities including anger (rs = −.29 to −.61), loneliness (rs = −.28 to −.51) and depressive symptoms (rs = −.31 to −.53). Strengths were positively correlated with acceptance (rs = .25 to .58), self-compassion (rs = .35 to .68) and perspective taking (rs = .25 to .44) but demonstrated unique correlations with aspects of empathy.

4.4. Comparing correlates of gratitude and forgiveness

We wished to examine how gratitude and forgiveness converged and diverged in relation to aforementioned variables. To

Table 1
Means, standard deviations, and alpha coefficients for variables.

Variables	M	SD	α
GQ-6	35.62	5.25	.91
HFS-self	29.53	6.09	.77
HFS-other	29.00	6.06	.79
HFS-situation	30.26	5.93	.78
HFS-total	88.70	14.02	.85
BFI-openness to experience	36.77	6.89	.85
BFI-conscientiousness	34.47	6.04	.83
BFI-extraversion	27.58	6.43	.87
BFI-agreeableness	35.92	6.08	.84
BFI-neuroticism	24.52	7.28	.87
BDI-II	9.94	8.18	.87
MAI-total score	51.19	9.17	.88
UCLA-8	16.26	5.40	.87
AAQ-II	50.68	7.98	.90
SCS-total score	81.90	17.28	.92
IRI-perspective taking	18.47	5.13	.78
IRI-empathic concern	21.76	4.45	.76
IRI-personal distress	11.43	5.21	.76
SWLS	24.29	6.81	.85

Table 2
Correlation coefficients and tests of dependent correlations and significance values, for self report measures of gratitude, forgiveness, and related variables.

	HFS				GQ-6	Z-value	p-value
	Self	Other	Situation	Total			
Openness	.19*	.01	.16	.16	.05	–	26, ns
Conscientiousness	.31**	.27**	.33**	.39**	.32**	–	.44, ns
Extraversion	.13	.10	.16	.17*	.22**	–	.71, ns
Agreeableness	.43**	.49**	.42**	.58**	.32**	−3.11	<.01
Neuroticism	−.52**	−.30**	−.55**	−.59**	−.27**	3.80	<.001
Depression	−.51**	−.31**	−.41**	−.53**	−.34**	2.22	.03
Anger	−.47**	−.39**	−.55**	−.61**	−.29**	−3.82	<.001
Loneliness	−.41**	−.30**	−.49**	−.51**	−.28**	−2.64	<.01
Acceptance	.50**	.25**	.58**	.57**	.38**	−2.30	.02
Self-compassion	.63**	.36**	.60**	.68**	.35**	−4.28	<.001
Perspective	.28**	.25**	.39**	.44**	.25**	−2.08	.04
Empathic concern	.08	.15	.09	.14	.24**	–	.30, ns
Personal distress	−.28**	−.27**	−.50**	−.45**	−.16	3.16	<.001
Well-being	.40**	.24**	.29**	.40**	.32**	–	.37, ns

Notes. Depression (i.e., depressive symptoms) = BDI-II; Anger = MAI total score; Loneliness = UCLA loneliness scale; Acceptance = AAQ-II; Self Compassion = SCS total score; Perspective = IRI-Perspective taking subscale; Empathic Concern = IRI-Empathic concern subscale; Personal distress = IRI-Personal distress subscale; Well-being = SWLS.
  * $p < .05$.
  ** $p < .01$.

do so, we tested differences in the magnitude of correlations between character strengths and variables. Tests of dependent correlations provide a Z-value to indicate significance. Results suggest that character strengths significantly differ in relation to Big Five, emotion vulnerabilities, and positive psychological processes (see Table 2).

4.5. Partial correlations between character strengths and variables

We also investigated the effects of each strength on the other's relation to variables under study. To do this, we conducted partial correlation analyses. Of note, when controlling for the effects of forgiveness on gratitude, we used the HFS total score.

Results suggest that gratitude and forgiveness both influenced the other's correlations. However, this effect was most notable for gratitude. At times, gratitude's correlations changed from significant to non-significant. For example, the correlation between gratitude and neuroticism was significant, $r = -.27$, $p < .001$. However, after controlling for forgiveness, gratitude was unrelated to neuroticism, $r = -.10$, ns. Similarly, the correlation between gratitude and anger was significant, $r = -.29$, $p < .001$, until controlling for forgiveness, $r = -.13$, ns. This suggests that relations between gratitude and these variables were considerably influenced by forgiveness (see Table 3).

4.6. Correlations between participant and informant ratings

We anticipated moderate convergence between participant and confidant ratings (Vazire, 2006). Data supported our expectations for ratings of gratitude and forgiveness (rs = .20 to .30) and well-being ($r = .47$, $p < .01$). Participant ratings of strengths also positively correlated with confidant ratings of participant well-being (rs = .24 to .40).

5. Discussion

Gratitude and forgiveness are distinct character strengths that uniquely relate to personality factors, emotion vulnerabilities, positive psychological processes, and well-being.

People who reported greater levels of gratitude and forgiveness also tended to report less anger and subjective feelings of loneliness as well as fewer depressive symptoms. These same people also reported greater acceptance, empathy, and self-compassion. Forgiveness, in particular, demonstrated strong associations with both emotional vulnerabilities (negative relations) and positive psychological processes (positive relations) suggesting that it is a robust indicator of mental health outcomes. Forgiveness also appears uniquely related to variables whereas much of the strength of relations between gratitude and some variables seems due to

Table 3
Partial correlations between GQ-6, HFS, and other variables.

Variables	HFS-Self Control for GQ-6	HFS-Other Control for GQ-6	HFS-Sit Control for GQ-6	HFS-Total Control for GQ-6	GQ-6 Control for HFS-Total
Partial correlations					
Openness	.18*	−.01	.16	.15	.04
Conscientiousness	.25**	.22**	.27**	.33**	.21**
Extraversion	.08	.05	.12	.11	.19*
Agreeableness	.39**	.45**	.39**	.54**	.19*
Neuroticism	−.48**	−.27**	−.52**	−.57**	−.10
Depression	.34**	−.27**	−.36**	−.48**	−.21*
Anger	−.43**	−.35**	−.52**	−.59**	−.13
Loneliness	−.36**	−.26**	−.46**	−.47**	−.14
Acceptance	.45**	.18*	.54**	.51**	.25**
Self compassion	.61**	.32**	.55**	.65**	.17*
Perspective taking	.23**	.31**	.37**	.40**	.15
Empathic concern	.02	.10	.05	.07	.22*
Personal distress	−.25**	−.25**	−.49**	−.43**	−.02
Well-being	.35**	.22**	.25**	.36**	.20*

Notes. See Table 2 for abbreviations.
  * $p < .05$.
  ** $p < .01$.

the co-occurrence of forgiveness. For example, controlling for the effects of forgiveness diminished relations between gratitude and both neuroticism and anger to the point of non-significance. However, both character strengths were positively related to observer reports of well-being with gratitude being more observable to others.

Arguably, our most intriguing findings involve the robustness of forgiveness. Forgiveness evidenced stronger correlations with most outcomes compared to gratitude and these relations retained much of their magnitude after controlling for the effects of gratitude. There are several possible explanations for these findings. First, forgiveness may be a less ambiguous behavioral response that relates more clearly and distinctly to other psychological phenomena. Second, forgiveness may require more time to develop as a person regulates aversive emotions (e.g., anger) and intentions and this temporal difference may lead to more intense and lasting benefits compared to gratitude. Third, less willingness to forgive despite being thankful may be more detrimental to functioning than the reverse. Unfortunately, the exact explanation is beyond the scope of this study.

Our results highlight unique aspects of gratitude and forgiveness and the benefits of studying strengths within the same sample. We applaud similar work by Toussaint and Friedman (2008) as well as Huta and Hawley (2010). The current study contributes to existing literature by demonstrating how strengths converge and diverge in relation to relevant psychological variables, emphasizing the robustness of forgiveness, and providing observer data linking perceptions of strengths and well-being.

There are several limitations to this study. Our data were cross-sectional, mostly self-report, and comprised of university students. In addition, we were unable to verify every aspect of our methodology pertaining to safeguarding confidant data. Future research with other samples and methodologies is needed. Nonetheless, this study achieved its primary goals by studying gratitude and forgiveness together. Profiles of strengths are not new with work by Seligman and colleagues and the Gallup Organization spearheading this endeavor. We agree with their approach and urge others to continue investigating character strength profiles in future research. What was gained from scientific reduction no longer offsets what is lost by ignoring the greater context in which character strengths exist.

Future work may also explore complex ways in which character strengths occur in everyday life. For example, what might it mean to be high in gratitude and low in forgiveness? Is there utility in exploring interactions among strengths (e.g., Gratitude X Forgiveness)? Are there are psychological disorders (e.g., Social Anxiety Disorder Kashdan, Julian, Merritt, & Uswatte (2006)) that impede the development or satisfaction of certain strengths (e.g., curiosity) or are buffered by others (e.g., forgiveness)? What might be learned from people who exhibit a large number of balanced strengths compared to those who experience extreme levels of one or two strengths? Exploring these questions might lead to new intervention targets including backdoor routes to dealing with distress (alternatives to symptom reduction). Continuing beyond the use of dispositional measures to time-series (e.g., daily diary) designs is also promising. To adequately understand strengths, we must acknowledge the complexity in which they occur.

Acknowledgement

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