

Protective Factors Against Callous-Unemotional Traits in Adolescents: The Role of Gratitude, Forgiveness, and Honesty

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INTRODUCTION

Background

Callous-unemotional (CU) traits have been associated with antisocial behavior in adolescents (Feshbach, 1997; Kimonis et al., 2008) and may indicate a risk for psychopathy in adulthood (Lynam, Caspi, Moffitt, Loeber, & Stouthamer-Loeber, 2007). While substantial research has investigated the role of risk factors in the development of CU traits, few studies have examined the role of protective factors.

Prior literature supports the examination of **gratitude**, **forgiveness**, and **honesty** as potential protective factors against CU characteristics in adolescents. For example, experiences of gratitude have been negatively correlated with narcissism (Watkins, Woodward, Stone, & Kolts, 2003), an unwillingness to forgive transgressions has been linked to empathy deficits (Malcolm & Greenberg, 2000), and dishonest response styles have been associated with CU traits (Laajasalo et al., 2016). Further, expressing gratitude has been identified as an effective strategy for youth with peer difficulties to bolster peer bonds (Bono & Froh, 2007) and an unwillingness to forgive is indicative of vengeful rumination and aggression in adults (Berry, Worthington, O'Connor, Parrott, & Wade, 2005).

Current study

The current study examines the extent to which **gratitude**, **forgiveness**, and **honesty** can predict CU traits in adolescents using both concurrent and longitudinal data. This is one of the few studies to examine protective factors against CU traits and, to our knowledge, it is the first to assess whether gratitude, forgiveness, and honesty protect against the development of CU traits in youth.

METHODS

Participants

Participants consisted of 116 adolescents recruited from probation agencies and youth centers that provide services for at-risk youth. Sample characteristics are presented in **Table 1**. Youth were interviewed on two occasions, six months apart. The attrition rate from Time 1 to Time 2 was 16.4%.

Measures

Levels of CU traits were assessed with the Inventory of Callous-Unemotional Traits (ICU; Frick, 2004), a 24-item self-report measure of uncaring, callous, and unemotional features in adolescents. Character strengths were assessed with the Values in Action Youth Inventory of Strengths (VIA-Youth; Peterson & Park, 2009), a 198-item self-report measure of character strengths. Three character strengths were evaluated in this study: **gratitude**, **forgiveness**, and **honesty**. Psychometric properties of the study variables are shown in **Table 2**, and correlations between the variables are shown in **Table 3**.

TABLES & FIGURES

Table 1.
Sample characteristics at Time 1.

Age	15.31 (1.56)
Mean (SD)	15.31 (1.56)
Range	12 - 18 years
Grade level	
Mean (SD)	9.97 (1.50)
Range	6 - 13
Gender	
% Girls	47.4
Ethnicity	
% Caucasian	40.5
% Indigenous	26.7
% East/Southeast Asian	5.2
% South Asian	5.2
% Mixed/Other	22.4
History of offending	
% Self-reported	64.7
% Previously charged	27.6

Note. n = 116.

Table 2.
Psychometric Properties of Major Study Variables.

	M(SD)	Range	Skew	Kurtosis
CU traits	24.59(9.46)	7 - 56	0.42	-0.01
Forgiveness	3.41(0.89)	1.14 - 5	-0.33	-0.47
Gratitude	3.85(0.68)	2.38 - 5	-0.28	-0.59
Honesty	3.51(0.70)	1.75 - 5	-0.10	-0.54

Note. CU = callous-unemotional.

Table 3.
Correlations Between Major Study Variables.

Variables	1	2	3	4
1. CU traits	--			
2. Forgiveness	-.41**	--		
3. Gratitude	-.50**	.34**	--	
4. Honesty	-.47**	.33**	.60**	--

Note. CU = callous-unemotional. ** p < .01, two-tailed.

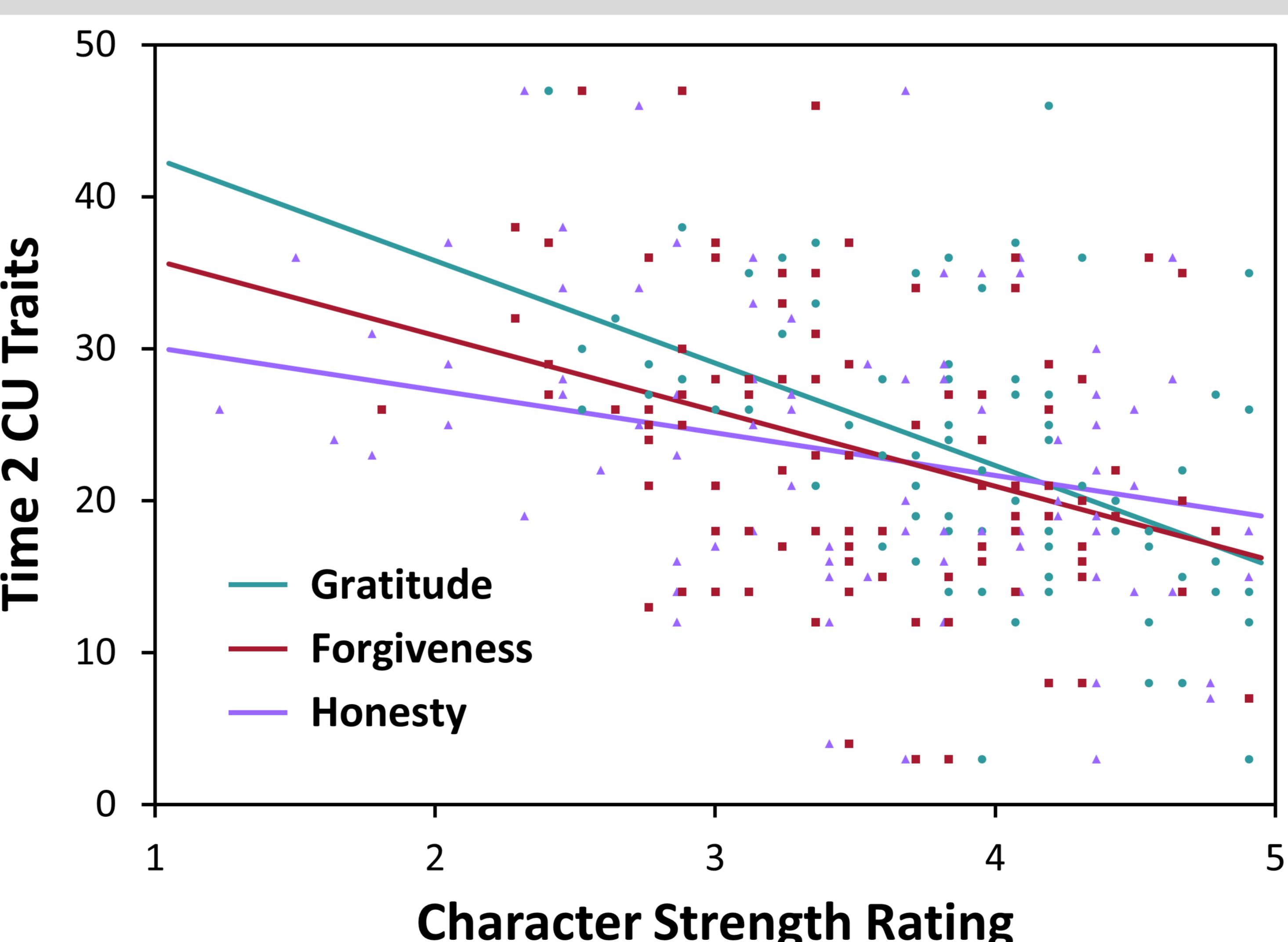


Figure 1. Prospective associations between character strengths and Time 2 CU traits

RESULTS

Concurrent associations

An ordinary least squares (OLS) regression analysis was conducted to predict Time 1 ICU scores based on Time 1 VIA-Youth subscale scores of gratitude, forgiveness, and honesty. A significant regression equation was found ($F[3, 112] = 19.36, p < .001$), with an R^2 of .34. Higher levels of **gratitude** ($\beta = -0.29, t = -2.92, p < .01$), **forgiveness** ($\beta = -0.25, t = -2.97, p < .01$), and **honesty** ($\beta = -0.21, t = -2.17, p < .05$) significantly predicted lower levels of CU traits at Time 1.

Prospective associations

A parallel regression analysis was performed to predict Time 2 ICU scores based on Time 1 VIA-Youth subscale scores. To control for pre-existing CU traits, Time 1 ICU scores were entered into Step 1, followed by VIA-Youth subscale scores in Step 2. Resulting associations are illustrated in **Figure 1**. A significant regression equation was found ($F[4, 92] = 17.38, p < .001$), with an R^2 of .43. Higher levels of **gratitude** ($\beta = -0.25, t = -2.33, p < .05$) significantly predicted lower levels of CU traits at Time 2. **Forgiveness** and **honesty** were not independently predictive of CU traits at Time 2 ($p > .05$).

Gender analysis

Hierarchical OLS regression analyses were conducted following the guidelines of Baron and Kenny (1986) to test whether gender moderated associations between VIA-Youth subscale scores and ICU total scores at Time 1 or Time 2. Gender did not moderate concurrent or prospective relationships between CU traits and gratitude, forgiveness, or honesty ($p > .05$).

DISCUSSION

Collectively, the character strengths examined in this study accounted for 34% of the variance in co-existing CU traits. **Forgiveness** and **honesty** were predictive of CU traits concurrently, but not prospectively. As such, low forgiveness and low honesty may be manifestations of CU features.

Gratitude was predictive of CU traits both concurrently and prospectively, even after controlling for pre-existing CU traits. This time-ordered evidence suggests that gratitude may protect against the development of CU traits. This finding is consistent with prior research linking the expression of gratitude to peer bonding (Bono & Froh, 2007) and the ability to make friends with the reduction of interpersonal callousness over time (Salekin & Lochman, 2008).

While further research is needed to clarify the role of character strengths in the development of CU traits, the current findings have uncovered **gratitude** as a promising conceptual clue in the search for protective factors.

