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6-2021

## Further Evaluation of the Associations Between Psychopathic Traits and Symptoms of PTSD and Depression in a Nonclinical Sample

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This document was originally published in:

Kavish, N., Boisvert, D., Cooke, E.M., Lewis, R.H., Woeckener, M., Wells, J., & Armstrong, T.A. (2021). Further Evaluation of the Associations Between Psychopathic Traits and Symptoms of PTSD and Depression in a Nonclinical Sample. *Journal of Personality Disorders*, 35(3), 469-480, Copyright 2021, Guilford Press. Reprinted with permission of The Guilford Press. Copyright restrictions may apply. [https://doi.org/10.1521/pedi\\_2020\\_34\\_467](https://doi.org/10.1521/pedi_2020_34_467)

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**BRIEF REPORT**

**FURTHER EVALUATION OF  
THE ASSOCIATIONS BETWEEN  
PSYCHOPATHIC TRAITS AND  
SYMPTOMS OF PTSD AND DEPRESSION  
IN A NONCLINICAL SAMPLE**

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Examining psychopathic traits at the factor or facet level has revealed that various aspects of psychopathy may be differentially related, even in opposing directions, to important outcomes (e.g., intelligence, emotion regulation). Empirical work on relations between psychopathy and internalizing disorders, such as posttraumatic stress disorder (PTSD) and depression, has provided evidence for a positive association with antisocial traits. However, findings for the affective domain have been more equivocal. The current study ( $N = 732$ ) sought to replicate past findings of the positive association of antisocial psychopathic traits with higher levels of PTSD and depressive symptoms, and to further explore associations between affective traits of psychopathy and these disorders using two measures of psychopathy. Results confirmed prior findings of a positive correlation between antisocial features and self-reported PTSD/Depression symptom severity, but they did not provide evidence for any association with affective traits. Future research using longitudinal designs is needed to begin establishing temporal ordering of the psychopathy–internalizing relationship.

*Keywords:* psychopathic traits, posttraumatic stress disorder, depression, internalizing, callousness

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The authors have no conflicts of interest to report.

This study was supported by an Enhancement Grant for Professional Development from the Office of Research and Sponsored Programs at Sam Houston State University. Sponsors were not involved in study development or implementation, data analysis, or report writing.

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The construct of psychopathy has alternatively been described as a severe personality disorder (Willemsen & Verhaeghe, 2012), a constellation of personality traits (e.g., Widiger & Lynam, 1998), or a personality syndrome (Salekin & Frick, 2005). Although much of the early research treated psychopathy as a unitary, discrete, and diagnosable entity,<sup>1</sup> researchers today have increasingly recognized that psychopathy is better understood as a multidimensional construct consisting of a number of correlated traits (see Lilienfeld, 2018). These psychopathic traits typically include features such as callousness and unemotionality, superficial charm, manipulateness, impulsivity, and grandiosity (Cleckley, 1941; Hare, 2003; Patrick, Fowles, & Krueger, 2009). Psychopathic traits are frequently grouped into factors and/or facets (e.g., interpersonal, affective, lifestyle, and antisocial; Hare, 2003), and research examining psychopathy at a more intricate level has demonstrated differential associations with other attributes (Gillen et al., 2018; Sánchez de Ribera, Kavish, Katz, & Boutwell, 2019), including psychopathologies such as posttraumatic stress disorder (PTSD) and depression (e.g., Sellbom, 2015; Willemsen, Vanheule, & Verhaeghe, 2011).

Given the description of the affective component of psychopathy (i.e., callousness, lack of empathy) as a particularly central feature of the construct (Cleckley, 1941; Verschuere et al., 2018), some researchers have posited that higher levels of global psychopathy should be negatively related to PTSD symptomatology and internalizing psychopathology (e.g., Blair & Mitchell, 2009; Pham, 2012). Alternatively, the disinhibited and antisocial features of psychopathy (i.e., impulsivity, delinquency/criminal behavior) may elevate risk for PTSD (or internalizing symptoms) by elevating risk for experiencing traumatic events. To date, examination of associations between facets of psychopathy and PTSD or internalizing symptomatology (e.g., depressive symptoms) have provided some support to both risk (Kubak & Salekin, 2009; Sellbom, 2015) and protective (Blonigen et al., 2010; Sellbom, 2015) lines of reasoning. The current study adds to this literature by further assessing the potentially differential associations between various factors of psychopathic traits and PTSD and depressive symptoms.

From a risk perspective, research on the impulsive and antisocial features of psychopathy has consistently found that these traits positively relate to PTSD symptomatology and internalizing disorders such as depression (see Blonigen, Hicks, Krueger, Patrick, & Iacono, 2005; Kubak & Salekin, 2009; Sellbom, 2015; *r*s ranged from .15 to .31). Indeed, Kubak and Salekin (2009) report positive associations between impulsive-antisocial features on self-report measures of PTSD symptoms and anxiety in a sample of juvenile offenders. Sellbom (2015) also found positive correlations between impulsive-antisociality and both PTSD symptoms and negative affectivity in a large undergraduate sample. Blonigen and colleagues (2005), using a community twin sample, also report a positive correlation between impulsive-antisociality and internalizing features, particularly for females. Most recently, Latzman

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1. As evidenced by the number of studies comparing groups of “psychopaths” to “nonpsychopaths”; see, for example, many of the studies included in Poeppl et al. (2019) and Pormoy and Farrington (2015).

and colleagues (2019) used a triarchic approach to psychopathy (Patrick et al., 2009) and found self-reported disinhibited traits to be generally positively related to internalizing psychopathology and specific internalizing subdomains ( $r$ s ranged from .22 to .41) in a combined sample of undergraduates and community members. In a second sample, the authors found a similar pattern of associations for informant-rated disinhibited traits and informant-rated internalizing symptomology (Latzman et al., 2019).

Research has also found support for the protective nature of the interpersonal and affective features of psychopathy. Sellbom (2015) found fearless dominance, assessed by the Psychopathic Personality Inventory (PPI; Lilienfeld & Andrews, 1996) scales created ad hoc in the Minnesota Multiphasic Personality Inventory–2 Restructured Form (Ben-Porath & Tellegen, 2008/2011; see Sellbom et al., 2012), to be negatively related to PTSD symptoms and negative affect ( $r$ s =  $-.41$  and  $-.47$ , respectively). Similarly, Blonigen and colleagues (2005) found negative correlations between fearless dominance, assessed by ad hoc PPI scales created in the Multidimensional Personality Questionnaire (Tellegen, 1982), and internalizing symptoms for men and women ( $r$ s =  $-.25$  and  $-.26$ , respectively). Latzman et al. (2019) found negative associations between both self-ratings and informant ratings of triarchic boldness and most of their indices of internalizing in their samples.

Research on psychopathy and psychopathology, which has used measures that do not explicitly assess boldness/fearless dominance, has produced less evidence for a negative association with the interpersonal-affective features (e.g., Kubak & Salekin, 2009). Across three measures of psychopathic traits, including both clinician ratings and self-report measures, Kubak and Salekin (2009) found no association between Factor 1 (the interpersonal-affective factor) psychopathy or callous-unemotional traits and a composite PTSD-anxiety measure in their sample of juvenile offenders. Blonigen and colleagues (2010) did find a significant, negative correlation between Factor 1 and internalizing symptomatology in their adult, forensic sample; however, the correlation was modest ( $r = -.12$ ) and markedly smaller in magnitude compared to the correlation between PPI fearless dominance and internalizing symptomatology in the same sample ( $r = -.51$ ).

There is growing evidence that psychopathic traits are correlated with PTSD symptoms and internalizing psychopathology. Furthermore, it appears that some of these traits, such as impulsivity and antisocial behavior, are associated with increased risk for psychopathological symptoms, while other traits (e.g., boldness/fearlessness) may protect individuals from developing these symptoms. Despite these findings, however, some questions remain. First, although the impulsive-antisocial traits of psychopathy seem reasonably consistent in their positive associations with PTSD symptoms and internalizing behaviors, associations with interpersonal-affective traits are much less clear. Boldness/fearless dominance seems to be negatively related to PTSD and internalizing psychopathology, but there is less evidence to support an association with other interpersonal-affective traits such as callousness. Anestis, Harrop, Green, and Anestis (2017) recently began exploring this question by examining associations between three factors of the Levenson Self-Report Psychopathy

scale (LSRP; Levenson, Kiehl, & Fitzpatrick, 1995) and PTSD in a sample of combat-exposed military personnel. The three-factor structure of the LSRP includes measurements of callousness, egocentricity, and antisociality. Despite prior findings that the egocentricity factor significantly predicts higher stress tolerance, low guilt, and higher scores on PPI Fearless Dominance (all of which suggest that it captures at least part of the boldness/fearless dominance construct; Salekin, Chen, Sellbom, Lester, & MacDougall, 2014; Sellbom, 2011), Anestis and colleagues (2017) found LSRP Egocentricity to be positively related to PTSD symptoms. They also found that the callousness factor was not statistically related to PTSD. The positive association between egocentricity and PTSD is surprising, and the replicability and generalizability of these results is unknown.

A second question is how psychopathic traits relate to specific internalizing dimensions such as depression. A review of several previous studies by Willemsen and colleagues (2011) found only a single significant association between interpersonal-affective psychopathic features and depression, although the authors reported negative associations between the interpersonal, affective, and lifestyle facets of psychopathy and depression in their own data. The studies reviewed by Willemsen and colleagues (2011) and their own analyses have potentially limited generalizability because they were all based on samples of incarcerated males. It remains unclear how psychopathic traits relate to depression in other types of samples.

## CURRENT STUDY

The current study seeks to contribute to the growing body of literature on the differential associations between facets of psychopathy, PTSD symptomatology, and depressive symptoms using a large sample of undergraduates. First, we assess the associations between dimensions of psychopathic traits and PTSD symptomatology using a broad measure of psychopathic traits (the LSRP) and a measure focused on the affective domain of psychopathy (the Inventory of Callous–Unemotional Traits [ICU]; Frick, 2004). On the basis of prior research, we hypothesize that the antisocial factor of the LSRP will be positively related to PTSD symptoms. In keeping with the findings of Anestis and colleagues (2017), we also hypothesize that, despite previous associations with stress tolerance and low guilt, the egocentricity factor of the LSRP will be positively related to PTSD. Similarly, in light of the lack of associations found in prior research (e.g., Anestis et al., 2017), we do not expect an association between LSRP callousness and PTSD or the ICU and PTSD. Next, we assess associations between psychopathic traits and a dimensional measure of depressive symptoms. Given the high comorbidity between PTSD and depression (Kilpatrick et al., 2003) and their similar natures (i.e., as internalizing syndromes with a primary distress component; Kotov et al., 2017), we expect that a similar pattern of associations (i.e., positive associations for LSRP Egocentricity and Antisocial; nonsignificant associations for LSRP Callousness and ICU) will emerge for depressive symptoms.

## METHOD

### PARTICIPANTS AND PROCEDURE

Participants for the current study were undergraduate students recruited from criminal justice courses at a large public university in the southwestern United States. A total of 872 students gave informed consent to complete the survey. Participants were excluded for missing demographic data, including missing age ( $n = 19$ ), gender ( $n = 2$ ), and race/ethnicity ( $n = 38$ ). Two additional participants self-identified as transgender and were excluded from analyses due to lack of sufficient representation. Finally, an additional 79 participants were excluded due to failure to finish the survey, resulting in a final analytical sample of 732. Average age of the sample was 20.21 years ( $SD = 2.59$ ) and was predominantly female ( $n = 459$ ; 62.7%). With regard to race/ethnicity, the majority of the sample identified as either White ( $n = 292$ ; 39.9%) or Hispanic ( $n = 269$ ; 36.7%), with the remainder identifying as African American ( $n = 100$ ; 13.7%), Asian ( $n = 11$ ; 1.5%), Native American ( $n = 6$ ; .8%), Hawaiian/Pacific Islander ( $n = 1$ ; .1%) or Other ( $n = 53$ ; 7.2%).

Of the 732 participants included in the analytical sample, 202 (28%) had missing data on one or more survey items. We used the multiple imputation procedure available in IBM SPSS 22 (IBM Corporation, USA) with items from our two psychopathy measures, depression measure, and PTSD measure as well as age, gender, and race included as predictors to impute each missing value 10 times. We imputed at the item level, rather than the scale level, because item-level imputation has been found in simulation studies to produce a meaningful advantage in terms of power (Gottschall, West, & Enders, 2012). For our analyses, we first conducted correlation analyses for all variables included in the study. As a robustness check, significant associations at the bivariate level were further tested using linear regression with age, dichotomized race, and gender included as covariates.

### MEASURES

*Levenson Self-Report Psychopathy Scale (LSRP)*. The LSRP (Levenson et al., 1995) is a 26-item self-report measure designed to assess behavioral and personality features of psychopathy. For each item, participants rate their agreement on a 4-point Likert scale. Subsequent research has suggested a three-factor solution (Egocentricity, Callousness, and Antisocial; Brinkley, Schmitt, Smith, & Newman, 2001; Sellbom, 2011), which we used in the current study. Prior research has also supported the convergent and discriminant validity of the three factors (Sellbom, 2011), particularly the Egocentricity and Antisocial factors (Salekin et al., 2014). The LSRP total scale (Cronbach's  $\alpha = .82$ ) and the three factors demonstrated questionable to good internal consistency (Cronbach's  $\alpha = .54$  [Callousness],  $.62$  [Antisocial],  $.81$  [Egocentricity]).

*Inventory of Callous-Unemotional Traits (ICU)*. The ICU (Frick, 2004) is a 24-item self-report measure assessing callous, unemotional, and uncaring

features. Items are rated by participants on a 4-point Likert scale. Responses were summed to create a total score as well as three subscales: Callousness (11 items), Uncaring (8 items), and Unemotional (5 items). The ICU has demonstrated good construct validity (Kimonis et al., 2008), and the total scale (Cronbach's alpha = .83) and subscales evidenced adequate to good internal consistency in the current study (Cronbach's alpha = .74 [Unemotional], .79 [Callousness], .84 [Uncaring]).

**PTSD.** PTSD is captured using a modified version of the PTSD Symptom Scale–Self-Report (PSS-SR; Foa, Riggs, Dancu, & Rothbaum, 1993), which is a 17-item self-report inventory of PTSD symptom severity.<sup>2</sup> Each item on the PSS-SR asks about the frequency with which the participant has experienced a specific symptom in the past 2 weeks and is rated on a 4-point Likert scale ranging from 0 (*not at all*) to 3 (*very much/almost always*), and the ratings are summed to create a total PTSD severity score. Participants for the current study were asked to rate each item on a scale from 0 (*Never*) to 8 (*2–3 times per day*) while thinking about the past year because the larger data collection was interested in assessing a longer history of psychopathology; however, the ratings were collapsed to fit the original scaling of the measure for the current study. Internal consistency for the PSS-SR in the current study was good (Cronbach's alpha = .91).

**Depression.** Depression was measured using a 20-item self-report inventory: the Center for Epidemiological Studies Depression Scale (CES-D; Radloff, 1977). Items are scored on a 4-point Likert scale ranging from 0 (*rarely or none*) to 3 (*most or all of the time*) and refer to the experience of depressive symptoms over the past week. Ratings are then summed to create a total depression score. As with the PSS-SR, participants were asked to rate the CES-D items on a 0 (*Never*) to 8 (*2–3 times per day*) scale, but the ratings were collapsed to match the original 0–3 scale for the current study. The CES-D has demonstrated consistent construct validity (Lewinsohn, Hoberman, & Rosenbaum, 1988). Internal consistency for the CES-D in the current study was good (Cronbach's alpha = .95).

**Covariates.** Age, race, and gender were included as covariates in all regression analyses. Age was coded as a continuous variable. Race and gender were coded dichotomously (0 = White, 1 = Nonwhite; 0 = Male, 1 = Female).

## RESULTS

Descriptive statistics for our independent and dependent variables are presented in Table 1. Bivariate analyses are presented in Table 2. Analyses demonstrated a moderate positive correlation between the Antisocial factor of the

2. Due to an error in the creation of the larger survey from which the current study is derived, one item ("trying to avoid activities or people that remind you of the traumatic event") was left out of the scale.



**TABLE 1. Descriptive Statistics of Study Variables**

	Mean	SD	Minimum	Maximum
Age (years)	20.21	2.59	17	47
Race (% White)	39.9			
Gender (% Female)	62.7			
LSRP total	22.14	7.47	4	53
Egocentricity	9.00	4.66	0	26
Callousness	7.78	2.18	4	16
Antisocial	5.36	2.55	0	14
ICU total	22.18	8.98	0	57
Uncaring	7.71	4.78	0	24
Callous	6.48	4.33	0	30
Unemotional	7.99	3.14	0	15
PTSD (PSS)	2.65	6.20	0	48
Depression (CES-D)	6.80	11.69	0	60

Note. LSRP = Levenson Self-Report Psychopathy scale; ICU = Inventory of Callous–Unemotional Traits; PSS = PTSD Symptom Scale–Self-Report; CES-D = Center for Epidemiological Studies–Depression Scale–Revised.

**TABLE 2. Correlation Matrix for Depression, PTSD, and Psychopathy Scores**

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. CES-D	—												
2. PSS-SR	<b>.65</b>	—											
3. LSRP Tot	<b>.11*</b>	<b>.08*</b>	—										
4. LSRP Ego	<b>.04</b>	<b>.03</b>	<b>.91</b>	—									
5. LSRP Callous	<b>-.02</b>	<b>-.04</b>	<b>.58</b>	<b>.36</b>	—								
6. LSRP Anti	<b>.28</b>	<b>.22</b>	<b>.70</b>	<b>.48</b>	<b>.15</b>	—							
7. ICU Tot	<b>.02</b>	<b>.02</b>	<b>.56</b>	<b>.48</b>	<b>.43</b>	<b>.35</b>	—						
8. ICU Uncare	<b>-.01</b>	<b>-.05</b>	<b>.44</b>	<b>.34</b>	<b>.40</b>	<b>.31</b>	<b>.79</b>	—					
9. ICU Callous	<b>.03</b>	<b>.04</b>	<b>.53</b>	<b>.49</b>	<b>.34</b>	<b>.33</b>	<b>.76</b>	<b>.36</b>	—				
10. ICU Unemot	<b>.04</b>	<b>.07</b>	<b>.15</b>	<b>.14</b>	<b>.14</b>	<b>.07</b>	<b>.56</b>	<b>.21</b>	<b>.20</b>	—			
11. Age	<b>-.00</b>	<b>.05</b>	<b>-.08*</b>	<b>-.09*</b>	<b>.00</b>	<b>-.06</b>	<b>-.01</b>	<b>.00</b>	<b>-.00</b>	<b>-.02</b>	—		
12. Gender	<b>.16</b>	<b>.14</b>	<b>-.21</b>	<b>-.19</b>	<b>-.25</b>	<b>-.03</b>	<b>-.28</b>	<b>-.20</b>	<b>-.28</b>	<b>-.09*</b>	<b>-.02</b>	—	
13. Race	<b>-.01</b>	<b>-.04</b>	<b>.06</b>	<b>.09*</b>	<b>.03</b>	<b>.00</b>	<b>.00</b>	<b>.02</b>	<b>.00</b>	<b>-.04</b>	<b>-.06</b>	<b>.14</b>	—

Note. CES-D = Center for Epidemiological Studies–Depression Scale–Revised; PSS-SR = PTSD Symptom Scale–Self-Report; LSRP Tot = LSRP Total Score; LSRP Ego = LSRP Egocentricity; LSRP Callous = LSRP Callousness; LSRP Anti = LSRP Antisocial; ICU Tot = ICU Total Score; ICU Uncare = ICU Uncaring; ICU Callous = ICU Callousness; ICU Unemot = ICU Unemotional. Gender is coded 0 = Male, 1 = Female; Race is coded 0 = White, 1 = Non-White. \* $p < .05$ . Bolded correlations are significant at  $p < .01$ .

LSRP and PTSD,<sup>3</sup> in line with our hypothesis that higher levels of antisocial features would be related to greater PTSD symptom severity. Also according to our prediction, we found no significant association between LSRP Callousness or any scale of the ICU and PTSD symptoms. In contrast to predictions, however, we did not find an association between LSRP Egocentricity and PTSD scores.

Our second goal was to assess the associations between psychopathic traits and an indicator of internalizing psychopathology: depressive symptoms. Our results closely mirrored those for PTSD. The LSRP Antisocial factor was positively associated with depression scores. No measure of callous-unemotional traits (LSRP Callousness or any ICU subscale) was related to depression. Again, contrary to predictions, LSRP Egocentricity was unrelated to depressive symptoms.

As a robustness check, we further tested the significant correlations (LSRP Antisocial with PTSD and depression scores) using linear regression (see Table 3). Controlling for age, gender, and race, LSRP Antisocial scores uniquely contributed to prediction of PTSD symptoms. Gender also predicted PTSD severity, with female participants reporting higher levels of symptoms. Similarly, LSRP Antisocial scores uniquely contributed to prediction of depressive symptoms after inclusion of covariates. Gender was also significantly predictive of depression scores, with females again demonstrating higher scores.

## DISCUSSION

Prior research has found nuanced and inconsistent associations between psychopathic traits and psychopathologies such as PTSD and depression (e.g., Anestis et al., 2017; Blonigen et al., 2010; Kubak & Salekin, 2009; Willemssen et al., 2011). The current study sought to help clarify these associations using a broad measure of psychopathic traits and a measure specifically focused on the affective traits of psychopathy in a large, undergraduate student sample. A similar pattern of associations emerged across both PTSD and depressive symptoms. We anticipated that the Antisocial and Egocentricity factors of the LSRP would be positively associated with PTSD and depression while the Callousness factor would not be significantly associated with PTSD or depression. In line with our predictions, the Antisocial factor was positively related to both PTSD and depression symptoms even after controlling for demographic covariates. This finding provides support for the perspective that more impulsive-antisocial features may elevate risk for developing symptoms of PTSD or depression. However, given the cross-sectional and correlational nature of the current study, we cannot rule out the possibility that the relationship points the other way, or is noncausal. Also in accordance with prediction, callousness (on either the LSRP or the ICU) was not statistically associated with either PTSD symptoms or depression. Conversely, and in contrast to

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3. For easier readability, we refer to the PSS as PTSD and CES-D as Depression throughout the remainder of the article. We note, however, that these inventories are only measures meant to capture the underlying constructs and are not the constructs themselves.

TABLE 3. Results of Multiple Linear Regression Predicting PSS and CES-D Scores

	PSS-SR			CES-D		
	<i>b</i>	<i>SE</i>	<i>p</i>	<i>b</i>	<i>SE</i>	<i>p</i>
LSRP Anti	.57***	.09	< .001	1.33***	.16	< .001
Race	-.69	.46	.14	-.94	.85	.27
Age	.14	.09	.10	.06	.16	.73
Gender	1.60***	.47	< .001	4.34***	.86	< .001

Note. PSS-SR = PTSD Symptom Scale–Self-Report; CES-D = Center for Epidemiological Studies–Depression; LSRP Anti = Levenson Self-Report Psychopathy Antisocial factor. \*\*\* $p < .001$ .

prior work (e.g., Anestis et al., 2017), LSRP Egocentricity was not statistically related to either PTSD or depression.

Our findings further support a growing body of research suggesting that the impulsive and antisocial features of psychopathy are related to higher levels of internalizing psychopathology and traumatic stress (e.g., Blonigen et al., 2005; Kubak & Salekin, 2009; Latzman et al., 2019; Sellbom, 2015). One interpretation of this association is that impulsive-antisocial traits are closely linked to affective dysregulation, in line with descriptions of the disinhibition domain of the triarchic model of psychopathy (see Patrick et al., 2009). Specifically, Patrick and colleagues (2009) conceptualized disinhibition as a tendency toward difficulties with regulation of affect and behavioral restraint. Furthermore, the authors argued that disinhibition can be understood from a personality perspective as a combination of impulsivity and negative affectivity.

The lack of association between any of our scales for callous-unemotional traits and PTSD or depression symptoms aligns with some prior research (e.g., Kubak & Salekin, 2009; but see Blonigen et al., 2010). Although Blonigen and colleagues (2010) did find a negative correlation between the interpersonal-affective Factor 1 of the Psychopathy Checklist-Revised and internalizing symptomatology, this association was small in magnitude ( $r = -.12$ ) and includes interpersonal traits in addition to the affective component. Similarly, Anestis and colleagues (2017) did find that LSRP Callousness moderated the association between combat experience and PTSD; however, the effect size ( $f^2 = .03$ ) was very small and derived from a somewhat modest sample size ( $N = 292$ ) for conducting multiple interaction tests. Taken together, the evidence seems to suggest that the association between the callous-unemotional traits of psychopathy and symptoms of PTSD and depression, although likely greater than zero, is weak and inconsistent enough to lack clinical or practical significance.

Prior research has found greater support for a protective effect of boldness/fearless dominance (Blonigen et al., 2005; Sellbom, 2015); however, we could not fully test such an association with our measures of psychopathic traits. As noted in the introduction of our article, the Egocentricity factor of the LSRP has been associated with stress tolerance and low guilt and has been found to correlate with boldness/fearless dominance. These associations have been small in magnitude and still possibly were inflated due

to shared method variance. Thus, it is plausible that the divergent results between LSRP Egocentricity and PTSD or depressive symptoms in Anestis and colleagues (2017) and the current study relative to the findings of prior work with boldness/fearless dominance could be because LSRP Egocentricity fails to adequately capture the apparent protective features of the boldness/fearless dominance construct.

## LIMITATIONS AND FUTURE DIRECTIONS

The findings of the current study should be evaluated in light of several limitations. First, although large and racially diverse, our sample was composed of undergraduates and may not be generalizable to other populations, especially clinical or forensic populations. To date, however, studies examining the topic of the current study in forensic samples (Blonigen et al., 2010; Kubak & Salekin, 2009) do not appear to have found substantively different results from research using community or student samples (e.g., Blonigen et al., 2005; Sellbom, 2015). Second, some research has suggested that the LSRP Callousness factor in the three-factor solution used in this study has limited convergent/divergent validity (Salekin et al., 2014), but our inclusion of an additional measure of callous-unemotional traits (the ICU) may have somewhat offset this limitation. As noted in the Methods section, the PSS-SR scale was administered with one item accidentally left out, and both the PSS-SR and the CES-D were rated on 0–8 scales rather than their original 0–3 format, but these variations are unlikely to substantively change the results. Finally, as noted above, the current study was cross-sectional in nature and cannot offer insight into the temporal order of development of psychopathic traits or PTSD and depressive symptomatology. Future research should use prospective longitudinal designs and multiple measures/operationalizations of psychopathic traits to better understand these associations. In addition, future research can explore the associations between various psychopathic traits and psychopathology among populations exposed to the same type of stressors (e.g., combat veterans; see Bowes, Brown, Thompson, Sellbom, & Lilienfeld, 2019).

## CONCLUSION

Overall, the current study supports the perspective that impulsive and anti-social psychopathic traits are associated with higher levels of psychopathology, specifically PTSD and depressive symptoms. No support was found for a negative association between any psychopathic trait and either PTSD or depression severity; however, no explicit measurement of boldness or fearless dominance was included. These results suggest that if viewed as a global construct, psychopathy is likely not protective against psychopathology and may actually be a risk factor; however, the differential associations between various psychopathic traits and symptoms of PTSD and depression argue for a more nuanced consideration of the multidimensional nature of psychopathy.

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