

**RESEARCH ARTICLE**

# The relationship between personality disorder traits, emotional intelligence, and college adjustment

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**Abstract**

**Objective** The current study examined the relationship between emotional intelligence, personality disorder traits, and college adjustment.

**Method** A sample of 246 first-semester, first-time freshmen (73.6% female, age mean = 18.7, standard deviation = 2.0) at a large university in the Eastern United States completed the Trait Emotional Intelligence Questionnaire (Petrides, 2009), the Schedule for Non-adaptive and Adaptive Personality-2 (Clark, Simms, Wu, & Casillas, 2014), and the Student Adaptation to College Questionnaire (Baker & Siryk, 1998).

**Results** As predicted, personality disorder symptoms and emotional intelligence were generally related, and both were related to adjustment. Unique patterns of association between traits reflecting personality disorder clusters and emotional intelligence deficits also emerged. Contrary to expectation, however, emotional intelligence did not moderate the relationship between personality disorders and adjustment.

**Conclusion** The results suggest an alternative model implicating emotional intelligence as a mediator of the relationship between personality difficulties and college adjustment.

**KEYWORDS**

college adjustment, emotional intelligence, personality disorders, personality disorder traits

The prevalence of personality disorders (PDs) among young adults between 18 and 34 has been estimated to be approximately 17% to 19%, as compared to 5% to 14% for individuals over the age of 30 (Dawson, Grant, Stinson, & Chou, 2005; Ekselius, Tillfors, Furmark, & Frederikson, 2001; Moran, Coffey, Mann, Carlin, & Patton, 2006). Rates for

PDs among enrolled college students have been reported to be even greater, between 20% and 27% (Klonsky, Jane, Turkheimer, & Oltmanns, 2002; Schoenleber & Berenbaum, 2011) and as high as 33% among freshmen (Oltmanns, Melley, & Turkheimer, 2002). Evidence indicates that PDs are debilitating and can be major sources of impairment in various domains of psychosocial functioning (Miller, Pilkonis, & Mulvey, 2006; Skodol et al., 2005). Given that approximately 30%–40% of incoming undergraduates drop out of college without obtaining a degree, and that the majority of those who leave their institution make the decision during the first year (Bradburn & Carroll, 2002; Consolvo, 2002), inquiry into how PDs relate to the ability to adjust to college is particularly important.

Undergraduates who drop out often do so for reasons related to social and emotional factors (Bradburn, 2003; Kalsner & Pistole, 2003; Kerr, Johnson, Gans, & Krummne, 2004). As such, transition to college may pose specific challenges for students with personality pathology symptoms. For example, individuals with PDs typically exhibit difficulties with affect regulation, interpersonal understanding and functioning, and impulse control. In addition, persons with PDs tend to be inflexible in their interpretation and responses to situations and are thus unable to adapt to changes (American Psychiatric Association [APA], 2000).

As a result, individuals with PDs have fewer friends and experience more relationship problems (King & Terrance, 2006; Tragesser & Benfield, 2012). College students scoring higher on PD scales also demonstrate lower grades and class attendance (Bagge et al., 2004; King, 1998), a lower likelihood of graduating (Hunt, Eisenberg, & Kilbourne, 2010), and a greater likelihood of exhibiting school disengagement (Vaughn et al., 2011). In addition, college-aged individuals with PDs are at increased risk for behavioral problems such as substance use, aggression, suicidal ideation and attempts (Cawood & Huprich, 2011; Manza, 2009; Schmeelk, Sylvers, & Lilienfeld, 2008), and symptoms of anxiety and depression (Weikel, 2010). Most importantly, the negative effects of PD pathology persist after controlling for other diagnoses, suggesting it may be a primary cause of disability. Several studies have also found a direct link between PD traits and self-reported college adjustment (Rathvon & Holmstrom, 1996; Rice & Dellwo, 2002).

Emotional intelligence (EI) has been used to refer to an individual's ability to experience, attend to, process, understand, regulate, and reason about affect-laden information in themselves and others (Mayer, Salovey, & Caruso, 2004). EI also describes an individual trait, the self-perceptions of individuals about their affect-related behavioral tendencies (Petrides, Perez-Gonzalez, & Furnham, 2007). Despite the theoretical and assessment differences, researchers suggest that ability and trait EI are generally consistent with each other (Brackett & Mayer, 2003; Mayer, Roberts, & Barsade, 2008; Mikolajczak, 2009; Schutte & Malouff, 2008). EI has been linked to PDs in college students (Petrides et al., 2007). Given that PDs vary in their presentation, the relationship may differ across specific PDs and various features of EI. Further, each cluster of PDs (Cluster A: odd or eccentric; Cluster B: dramatic, emotional, and erratic; Cluster C: anxious and fearful) might also be related to particular patterns of EI factors.

Leible and Snell (2004), for example, examined PD traits and EI in a sample of 1,418 undergraduates. All PD scales were related to lower scores on global EI, while the associations between specific PD and EI scales were consistently in the expected direction. For instance, higher scores on borderline PD symptomatology were associated with various indicators of poor emotional regulation, while students who scored higher on PD dimensions associated with Cluster A generally lacked the ability to understand and modulate emotions. Leible and Snell hypothesized these difficulties could produce the behaviors perceived as odd or eccentric by others.

Extensive research has also demonstrated a protective role for EI among college students. For instance, higher EI scores were associated with better academic performance and retention rates among freshmen (Parker, Duffy, Wood, Bond, & Hogan, 2005); better interpersonal functioning (Lopes, Salovey, & Straus, 2003); better adjustment to college programs and activities (Bar-On, 2001; Palmer, Walls, Burgess, & Stough, 2001); and less difficulty managing academic, social, and personal/emotional adjustment to college (Johnson, Gans, Kerr, & LaValle, 2010). A meta-analysis by Martins, Ramalho, and Morin (2010) also confirmed that EI is generally a strong positive predictor of mental health across populations.

EI has also been shown to moderate relationships between various negative factors and students' college adjustment. For example, first- and second-year college students' EI scores moderated the relation between academic self-efficacy and achievement even after controlling for age, gender, and entry qualifications (Adeyemo, 2007). Also, higher EI scores were associated with better social adjustment to college among young adults from problematic family

environments (Johnson et al., 2010). Thus, EI appears to act as a buffer and is positively associated with students' ability to transition into college.

To date, no studies have examined whether EI can serve a similar moderating role in the association between PD traits and college adjustment. To study this relationship, the following hypotheses were examined:

- H1:** The relationship between PD traits and EI would tend to be negative.
- H2:** Traits associated with PD clusters would be associated with particular patterns of EI factors. Specifically, Cluster A PD traits would be associated with poorer emotion expression and emotion perception, Cluster B PD traits with impulsiveness and poor control/emotion regulation, and Cluster C PD traits with poor control/emotion regulation and stress management. No predictions were made regarding traits associated with specific PDs.
- H3:** An inverse relationship would tend to emerge between PD traits and college adjustment.
- H4:** Global and factor scores of EI would be positively associated with overall college adjustment.
- H5:** Global EI scores would moderate the relationship between PD traits and adjustment to college.

## 1 | METHOD

### 1.1 | Participants

A total of 292 adult freshmen were recruited through a psychology subject pool and flyers distributed in freshman seminar and general psychology courses at Fairleigh Dickinson University in Teaneck, New Jersey. The university's institutional review board approved the study, and all students signed consent forms to participate. Assessment occurred during the Fall 2013 and Fall 2014 semesters. A total of 46 cases were excluded from analyses: 38 were not first-semester, first-time students and eight were missing more than 15% of data on two or more measures.

The final sample consisted of 246 participants (73.6% female) between 18 and 38 years of age (mean [ $M$ ] = 18.7, standard deviation [ $SD$ ] = 2.0). In terms of ethnicity, 37.0% were Caucasian, 23.6% were Hispanic, 19.5% were African American, 10.6% identified as Asian/Pacific Islander, 2.8% were Caribbean Islander, 1.6% were Middle Eastern, 0.4% were Native American, and 4.5% identified as Other; 86.6% of the participants were born in the United States. The majority of participants reported being single (96.7%), having no children (97.6%), being unemployed (65.3%), and living on campus (60.6%).

### 1.2 | Measures

#### 1.2.1 | Schedule for Nonadaptive and Adaptive Personality-2

The Schedule for Nonadaptive and Adaptive Personality-2 (SNAP-2; Clark, Simms, Wu Kevin, & Casillas, 2014) is comprised of 390 true-false items that provides a self-report assessment of a dimensional model of personality pathology based on the fourth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (APA, 1994). SNAP-2 scores have correlated strongly with corresponding scales from other self-report inventories of PDs (e.g., Widiger & Boyd, 2009) and scores from a structured PD interview (Samuel et al., 2010). In the present sample, Cronbach's alpha for the 12 PD scales varied between .66 and .84 ( $M = .78$ ), and was .96 for the total PD score.

#### 1.2.2 | Trait Emotional Intelligence Questionnaire

The Trait Emotional Intelligence Questionnaire (TEIQue; Petrides, 2009) consists of 153 self-report items that are completed on a 7-point Likert scale ranging from 1 (*disagree strongly*) to 7 (*agree strongly*). The TEIQue generates four broad scales, each of which is comprised of several more specific "factor" scales: (a) well-being: happiness, optimism, and self-esteem; (b) self-control: control/emotional regulation, stress management, and low impulsiveness;

(c) emotionality: emotion expression, empathy, emotion perception of self and others, and relationship skills; and (d) sociability: social competence, assertiveness, and emotion management (others).

In addition to the 13 factors that comprise the four broad scales, two additional factors—self-motivation and adaptability—are available. A global EI score can also be computed. The TEIQue has been shown to have good validity (Freudenthaler, Neubauer, Gabler, Scherl, & Rindermann, 2008; Mikolajczak, Luminet, Leroy, & Roy, 2007). Cronbach's alpha for the global EI scale in the current study was .91, and varied between .75 and .88 for the broad scales ( $M = .80$ ), and between .66 and .90 for the 15 factors ( $M = .76$ ).

### 1.2.3 | Student Adaptation to College Questionnaire

The Student Adaptation to College Questionnaire (SACQ; Baker & Siryk, 1998) is a 67-item self-report inventory scored on a 9-point Likert scale, ranging from 1 (*applies very closely*) to 9 (*me to does not apply to me at all*). The SACQ generates four subscales. Academic adjustment measures a student's ability to cope with the educational demands of college; social adjustment refers to the student's capacity to cope with societal demands; personal/emotional adjustment quantifies a general sense of how a student feels physically and psychologically; and institutional attachment measures a student's satisfaction with the institution attended. The scale also provides a total adjustment score. The SACQ has been found to have good validity (Baker & Siryk, 1999). In the current study, Cronbach's alpha varied between .86 and .94 for the subscales ( $M = .91$ ), and was .95 for total college adjustment.

## 1.3 | Procedure

Participants completed the study in the first semester of their freshman year via an online survey. Students were administered the questionnaires individually and were advised to complete them in a quiet place without disruptions. Completing the questionnaires took approximately 95 minutes. Students received credit toward completion of their course research requirement when such a requirement existed, or received two extra credit points toward their final grade in other courses.

## 2 | RESULTS

Descriptive statistics are presented in Table 1. The invalidity index, which is a composite of all other validity scales on the SNAP-2 and suggests biased or random responding, was high for 30 participants ( $T$  score > 70). Analyses excluding those cases produced the same outcomes, so findings are presented using the total sample.

The first hypothesis suggested an inverse relationship between PD traits and EI. As shown in Table 2, all PD scales with the exception of histrionic, narcissistic, and obsessive-compulsive PD traits were inversely associated with global EI. In most cases, PD scales also correlated negatively with all four TEIQue broad scales. The mean correlation across comparisons was  $-.34$ .

H2 suggested that unique patterns would emerge between the three PD clusters and EI. This hypothesis was tested using multiple regression (see Table 3). Cluster A PD traits, as hypothesized, were related to emotion expression and emotion perception; however, Cluster A PD traits did not uniquely predict these variables. The other parts of the hypothesis were fully confirmed: Cluster B PD traits uniquely predicted impulsivity, Cluster C PD traits uniquely predicted stress management, and both Cluster B and C PD traits, but not Cluster A PD traits, were associated with control/emotion regulation.

According to H3, PD traits were expected to be inversely associated with college adjustment (see Table 4). Consistent with findings for EI, inverse relationships emerged between PD traits and total college adjustment except for histrionic, narcissistic, and obsessive-compulsive PD traits, which were largely unrelated to adjustment variables. The mean correlation across comparisons was  $-.27$ .

As predicted by H4, positive relationships also emerged between EI factors and college adjustment (see Table 5). All except two associations were significant in the positive direction, and the mean correlation was .38.

**TABLE 1** Descriptive statistics for study variables

Scale	<i>M</i>	<i>SD</i>	<i>Skew</i>	<i>Min</i>	<i>Max</i>
<b>TEIQue</b>					
Self-Esteem	4.67	1.08	-.23	1.64	7.00
Emotion Expression	4.28	1.22	-.02	1.00	7.00
Self-Motivation	4.55	0.85	.01	1.90	7.00
Emotional Regulation	4.26	0.88	.02	1.67	6.50
Happiness	5.31	1.23	-.32	1.50	7.00
Empathy	4.80	0.91	.14	2.33	7.00
Social Competence	4.60	0.86	.15	1.91	7.00
Low Impulsivity	4.50	0.88	-.18	1.67	6.56
Emotion Perception	4.57	0.94	.20	1.60	7.00
Stress Management	4.27	0.88	-.01	1.80	6.70
Emotion Management	4.60	0.89	.32	2.33	6.89
Optimism	4.94	1.14	-.36	1.75	7.00
Relationship Skills	5.28	0.92	-.22	3.22	7.00
Adaptability	4.25	0.81	-.08	1.78	6.56
Assertiveness	4.54	0.88	.09	1.56	6.89
Global Emotional Intelligence	4.63	0.65	.31	3.04	6.61
<b>SNAP-2</b>					
<i>Cluster A</i>	9.78	3.75	.18	1.00	20.00
Paranoid	11.09	4.75	.23	1.00	22.00
Schizoid	7.19	4.03	.52	.00	19.00
Schizotypal	11.07	4.63	.26	1.00	22.00
<i>Cluster B</i>	9.98	3.55	.44	2.75	23.50
Antisocial	8.16	5.12	.78	1.00	26.00
Borderline	11.31	5.78	.41	1.00	29.00
Histrionic	9.67	4.08	.29	1.00	22.00
Narcissistic	10.76	3.84	.17	2.00	22.00
<i>Cluster C</i>	9.56	3.19	.21	3.33	17.33
Avoidant	9.36	4.64	.02	.00	18.00
Dependent	5.85	4.10	.43	.00	18.00
Obsessive-Compulsive	13.45	3.88	.14	5.00	24.00
<b>Appendix PDs</b>					
Depressive	10.46	4.70	.47	2.00	22.00
Passive-Aggressive	8.21	4.35	.19	.00	19.00
Total PD	116.59	36.07	.30	37.00	239.00
<b>SACQ</b>					
Academic Adjustment	144.57	27.92	.05	69.00	212.00
Social Adjustment	119.44	27.95	-.08	48.00	177.00
Personal Emotional Adjustment	80.81	21.83	-.13	23.00	128.00

(Continues)

**TABLE 1** (Continued)

Scale	M	SD	Skew	Min	Max
Attachment to College	98.21	23.06	-.27	32.00	135.00
Total College Adjustment	397.10	72.90	.05	172.00	572.00

Note. M = mean; SD = standard deviation; Min = minimum; max = maximum; TEIQue = Trait Emotional Intelligence Questionnaire (N = 244); SNAP-2 = Schedule for Nonadaptive and Adaptive Personality-2 (N = 242); SACQ = Student Adaptation to College Questionnaire (N = 242); PD = personality disorder.

**TABLE 2** Correlations between personality disorder traits and emotional intelligence scales

SNAP-2	TEIQue Broad Scales				
	Well-Being	Self-Control	Emotionality	Sociability	GEI
<b>Cluster A</b>					
Paranoid	-.47**	-.47**	-.39**	-.22**	-.48**
Schizoid	-.46**	-.13*	-.47**	-.39**	-.46**
Schizotypal	-.47**	-.38**	-.35**	-.27**	-.45**
<b>Cluster B</b>					
Antisocial	-.25**	-.29**	-.34**	-.04	-.30**
Borderline	-.57**	-.54**	-.46**	-.16*	-.55**
Histrionic	.00	-.26**	.07	.20**	-.02
Narcissistic	.01	-.12	-.04	.19**	-.01
<b>Cluster C</b>					
Avoidant	-.59**	-.42**	-.47**	-.49**	-.61**
Dependent	-.56**	-.54**	-.40**	-.38**	-.59**
OC	-.14*	-.15*	-.06	.14*	-.08
<b>Appendix PDs</b>					
Depressive	-.75**	-.55**	-.46**	-.39**	-.67**
PA	-.57**	-.58**	-.40**	-.22**	-.56**
<b>Total PD</b>	<b>-.62**</b>	<b>-.57**</b>	<b>-.49**</b>	<b>-.27**</b>	<b>-.61**</b>

Note. TEIQue = Trait Emotional Intelligence Questionnaire (N = 244); SNAP-2 = Schedule for Nonadaptive and Adaptive Personality-2 (N = 242); GEI = global emotional intelligence; OC = obsessive-compulsive; PD = personality disorder; PA = passive-aggressive.

\* $p < .05$  (2-tailed). \*\* $p < .01$  (2-tailed).

Regression analyses using the total college adjustment score as the criterion were conducted to test the final hypothesis that EI would moderate the relationship between PDs and college adjustment (see Table 6). The demographic variables of gender and race/ethnicity were entered into the analyses as covariates, as these variables have been found related to college adjustment (e.g., Krajniak, 2015). Block 1 also included the global EI and total PD scores. EI was the only significant predictor of college adjustment. Though Table 4 indicated a significant correlation between the total PD and total adjustment scales, the total PD score did not achieve significance after controlling for the other predictors. The product term from global EI and total PD scores was entered in Block 2. This also proved nonsignificant. In fact, the increase in the proportion of variance accounted for by the interaction term was 0.

Given the failure to find evidence of moderation, a mediation analysis was conducted on an exploratory basis to investigate whether global EI might mediate the relationship between the total PD score and college adjustment. This analysis was performed using Preacher and Hayes's (2004) method of testing for simple mediation via the PROCESS macro version 2.16 for SPSS (Hayes, 2013). As could be expected given correlations provided in prior tables, regressing college adjustment on total PD score and on global EI resulted in a significant effect of global EI,  $B = 63.72$ , standard

**TABLE 3** Regression analyses predicting emotional intelligence from personality disorder trait clusters

	<i>F</i>	<i>df</i>	<i>p</i>	<i>r</i> <sup>2</sup>	<i>B</i>	<i>SE</i>	$\beta$
<b>Emotion Expression</b>							
Model Summary	23.57	3, 236	<.001	.23			
Cluster A			<.001	.07	-.11	.03	-.34
Cluster B			<.001	.04	.09	.02	.25
Cluster C			<.001	.04	-.11	.03	-.28
<b>Emotion Perception</b>							
Model Summary	13.65	3, 236	<.001	.15			
Cluster A			<.01	.04	-.07	.02	-.26
Cluster B			.47	.00	.01	.02	.05
Cluster C			.02	.02	-.06	.02	-.20
<b>Impulsiveness</b>							
Model Summary	18.61	3, 236	<.001	.19			
Cluster A			.08	.01	-.03	.02	-.14
Cluster B			<.001	.08	-.09	.02	-.34
Cluster C			.78	.00	-.01	.02	-.02
<b>Poor Control/Emotion Regulation</b>							
Model Summary	21.12	3, 236	<.001	.21			
Cluster A			.82	.00	.00	.02	-.02
Cluster B			.02	.02	-.04	.02	-.16
Cluster C			<.001	.07	-.10	.02	-.35
<b>Stress Management</b>							
Model Summary	27.92	3, 236	<.001	.26			
Cluster A			.40	.00	-.02	.02	-.06
Cluster B			.39	.00	-.01	.02	-.06
Cluster C			<.001	.11	-.12	.02	-.44

Note. SE = standard error; df = degree of freedom.

error [*SE*] = 7.05, *p* < .001, as did regressing global EI on total PD score, *B* = -.01, *SE* < .001, *p* < .001. There was also a significant indirect effect of total PD score on college adjustment mediated by global EI, *B* = -.71, *SE* = .10, 95% confidence interval [-.91, -.52].

### 3 | DISCUSSION

Because of the high dropout rate among undergraduates (Bradburn, 2003; Kerr et al. 2004), the current study sought to examine whether EI serves a protective role against the negative impact of PD traits on college adjustment in first-semester freshman students. Consistent with previous findings (Leible & Snell, 2004; Petrides et al., 2007), an inverse relationship emerged between nearly all PD traits and EI broad scales. Specifically, PD traits were inversely associated with global EI with the exception of histrionic, narcissistic, and obsessive-compulsive PDs. PD traits were also related to poor well-being, self-control, emotional lability, and sociability. This is reflective of the tendency of individuals with personality pathology to be impulsive and inflexible, lack the ability to manage stress, experience difficulty recognizing and expressing emotions, have problems in interpersonal relationships, and to experience other emotional problems (APA, 2000; Miller et al., 2006; Skodol et al., 2005).

**TABLE 4** Correlations between personality disorder traits and college adjustment

SNAP-2 Scales	Adjustment Scales				
	Academic	Social	Personal/ Emotional	Attachment	Total CA
<b>Cluster A</b>					
Paranoid	-.18**	-.30**	-.40**	-.20**	-.32**
Schizoid	-.28**	-.39**	-.22**	-.31**	-.35**
Schizotypal	-.28**	-.28**	-.43**	-.21**	-.37**
<b>Cluster B</b>					
Antisocial	-.29**	-.12	-.22**	-.19**	-.27**
Borderline	-.27**	-.24**	-.50**	-.22**	-.39**
Histrionic	-.09	.12	-.18**	-.04	-.07
Narcissistic	-.02	.07	-.10	-.10	-.04
<b>Cluster C</b>					
Avoidant	-.29**	-.46**	-.43**	-.24**	-.43**
Dependent	-.44**	-.36**	-.51**	-.30**	-.50**
OC	.06	-.01	-.14*	.04	-.02
<b>Appendix PDs</b>					
Depressive	-.36**	-.46**	-.60**	-.33**	-.53**
PA	-.30**	-.31**	-.51**	-.26**	-.42**
<b>Total PD</b>	<b>-.35**</b>	<b>-.35**</b>	<b>-.54**</b>	<b>-.30**</b>	<b>-.48**</b>

Note. CA = college adjustment; SNAP-2 = Schedule for Nonadaptive and Adaptive Personality-2; OC = obsessive-compulsive; PA = passive-aggressive; PD = personality disorder.

\* $p < .05$  (2-tailed). \*\* $p < .01$  (2-tailed).

Histrionic, narcissistic, and obsessive-compulsive PD traits did not correlate with EI scales, contrary to expectation. Individuals with histrionic and narcissistic PDs have an intrinsic difficulty perceiving and/or admitting their shortcomings, and perhaps individuals with similar traits are less likely to endorse their inadequacies (Campbell & Campbell, 2009; Morf, Torchetti, & Schürch, 2011). The lack of association between obsessive-compulsive PD traits and total EI is consistent with evidence that these individuals experience deficits in some facets of EI (e.g., well-being) but not in other areas (e.g., sociability; Petrides et al., 2007). It may also be the case that these traits play a protective role in early college students, by rendering the student more resistant to negative events in the case of histrionic and narcissistic features, and by enhancing academic performance in the case of obsessive-compulsive traits.

In terms of unique patterns between EI factors and particular PD clusters, results were in the expected direction and consistent with findings described by Leible and Snell (2004). Cluster A PD traits were associated with low emotion expression and emotion perception. These relationships were not unique, however. Cluster B PD traits were positively and Cluster C PD traits were negatively related to emotion expression, and Cluster C PD traits were negatively associated with emotion perception. These results indicate that all individuals with high levels of PD traits, no matter which cluster those traits belong to, may be confused about or detached from their own and others' emotional experiences, have difficulties expressing their feelings, and present a high level of disability and might thus be perceived as odd.

As expected, Cluster B PD traits were associated with low emotion regulation, which is exemplar of the dramatic, emotional, or erratic behavior associated with the PDs that fall into this category. They were also related to high impulsivity. This is in line with the risky behavior, such as self-harm and substance use (Casillas & Clark, 2002; Manza, 2009), associated with the PDs subsumed in this cluster.

Finally, Cluster C PD traits were associated with low emotion regulation and stress management. These results are consistent with the tendency of individuals with avoidant, depressive, or obsessive-compulsive personality disorder



**TABLE 5** Correlations between emotional intelligence and college adjustment

EI Scales	Adjustment Scales				
	Academic	Social	Personal/ Emotional	Attachment	Total CA
SE	.43*	.40*	.49*	.35*	.51*
EE	.27*	.30*	.29*	.22*	.33*
SM	.61*	.46*	.50*	.46*	.63*
ER	.24*	.25*	.43*	.12	.33*
H	.44*	.46*	.56*	.46*	.58*
E	.29*	.31*	.26*	.31*	.35*
SC	.37*	.49*	.37*	.34*	.47*
LI	.32*	.23*	.33*	.25*	.35*
EP	.32*	.33*	.36*	.23*	.39*
SM	.39*	.38*	.62*	.29*	.52*
EM	.24*	.25*	.12	.21*	.25*
O	.44*	.49*	.54*	.42*	.57*
RS	.41*	.27*	.38*	.34*	.43*
Ad	.24*	.30*	.31*	.20*	.31*
As	.41*	.39*	.31*	.29*	.44*
GEI	.54*	.53*	.58*	.45*	.64*

Note. EI = emotional intelligence; CA = college adjustment; SE = self-esteem; EE = emotion expression; SM = self-motivation; ER = control/emotional regulation; H = happiness; E = empathy; SC = social competence; LI = low impulsivity; EP = emotion perception; SM = stress management; EM = emotion management; O = optimism; RS = relationship skills; Ad = adaptability; As = assertiveness; GEI = global emotional intelligence.

\* $p < .01$  level (2-tailed).

**TABLE 6** Moderating effect of emotional intelligence on the relationship between personality disorder traits on college adjustment

Step	Variables	F	df	p	$\Delta r^2/r^2$	B	SE	$\beta$
1		43.83	4, 231	<.001	.43			
	Total PD			.06	.01	-.24	.13	-.12
	GEI			<.001	.21	64.70	7.06	.58
	Gender			.54	.00	-5.17	8.35	-.03
	Race/ethnicity			.09	.01	-3.11	1.82	-.09
2		.28	1, 230	.60	.00			
	PD x GEI			.60	.00	-.08	.14	-.14

Note. SE = standard error; df = degree of freedom; PD = personality disorder; GEI = global emotional intelligence.

\* $\Delta r^2$  presented for Step 2.  $r^2$  presented in all other instances.

traits to experience difficulties managing stress and emotions. Individuals with avoidant tendencies may withdraw from their stress, those with depressive styles may isolate themselves more completely, and obsessive-compulsive individuals, due to their need for perfectionism, manifest their difficulties with stress and emotions in a tendency for over-control (Pinto, Steinglass, Greene, Weber, & Simpson, 2014).

The results of the current study also confirm the negative impact of PD traits on college adjustment (Rathvon & Holmstrom, 1996; Rice & Dellwo, 2002) for paranoid, schizoid, schizotypal, borderline, avoidant, dependent, depressive and passive-aggressive PD traits. Although not all freshmen reporting PD traits endorsed significant difficulties in overall adjustment, it is likely that impairment related to PD symptomatology would become notable over time. For

instance, while persons with antisocial and narcissistic PDs tend to be manipulative (APA, 2000), the charisma characteristic of these individuals might initially draw others to them (Park & Colvin, 2014). Further, students high on histrionic PD symptoms only endorsed problems in personal/emotional adjustment, which is in line with higher rates of dysthymic and major depressive disorders in this group (Johnson, Cohen, Kasen, & Brook, 2005). Mood problems might subsequently lead to difficulties in other realms of adjustment (Johnson, Gans, Kerr, & Deegan, 2008; Kerr et al., 2004) and dropping out (Hunt et al., 2010; King, 1998).

It is worth noting that histrionic, narcissistic, and obsessive-compulsive PD traits were for the most part uncorrelated with either EI or college adjustment, whereas all the other PD traits were significantly correlated with nearly every TEIQue broad scale and SACQ adjustment scale. More research is warranted to investigate why individuals with these particular PD traits are more emotionally aware and better adjusted in their freshman year of college. It may be that they are associated with other characteristics that strengthen EI, which then improves adjustment to college.

Current findings are also consistent with research demonstrating a positive relationship between EI and student adjustment to college (Kerr et al., 2004; Palmer et al., 2001). No significant association, however, emerged between emotion management and personal/emotional adjustment or between emotion regulation and institutional attachment. This may have occurred because these EI factors encompass both positive (e.g., soothing others) and negative (e.g., manipulating others) coping styles, reducing the potential for a directional relationship.

Last, despite previous research suggesting that EI plays a protective role (Adeyemo, 2007; Johnson et al., 2010), the results of the current study did not support the hypothesis that among freshmen reporting more PD symptoms, those with higher global EI would demonstrate better overall college adjustment. However, an alternative model emerged in which EI mediated the relationship between PD symptoms and college adjustment. These results indicate that PD pathology may result in underdeveloped EI or perhaps interfere with particular EI skills, which in turn affects students' ability to adjust to college. The process by which this occurs is unclear at this time, and further research is needed to clarify the relationship. It would be particularly interesting to examine how specific PD traits are related to the development of different patterns in EI deficits.

### 3.1 | Limitations

This study used exclusively self-report measures of the constructs, which are subject to bias. Self-assessment by individuals with deficits in their ability to correctly identify, label, and assess emotional content and/or those high on PD traits might be particularly inaccurate. As noted earlier, validity scores on the SNAP-2 invalidity index reflected inconsistent reporting for many individuals, demonstrating issues with the validity of the self-reported information. Future research investigating the relationship between PD traits, EI, and college adjustment should consider the addition of objective measures. For instances, clinical assessment of personality pathology could reflect the PD symptomatology more accurately. In terms of college adjustment, dropout rates after the freshman year could be used. Furthermore, employing longitudinal data such as dropout rates over time would help elucidate causal pathways.

In addition, the present study relied heavily on correlation matrices to analyze hypotheses 1, 3, and 4. These matrices, while the best way to depict the many relationships between individual PD traits, EI broad scales, and college adjustment scales, do not control for family-wise error. It is therefore possible that some of the relationships that emerged as significantly related may be the result of Type I error. Further research should be conducted to replicate these results.

## 4 | CONCLUSION

The results of the current study support and build on previous findings that features of PD are inversely related to EI, and that PD clusters and specific PD traits demonstrate particular patterns in relation to EI deficits. These findings also support recent research indicating that PD symptomatology negatively affects student college adjustment, whereas EI is positively associated with freshmen's ability to transition to college. Despite evidence of the protective role of EI,

current results do not support the hypothesis that EI provides a buffer against the negative effects of PD symptoms on the transition to college; however, this study suggests that EI mediates the relationship.

Though it is important to recognize that the SNAP-2 is at best a measure of traits related to PD, and that late adolescence is a time when PD diagnoses can be particularly problematic, the above findings can have several clinical implications. For instance, undergraduates who do not meet the diagnostic criteria for PDs but endorse subsyndromal PD traits are still likely to experience difficulties with college adjustment. Thus, evaluation of PD symptoms, rather than clinically significant syndromes, might effectively identify at risk students. Also, since problems related to PD symptoms might not emerge until later in the freshman year, assessment of EI, as compared to college adjustment or even PDs, might be better able to predict those students who are at risk for dropping out.

Although the proposed model was not supported, EI emerged as a potential mediator of the relationship between PD symptoms and college adjustment. As such, therapies focused on bolstering EI might be successful in improving college adjustment. Several studies have already shown the success of EI enhancing programs (Kotsou, Nelis, Grégoire, & Mikolajczak, 2011; Nelis et al., 2011). Emerging research has also demonstrated that EI training not only improves EI scores but also decreases depressive symptoms in individuals with PDs (Jahangard et al., 2012). Given the pattern of unique EI deficits across PD traits, treatments targeting weaknesses consistent with the students' particular PD pathology will have greater impact on improving student's functioning.

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