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Personality factors and psychopathy, alexithymia and stress

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ABSTRACT

The present study investigated the relations between the Five-Factor Model of personality, psychopathy, alexithymia and stress in 205 technology students. Students completed four tests: the NEO Personality Inventory Revised, the Levinson Self-report Psychopathy Scale, the Toronto Alexithymia Scale and the Recognize Sign of Stress. Multiple regression analyses revealed that Agreeableness and Conscientiousness were significant predictors of total scores of psychopathy, and Openness was a significant predictor of alexithymia. Path analyses indicated that apart from Openness, all personality traits were significant to the model, and stress acted as a mediator between Neuroticism and alexithymia.

1. Introduction

Psychopathy is a personality disorder that has been characterized by deficits in emotional functioning (e.g., callousness), interpersonal relations (e.g., pathological lying), and lifestyle choices (e.g., impulsive and irresponsible), as well as antisocial tendencies (Hare and Neumann, 2005, 2006). Earlier work described psychopathy in terms of a two factor model (Blackburn, 1975; Harpur et al., 1989; Karpman, 1941). Factor I includes affective and interpersonal traits that contribute to the pursuit of personal gain without remorse through the callous, calculated, deceitful, and manipulative misuse of others. Factor II includes a neurotic disorder trait that contributes to impulsivity and delinquency.

More recently, Factor 1 was separated into two factors and a three factor model of psychopathy was proposed: (1) Deceitful Interpersonal Style (e.g., superficial charm, grandiosity, and manipulativeness), (2) Deficient Affective Experience (e.g., lack of remorse, empathy, and a sense of personal responsibility), and (3) Irresponsible Behavioral Style (e.g., inclination to boredom, impulsivity, a parasitic lifestyle, and irresponsibility) (Cooke and Michie, 2001). This model has been challenged by a four factor model that conceptualizes psychopathy as comprising four deficits in four realms: (1) interpersonal relations, (2) affective experience, (3) accepting societal norms, and (4) obeying societal laws (Hare and Neumann, 2005, 2006; Neumann et al., 2007; Williams et al., 2007).

In general, each of the different models assumes that psychopathy is a diverse disorder consisting of multiple factors. Based on this characterization, personality models, particularly the Five Factor Model (FFM), have been used in an attempt to partition psychopathy into specific personality facets. The FFM hierarchically classifies personality into five overarching domains: Neuroticism, Extraversion, Openness to Experience, Agreeableness, and Conscientiousness (McCrae and John, 1992). Though developed to describe personality in normal populations, advocates of the FFM claim that it is valuable in describing personality disorders as well (Costa and Widiger, 1994). In support of this claim, research reports that psychopathy can be described in terms of the FFM. For example, when 15 experts in psychopathy assessed a prototypical psychopath in terms of the FFM, there was strong agreement that psychopaths are low in all facets of Agreeableness, and many facets of Conscientiousness (Miller et al., 2001; Ross et al., 2009). When personality and psychopathy were assessed in known crack cocaine abusers, researchers reported that psychopathy could be understood as a constellation of those personality traits described by the FFM (Derefinko and Lynman, 2007). The FFM has been used to describe psychopathic dispositions in university students as well (Ross et al., 2004). Primary psychopathy (callous, calculating, and conning) was associated with low Agreeableness and secondary psychopathy (impulsivity and social deviance) was marked by high Neuroticism, low Agreeableness, and low Conscientiousness.

Psychopathy shares some similar manifestations with alexithymia (Louth et al., 1998), as both are associated with emotional deficits, interpersonal difficulties, and deficits in understanding self and others. Empathy, insight, and introspection are lacking in

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people with psychopathy and alexithymia (Haviland et al., 2004). However, the personality trait of alexithymia differs from the personality disorder of psychopathy. Individuals with alexithymia tend to be anxious, over controlled, submissive, boring, ethically consistent, and socially conforming whereas individuals with psychopathy tend to be the opposite (e.g., anxiety-free, dominant, and nonconforming) (Haviland et al., 2004).

Similar to psychopathy, alexithymia has been described in terms of the FFM. For example, Wise et al. (1992) investigated the relationship between alexithymia and the FFM in psychiatric outpatients and normal volunteers. When controlling for depression, Neuroticism, Introversion, and low Openness predicted alexithymia. These three dimensions accounted for 57.1% of the explained variance in the outpatients and 38.1% in the volunteers. Introversion was the most significant predictor of alexithymia in the volunteer group.

Both psychopathy and alexithymia have been associated with stress. For example, psychopathic personality traits have been associated with blunted stress reactivity (Loney et al., 2006; O'Leary et al., 2007). Additionally, the most distinctive characteristic of a subgroup of psychopaths (i.e., emotionally stable) sampled from a prison population was their immunity to negative events (i.e., low Stress Reaction scores) (Hicks et al., 2004). Post secondary students who score high on measures of psychopathy and alexithymia show reduced responses to experimentally induced stress. For example, male (but not female) students who scored high in psychopathy did not display an increase in cortisol to under stress (O'Leary et al., 2007) and high levels of alexithymia are linked to reduced ability to cope with stress (Fukunishi and Rahe, 1995). Furthermore, students who scored high in alexithymia demonstrated a blunted cardiovascular response to stress (e.g., Linden et al., 1996). Moreover, several researchers have reported a close relation between alexithymia and trauma-related conditions, such as posttraumatic stress disorder (Fukunishi et al., 1996; Yehuda et al., 1997). However, alexithymia is not always related to a reduced response to stress. For example, cervical dystonia patients exposed to cognitive and emotional stressors showed increased physiological and subjective responses if they had high alexithymia scores compared to low scores (Gündell et al., 2002). Additionally, Connelly and Denney (2007) reported no differences between alexithymic and non-alexithymic people in their physiological responses to stress (i.e., heart rate and skin conductance) though the alexithymic participants showed heightened negative affect to the experimental stressors. Similarly, though salivary cortisol levels were positively correlated with measures of alexithymia in male university students, changes in cortisol levels to a stressor were similar for those with high and low levels of alexithymia (de Timary et al., 2008).

Research has associated stress and personality traits, initially reporting that Neuroticism and Extraversion are important predictors of stress and coping. For example, individuals high in Neuroticism experience more stressful events, whereas those high in Extraversion experience both more stressful and more pleasurable events (Bolger and Schilling, 1991; Fergusson and Horwood, 1987; Magnus et al., 1993; Suls et al., 1998). Moreover, Neuroticism predisposes people to experience negative emotions and distress, regardless of level of stress (Bolger and Schilling, 1991; Watson and Clark, 1984.), whereas Extraversion predisposes them to experience positive affect (Watson et al., 1988). Rovik et al. (2007) concluded that the combination of the personality dimensions of Neuroticism, Extraversion, and Conscientiousness may be important in understanding an individual's reaction to stress.

Psychopathy and alexithymia can be distinguished by the level of anxiety which is a facet of Neuroticism. For example, alexithymia is characterized by high anxiety and psychopathy is characterized by low anxiety (Haviland et al., 2004). However, though low levels of anxiety have traditionally been associated with psychopathy (e.g., Cleckley, 1941), the link between anxiety and psychopathy is not clear (see Williams et al., 2007). Nonetheless, the level of Neuroticism is correlated with responses to stress including cortisol response (Mangold and Wand, 2006; McCleery and Goodwin, 2001) and job stress (Cieslak et al., 2007).

The first objective of the present study was to confirm that FFM could describe psychopathy and alexithymia in a nonclinical and noninstitutionalized sample of students. The second objective was to test a model for understanding and contrasting psychopathy and alexithymia. This model is based on three sets of findings: (1) personality factors are related to stress, (2) stress is related to alexithymia and psychopathy and (3) personality factors are related to alexithymia and psychopathy. Therefore, the present study investigated whether the relation between the FFM and alexithymia and psychopathy is mediated by stress.

2. Method

2.1. Participants

Two hundred and five volunteers (73% boys and 27% girls) aged 18–27 years ($M = 20.67$, SD = 1.69) participated. The sample was comprised of graduate and undergraduate technology students. Participants included 192 (93.7%) individuals whose father was employed and 58 (28.3%) individuals whose mother was also employed. The majority of individuals (85.4%, $n = 175$) reported that they were from a nuclear family and the remaining participants (14.6%, $n = 30$) were from a joint family. 91.7% ($n = 188$) of participants were from urban areas and 8.3% ($n = 17$) were from rural areas of India.

2.2. Measures

Participants were given a booklet containing standardized instructions for tests, a final debriefing sheet, and a demographic profile sheet. The four psychological self-report tests assessed aspects of personality, psychopathy, alexithymia, and stress.

2.2.1. Revised NEO Personality Inventory (NEO PI-R; Costa and McCrae, 1992)

The NEO PI-R consists of 240-items and uses a 5-point Likert scale (1 = strongly agree, 5 = strongly disagree) to assess five personality dimensions. Higher scores indicate higher incidence of the personality trait. Internal consistency (Cronbach's alpha) for Form S is reported to range from $\alpha = 0.86$ to $\alpha = 0.92$ for domain scales and from $\alpha = 0.56$ to $\alpha = 0.81$ for facet scales (Costa et al., 1991). In the present study, Cronbach's alphas were $\alpha = 0.86$ for Neuroticism, $\alpha = 0.78$ for Extraversion, $\alpha = 0.73$ for Openness, $\alpha = 0.81$ for Agreeableness and $\alpha = 0.87$ for Conscientiousness.

2.2.2. Levenson Self-Report Psychopathy (LSRP) scales (Levenson et al., 1995)

The LSRP is a 26-item measure, developed to assess psychopathic attitudes and beliefs. The primary psychopathy subscale consists of 16 items measuring an inclination to lie, lack of remorse, callousness, and manipulativeness. The secondary psychopathy subscale consists of 10 items measuring impulsivity, frustration tolerance, quick-temperedness, and lack of long-term goals. Internal reliability for the LSRP total score (26 items), F1 (D1; 16 items) and F2 (D2; 10 items) were $\alpha = 0.80$, $\alpha = 0.81$, and $\alpha = 0.52$, respectively (Lynam et al., 1999). Recently, Ross et al. (2007) reported $\alpha = 0.83$ for D1 and $\alpha = 0.65$ for D2. In the present sample, Cronbach's alphas were $\alpha = 0.78$ for primary psychopathy, $\alpha = 0.63$ for secondary psychopathy, and $\alpha = 0.82$ for the LSRP total score.

Table 1
Descriptive statistics (means and SD) and bivariate correlations between personality, psychopathy, alexithymia and stress.

Factors		Mean	SD	1	2	3	4	5	6	7	8	9	10	11	12
1	N	96.42	18.15	1											
2	E	110.39	15.73	−0.32**	1										
3	O	118.48	15.02	−0.15*	0.42**	1									
4	A	105.79	15.36	−0.14	0.12	0.05	1								
5	C	108.09	18.90	−0.41**	0.34**	0.32**	0.14*	1							
6	D1	39.19	6. 48	0.05	0.03	−0.06	−0.53**	−0.16*	1						
7	D2	20.69	3.53	0.43**	−0.27**	−0.21**	−0.22**	−0.50**	0.29**	1					
8	Total PS	59.88	8.24	0.23**	−0.09	−0.14*	−0.51**	−0.34**	0.91**	0.66**	1				
9	DIF	20.24	5.27	0.27**	−0.21**	−0.27**	−0.07	−0.30**	0.25**	0.29**	0.32**	1			
10	DDF	11.47	2.53	0.06	−0.24**	−0.20**	0.02	−0.18**	0.18**	0.14**	0.20**	0.55**	1		
11	EOT	23.53	4.16	−0.02	−0.16*	−0.15*	−0.05	−0.08	0.17*	0.04	0.15**	0.26**	0.26**	1	
12	Total AL	55.40	9.14	0.16*	−0.25**	−0.29**	−0.05	−0.26**	0.27**	0.22**	0.30**	0.84**	0.70**	0.68**	1
13	Stress	40.27	14.45	0.43**	−0.23**	−0.15*	0.01	−0.28**	0.13	0.34**	0.25**	0.38**	0.27**	0.08	0.33**

Notes. $N = 205$. *Abbreviations*: N, Neuroticism; E, Extraversion; O, Openness; A, Agreeableness; C, Conscientiousness; D1, primary psychopathy; D2, secondary psychopathy; PS, total psychopathy; DIF, difficulty in identifying feelings; DDF, difficulty in describing feelings; EOT, externally oriented thinking and AL, total alexithymia.
* $p < 0.05$.
** $p < 0.01$.

2.2.3. Toronto Alexithymia Scale (TAS-20)

The TAS-20 consists of 20 items from the Toronto Alexithymia Scale (Bagby et al., 1994) and uses a five-point Likert scale. Parker et al. (2001) suggested a 3-factor structure: difficulty in identifying feelings (DIF), difficulty in describing feelings (DDF), and externally oriented thinking (EOT). The TAS-20 is currently the most widely used scale to assess alexithymia and has shown reliability and validity (Taylor et al., 1997). Cronbach's alphas in the present study were $\alpha = 0.79$ for difficulty in feelings, $\alpha = 0.48$ for difficulty in describing feelings, $\alpha = 0.55$ for externally oriented thinking, and 0.79 for the overall scale.

2.2.4. Recognize sign of stress (Powell, 2000)

This test consists of 30 items and uses a 5-point Likert Scale. Ten items were related to each of three components: physical factors/manifestation of mental stress, psychological factors in mental stress, and the depression component of mental stress. A total score was used in the present research. Cronbach's alpha for the present study was $\alpha = 0.88$ for the overall scale.

3. Results

3.1. Descriptive statistic and zero-order correlations

The study variables were described in terms of means and standard deviations. Bivariate correlations were computed to examine the relations among all variables of interest (see Table 1). The results revealed significant inter-correlations between the measures of personality, psychopathy, and alexithymia, as well as between personality and the sub factors of psychopathy and alexithymia. As expected, psychopathy and alexithymia were positively correlated. Moreover, psychopathy and alexithymia were positively correlated with Neuroticism and negatively correlated with Openness and Conscientiousness. Psychopathy was also negatively correlated with Agreeableness, and alexithymia was negatively correlated with Extraversion

The D1 (primary psychopathy) sub factor of psychopathy significantly correlated with Agreeableness and Conscientiousness, and D2 (secondary psychopathy) significantly correlated with all personality measures. The DIF sub factor of alexithymia positively correlated with Neuroticism and negatively correlated with Extraversion, Openness, and Conscientiousness, DDF negatively correlated with Extraversion, Openness and Conscientiousness, and EOT was found negatively correlated with Extraversion and Openness. Stress was positively correlated with Neuroticism, psychopathy and its sub factor D2 and alexithymia and its sub factors DIF and DDF. Stress was negatively correlated with Extraversion, Openness, and Conscientiousness (see Table 1).

3.2. Psychopathy, alexithymia, and stress predictors

3.2.1. Multiple regression analyses

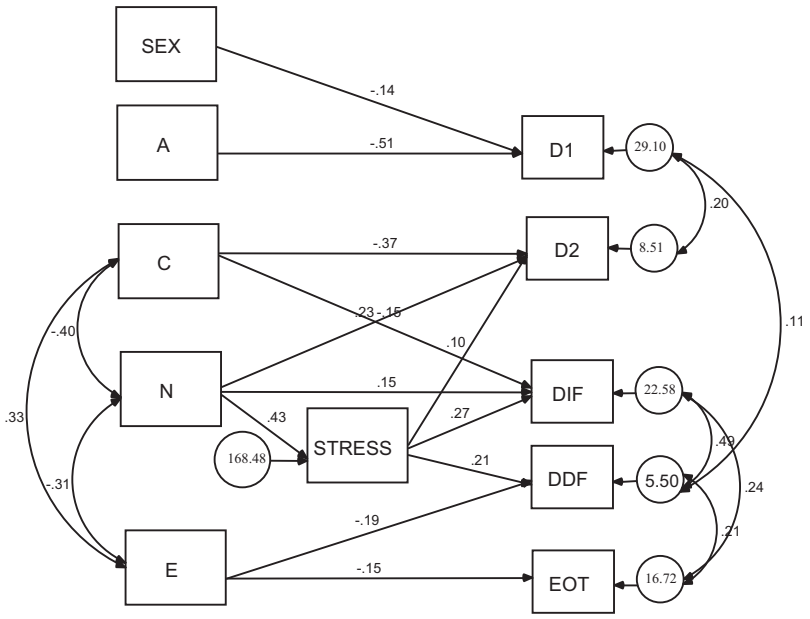
To test the effect of personality on psychopathy, alexithymia, and stress, a series of multiple regression analyses were performed (see Table 2). Psychopathy, alexithymia, D1, D2, DDI, DDF, EOT and stress were the predicted variables and the five personality factors were the predictors

Multiple regression analyses revealed that Agreeableness ($\beta = -0.53$, t = -8.87, $p < 0.01$) and Extraversion ($\beta = -0.15$, t = 2.20, $p < 0.05$) were significant predictors of D1. In other

Table 2
Regression analysis of personality factors onto psychopathy, alexithymia and stress.

The Big Five Factor	Psychopathy						Alexithymia								Stress	
	D1		D2		Total PS		DIF		DDF		EOT		Total AL			
	β	t	β	t	β	t	β	t	β	t	β	t	β	t	β	t
N	−0.03	−0.47	0.25	3.79***	0.08	1.26	0.17	2.34*	−0.05	−.69	−0.10	−1.32	0.03	0.45	0.38	5.32***
E	0.15	2.20*	−0.04	−0.60	0.10	1.52	−0.01	−0.18	−0.18	−2.32*	−0.13	−1.67	−0.12	−1.51	−0.07	−0.93
O	−0.06	−0.89	−0.04	−0.62	−0.06	−0.98	−0.19	−2.5*	−0.10	−1.3	−0.09	−1.18	−0.18	−2.46*	−0.04	−0.56
A	−0.53	−8.87***	−0.13	−2.13*	−0.47	−8.08***	−0.01	−0.15	0.06	0.88	−0.04	−0.51	−0.002	−0.03	0.08	1.25
C	−0.13	−1.89	−0.35	−5.27***	−0.25	−3.81***	−0.17	−2.2*	−0.11	−1.47	−0.04	−0.55	−0.14	−1.87	−0.10	−1.3
Adjusted R^2	0.29		0. 31		0.32		0.13		0.06		0.02		0.10		0.19	

* $p < 0.05$.
** $p < 0.01$.
*** $p < 0.001$.



Notes

[1] The PGFI (Malaik, et al., 1989; parsimony goodness-of-fit indicator) is a measure of power and is optimal around .50). For the RMSEA (Browne and Cudeck, 1993; root-mean-square error of approximation), values of .08 or below indicate reasonable fit for the model. Finally, for the CFI (Bentler, 1990; comparison of the hypothesized model with a model in which all correlations among variables are zero), values around .90 indicate very good fit.

Fig. 1. The hypothesized model linking psychopathy sub factors (D1 and D2), alexithymia sub factors (DIF, DDF and EOT), personality traits (A, Agreeableness; C, Conscientiousness, N, Neuroticism and E, Extraversion), sex and stress.

words, higher psychopathy D1 scores were associated with lower levels of Agreeableness. Three personality traits (Conscientiousness, Neuroticism and Agreeableness) accounted for 31% of the variance in D2. Agreeableness and Conscientiousness were the significant predictors for the total score of psychopathy and accounted by 32% of the variance.

For the total score of alexithymia, Openness ($\beta = -0.18$, $p < 0.05$) was a significant predictor. DIF was predicted by Openness, Conscientiousness and Neuroticism accounted for 13% of the variance. DDF ($\beta = -0.18$, $p < 0.05$) was solely predicted by Extraversion and EOT was not significantly predicted by the personality factors. Finally, Neuroticism accounted for 19% of the variance in stress ($\beta = -0.38$, $p < 0.01$).

3.2.2. Path analysis

An initial Structural Equation Model (SEM) was built based on the significant correlations and regression results. Psychopathy and alexithymia were modeled as non observed endogenous variables, and sex and the five personality traits were modeled as observed exogenous. Stress was tested as a mediator between Neuroticism and alexithymia, thus it was modeled as exogenous and endogenous. The results revealed an inadequate model fit [$\chi^2(44) = 298.442$, $p < 0.001$; CFI = 0.46; PGFI = 0.52, RMSEA = 0.17].

Two areas of misfit were identified: (1) non significant paths from Openness to psychopathy and (2) low loadings of the observed sub factors (D1, D2 and DIF, DDI and EOT) on the latent variables (psychopathy and alexithymia). Therefore, path analyses (Arbuckle and Wothke, 1999) were conducted with the sub factors modeled as endogenous variables, and sex and the personality traits (Neuroticism, Agreeableness, Extraversion and Conscientiousness) modeled as exogenous, and stress modeled as a mediator between Neuroticism and D2, DDI, and DDF. Sobel's test of mediation (Sobel, 1982) confirmed the three mediation paths: (1) N-Stress-D2 ($Z = 4.02$, $p < 0.01$; β N-D2 direct = 0.41; β N-D2 indirect = 0.34); (2) N-Stress-DIF ($Z = 4.69$, $p < 0.01$; β N-DIF direct = 0.27; β N-DIF indirect = 0.13), and (3) N-Stress-DDF ($Z = 2.99$, $p < 0.01$; β N-DDF direct = 0.06; β N-DDF indirect = −0.06). Fig. 1 shows the final model [$\chi^2(35) = 69.727$, $p < 0.01$; CFI = 0.92; PGFI = 0.50, RMSEA = 0.07 (90% confidence interval: 0.04, 0.09)].

4. Discussion

The present paper is consistent with the assumption that personality disorders can be understood as a constellation of extreme levels on normative personality traits (Widiger, 1993; Widiger and Costa, 1994). In particular, the present findings are consistent with previous work showing that a configuration of traits derived from the FFM of personality can help describe the personality disorder of psychopathy (e.g., Derefinko and Lynman, 2007; Miller and Lynam, 2003; Miller et al., 2001) and the personality trait of alexithymia (Wise et al., 1992). Psychopathy and alexithymia share some common characteristics (Haviland et al., 2004; Louth et al., 1998), and the present study found that psychopathy and alexithymia were correlated with each other. However, psychopathy and alexithymia are independent (Haviland et al., 2004), and the present study found that Agreeableness

and Conscientiousness predicted psychopathy whereas Openness predicted alexithymia. The present study extended the work on the FFM and psychopathy and alexithymia, by demonstrating that stress may mediate the relation between the FFM of personality and psychopathy and alexithymia.

The present results are consistent with a growing literature that the FFM of personality can describe psychopathy and alexithymia (Hare, 1991; Helgeson and Fritz, 1999; Lee and Ashton, 2005; Lynam, 2002; Paulhus and Williams, 2002). Furthermore, the present study shows that the personality predictors of psychopathy and alexithymia and their sub factors differ. This result is consistent with the findings and conclusions of others that psychopathy and alexithymia are independent (Frick et al., 2000; Hare, 1994; Levenson et al., 1995; Lilienfeld and Andrews, 1996), and their sub domains are distinct (Deary et al., 1997; Ross et al., 2004).

Psychopathy and alexithymia have been described in terms of a constellation of personality traits. For example, research often reports that psychopathy is associated with low Agreeableness and Conscientiousness, and high Neuroticism (Hare, 1991; Miller et al., 2001; Ross et al., 2004). Alexithymia has been associated with high Neuroticism, low Extraversion, and low Openness (Pandey and Mandal, 1996; Thomas and Mann, 1994). In the present study, low Agreeableness and Conscientiousness predicted psychopathy and Openness predicted alexithymia. Our finding that psychopaths are disagreeable and unconscientious agrees with previous work (e.g., Williams et al., 2007) and confirms the critical characteristics of psychopathy. Similarly, our results that high levels of alexithymia are associated with high levels of Neuroticism and low levels of Extraversion and Openness are consistent with previous work. For example, Neuroticism was found to be negatively correlated with alexithymia particularly with the facets of anxiety, depression, self-consciousness and vulnerability (Bagby et al., 1994; Luminet et al., 1999), and Extraversion (Wise et al., 1992) and Openness were found to negatively correlate with alexithymia (Bagby et al., 1994; Luminet et al., 1999).

For both alexithymia and psychopathy, stress acted as a mediator between these constructs and Neuroticism. One of the major outcomes of stress is depression and Neuroticism is associated with depression and negative affect (Chioqueta and Stiles, 2005; Hirschfeld et al., 1989; Lau et al., 2006; Watson et al., 1988). Perhaps the mediation by stress observed here is due to the stress sub facet included in the Neuroticism trait.

Most research on gender differences and psychopathy has focused on issues related to differences in prevalence (Hare, 1991; Verona and Vitale, 2006). The limited research that has focused on the construct of psychopathy suggests that the construct applies similarly across genders (Derefinko and Lynman, 2007; Vitale and Newman, 2001). In the present study, differences in the prevalence of traits related to D1 were found; males had a higher tendency to lie, to have lack of remorse, and to engage in manipulative behavior. The finding that males' psychopathy scores are higher than females is consistent with previous work including research based on samples from nonclinical populations (Levenson et al., 1995; Forth et al., 1996).

4.1. Limitations

The present study was limited to post-secondary students which may demonstrate insufficient variance in psychopathy and alexithymia traits (Lilienfeld and Andrews, 1996). However, research has shown an increasing focus on studying disorders, including psychopathy in samples from normal (i.e., nonclinical and nonforensic) populations (e.g., Book and Quinsey, 2003; LeBreton et al., 2006). These samples include people who may function satisfactorily in society without interacting with the criminal justice system. For example, college-age people do display high rates of antisocial behaviors, though they are not typically serious (Moffitt, 1993). Furthermore, studies have successfully assessed the relation between personality dimensions and dispositions related to psychopathy and alexithymia in nonclinical, noninstitutional populations using the same measures of personality and personality disorders as employed in the present study (Ross et al., 2004; Zimmerman et al., 2005). Nonetheless, given that research on personality disorders, particularly psychopathy, is largely based on specific populations (e.g., forensic), it is important that the relation between these disorders, stress, and personality be assessed with samples drawn from these unique populations.

The meditational analysis is consistent with the perspective that stress may play a meditational role in the relation between personality and alexithymia and personality and pscyhopathy. However, given the limitations of cross-sectional data, we cannot confidently infer a causal link.

4.2. Conclusion

In general, our findings contribute to the growing literature suggesting that the study of psychopathy in populations outside of the clinical and criminal justice systems is appropriate (e.g., LeBreton et al., 2006; Williams et al., 2007). Furthermore, our study confirms the work of others (e.g., Widiger, 1993; Widiger and Costa, 1994) that personality disorders, in particular alexithymia and psychopathy, can be characterized in terms of the FFM of personality. We extend this literature by suggesting that stress may mediate the relation between personality and psychopathy and alexithymia.

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