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Psychopathic and antisocial, but not emotionally intelligent

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ABSTRACT

Psychopaths are characterized as skilled manipulators, yet they are also said to be deficient in recognizing others' emotions. These two depictions suggest opposing predictions for the relation of ability-based emotional intelligence (EI) to psychopathy. The current study investigated EI, psychopathy, and antisocial behavior in a sample of 429 undergraduate students from three universities. Results indicated that, as expected, EI was negatively correlated with antisocial behavior, and psychopathy was highly positively correlated with antisocial behavior. Total EI was significantly negatively correlated with all psychopathy scales for both sexes. There were no positive correlations between any EI subscales and psychopathy in either sex, suggesting that psychopathy is not related to high ability in any aspect of EI.

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1. Introduction

Psychopathy refers to a pattern of manipulative, callous, erratic, and antisocial characteristics. Harris, Rice, Hilton, Lalumière, and Quinsey (2007) hypothesized that psychopathy reflects an evolutionarily plausible life history strategy, characterized by high short-term mating effort. In order for psychopathy to have evolved as a viable life history strategy involving the self-serving manipulation of others, one might expect psychopathic individuals to possess high levels of abilities that are related to understanding the emotions of others in order to use them effectively for personal gain. However, the suggestion that a psychopathic strategy depends on sophisticated interpersonal skills would seem to contradict the research indicating that psychopathy is related to deficits in the recognition and/or processing of emotions in others.

Shallowness of emotions has long been considered a hallmark of psychopathy (Cleckley, 1941/1988), with psychopaths described as lacking in empathy and callous in their emotional responses to others (Cleckley, 1941/1988; Hare, 2003). What is less certain is whether this blunted experience of emotion comes with a corresponding deficiency in the ability to detect and understand the emotions of others. For example, although lack of empathy is a definitional feature of psychopathy, there is evidence that psychopathic individuals show no deficits in theory of mind tasks (Blair et al., 1996; Richell et al., 2003), which assess

the ability to determine what others are thinking, feeling, or believing and are positively associated with Emotional Intelligence (Barlow, Qualter, & Stylianou, 2010). These findings suggest that psychopathy-related deficits in empathy might be affective rather than cognitive. Furthermore, there is a substantial literature related to psychopathy and accuracy in the identification of emotions from facial expressions. The results have been mixed, with some studies finding no psychopathy-related deficits in recognition of facial expressions (e.g., Book, Quinsey, & Langford, 2007; Glass & Newman, 2006) but with a number of studies supporting such a deficit, particularly in the recognition of sad affect (e.g., Dolan & Fullam, 2006; Hastings, Tangney, & Stuewig, 2008) and fearful affect (e.g., Blair, Colledge, Murray, & Mitchell, 2001; Montagne et al., 2005). These psychopathy-related deficiencies are sometimes related largely or entirely to Factor 2 psychopathy (Erratic Lifestyle, Antisocial Behavior), whereas Factor 1 (Interpersonal Manipulation, Callous Affect) has sometimes been positively correlated with accuracy of recognition of facial expressions (Blair et al., 2001; Habel, Kuehn, Salloum, Devos, & Schneider, 2002).

Given the importance of emotions to psychopathy, emotional intelligence (EI) would seem to be a significant construct in relation to psychopathy. EI has been defined by Mayer, Salovey, and Caruso (2008) as four related abilities: *Perceiving* emotions accurately in oneself and others; *Understanding* emotions as well as associated emotional language; *Facilitating* thinking and problem-solving with the use of emotions; and *Managing* emotions or regulating moods in oneself and others to attain goals. Some aspects (subscales) of EI could be expected to relate to psychopathy in

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different ways. Given that psychopathy, by definition, involves the use of interpersonal manipulation, psychopathic individuals could be hypothesized to score highly on the managing subscale, which assesses the management of emotions to attain goals. However, the observed psychopathy-related deficits in the recognition of sad affect would suggest that highly psychopathic individuals might score poorly on the perceiving EI scale, which includes an assessment of the ability to accurately identify the emotions expressed in faces, photographs, and artwork.

1.1. Ability vs. (personality) Trait EI

EI is a relatively new concept that has yet to be fully developed in the research literature. One issue in EI relates to its conceptualization. Salovey and Mayer (1990) described the construct of EI as a cognitive ability, but other researchers and many writers in the popular press have defined EI by listing a number of personality characteristics that do not relate to general intelligence (or IQ) but can be assumed to be important to high performance both in the business environment and in the personal realm. Petrides and Furnham (2001) argued for a distinction between Trait EI (by which the authors seem to be referring to *personality* traits, in particular) and Ability EI, with Trait EI including diverse characteristics such as self-esteem, optimism, happiness, low impulsiveness, and assertiveness, as well as more clearly EI-related characteristics such as emotion appraisal and management.

The two different definitions of EI have resulted in different types of assessment instruments. Ability-based measures of EI, such as the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, & Caruso, 2002), tend to correlate positively with measures of intelligence (e.g., Schulte, Ree, & Carretta, 2004), as well as with Agreeableness and Openness to Experience (e.g., Brackett & Mayer, 2003), and might reflect individuals' capacity for EI as opposed to their typical expression of EI. Trait EI has been more often measured using self-report instruments which tend to correlate with self-reports of other personality traits. Petrides and Furnham (2003) reported substantial correlations between their measure of Trait EI and four of the five (i.e., all but Agreeableness) NEO-PI personality factors, with significant correlations ranging from .34 for Conscientiousness to -.70 for Neuroticism. Scores on measures of Ability EI and Trait EI are only modestly correlated with each other ($r = .21$ in Brackett & Mayer, 2003), suggesting they may represent different constructs.

The personality correlates of psychopathy have been explored in a number of investigations (Lee & Ashton, 2005; Miller, Lynam, Widiger, & Leukefeld, 2001; Paulhus & Williams, 2002). Given that Trait EI is so strongly associated with personality characteristics, an exploration of the relationship between self-reports of Trait EI and of psychopathy is unlikely to add much to our understanding of either construct. Moreover, to the extent that psychopathic individuals show an "egoistic bias" (Paulhus & John, 1998), those persons might overestimate their levels of Trait EI, thereby distorting any relations between the two constructs. In contrast, however, the degree to which highly psychopathic individuals possess Ability EI is an unanswered question of scientific interest. Although the willingness of psychopathic individuals to manipulate others has been well established, it remains to be seen whether these manipulative tendencies are associated with exceptional abilities in understanding and using the emotions of themselves and others.

To the authors' knowledge, there has been only one published investigation to date of the relations between psychopathy and emotional intelligence. Malterer, Glass, and Newman (2008) explored the relations between psychopathy and the Trait Meta-Mood Scale (TMMS; Salovey, Mayer, Goldman, Turvey, & Palfai, 1995), which they described as Trait EI, in a sample of Caucasian male inmates. Malterer et al. found that Psychopathy Checklist Re-

vised (PCL-R; Hare, 2003) Factor 1 was modestly but significantly negatively correlated with the TMMS Attention subscale, a self-report measure of ability to allocate attention to one's own feelings. Austin, Farrelly, Black, and Moore (2007) investigated the relations of Ability EI to Machiavellianism, a construct which would seem to have a great deal of overlap with sub-clinical psychopathy (Lee & Ashton, 2005; McHoskey, Worzel, & Szyarto, 1998). Austin et al. (2007) reported a pattern of negative correlations between Machiavellianism and all EI subscales, with correlations for total EI, Facilitating Emotions, and Managing Emotions reaching significance. The authors noted that high scorers on Machiavellianism endorsed items on a self-report scale of emotionally manipulative behaviors, although their EI scores suggested they would not be highly skilled in these behaviors.

1.2. Antisocial behavior

One indication of a relation between psychopathy and Ability EI is that both have been linked to antisocial behavior. Psychopathy has been shown not only to predict violent recidivism in male offenders (Harris, Rice, & Cormier, 1991), but also to predict antisocial behavior in college samples (Levenson, Kiehl, & Fitzpatrick, 1995; Nathanson, Paulhus, & Williams, 2006). In addition, there is some evidence of a relation between low Ability EI and antisocial behavior. Brackett, Mayer, and Warner (2004), for example, reported an association between low EI (primarily in the subscales related to perceiving and using emotions) and illegal drug use and deviant conduct in college men but not women, whereas Brackett and Mayer (2003) reported that MSCEIT scores were negatively correlated with deviant behavior but not drug use in college men and women. This evidence of a negative correlation between Ability EI and antisocial behavior might suggest that psychopathy and Ability EI would also be negatively correlated, but an examination of correlations at the subscale level (of both psychopathy and EI) could shed further light on the relations between the constructs.

1.3. Sex differences

Prior research provides evidence that there are sex differences in all three constructs employed in this study. The MSCEIT manual indicates that women typically score about half a standard deviation higher than men on total EI and also score higher on all subscales (Mayer et al., 2002). With regard to psychopathy, the base rate of male psychopaths is considerably higher than that for female psychopaths in forensic settings (Salekin, Rogers, & Sewell, 1997; Vitale & Newman, 2001) and men typically score about one standard deviation higher than women in non-clinical samples (Levenson et al., 1995; Lilienfeld & Andrews, 1996; Paulhus & Williams, 2002). Men also report higher levels of antisocial behavior than do women, even in student samples (e.g., Levenson et al., 1995). The substantial sex differences in these variables highlight the importance of conducting separate analyses for men and women, or otherwise controlling for sex in any investigation of these variable inter-relations.

1.4. Current study

The current study investigates the relations between psychopathy, Ability EI, and antisocial behavior (subsequently referred to as "student antisociality" to distinguish it from the SRP-III Antisocial Behavior subscale). It is hypothesized that, in keeping with previous research, psychopathy will be strongly positively correlated with student antisociality, and that Ability EI will be negatively correlated with student antisociality. It is hypothesized that, consistent with their differential relations with antisocial behavior,

overall psychopathy and overall Ability EI scores will be negatively correlated. However, there are no specific hypotheses around the relations between EI subscales and psychopathy subscales, as this study was designed to provide a first investigation as to the relations between these two constructs.

2. Methods

2.1. Participants

The 486 first- and fourth-year undergraduate student participants were recruited from three universities (Canada = 168, United States = 118, South Africa = 144) via posters and in-class presentations. Fifty-seven observations with complete responses on only one portion of the two-part series of online questionnaires were removed, leaving a sample of 429 (254 female, 175 male). Of the 429 participants (M age = 20.48, SD = 3.09), 250 were Accounting majors, and 179 were Humanities or Social Sciences majors. The sample was racially mixed, with 290 (67.4%) participants identifying themselves as Caucasian, 69 as Black (16.0%), 27 (6.3%) as Chinese, 13 (3.0%) as South East Asian, 7 (1.6%) as Latin American, and the remaining identifying themselves as one of the other five racial categories or “other”.

2.2. Measures

2.2.1. Psychopathy

The Self-Report Psychopathy-III scale (SRP-III; Paulhus, Neumann, & Hare, in press) was used to measure psychopathy. This 64-item self-report scale yields a total score as well as four subscale scores: Interpersonal Manipulation, Callous Affect, Erratic Lifestyle, and Antisocial Behavior. Participants responded on a scale of 1 (*Disagree Strongly*) to 5 (*Agree Strongly*). The internal consistency reliabilities (Cronbach's alpha) in the current study were .91 for SRP Total, .82 for Interpersonal Manipulation, .74 for Callous Affect, .79 for Erratic Lifestyle, and .74 for Antisocial Behavior.

2.2.2. Emotional intelligence

The Mayer–Salovey–Caruso Emotional Intelligence Test (MSCEIT; Mayer et al., 2002) was used to measure EI. This 141-item test yields an overall score as well as four subscale scores: Perceiving Emotions, Facilitating Emotions, Managing Emotions, and Understanding Emotions. Each subscale is calculated from two different types of tasks. Internal consistency reliabilities in normative studies were .93 for Total EI, .91 for Perceiving, .79 for Facilitating, .83 for Managing, and .80 for Understanding (Mayer et al., 2002).

2.2.3. Student antisociality

Several items from Levenson et al.'s (1995) Antisocial Action scale were used (with the permission of the first author) in addition to items developed specifically for the current study. The final 23-item scale included items to reflect academic misconduct (*I have cheated on an exam*), uncooperative group behavior (*When I'm working in a group, I usually end up doing at least my fair share* – reverse keyed), and antisocial behavior (*I have vandalized school or public property*). Participants responded on a scale of 1 (*Disagree Strongly*) to 5 (*Agree Strongly*). The internal consistency reliability for this scale was .77.

2.3. Procedure

Every participant was assigned a unique identification number and a password. Participants completed all measures online, either in campus computer laboratories or from a personal computer.

Each participant who completed all items received the equivalent of \$10 (Canadian) in compensation.

3. Results

3.1. Descriptive statistics

Means and standard deviations (both overall and by sex) for study variables are presented in Table 1, as are the d values representing the magnitude of sex differences, and significance levels of associated t -tests (note that age was uncorrelated with psychopathy and EI). As expected, there were sex differences in all study variables, with men scoring significantly higher in student antisociality, total psychopathy, and all psychopathy subscales. Women scored significantly higher on total EI and all EI subscales. There were no significant differences in psychopathy or student antisociality between Accounting students and Humanities/Social Sciences students, but Humanities/Social Sciences students scored significantly higher than Accounting students in total EI ($p < .01$).

3.2. Relations between psychopathy, EI, and student antisociality

Zero-order correlations between psychopathy, EI, and student antisociality are reported in Table 2. The correlations are presented separately for men and women due to the substantial sex differences in scores on study variables. The patterns of correlations, however, are similar for both sexes. That is, for both men and women, psychopathy subscales were negatively correlated with EI subscales and positively correlated with student antisociality, and EI subscales were negatively correlated with psychopathy subscales and with student antisociality. The correlations between total psychopathy and total EI were significant and negative in both sexes and the correlations between total psychopathy and student antisociality were significant and positive for both sexes. Total EI and student antisociality were significantly and negatively correlated in both sexes.

To assess the extent to which psychopathy and EI predicted student antisociality, we conducted separate multiple regression analyses for men and women. For each sex, we predicted student antisociality from total EI and total psychopathy scores (see results in Table 3). For women, this model accounted for 33.4% of the variance, but only psychopathy was a significant predictor. For men, the model accounted for 52.3% of the variance in student antisociality, with both psychopathy and low EI significant predictors.

4. Discussion

The current study investigated the relations between psychopathy, EI, and student antisociality in a sample of undergraduate students. The expected sex differences emerged, with women scoring significantly higher than men in EI, and men scoring significantly higher than women in psychopathy and student antisociality. As hypothesized, total psychopathy was significantly and positively correlated with student antisociality for both men and women, and total EI was significantly and negatively correlated with student antisociality for both men and women. The hypothesis that total psychopathy and total EI would be significantly and negatively correlated was supported, in both male and female participants. At the subscale level, there were no positively signed inter-correlations between psychopathy and EI, indicating that none of the four measured facets of psychopathy were associated with high levels of any of the four measured facets of EI. Thus, there was no evidence of any Factor 1 psychopathy-related superiority in any of the EI subscales.

Table 1
Means, standard deviations, and sex differences for study variables.

	Total		Female		Male		F–M
	Mean	SD	Mean	SD	Mean	SD	<i>d</i>
Total EI	91.03	15.10	94.16	14.35	86.40	15.00	.53*
Perceiving	96.46	15.67	99.30	15.17	92.31	15.55	.46*
Managing	91.84	11.93	93.92	11.42	88.73	12.00	.44*
Facilitating	91.43	15.17	94.39	14.06	87.05	15.70	.49*
Understanding	91.73	13.88	93.39	13.70	89.22	13.80	.30*
Total SRP	2.25	.43	2.10	.35	2.48	.43	–.97*
Inter. manipulation	2.58	.58	2.42	.53	2.81	.59	–.69*
Callous affect	2.33	.50	2.13	.44	2.62	.44	–1.11*
Erratic lifestyle	2.58	.57	2.41	.49	2.83	.60	–.77*
Antisocial behavior	1.52	.48	1.42	.41	1.65	.54	–.47*
Student antisociality	1.89	.45	1.80	.40	2.02	.48	–.50*

Note: *N* = 254 women, 175 men.

* $p \leq .01$ (based on associated *t*-tests).

Table 2
Zero order correlations between psychopathy, emotional intelligence, and student antisociality by sex.

	1	2	3	4	5	6	7	8	9	10	11
1. Total EI		.77	.74	.78	.77	–.30	–.27	–.24	–.15	–.22	–.22
2. Perceiving	.80		.34	.52	.43	–.18	–.13	–.11	–.12	–.19	–.12
3. Managing	.81	.47		.48	.48	–.31	–.30	–.26	–.16	–.20	–.26
4. Facilitating	.85	.63	.62		.49	–.19	–.21	–.13	–.08	–.15	–.17
5. Understanding	.76	.42	.57	.58		–.22	–.20	–.18	–.10	–.18	–.14
6. Total SRP	–.40	–.34	–.39	–.32	–.29		.83	.73	.80	.61	.58
7. Interpersonal man.	–.28	–.28	–.28	–.20	–.17	.84		.58	.54	.29	.43
8. Callous affect	–.26	–.16	–.30	–.19	–.21	.73	.57		.39	.19	.37
9. Erratic lifestyle	–.28	–.23	–.29	–.24	–.20	.82	.58	.46		.44	.51
10. Antisocial beh.	–.42	–.39	–.36	–.36	–.35	.74	.47	.37	.48		.43
11. Student antisoc.	–.46	–.38	–.47	–.37	–.31	.70	.47	.45	.62	.66	

Note: *N* = 254 women, 175 men. Correlations for women are above the diagonal and correlations for men are below the diagonal. Total EI = total emotional intelligence; Interpersonal man. = Interpersonal manipulation; Antisocial beh. = Antisocial behavior; Student antisoc. = Student antisociality. For women, $r_s \geq .13$ are significant at the .05 level and $r_s \geq .16$ are significant at the .01 level. For men, $r_s \geq .15$ are significant at the .05 level and $r_s \geq .20$ are significant at the .01 level.

Table 3
Predictors of student antisociality for male and female participants.

Predictor	<i>B</i>	<i>p</i>	95% CI
<i>Women</i>			
Constant	.58	.008	[.16, 1.01]
Psychopathy	.64	.000	[.52, .77]
Ability EI	.00	.332	[–.00, .00]
Adj. <i>R</i> square	.33		
<i>Men</i>			
Constant	.90	.001	[.38, 1.42]
Psychopathy	.69	.000	[.56, .81]
Ability EI	–.01	.000	[–.01, –.00]
Adj. <i>R</i> square	.52		

Note: *N* = 254 women, 175 men. Unstandardized coefficients predicting student antisociality are reported. CI = confidence interval.

Whereas psychopathic individuals have sometimes been depicted as charming, masterful manipulators of others, the results of the current study suggest that psychopathic individuals possess no exceptional ability in any area of EI. In fact, psychopathy (even the interpersonal manipulation subscale, the facet of psychopathy that would seem to be most reliant on EI), was consistently associated with low levels of EI in both men and women. It seems that, at least in a university sample, psychopathic students are likely to behave in ways that are detrimental to fellow students and to society, but to possess lower levels of perceiving, understanding, facilitating, and managing emotional information than do their less psychopathic peers.

Both psychopathy and EI were highly related to a measure of student antisociality, indicating that high scorers in psychopathy

and low scorers in EI were also likely to behave in an uncooperative, socially antagonistic manner. However, in the prediction of student antisociality from EI and psychopathy, only psychopathy was significant for women, and psychopathy was the stronger of the two predictors for men. This finding suggests that to the extent that previous research has linked Ability EI to antisocial behavior, this link might be substantially attenuated after controlling for psychopathy. One obvious area of overlap between Ability EI, psychopathy, and antisocial behavior, is that all three are related to the Big Five Agreeableness factor—high Agreeableness in the case of Ability EI (Brackett & Mayer, 2003), and low Agreeableness in the case of psychopathy (Lee & Ashton, 2005) and antisocial behavior (Miller, Lynam, & Leukefeld, 2003). Future research could examine whether the negative association between psychopathy and EI can be explained by personality variables, such as Agreeableness.

The current study was limited in that the broad factors of personality were not assessed, nor were variables assessing self-esteem or any forms of psychopathology. In addition, the sample was of restricted variability in age and education and presumably in intellectual ability. Future research could explore the generalizability of the present results to samples that are more heterogeneous in age and in education level.

The current study suggests that the stereotype of the psychopath as a skilled manipulator might be based on fictional representations of psychopaths or on psychopathic individuals with exceptional levels of skill and/or intelligence. (Empirical studies have shown that psychopathy is generally uncorrelated with measures of general intelligence (Hare, 2003).) It would seem that deficits in EI are characteristic of students who scored high in psychopathic traits, whether EI is measured in a personality

trait-like fashion (Malterer et al., 2008) or as an ability, such as in the current study. To the extent that measures of Ability EI can capture the ability to understand the emotional states of others, psychopathic individuals tend to be rather low in this ability. However, it is not at all clear that interventions aimed at improving EI would reduce psychopathy levels. Rice, Harris, and Cormier (1992) famously discovered that psychopathic patients who received empathy training were more likely to recidivate violently than were non-treated psychopathic patients. Future research could investigate whether psychopathy-related antisociality increases or decreases following similar interventions in non-clinical samples. If psychopathy is, indeed, an evolved life history strategy, the tendency that has evolved would seem to be a willingness to exploit other people rather than any exceptional ability in understanding the emotional states of others.

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