

Emotional Intelligence and Psychopathy: A Comparison of Trait and Ability Measures

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A dysfunction in the processing of emotional material has been suggested to underpin the concept of psychopathy, hence we hypothesized that individuals high in psychopathic traits should have low scores on measure of emotional intelligence (EI). We measured EI by using both an ability-based measure (Mayer-Salovey-Caruso Emotional Intelligence Test) and a self-report measure (Trait Meta-Mood Scale) in a sample of offenders. Psychopathy was measured by using both a clinical checklist (Psychopathy Checklist-Revised) and a self-report scale (Psychopathy Personality Inventory-Revised). We also took a measure of intellectual ability (Wechsler Abbreviated Scale of Intelligence) to assess any unique contribution from EI over that of IQ. We found that the concepts of EI (both ability-based and self-report) were related to IQ. We also found that there was a negative relationship between self-report EI and ability EI. In relation to psychopathy, the results did not support the hypotheses of a general deficit in EI. While the results relating different facets of psychopathy to different aspects of EI were complex, there was some evidence that some aspects of psychopathy were positively related to the unique variance related to EI once IQ was partialled out. We suggest that there is not a general deficit in EI in psychopathy, and that future research needs carefully to carefully consider just what aspects of psychopathy and of EI are being measured, and the influence of intellectual ability, before drawing conclusions on this matter.

Keywords: emotional intelligence, IQ, psychopathy

Emotional intelligence (EI) can be defined as the capacity to perceive and understand emotions and the ability to use this information as part of decision-making and the management of behavior. There has been an explosion of research into the uses of EI because of the claims that EI can predict educational, occupational and, of interest for the present study, clinical outcomes more accurately than traditional intelligence (Matthews, Zeidner, & Roberts, 2007). A meta-analysis (Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007) of 44 studies to investigate the relationship between EI and health found weak to modest correlations between EI and mental health ($r = .29$), physical health ($r = .31$), and psychosomatic health ($r = .22$). While these correlations do not tell us about causality, the results suggest that EI is a concept that may have considerable

utility when considering issues such as the etiology and maintenance of mental health.

However, the concept of EI has come under increasing attack because of some rather “catch-all” definitions (e.g., Locke, 2005; Mayer, Salovey, & Caruso, 2008) and the many different measures and interpretation of EI (Matthews, Roberts, & Zeidner, 2004; Matthews et al., 2007). Hence, it is important to be clear about exactly what definition of the term is being used (Mayer et al., 2008).

Trait and Ability EI

Petrides and colleagues proposed that an important distinction should be made between “trait EI” and “ability EI” They state that: “Trait EI (or “trait emotional efficacy”) concerns emotion-related dispositions and self-perceptions measured via self-report, whereas ability EI (or “cognitive emotional ability”) concerns emotion-related cognitive abilities that ought to be measured via maximum-performance tests” (Petrides, Perez-Gonzalez, & Furnham, 2007, p. 151). A number of studies support this view that trait and ability EI are conceptually different. Nonsignificant or low correlations have been found between trait and ability EI measures (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006; Engelberg & Sjoberg, 2004; O'Connor & Little, 2003; Warwick & Nettelbeck, 2004). Petrides et al. (2007) state that there are a number of researchers

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who believe that ability and trait models of EI can coexist (Tett, Fox, & Wang, 2005). However, others urge the importance of maintaining this difference between them (Mayer et al., 2008).

Psychopathy

The modern day notion of the psychopath is rooted in the work of Herv Cleckley whose book *The Mask of Sanity* (Cleckley, 1941) was extremely influential among those clinicians interested in the concept of psychopathy. Cleckley described many aspects of what he regarded as the psychopathic individual. He was keen to describe such individuals in terms of their personality traits and not merely through their observable behaviors or, indeed, antisocial ones.

The modern era of work into psychopathy is really defined and underpinned by the development of the Psychopathy Checklist (PCL) under the guidance of Robert Hare (Hare, 2003). At the core of the description and definition of psychopathy are personality traits that include the cold-hearted, unemotional, and detached nature of such individuals.

Recent developments in the analysis of psychopathy suggest that several factors or facets may underlie the overall global concept of psychopathy. For many years, a two-factor model of the Psychopathy Checklist-Revised (PCL-R) was popular, with Factor 1 representing the interpersonal and affective components and Factor 2 the lifestyle and antisocial components (Hare, 2003). More recently, the PCL-R has been suggested to contain three (Cooke & Michie, 2001) or four facets (Hare, 2003). For instance, the model of Hare (2003) suggests the four facets of (a) interpersonal, (b) affective, (c) lifestyle, and (d) antisocial.

While the PCL-R remains a popular instrument to measure psychopathy, it is not without problems. It was developed for use in forensic settings, places emphasis on antisocial behavior, and needs official records to score certain items. It is heavily reliant on good collateral information about the person being assessed. In nonforensic settings such information is often not available and so efforts have been made to develop alternate measures of psychopathy. The Psychopathy Personality Inventory-Revised (PPI-R; Lilienfeld & Widows, 2005) is a self-report measure of psychopathy designed for use in a community setting. It contains at least two underlying factors that are termed (a) fearless dominance and (b) self-centered impulsivity. However, there does not appear to be any strong conceptual relationship between the two factors identified by the PPI-R and the PCL-R (Copestake, Gray, & Snowden, 2011; Malterer, Lilienfeld, Neumann, & Newman, 2010; Poythress et al., 2010).

Psychopathy and Intelligence

Psychopaths are often portrayed as intelligent individuals. Indeed, among the features noted by Cleckley was the idea that such individuals often had superior intelligence and that this could be used to manipulate others (Cleckley, 1941). Hence, though the concept of EI was not yet formulated, Cleckley might well have suggested that such individuals would have superior emotional intelligence. However, scientific data has been not supportive of the notion that psychopaths have superior intelligence. Analyses of large data sets drawn from offender populations show that the PCL-R has little correlation with IQ measures (Hare, 2003). In-

deed, more recent data suggest that most aspects of psychopathy are actually negatively related to IQ measures (Vitacco, Neumann, & Jackson, 2005; Vitacco, Neumann, & Wodushek, 2008). The possible exception to this being the interpersonal factors of psychopathy that may either have no association with IQ, or have a positive association with IQ (Vitacco et al., 2008).

Psychopathy and Emotions

The evidence that psychopaths have a dysfunction in processing the emotional content of a stimulus is large. It has been obtained from a variety of techniques such as reduced physiological reactions to distressing pictures (Patrick, Cuthbert, & Lang, 1994), reduced modulation of the startle response by emotional material (Patrick, Bradley, & Lang, 1993), a deficit in processing the emotional content of words (Williamson, Harpur, & Hare, 1991), an impaired recognition of affect in facial expressions (Blair et al., 2004), or in speech (Blair et al., 2002), to name but a few. In turn, this dysfunction has led to specific hypotheses about which brain regions, such as the amygdala, are impaired in psychopathic individuals (Blair, Mitchell, & Blair, 2005). However, it should be noted that there are several reports that do not fit with this idea of a dysfunction. For instance, there appear to be several reports where psychopathy is not associated with inferior performance on emotion related tasks (Day & Wong, 1996; Glass & Newman, 2006; Kosson, Suchy, Mayer, & Libby, 2002; Pham & Philippot, 2010), others where performance is impaired but the deficit appears for emotions other than fear (Hastings, Tangney, & Stuewig, 2008), and others where psychopaths appear to have superior performance for some emotions (Book, Quinsey, & Langford, 2007; Habel, Kuhn, Salloum, Devos, & Schneider, 2002; Hansen, Johnsen, Hart, Waage, & Thayer, 2008; Kosson et al., 2002).

Psychopathy and EI

Given the alleged importance of the concept of EI for social functioning, the idea that psychopaths have poor social functioning, and data that indicate dysfunctional processing of emotional material in psychopaths, it is most surprising that there have been few studies testing EI in this population until recently.

Several studies have examined the relationship between self-reported psychopathy and self-reported (or trait) emotional intelligence in community (mainly undergraduate) samples. Ali, Amorim, and Chamorro-Premuzic (2009) examined EI and psychopathy in a college sample. They used a self-report measure of EI (TEI Que-Short Form; Petrides & Furnham, 2006) and a self-report measure of psychopathy (Levenson Self-Report Psychopathy Scale; Levenson, Kiehl, & Fitzpatrick, 1995). They found that those reporting higher levels of secondary psychopathy reported lower levels of trait EI with a moderate effect size ($r = -.48$), but no effect of primary psychopathy was found for the EI measure. Grieve and Mahar (2010) also examined psychopathy using Levenson's scale but used Schutte's EI scale (Schutte et al., 1998). Primary psychopathy was not significantly related to EI, but secondary psychopathy was negatively related with a small effect size ($r = -.26$). Using the TEI Que; Petrides, Vernon, Schermer, and Veselka (2011) show that trait EI was inversely associated to another self-report measures of psychopathy (SRP-III; Hare, 1985) with a small effect size ($r = -.21$ to $-.24$).

Recently, there have been the first reports of ability EI (all using the Mayer-Salovey-Caruso Emotional Intelligence Test, MSCEIT—see description below) as a function of self-report psychopathy in college samples. Vidal, Skeem, and Camp (2010) showed that PPI-R total score was not related to EI, but that the Self-Centered Impulsivity subscale was negatively related to EI with a moderate effects size ($r = -.30$). Visser, Bay, Cook, and Myburgh (2010) showed that the total score for the SRP-III was negatively related to EI with a moderate effect size ($r = -.40$), and Lishner, Swim, Hong, and Vitacco (2011) using similar measures, again in a college sample, also demonstrated a moderate negative relationship ($r = -.34$).

The studies reviewed so far appear to point to the expected negative relationship between EI and psychopathy, and particularly with the secondary aspects of psychopathy (e.g., impulsivity—see Snowden & Gray, 2011). However, all these studies have used community samples. It is far from clear if this relationship would hold at higher levels of psychopathy that are found in offender samples, or when levels of psychopathy are judged using clinical ratings.

Malterer, Glass, and Newman (2008) examined offenders and assess psychopathy via the PCL-R. However, they used a self-report instrument to measure EI. The Trait Meta-Mood Scale (TMMS; Salovey, Mayer, Goldman, Turvey, & Palfal, 1995) has three subscales thought to measure the ability to recognize affective states (Clarity scale), a person's attention to one's feelings (Attention scale), and the ability to repair one's mood (Repair scale). They found that the PCL-R score was negatively correlated with the Attention and Repair scale (though the correlations were small; $r = -.10$ and $-.14$, respectively), but not with Clarity. Hence, these data provide some support for the notion that EI is impaired in psychopaths, but that this is related to the ability to pay attention to their emotions and regulated them, rather than recognize emotions. The authors note that this pattern of results is consistent with predictions from the Response Modulation theory of psychopathy (Patterson & Newman, 1993). While the findings of Malterer et al. (2008) are of great interest, there are clearly some limitations. First, the TMMS is a self-report measure of EI. The extant literature does not support the idea that self-report EI is a good predictor of ability EI. Second, the correlations reported are very small and may be of limited value for those who are interested in the management of such individuals.

Since the submission of the present article, there has been the first report of ability EI (using the MSCEIT) and clinically rated psychopathy. Ermer, Kahn, Salovey, and Kiehl (2012) found that the total MSCEIT score was not related to PCL-R score, but there was a small negative relationship ($r = -.11$) if the effects of general intelligence were controlled for.

The Present Study

In this article, we report on further measurement of the concepts of EI and psychopathy. The articles reviewed above appear limited in that they have confined themselves to community samples (nearly always undergraduates) and/or to measuring psychopathy via a self-report questionnaire. The only exception being that of Malterer et al. (2008). They have also either measured EI by either self-report, or by ability tests, but not by both. It is also a great worry that very few of these studies have examined the role of IQ on the pattern of results.¹ Given reports of a consistent relationship

between EI and IQ (e.g., Mayer, Caruso, & Salovey, 1999), this seems a significant oversight.

Our primary aim was to look at an ability-based measure of EI given that others (e.g., Mayer et al., 2008) believe that the most appropriate way to define EI is by testing this ability, rather than asking people about their abilities. However, we also decided to take a measure of self-reported EI in order to compare the pattern of results to those obtained with self-report measures. Clearly, if self-report EI can be used as a substitute for ability EI this would have important ramifications as self-report EI is much easier to measure.

The most prominent ability measure of EI is the MSCEIT version 2 (Mayer, Salovey, & Caruso, 2002). It measures four factors (often referred to as branches) of EI, namely; Perceiving Emotions (Branch 1), Facilitating Thought (Branch 2), Understanding Emotions (Branch 3), and Managing Emotions (Branch 4). This four-factor model has been the subject of some debate (see, for instance, Palmer, Gignac, Manocha, & Stough, 2005). Trait measures of EI are numerous. Therefore, we had to make a decision as to which to use in the present research. We chose to use the TMMS because it was developed by the same group of researchers as the MSCEIT, and both are based on the same four-branch model of EI (Mayer & Salovey, 1997).

We also took two measures of psychopathy. Our main measure of psychopathy was the PCL-R because it is used in much research and clinical practice. The PCL-R has a large literature that illustrates its value as both a clinical instrument and as a research tool (see Hare & Neumann, 2008, for a review). It is scored by a clinician based on a review of collateral information, as well as a clinical interview and, therefore, is less reliant on the self-report of the person being assessed than typical self-report questionnaires. We also used a self-report measure of psychopathy. The PPI has a developing literature that supports its utility as a research instrument (e.g., Poythress et al., 2010). In this research, we used the latest version of the PPI (PPI-R; Lillienfeld & Widows, 2005). We have reported on the relationship between this PCL-R and PPI-R data in a separate publication (Copestake et al., 2011).

Development of Hypotheses

To develop hypotheses to guide the present research, we will consider two models of psychopathy. Blair's model (Blair et al., 2005) postulates that psychopaths have a dysfunction in the amygdala that leads to impairments in aversive conditioning, instrumental learning, and the processing of fearful and sad expressions. This model predicts that psychopaths should have low scores for Branch 1 (Perceiving Emotions) of the MSCEIT and for the Clarity Scale of the TMMS. It is less clear what the pattern of results should be for the other Branches of the MSCEIT and scales of the TMMS. One could postulate that if the emotion cannot be recognized in the first place, then these scales should also be affected. However, it is possible that the emotional information may be able to be generated internally and, hence, these other

¹ Malterer et al. (2008) did take a measure of intellectual functioning, but the results are not given or discussed. Ermer et al. (2012) did take a measure of general intelligence and show that some significant results emerged only after partialling out the effect of general intelligence.

functions may be intact. Therefore, no specific predictions will be made for these branches and scales in the present study.

A second possibility is that the deficit does not lie in the recognition of emotions per se (or in the recognition of specific emotions), but that this recognition does not trigger autonomic activity (sometimes known as the “emotions paradox”; Lorenz & Newman, 2002). Thus, psychopaths recognize but do not feel the emotions and, hence, do not have “somatic markers” to guide behavior (Bechara, Damasio, Damasio, & Anderson, 1994; van Honk, Hermans, Putman, Montagne, & Schutter, 2002). This theory predicts that Branch 1 (Perceiving Emotions) of the MSCEIT and the Clarity scale of the TMMS will not be related to psychopathy. If emotions cannot be felt, then this should lead to an inability to use emotions to guide behavior. Therefore, psychopathy should be negatively related to branches 2–4 of the MSCEIT. For the Attention and Repair scales of the TMMS, the hypotheses are less clear. If one has a reduced feeling of an emotion this might produce greater attention to this emotion in order to compensate for its weakness, or less attention to it as it does not attract attention. Likewise, it is unclear whether the ability to repair mood would be reduced (because there is less emotion available to use), or enhanced (as there is less mood to repair). Hence, we did not make a specific prediction for these scales.

Method

Participants

Participants were 57 convicted, male offenders located at three different prisons. Twenty were located at HMP Long Lartin, which is a high-security prison; 25 were located at HMP Leyhill, which is an open prison; and seven were located at the Westgate Unit at HMP Frankland, which is a specialist unit for offenders who meet the criteria for Dangerous and Severe Personality Disorder (DSPD). Of the total sample, 85% were serving life sentences, and 15% were serving determinate sentences. The mean age of the sample was 38 years old ($SD = 9.7$, range = 22–66 years). Most of the sample (77%) was of Caucasian origin, 18% were of Black Caribbean or Black African origin, and 5% were of Asian origin. As part of our ethical protocol, participants were only included if they were deemed to be fit to take part that day (i.e., they were regarded as physically and mentally healthy and were not in an agitated mood). No other attempts were made to screen for other comorbid mental disorders. Ethical approval for the study was provided by both the Directorate of High Security Prisons and HMP Leyhill.

Measures

PCL-R. The PCL-R is a 20 item tool that has been designed to measure psychopathic traits via the assessment of file information, collateral reports, and interviews with the offender (Hare, 2003). All participants' PCL-R assessments in this study were completed either as part of a risk assessment, as most of them are life-sentenced prisoners, or to make a decision about whether an identified accredited offending behavior program would meet the offender's needs.

PCL-R assessments were completed in line with HM Prison Service guidelines for the administration of the PCL-R (Attrill, 2004). All PCL-R assessments were either completed or supervised by psychologists who have successfully completed HM Prison Service PCL-R

training and achieved interrater reliability through either the Darkstone or HM Prison Service certification process. As is recommended in the PCL-R manual (Hare, 2003), the vast majority of the assessments (54/57) were second scored and the consensus score of the two raters was used.² The PCL-R scores for the remaining three participants were obtained from a database, and it was unclear whether these had been subjected to a second rater or not.

The internal consistency of the total PCL-R score was acceptable (Cronbach's alpha = .91) and similar to those published in the PCL-R manual 2nd Edition ($\alpha = .81$ – 0.89). We also achieved acceptable internal consistency at the facet level (Facet 1: $\alpha = .84$; Facet 2: $\alpha = .73$; Facet 3: $\alpha = .74$; Facet 4 $\alpha = .76$).

PPI-R. The PPI-R is a 154 =-item self-report measure of psychopathy (Lillienfeld & Widows, 2005). Each question is answered on a four-point scale of 1 (*false*), 2 (*mostly false*), 3 (*mostly true*), and 4 (*true*). Participants were presented with written instructions about the PPI-R and how it should be completed. The PPI-R produces a global psychopathy score and scores for the PPI-I (Fearless Dominance) and PPI-II (Self-Centered Impulsivity) scales.

Previous work (Lillienfeld & Widows, 2005) has shown that the scales of the PPI-R have good internal consistency ($\alpha = .78$ – 0.92) and test–retest reliability ($r = .82$ – 0.95). Analyses of the present data showed high internal consistency for the global psychopathy score ($\alpha = .93$) and for each of the subscales (Fearless Dominance: $\alpha = .87$, Self-Centered Impulsivity: $\alpha = .95$).

Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT). The MSCEIT is a 141-item emotional intelligence test for use in adults 17 years and above (Mayer et al., 2002). It involves the completion of 8 tasks.

Faces task. The respondent is presented with a series of pictures of different people. Each picture is followed by four different emotions and the respondent has to assess how much of each of the four different emotions is displayed by the individual in the picture on a 5-point Likert scale.

Pictures task. This task measures whether an individual is able to perceive emotions that are conveyed in music, art and the environment. The respondent is presented with a series of pictures, for example, pebbles on a beach and a solitary sun-scorched tree in a desert setting. Scoring is as for the Faces task.

Sensations task. This measures whether an individual can compare different emotions to sensations such as color, light, and temperature. The following is an example. “Imagine feeling guilty that you forgot to visit a close friend who has a serious illness. In the middle of the day, you realize you completely forgot to visit your friend at the hospital. How much is the feeling of guilt like the following?” The respondent is presented with descriptive words; cold, blue and sweet and asked to rate each descriptive word on a 5-point Likert scale.

Facilitation task. This task measures an understanding of how different moods interact and support thinking and reasoning. The following is an example. “What mood(s) might be helpful to feel when creating new exciting decorations for a birthday party?” The respondent is presented with three options (e.g., annoyance, boredom, and joy) and asked to rate each on a 5-point Likert scale where 1 equals not useful and 5 equals very useful.

² Unfortunately, the individual scores from the two raters were not available to us to perform an analysis of inter-rater reliability.

Blends task. This measures an individual's ability to blend emotions and to assemble simple emotions into complex feelings. The following is an example. "A feeling of concern most closely combines the emotions of . . ." The respondent is asked to select the best alternative from five alternatives.

Changes task. This measures an individual's knowledge of emotional chains. A situation is described (e.g., "A middle aged woman was happy and shortly thereafter felt disapproving. What most likely happened in between?"), and the respondent has to choose from a list of possible reasons.

Emotion management task. This task measures an individual's ability to incorporate his or her emotions into decision making. This task requires the respondent to evaluate the effectiveness of a number of options in a situation where a hypothetical individual is required to regulate emotions by using a Likert scale.

Emotional relations task. This task measures an individual's ability to incorporate his or her emotions into decision making that involves others. The structure of this task is similar to the question described above in the Emotion Management Task; however, in this task the respondent is asked to evaluate a number of actions that involve other people.

The MSCEIT provides an overall Emotional Intelligence score (EQI), and four Branch scores. Branch 1 (Perceiving Emotions) is a measure of whether an individual can identify emotion in self and others and when conveyed in music, art and the environment. Branch 2 (Facilitating Thought) is a measure of whether an individual can use his or her emotions to facilitate thinking and decision making. Branch 3 (Understanding Emotions) is a measure of how well an individual understands the complexities of emotion and how different emotions may change and combine over time. Branch 4 (Emotional Management) is a measure of how well an individual is able to manage emotion in self and others. This branch measures the ability to express emotion in an effective manner, for example, not acting on anger which may have negative consequences.

TMMS. The TMMS is a 48 item self-report measure (Savolney et al., 1995). Participants are asked to read each statement and rate the extent to which they agree with it using a 5 point Likert scale (1 = *strongly disagree*, 2 = *somewhat disagree*, 3 = *neither agree nor disagree*, 4 = *somewhat agree*, and 5 = *strongly agree*). The TMMS provides an overall score and scores on 3 subscales (Clarity, Attention, and Repair).

Wechsler Abbreviated Scale of Intelligence (WASI). The WASI (Wechsler, 1999) consists of four subtests (Similarities, Vocabulary, Matrix Reasoning, and Block Design) that give a global measure of IQ and scores for both Verbal and Performance IQ. All participants' WASI assessments were completed by Psychological Assistants, Trainee Forensic Psychologists, or Registered Forensic Psychologists. WASI assessments are routinely completed in HM Prison Service as an estimate of intellectual functioning prior to an offender being offered a place on an accredited offending behavior program.

Results

Descriptive Statistics

Overall the sample appeared to have average intelligence and showed a good range of scores (see Table 1). No offender had a

score that was suggestive of Learning Disabilities (e.g., <70). Levels of PCL-R defined psychopathy were slightly higher than for the general United Kingdom prison population (Hare, 2003). Using the often used cut-off threshold for psychopathy (≥ 30), 19.3% would be defined as psychopaths. This was not surprising because we deliberately recruited from some high-security institutions so as to ensure we had some individuals with high psychopathy levels. Despite these high PCL-R scores, the PPI-R score was actually less than for the norms for a North American offender population (Lilienfeld & Widows, 2005). This may reflect differences in levels of psychopathy across these cultures (Cooke & Michie, 1999). However, it may also reflect issues related to the self-report of psychopathy (see Copestake et al., 2011, for a discussion).

The offender population showed greater performance on Branch 1 (Perceiving Emotions) of the MSCEIT in comparison to the norms (Mayer et al., 2002), but showed poorer performance on Branch 3 (Understanding Emotions) and Branch 4 (Managing Emotions). For the TMMS, the sample generally reported lower levels of EI than a normative sample (Palmer, Gignac, Bates, & Stough, 2003) except for the Attention scale.

Psychopathy and IQ

PCL-R and IQ. The PCL-R total score showed a negative relationship to the Full-scale IQ score of moderate effect size. Examination of the four facets of PCL-R showed that most of them were also negatively related to Full-scale IQ score, the exception being Facet 1 (Interpersonal). Examination of the Verbal and Performance IQ scales shows that both of these scales show a similar pattern of results to Full-scale IQ. However, the correlations for the Verbal scale are stronger than that for the Performance scale.

As a further test of the relationship between the facets of the PCL-R and Full-scale IQ we performed a multiple regression of the facets scores onto the Full-scale IQ. A significant model emerged, $F(4,37) = 7.15, p < .001$ Adjusted $R^2 = .375$. Facets 3 ($\beta = -.343, p < .05$) and 4 ($\beta = -.344, p < .05$) had significant negative relationships to IQ, while Facet 2 was not significantly related to IQ ($\beta = -.205, p > .05$). Of most interest was that Facet 1 was positively related to IQ score ($\beta = .392, p < .05$). Hence, the different facets of PCL-R defined psychopathy have quite different relationships to IQ score.

While we are not the first to find negative correlations between aspects of psychopathy and IQ (e.g., Beggs & Grace, 2008), we were worried that the negative relationship might arise, in part at least, because of the ability of those offenders with high IQ to disguise or dissimulate their responses on the PPI-R, or to impression manage their PCL-R interview, so as to have falsely deflated psychopathy scores. As a check on this, we chose to look for aspects of psychopathy where the person would not be able to dissimulate or impression manage. Some items of the PCL-R are scored mainly, or solely, on collateral information. For instance, the item "Criminal Versatility" depends on the official records of conviction and hence it would seem difficult to impression manage such an item.³ Therefore, we examined four PCL-R items that we thought would be relatively immune to impression management. All four items were negatively related to IQ,

³ It could be argued that high IQ might help a person evade being caught or convicted for crimes and hence even this item is influenced in such a manner.

three of them significantly so (Early Behavioral Problems, $r = -.41$, $p < .05$; Juvenile Delinquency, $r = -.25$, $p > .05$; Revocation of Conditional Discharge, $r = -.36$, $p < .05$; Criminal Versatility, $r = -.38$, $p < .05$). Hence, these data do not support the idea that the negative correlations are attributable to good impression management by highly intelligent offenders leading to lower psychopathy scores.

PPI-R and IQ. Table 2 also shows the correlations for the self-report assessment of psychopathy (PPI-R) and IQ. Like the PCL-R, the total PPI-R score was negatively associated with IQ. At the factor level, the Self-Centered Impulsivity factor was negatively related to Full-scale IQ, while the Fearless Dominance factor showed no significant association to Full-scale IQ. Again this pattern of results was apparent for the Verbal scale also, with the Performance scale showing correlations of a lesser magnitude. A multiple regression analysis of the relationship of the PPI-R facets to Full-scale IQ narrowly failed to produce a significant model, $F(3,44) = 2.55$, $p = .07$, adjusted $R^2 = .090$.

Emotional Intelligence and IQ

Table 3 shows the relationships between the various measures of EI and intellectual ability. There was a strong positive correlation between Full-scale IQ and EI as defined by the ability-based measure (MSCEIT), and this was also apparent also for the Verbal and for the Performance scales. These positive relationships appear to be related, in particular, to the later Branches of the model, whereas the early branch (Perceiving Emotions) was not found to be related to IQ.

In contrast to the MSCEIT, the TMMS measure of EI was negatively related to Full-scale IQ with a small effect size. This relationship at the global level derives mainly from the moderate relationship between the Clarity scale and IQ.

Table 1
Descriptive Statistics of the Sample

	M	SD	Range
WASI Total	99.60	11.93	74–118
Verbal	97.64	14.76	72–126
Performance	100.00	10.97	79–122
PCL-R Total	19.88	8.69	0–37
Facet 1 Interpersonal	2.98	2.44	0–8
Facet 2 Affective	4.12	2.14	0–8
Facet 3 Lifestyle	4.70	2.61	0–9
Facet 4 Antisocial	6.20	2.93	0–10
PPI-R Total	269.16	44.47	199–410
Fearless Dominance	110.04	18.63	65–168
Self-centered Impulsivity	127.02	33.20	78–218
MSCEIT Total	95.00	18.33	55–142
Branch 1 Perceiving Emotions	105.98	15.50	65–135
Branch 2 Facilitating Thought	96.07	17.06	60–133
Branch 3 Understanding Emotions	91.86	16.36	56–124
Branch 4 Managing Emotions	90.53	16.75	52–123
TMMS Total	67.77	19.26	20–118
Clarity	13.18	4.29	6–27
Attention	24.94	9.51	12–48
Repair	29.83	7.97	3–48

Note. WASI = Wechsler Abbreviated Scale of Intelligence; PCL-R = Psychopathy Checklist–Revised; PPI-R = Psychopathy Personality Inventory–Revised; MSCEIT = Mayer-Salovey-Caruso Emotional Intelligence Test; TMMS = Trait Meta-Mood Scale.

Table 2
Correlations (Pearson’s R) Between the Measures of Psychopathy and Wechsler Abbreviated Scale of Intelligence (WASI) Scores

	Full-scale IQ	Verbal IQ	Performance IQ
PCL-R Total	-.33*	-.38*	-.22
Facet 1	.02	.03	.13
Facet 2	-.34*	-.29	-.25
Facet 3	-.57**	-.55**	-.45**
Facet 4	-.48**	-.52**	-.33*
PPI-R Total	-.33*	-.35*	-.20
PPI-I (Fearless dominance)	-.06	-.03	-.01
PPI-II (Self-centered impulsivity)	-.37**	-.43*	-.25

Note. PCL-R = Psychopathy Checklist–Revised; PPI-R = Psychopathy Personality Inventory–Revised.
* $p < .05$. ** $p < .01$.

Ability Versus Trait Measure of EI.

The two measures of EI were negatively related (Table 4) indicating that those who regarded themselves as having high trait EI were likely to have low ability EI. This negative relationship was apparent in the majority of the subscales of the MSCEIT and TMMS, the notable exception being that the Attention scale of the TMMS was not significantly correlated with any aspect of ability EI as indexed by the MSCEIT.

PCL-R and PPI-R

The two measures of psychopathy were correlated ($r = .53$; $p > .001$). Details of the relationships between the various factors of the PCL-R and PPI-R are available in a separate publication (Copestake et al., 2011).

Psychopathy and EI

PCL-R–MSCEIT. Table 5 illustrates the relationship between the PCL-R and MSCEIT scores. It is notable that nearly all of the correlations between the PCL-R and the MSCEIT were small and did not reach statistical significance. The one exception to this was a moderate correlation between Facet 4 (Antisocial) and Branch 1 (Perceiving Emotions). We have demonstrated that EI as defined by the MSCEIT is strongly correlated with IQ, and that PCL-R score is also correlated with IQ in this sample. Hence, we repeated the analyses, but partialled out the effect of IQ (using the WASI Full-scale IQ). These results are given in parentheses in Table 5. Now both Facets 3 (Lifestyle) and 4 (Antisocial) were positively correlated with Branch 1 (Perceiving Emotions) of the MSCEIT.

PPI-R–MSCEIT. Table 5 illustrates the relationship between the PPI-R and MSCEIT scores. Nearly all of the correlations between the PPI-R and the MSCEIT were small and did not reach statistical significance. However, we noted that the direction of the results was that Fearless Dominance had a positive relationship to PPI-R while Self-Centered Impulsivity had a negative relationship. The difference between these correlations was significant ($z = 2.59$; $p < .01$).

Table 3
Correlations (Pearson's R) Between the Measures of Emotional Intelligence and Wechsler Abbreviated Scale of Intelligence (WASI) Scores

	Full-scale IQ	Verbal IQ	Performance IQ
MSCEIT	.55**	.66**	.50**
1. Perceiving emotions	.06	.18	-.09
2. Facilitating thought	.26	.42*	.15
3. Understanding emotions	.64**	.72**	.66**
4. Emotional management	.51**	.56**	.44**
TMMS	-.23*	-.21	-.11
Clarity	-.36**	-.51**	-.30
Attention	-.13	.09	-.11
Repair	-.04	-.05	-.04

Note. MSCEIT = Mayer-Salovey-Caruso Emotional Intelligence Test; TMMS = Trait Meta-Mood Scale.

* $p < .05$. ** $p < .01$.

Fearless Dominance and Branch 1 (Perceiving Emotions) showed a significant positive correlation, while Self-Centered Impulsivity was negatively related to Branch 4 (Emotional Management). We have demonstrated that EI as defined by the MSCEIT is strongly correlated with IQ, and that PPI-R score is also correlated with IQ in this sample. Hence, we repeated the analyses but partialled out the effect of IQ (using the WASI Full-scale IQ). The positive correlation between Fearless Dominance and Branch 1 remained and Fearless Dominance was now also positively correlated with Branch 3 (Understanding Emotions). The correlation between Self-Centered Impulsivity and Branch 4 was eliminated by partialling out the effects of IQ.

PCL-R-TMMS. Table 6 illustrates the relationship between the PCL-R and the TMMS scores. Overall there are a number of moderate positive correlations. The total PCL-R score was significantly correlated with the Clarity scale, but not with the other scales (Attention or Repair). At the facet level, Facets 2, 3 and 4 all were positively related to the Clarity scale. When the effects of IQ were partialled out only the relationship between PCL-R total and the Clarity scale remained significant.

PPI-R-TMMS. Table 6 illustrates the relationship between the PPI-R and the TMMS scores. Overall, there was a positive correlation between TMMS total score and PPI-R total score. This association with PPI-R total score was also apparent for the Clarity scale and the Repair scale. Examination of the factors of the PPI-R show that the Self-Centered Impulsivity factor underpinned this positive correlation and that the Fearless Dominance factor was not related to any TMMS scores. The difference in correlations between these subscales and the TMMS scores was significant ($z = 2.96$; $p < .01$). Partialling out the effects of IQ tended to reduce all these positive correlations, but some still remained significant.

Discussion

The primary aim of this work was to look at the concept of ability EI (as defined by the MSCEIT) as a function of psychopathy (as defined by the PCL-R). As a secondary aim, we also took self-report measures of each of these concepts in order to compare how self-report versions (which are much easier to administer)

would compare with these measures. We aimed to test the hypotheses that psychopaths would have EI deficits related to the perception of emotions (Branch 1) or in feeling, and therefore utilizing, their emotions (later Branches of MSCEIT). Our results did not support either hypothesis.

The pattern of results in this study revealed a complex interaction between the concepts of psychopathy and EI. First, psychopathy was related to intellectual ability (IQ). Given that we also found that the ability measure of EI was also strongly related to IQ, this serves as a complicating factor that may obscure any relationship between EI and psychopathy. Second, we found that the two measures of EI were actually inversely related to one another—those self-reporting good EI were likely to have low-ability EI. Third, considering the ability measure of EI, we found that several aspects of psychopathy, and in particular those related to antisocial behaviors were positively related to EI. Fourth, for the self-report measure of EI we also found that several aspects of psychopathy were positively related to EI. We shall discuss each of these issues in turn.

Psychopathy and IQ

Although early studies failed to find a significant relationship between psychopathy and IQ, the results of more recent studies indicate that the four facets of the PCL-R may have different relationships with IQ (Vitacco et al., 2005; Vitacco et al., 2008). Our results are in line with this notion. We found strong negative relationships between IQ and several aspects of psychopathy, notably those related to impulsive lifestyle and antisocial behavior (see also Weizmann-Henelius, Viemero, & Eronen, 2004). However, when the interpersonal aspects of psychopathy were isolated, they were found to be positively related to IQ. This pattern of results was also apparent for the self-report measure of psychopathy, where the Self-Centered Impulsivity scale was negatively related to IQ, whereas the Fearless Dominance scale was not. This pattern of results replicated those of Benning, Patrick, Hicks, Blonigen, and Krueger (2003).

The finding of relationships between the various scales of psychopathy and IQ means that this should be taken into consideration when considering performance on other tasks. There is now an extensive literature on the performance of psychopaths on a variety of tasks related to emotion, such as the recognition of emotion in voices or in faces (Blair et al., 2005). It seems quite plausible that performance on such tasks may be sensitive to overall cognitive ability. Hence, any deficits shown by psychopathic individuals

Table 4
Correlations (Pearson's R) Between the Measures of Emotional Intelligence

	TMMS	Clarity	Attention	Repair
MSCEIT	-.48**	-.48**	-.20	-.43**
1. Perceiving emotions	-.31*	-.23	-.22	-.30*
2. Facilitating thought	-.48**	-.52**	-.11	-.48**
3. Understanding emotions	-.22**	-.34**	-.05	-.16
4. Emotional management	-.50**	-.43**	-.21	-.46**

Note. TMMS = Trait Meta-Mood Scale; MSCEIT = Mayer-Salovey-Caruso Emotional Intelligence Test.

* $p < .05$. ** $p < .01$.

Table 5

Correlations (Pearson's R) Between the Psychopathy Scales (Psychopathy Checklist-Revised [PCL-R] and Psychopathy Personality Inventory-Revised [PPI-R]) and an Ability Measure of Emotional Intelligence (EI) (Mayer-Salovey-Caruso Emotional Intelligence Test [MSCEIT])

MSCEIT	Total	1. Perceiving emotions	2. Facilitating thought	3. Understand emotions	4. Emotional management
PCL-R Total	.06 [.34*]	.26 [.38*]	-.08 [.05]	-.10 [.21]	-.08 [.19]
Facet 1	.04 [.15]	-.01 [.09]	-.09 [-.04]	.08 [.20]	-.01 [.06]
Facet 2	-.02 [.20]	.12 [.23]	-.10 [-.03]	-.13 [.09]	-.11 [.09]
Facet 3	-.12 [.29]	.14 [.33*]	-.04 [.17]	-.21 [.19]	-.25 [.15]
Facet 4	.10 [.37*]	.37* [.44**]	.06 [.15]	-.08 [.14]	-.10 [.20]
PPI-R Total	-.06 [.18]	.07 [.14]	-.13 [-.03]	-.03 [-.25]	-.17 [.03]
Fearless dominance	.27 [.36*]	.33* [.36*]	.17 [.21]	.23 [.34*]	.16 [.22]
Self-centered impulsivity	-.20 [.01]	-.12 [-.07]	-.22 [-.14]	-.14 [.12]	-.29* [-.11]

Note. Figures in parentheses are the correlation after partialling out the effects of IQ.

* $p < .05$. ** $p < .01$.

might be because of their poorer cognitive abilities, rather than to any emotion-specific deficits. Few studies have taken measures of IQ in order to test for this possibility. Of course, this criticism is not confined to tasks related to emotions, and we recommend that all researchers should consider the possible effects of IQ on the neuropsychological tasks when assessing the effects of psychopathy.

A second possible consequence of low IQ is that it may impair the ability of self-evaluation. Hence, self-report measures of things such as emotional intelligence and psychopathy may become unreliable.

IQ and EI

In our offender sample there were several strong relationships between EI and IQ. For the ability-based measure of EI, the MSCEIT, the ability to recognize emotions in pictures (Branch 1, Perceiving Emotions) was not related to IQ, whereas the later branches (Facilitating Thought, Understanding Emotions, and Managing Emotions) were all positively related to IQ. There are a

number of studies that have explored the relationship between the MSCEIT and intelligence in other samples. In one of the earliest studies, Mayer et al. (1999) found moderate correlations ($r_s = .36-.38$) in samples of American adult and adolescents between the MSCEIT and the Army Alpha Vocabulary scale. Van Rooy, Viswesvaran, and Pluta (2005) carried out a meta-analysis of the MSCEIT and different measures of verbal and spatial ability and found an overall modest correlation ($r = .34$). Thus, it seems well established that ability EI (at least as defined via the MSCEIT) is related to IQ, and our results for this offender sample are in line with this notion. Furthermore, our data suggest that it the later Branches of ability EI, and in particular the ability to understand emotions (Branch 3), that are most related to IQ, and that these effects are more apparent in measures of verbal IQ than performance IQ. This pattern of results seems to be consistent with previous reports (for a review, see Mayer et al., 2008).

Perhaps more surprisingly, the trait measure of EI, the TMMS, was also related to IQ—in this case in a negative fashion. Hence, those with low IQ were more likely to report that they had good EI. Unfortunately, there does not appear to be any extant data to which directly to compare this finding. Burns, Bastian, and Nettlebeck (2007) explored the relationship between the TMMS and cognitive intelligence using Ravens Advanced Progressive Matrices (APM). They found no relationship between the TMMS and the APM. Hence, our findings may be something that is confined to offender populations. Alternatively, the APM measures nonverbal intelligence and our result suggest that the relationships between psychopathy and intelligence are stronger for the verbal measures.

The reasons for the negative relationship between self-report EI and IQ are unclear. It may be that those with low cognitive abilities do not have the capacity to see themselves as others do. Hence, even if they lack skills in the domains of emotional management, and so forth they are not able to see this in themselves and, hence, they report that they are good at this.

Trait Versus Ability Measures of EI

Our results showed a negative relationship between the MSCEIT and the TMMS, with some of these correlations being of a large effect size. Hence, those that are poor in their actual ability to solve EI problems (as tested in the MSCEIT) are more likely to report

Table 6

Correlations (Pearson's R) Between the Psychopathy Scales (Psychopathy Checklist-Revised [PCL-R] and Psychopathy Personality Inventory-Revised [PPI-R]) and a Self-Report Measure of Emotional Intelligence (EI) (Trait Meta-Mood Scale [TMMS])

TMMS	Total	Clarity	Attention	Repair
PCL-R Total	.27 [.21]	.36* [.31*]	.06 [-.02]	.23 [.26]
Facet 1	.21 [.22]	.17 [.20]	.15 [.14]	.23 [.22]
Facet 2	.20 [.13]	.32* [.27]	.01 [-.06]	.11 [.11]
Facet 3	.27 [.19]	.38* [.28]	.02 [-.05]	.28 [.32*]
Facet 4	.20 [.15]	.32* [.25]	.00 [-.03]	.13 [.16]
PPI-R Total	.30* [.21]	.31* [.19]	.20 [.20]	.36** [.31*]
Fearless dominance	-.14 [-.18]	-.02 [.19]	-.04 [-.15]	.01 [-.01]
Self-centered impulsivity	.39** [.32*]	.37** [.27]	.24 [.28]	.41** [.37**]

Note. Figures in parentheses are the correlation after partialling out the effects of IQ.

* $p < .05$. ** $p < .01$.

being good at these same skills. Previous research (Warwick & Nettelbeck, 2004) has also explored the relationship between the MSCEIT and TMMS total scores. They found a nonsignificant but positive relationship ($r = .19$) in a sample of college students. They conclude that trait and ability EI are two distinct constructs.

One possibility for the pattern of results we find may be related to the effects of cognitive abilities (see previous section). Those with low IQ appear to have poor abilities on EI tasks (as evidenced by the positive correlation between WASI and MSCEIT), yet they rate themselves as good at EI (as evidenced the negative relationship between WASI and TMMS). Again, whether this finding is unique to this sample, a function of offender populations in general, or a finding across a large range of samples, will require much further data collection.

Ability EI and Psychopathy

The major aim of this article was to test for deficits in ability defined EI in psychopathy. We were particularly interested in whether the psychopathy related dysfunction would be at the early stages of EI (such as the recognition of emotion in faces and picture) or in the later stages (such as managing emotions).

We found few signs of any dysfunction as a function of psychopathy (the one exception being a negative relationship between Self-Centered Impulsivity and Emotion Management, though this was not significant after partialling out the effects of IQ). Indeed, once we partialled out the effects of IQ then several positive relationships occurred that suggest heightened EI abilities. While the pattern of results is far from clean, this heightened ability was most apparent for Branch 1 of the MSCEIT that relates to the ability to perceive emotions.

Recently, Ermer et al. (2012) have provided data on the relationship between MSCEIT and the PCL-R in a sample of male offenders. Their results appear to show small negative correlations (some of which reach statistical significance) between ability EI and psychopathy. Hence, these results are not in agreement with the present ones. Examination of the differences between the studies shows some agreement and some areas of disagreement. The two samples are well-match on levels of psychopathy (PC-R total 19.9 vs. 20.8), but our sample showed both higher general (99.6 vs. 95.7) and emotional intelligence (95.0 vs. 87.7). Both studies show a strong link between general IQ and EI ($r_s = .55$ vs. $.51$). Both studies showed the interesting pattern of relatively high Branch 1 scores (106.0 vs. 103.1), moderate Branch 2 scores (96.1 vs. 91.6), and low Branch 3 (91.6 vs. 83.6) and Branch 4 (90.5 vs. 85.8) scores. One area of difference is the link between psychopathy and IQ. Our study showed significant negative correlations (with some large effect sizes) whereas that of Ermer et al. (2012) did not show any relationship. It is unclear why these differences have occurred, but we note the large variation in the literature on the relationship between IQ and psychopathy, and the importance of particular traits of psychopathy in producing different patterns of results (Vitacco et al., 2008). Future studies need to be aware of the importance of general intelligence in considering any pattern of results that purport to examine such issues as emotional intelligence, the processing of emotional material, or other aspects of neuropsychological function.

This finding of a greater ability to perceive emotion in psychopaths would seem to go against the prevailing literature (for a

review see Blair et al., 2005). It is, however, not unique. Kosson et al. (2002) found that while psychopathic individuals were poorer at identifying disgust, they appeared better at recognizing anger. Habel et al. (2002) found that psychopathic participants' accuracy rate on a facial recognition task was significantly higher than healthy individuals. Hansen et al. (2008) found positive correlations between psychopathy and the accurate identification of disgust in a facial recognition task. Hence, recent evidence is beginning to suggest that some aspects of psychopathy may be related to good performance on some emotional recognition tasks. Book et al. (2007) have also shown that psychopaths may have an enhanced ability to categorize emotions on faces, and especially ones that are fearful and vulnerable.

Both Hansen et al. (2008) and Habel et al. (2002) have also examined which aspects of psychopathy were related to this heightened performance on the emotional recognition tasks. Hansen et al. (2008) found that it was Facets 3 and 4 of the PCL-R (the two facets that underpin the old Factor 2) that showed these strong, significant positive correlations. Habel et al. (2002) on the other hand, found Factor 1 (which comprises both Facets 1 and 2) was related to superior performance to discriminate between emotions. Hence, the literature presents a very mixed picture of which aspects of psychopathy might be related to superior performance. The results of the present study show that the ability to recognize emotions was positively related to Facets 3 and 4 of the PCL-R and are in agreement with Hansen et al. (2008).

It should be stressed that some these positive relationships between MSCEIT and psychopathy (Facets 3 and 4) were apparent only after partialling out the effects of IQ. Heightened sensitivity to emotional material has been found in other groups such as those with Borderline Personality Disorder (Lynch et al., 2006; Herpertz et al., 2001; Wagner & Linehan, 1999). Facets 3 and 4 share many characteristics with this personality disorder and with Antisocial Personality Disorder (impulsive lifestyle, drug use, self-injury, antisocial acts). This heightened sensitivity to emotional expression may lead to an over emotionality or to reading expressions (such as angry intent) that are either not there, or are not apparent to others. Clearly, this speculation that there may be some tasks where such patient groups will perform better, or be more sensitive to emotional material, is a testable one. There is some extant data that has some bearing on the issue. Puglia, Stough, Carter, and Joseph (2005) administered an early version of MSCEIT to a group of convicted sex offenders, nonsexual offenders and controls. They found that sex offenders had a significantly higher score on the Perception scale (similar to the Branch 1 scale of the later MSCEIT) compared with nonsexual offenders. Hence, these offenders also show a heightened ability to detect emotions. On the other hand, Hertel, Schutz, and Lammers (2009) found that patients with Borderline Personality Disorder showed poorer performance on Branches 3 (Understanding Emotions) and 4 (Managing Emotions) than nonclinical controls, while Gardner and Qualter (2009) found poorer performance on Branch 4 as a function of self-reported symptoms of Borderline Personality Disorder in non-clinical sample recruited via a website. However, the effects of IQ were not accounted for in either of these studies, and hence any effects may be related to IQ given the strong relationship between IQ and Branches 3 and 4 of the MSCEIT that we demonstrate in the present study.

Trait EI and Psychopathy

On the whole we found that self-reported EI traits were positively associated with aspects of psychopathy for both the clinical checklist (PCL-R) and self-reported psychopathy (PPI-R). In particular, the Clarity scale showed positive correlations with the many of the impulsive and antisocial aspects of psychopathy (Facets 2, 3, 4 and Self-Centered Impulsivity), but not with the aspects associated with interpersonal factors (Facet 1 and Fearless Dominance). Thus, the results for this self-report EI measure parallel those for the ability measure of EI when considering the PCL-R. However, for the PPI-R the results are the mirror image with the Self-Centered Impulsivity factor being correlated with TMMS Clarity scale, and the Fearless Dominance scale not being correlated with any aspect of self-report EI.

These positive relationships seem to stand in contrast to previous reports on community samples where the relationship reported tends to be negative (see Introduction). There is little doubt that the present results showing a positive relationship between self-reported psychopathy and self-reported EI is out-of-line with the prevailing literature and was against our hypotheses. This exaggerated belief in their EI in some psychopathic offenders (exaggerated in the sense that they were actually worse on the ability-based measures) may reflect a heightened self-worth and a lack of insight that is a common feature of psychopathy (Hare, 2003) but may not be present at lower levels of psychopathy such as those found in college samples.

Limitations

There are some limitations to this study. First, the numbers in the study are small and it would clearly be desirable to test some of the issues and findings in a larger sample. Nevertheless, despite the low power of the study, we found significant relationships and some of quite large magnitude. Second, we have presented the results of our statistical analyses without correcting for making multiple comparisons. We did this because there were no previous studies ability-based EI and psychopathy, and, though we had some specific hypotheses in mind, the study was also explorative in nature. Third, the problems of self-report have been well rehearsed elsewhere (Lilienfeld & Fowler, 2006). While, there are many benefits to the self-report mode for measuring such concepts as psychopathy and EI, the present set of results show that a person's ability to report on such a concept as EI appears seriously flawed, at least in this forensic sample. Fourth, our results show that the concepts of EI, whether measured via ability or trait measures, are contaminated by general cognitive ability (at least for this population).

Concluding Remarks

We aimed to test notion that psychopathy would be related to low EI, and to explore what aspects of EI are dysfunctional in psychopaths. Our results did not support this idea. However, the complex pattern of results we present appear to suggest that some aspects of psychopathy are actually associated with greater EI. In particular, we found that aspects of EI related to recognizing emotions were positively related to some of the impulsive and antisocial aspects of psychopathy.

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