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# Emotion Management Ability: Predicting Task Performance, Citizenship, and Deviance

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*This article examines emotion management ability (EMA) as a theoretically relevant predictor of job performance. The authors argue that EMA predicts task performance, organizational citizenship behavior (OCB), and workplace deviance behavior. Moreover, to be practically meaningful, managing emotions should predict these important organizational outcomes after accounting for the effects of general mental ability and the Big Five personality traits. Two studies of job incumbents show that EMA consistently demonstrates incremental validity and is the strongest relative predictor of task performance, individually directed OCB, and individually directed and objectively measured deviance.*

**Keywords:** *emotion management ability; emotional intelligence; job performance*

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The topic of emotions in the workplace has gained much momentum in recent decades (e.g., Grandey, 2000; Gross, 1998b). Among the most popular yet controversial emotion-related stream of research is that of emotional intelligence (EI; Ashkanasy & Daus, 2005; Zeidner, Roberts, & Matthews, 2004).<sup>1</sup> A lack of theoretical clarity regarding the definition

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and measurement of EI has spurred calls for researchers to “steer away from gestalt predictions about the effects of total EI” and to “make specific predictions about the effects of individual processes, such as expression, recognition, and regulation” (Elfenbein, 2008: 365). The ability-based model of EI (Mayer & Salovey, 1997) involves the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in self and others (Mayer & Salovey, 1997) and consists of four branches (ability to perceive, facilitate, understand, and manage emotion), ranging from the most basic (ability to perceive emotions) to the most complex (emotion management ability). Thus, emotion management ability (EMA)—involving one’s ability to regulate the emotions of oneself and others (Mayer & Salovey, 1997)—is the apex of the four-dimensional hierarchical model (Mayer, Salovey, Caruso, & Sitarenios, 2001). In support of this hierarchy, Joseph and Newman (2010) conducted a meta-analysis to test antecedents and outcomes of the branches of EI, finding support for EMA as the apex of EI. Further, the authors hypothesized EMA as a predictor of task performance, finding negligible results. However, post hoc analyses were conducted by assessing high versus low emotional labor groups (i.e., occupations in which there is frequent customer or interpersonal interaction). Results revealed a statistically significant average correlation of .22 when emotional labor requirements were high but .01 when emotional labor requirements were low. However, Joseph and Newman report small sample sizes for the high emotional labor subgroup and call for future research to further address this issue. Thus, given the recent calls to focus on the specific branches of EI rather than on the higher order construct (e.g., Jordan, Ashkanasy, & Daus, 2008), EMA shows the most empirical promise and can be theoretically grounded in the well-established frameworks of emotion regulation (i.e., Gross, 1998a) and emotional labor (i.e., Hochschild, 1983).

This article extends prior research in several ways. First, we further integrate theoretical frameworks from the EI (Salovey & Mayer, 1990), emotion regulation (Gross, 1998b), and emotional labor (Hochschild, 1983) literatures to explain the job-relevant nature of EMA when one’s work requires emotional labor. We answer the call from Joseph and Newman (2010), based on their post hoc analyses, to further evaluate the ability of EMA to predict task performance in high emotional labor jobs. Further, Dalal (2005) demonstrated that job performance is actually composed of three unique parts, each with an impact on overall job performance, including task performance, organizational citizenship behavior (OCB), and workplace deviance. O’Boyle, Humphrey, Pollack, Hawver, and Story (2010) call for an expanded focus of EI’s theoretically relevant outcomes to include citizenship behavior and deviance, suggesting the possibility of stronger relationships than with task performance. Thus, we test whether EMA will predict multiple aspects of job performance, namely, task performance, organizational citizenship, and workplace deviance. Finally, we test whether these relationships hold when accounting for general mental ability (GMA) and the Big Five personality characteristics, using both tests of incremental validity and relative weight analysis.

### *Emotion Regulation and EMA*

Emotion regulation provides a rich theoretical foundation to help understand the process through which EMA is relevant in the organizational context. Emotion regulation is defined

as “the process by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (Gross, 1998b: 275) and has roots in biological, cognitive, developmental, social, personality, clinical, and health psychology (Gross, 1998b). Emotions influence social behavior (Averill, 1980) and inform individuals about the behavioral intentions of others (Fridlund, 1994). Through conscious and subconscious processes (Gross, 1998a), people elevate, maintain, or lower both positive and negative emotions (Parrott, 1993). This ability to control emotions begins during childhood (Cole, Zahn-Waxler, & Smith, 1994) and typically increases with age (Gross, Carstensen, Pasupathi, Tsai, Gottestam, & Hsu, 1997).

Emotion regulation theory (Gross, 1998a, 1998b) proposes that an individual can regulate emotions at two points. First, an individual can engage in antecedent-focused strategies by modifying the situation or perception of the situation in an effort to adjust emotions. These strategies include choosing or modifying the situation that will invoke emotions, selecting which aspects of the situation one focuses on by distracting attention away from the elements of a situation that are harmful and reappraising the situation by selecting the least emotionally harmful of many possible meanings. Second, individuals can engage in the response-focused strategy of manipulating their reactions to the situation by changing their emotional expressions. Totterdell and Parkinson (1999) identify a wide range of strategies that people use to deliberately improve their emotions, such as thinking positively (e.g. Goodhart, 1985), engaging in distracting activities (e.g., Zillmann, 1988), venting feelings (e.g., Westen, 1994), and seeking social support (e.g., Garber, Braafladt, & Weiss, 1995). As such, managing emotions is linked to a broader capacity for self-control (Lopes, Salovey, Côté, & Beers, 2005), including the control of impulsive behavior (Baumeister, Heatherton, & Tice, 1994). This leads to more effectiveness in coping with stress, performing well under pressure, and attaining personal goals (Lopes, Grewal, Kadis, Gall, & Salovey, 2006). For example, Huy (2002: 41) found that managers under stress expressed a need to “blank out negative thoughts” and “‘psych’ themselves up” to perform their job effectively.

Individuals also attempt to regulate others’ emotions at work, and they do so using the same strategies they use to regulate their own emotions (Francis, 1997; Lively, 2000; Thoits, 1996; Williams, 2007). They do so for a variety of reasons, such as caretaking (Pierce, 1995); anticipation of reciprocity (Sutton, 1991; Van Maanen & Kunda, 1989); personal gain, such as compliance (Becker & Maiman, 1975); an expectation of the job (Hochschild, 1983; Pierce, 1995; Rafaeli & Sutton, 1990); to reward or punish others (Elfenbein, 2008); to model reactions to signal how to make meaning of an event (Pescosolido, 2002; Pirola-Merlo, Hartel, Mann, & Hirst, 2002; Yukl, 1999); to get others excited about a project; to provide critical performance feedback without hurting others’ feelings; or to effectively diffuse conflicts (Lopes, Grewal, et al., 2006). Managing emotions in others allows an individual to connect or disconnect from an emotion depending on its usefulness in any given situation (Mayer & Salovey, 1997). This should allow an individual to display appropriate passion and restraint when communicating with others (Rode et al., 2007). It entails modulating expressed emotions in the context of interpersonal interactions to achieve one’s goals (Lopes, Grewal, et al., 2006) through a social cognitive process of purposeful planning and formulating clear behavioral intentions (Bandura, 2001). According to Williams (2007), in her theory of trust development via emotion regulation, emotion management of one’s counterpart can be used to generate cooperative behavior, perceptions of increased trustworthiness, and feelings

of ease and reduced anxiety. In this way, emotional expression provides social information to one's counterpart (Keltner & Haidt, 1999), which changes the emotions, attitudes, and/or behaviors of the counterpart. Optimal emotional influence from the perspective of the sender is to create a postemotional response in the counterpart consistent with the sender's preference, such as instilling happiness for customer service representatives, instilling fear for police, or instilling anger for drill sergeants (Elfenbein, 2008). For example, Van Kleef, DeDreu, and Manstead (2004) found that negotiators' emotional expressions of anger resulted in their counterparts making larger concessions than when the negotiators expressed happiness.

### *Emotional Labor and EMA*

In addition to emotion regulation theory, relationships between EMA and performance can be informed through the theory of emotional labor. Hochschild (1983: 7) coined the term *emotional labor* to refer to "the management of feeling to create a publicly observable facial and bodily display." The emotional labor processes of surface acting (faking or enhancing facial and bodily signs of emotion) and deep acting (modifying feelings or reappraising events) constitute processes of emotion regulation (Grandey, 2000). Central to emotional labor theory is the idea of display rules (Ekman, 1972)—norms about what is appropriate to display—which include deintensifying, intensifying, neutralizing, and masking (Ekman, Sorenson, & Friesen, 1969). By regulating one's emotions, individuals can control their emotional expressions to fit the display rules of the situation (Goffman, 1959). Display rules can vary based on the time of day, season of the year, and the weather; across occupations; across interaction partners; and in light of different social goals (Rafaeli & Sutton, 1989). This supports Morris and Feldman's (1997) interactionist approach in which emotional expression is partially determined by the environment. Elfenbein (2008) argues that emotional expression leads to performance only when such labor succeeds in eliciting the desired response from an interaction partner. Individuals with the ability to manage the emotions are more capable of altering their emotional expressive behavior based in the context of these display rules, thereby improving the quality of social relations with others (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006; Carton, Kessler, & Pape, 1999; Ciarrochi, Chan, & Caputi, 2000; Lopes, Brackett, Nezlek, Schutz, Sellin, & Salovey, 2004; Lopes et al., 2005), which should result in increased levels of performance.

Thus, jobs with limited need for emotional labor provide little opportunity for those high in EMA to influence the emotions of others. Thus, the impact of one's emotional ability depends on how central emotional labor is to the job (Collins, 2001; Joseph & Newman, 2010; Wong & Law, 2002). An increase in the frequency of face or voice contact demands a higher level of emotional labor from employees (Hochschild, 1983); in this vein, Gross (1998b) indicated that emotion regulation is almost always a social affair. It should be noted that EMA in self may be related to jobs involving high levels of stress (Antonakis, Ashkanasy, & Dasborough, 2009; Daus, 2006), which may include jobs with limited emotional labor. However, jobs requiring emotional labor are typically stressful, as interactions with others are potent triggers for emotions (Gross & John, 2003). Further, EMA in others

requires an interaction partner. In other words, managing the emotions of another individual necessarily requires contact between the individual who is managing the other's emotions and the individual whose emotions are being managed. Schmitt (2006) identified various job families in which EI may more readily impact performance, such as public safety, health care, social services, and customer services. The key aspect of these jobs is the frequency and degree of emotion-related interaction with others; that is, these jobs require emotional labor. Thus, in accordance with the findings of Joseph and Newman (2010), we focus exclusively on jobs that require emotional labor as the most appropriate organizational context in which EMA predicts job performance.<sup>2</sup>

### *The Big Five, GMA, and EMA*

Beyond the potential for main effect prediction, most practitioners and academics would agree that for a new construct to be useful in explaining and predicting employee behavior, it must explain variance that is not accounted for by other established constructs (Brackett & Mayer, 2003). Emotion-related constructs have utility to the extent that they not only predict performance but explain incremental validity with respect to existing constructs (Zeidner et al., 2004). Two such widely studied sets of existing constructs are the Big Five personality traits (i.e., emotional stability, extraversion, openness to experience, agreeableness, and conscientiousness) and GMA, which have well-established relationships with job performance (e.g., Barrick & Mount, 1991; Hunter & Hunter, 1984). Regarding the broad construct of EI, a prevailing argument is that EI is nothing more than a constellation of the Big Five factors and thus is not distinct from personality factors (Davies, Stankov, & Roberts, 1998; Matthews, Zeidner, & Roberts, 2002; Roberts, Zeidner, & Matthews, 2001; Van Rooy & Viswesvaran, 2004). This claim is misleading, as it does not differentiate evidence from different types of EI measures: ability based and self-reports. When only ability-based EI is considered, evidence provides solid, replicable evidence that EI discriminates from the Big Five (Ciarrochi et al., 2000; Daus, 2006; MacCann, Matthews, Zeidner, & Roberts, 2003; MacCann, Roberts, Matthews, & Zeidner, 2004; Roberts et al., 2001; Zeidner et al., 2004). Thus, it is well established that ability-based EI is distinct from the broad Big Five personality traits. Similar criticisms have been leveled regarding EI and its overlap with GMA (Davies et al., 1998; Matthews et al., 2002; Roberts et al., 2001; Van Rooy & Viswesvaran, 2004). When EI is studied using an ability-based measure, the correlation with GMA has been shown to be of small to moderate magnitude (Mayer, Salovey, & Caruso, 2004; Schulte, Ree, & Caretta, 2004). Therefore, ability-based EI shows discriminant validity from both GMA (MacCann et al., 2004) and the Big Five.

Despite the frequently voiced concerns that EI may not explain variance in job performance over and above the variance explained by scores on measures of GMA and the Big Five personality traits (e.g., Antonakis, 2004; Brody, 2006; MacCann et al., 2003; Schulte et al., 2004), Harms and Crede (2010) conclude that very few authors have examined this issue empirically. Their search of the literature revealed only six articles in which the authors either explicitly or implicitly examined the incremental validity of EI scores over measures of both GMA and the Big Five personality traits in predicting either academic or

work performance or presented data in a manner that allowed examination of this issue. None of these six articles (i.e., Barchard, 2003; Newsome, Day, & Catano, 2000; O'Connor & Little, 2003; Rode, Arthaud-Day, Mooney, Near, & Baldwin, 2008; Rode et al., 2007; Rossen & Kranzler, 2009) showed a significant contribution for EI in the prediction of performance after controlling for both GMA and the Big Five. It should be noted, however, that a focus on EI-relevant jobs, such as those with a high level of emotional labor, may provide a more appropriate condition under which incremental validity of EI might be present.

Though empirical results show little promise for the incremental validity of EI generally, EMA shows more promise. EMA creates an interface between the cognitive system and the more general personality system (Mayer et al., 2001). As such, EMA is actually less cognitive than other facets of the broad EI domain because it must balance many factors including the motivational, emotional, and cognitive (Mayer et al., 2001). Therefore, EMA, although moderately correlated with personality, shares less space with GMA (see Mayer et al., 2004) than does ability-based EI. To the degree that EMA shares less overall variance with the correlates of GMA and personality than does ability-based EI, the greater the likelihood is of establishing incremental variance after controlling for those correlates. In addition, since GMA has been shown to predict substantial variance in job performance, EMA stands a greater chance than overall EI of predicting unique variance in job performance after accounting for GMA. In fact, EMA has been shown to predict task performance beyond GMA and the Big Five in high emotional labor jobs (Joseph & Newman, 2010). Replication of incremental validity findings for task performance is needed. In addition, no study to date has assessed the incremental validity of EMA beyond GMA and the Big Five on either OCB or workplace deviance.

### *EMA's Relationship With Task Performance, OCB, and Deviance*

A strong case has been made for the direct relationship between EI and task performance (e.g., Daus, 2006; Lopes, Côté, & Salovey, 2006). Cherniss (2010) recently assessed the research appearing in peer-reviewed journals and found that there have been 12 studies based on the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) or a related ability test (e.g., the Diagnostic Analysis of Nonverbal Accuracy, or DANVA) that have found a relationship between EI and performance (Côté & Miners, 2006; Day & Carroll, 2004; Elfenbein & Ambady, 2002; Elfenbein, Foo, White, Tan, & Aik, 2007; Feyerherm & Rice, 2002; Lam & Kirby, 2002; Lopes, Grewal, et al., 2006; Matsumoto, LeRoux, Bernhard, & Gray, 2004; Mueller & Curham, 2006; Rosete, 2007; Rosete & Cairrochi, 2005; Rubin, Munz, & Bommer, 2005). In addition, Côté and Miners (2006) reveal an interaction between EI and GMA in predicting task performance and OCB.

When focusing on EMA specifically, Joseph and Newman (2010) posit that EMA includes the ability to select emotion regulation strategies that are relatively less draining of personal resources. As such, individuals high in EMA will match their chosen regulation strategy (e.g., surface vs. deep acting; antecedent- vs. response-focused) to the demands of the task, thereby retaining more cognitive resources so as to maximize overall job performance (Joseph & Newman, 2010). Individuals high in EMA tend to manage their feelings such that positive



emotions are induced and sustained. Because increased levels of positive emotions have been shown to improve motivation (Erez & Isen, 2002; Totterdell, 2000), EMA has the potential to positively influence performance on the job through subsequent increases in motivation. In addition, factors that improve interpersonal interactions improve employee performance by enabling workers to nurture positive relationships on the job, work effectively in teams, build social capital (Lopes, Grewal, et al., 2006), communicate more effectively, and influence others to get what they want (Lopes, Côté, et al., 2006). Hence, employees with high levels of EMA generally master their interactions with others in a more effective manner (Wong & Law, 2002), thereby enhancing their performance in jobs that require emotional labor.

*Hypothesis 1:* EMA will be a positive relative and incremental predictor of task performance beyond GMA and the Big Five personality traits.

Though task performance focuses on activities that are formally recognized as part of one's job, it is not the only employee behavior important for individual and organizational effectiveness. OCB (Smith, Organ, & Near, 1983) is also an important element of job performance. OCBs are often tied to interpersonal interactions, which may be driven by the same motivational forces (Erez & Isen, 2002) relating to EMA as is task performance. Further, OCBs have been linked to positive moods indirectly through interpersonal processes (Tsai, Chen, & Lui, 2007) and affective bonds (Williams, 2007), likely fostered through the effective use of emotion management strategies. Individuals differ in their sensitivity and reactions to events (Lazarus & Folkman, 1984). EMA is an individual difference that may help to foster one's ability to engage in appropriate positive and negative behaviors through the use of effective coping strategies such as emotion-focused coping (Lazarus & Folkman, 1984). As individuals high in EMA cope better and have more positive social relationships, they also are more likely to engage in prosocial activities at work (Day & Carroll, 2004). Indirect links already exist, such as individuals high in emotional abilities being more empathetic (Ciarrochi et al., 2000) and having smoother interactions with team members due to the ability to take appropriate actions (Mayer et al., 2004).

Thus, social interactions may be improved through more effective coping strategies, which in turn may facilitate helping behaviors.

*Hypothesis 2:* EMA will be a positive relative and incremental predictor of OCB beyond GMA and the Big Five personality traits.

Jordan and colleagues (2008) indicate that there is a dearth of research examining the relationship between EI and workplace deviance. Workplace deviance has been defined as a voluntary behavior that violates significant organizational norms and, in doing so, threatens the well-being of the organization, its members, or both (Robinson & Bennett, 1995). Specifically, some workplace deviance behaviors (e.g., unexcused absences; George, 1989) are a result of emotional experiences at work (Lee & Allen, 2002), such as "a need to vent, release, or express one's feelings of outrage, anger, or frustration" (Robinson & Bennett, 1997: 18). Judge, Scott, and Ilies (2006) argued that deviant behavior in the workplace acts



as a kind of catharsis in which workers feel that they have restored control after feeling frustration. Fox and Spector (1999) present a theoretical framework for the relationship between affective reactions and workplace deviance. Individuals with a tendency to experience negative emotions are expected to respond to these feelings with deviant workplace behaviors in an effort to minimize those negative emotions (Spector & Fox, 2002). Individuals high in EMA effectively manage emotions in themselves, thereby mitigating the negative emotional response thought to cause certain forms of workplace deviance. In addition, those high in EMA have better quality social relationships and social support. The desire to maintain these relationships is likely to reduce certain forms of deviance toward others, such as coworker mistreatment. This is particularly germane in jobs with high demand for emotional labor.

Although little empirical work has been done regarding EMA and deviant behavior in the workplace, several studies have evaluated EI and deviant behavior in society. EI has been found to be negatively related to alcohol and tobacco use (Trinidad & Johnson, 2002), smoking risk factors (Trinidad, Unger, Chou, & Johnson, 2004), drug-related and violent behavior (Mayer, Caruso, & Salovey, 1999), and social deviance (Brackett & Mayer, 2003; Brackett, Mayer, & Warner, 2004). The prediction of deviance, we argue, should transfer to organizational settings, particularly given the strong behavioral norms against deviance behaviors in the organizational context (Robinson & Bennett, 1995). Thus, individuals with high EMA are less likely to engage in workplace deviance behaviors since engaging in such behavior would risk damaging working relationships with their peers (Jordan et al., 2008).

*Hypothesis 3:* EMA will be a negative relative and incremental predictor of workplace deviance behavior beyond GMA and the Big Five personality traits.

### *Analytic Approach*

Incremental variance is important because it ensures that the variable of interest is tapping unique variance in the criteria above that of the other variables in the model. However, any criterion variance predicted by both “new” and “old” variables is automatically credited to the “old” variable. Thus, assessing only incremental validity might lead to making incorrect or misinformed decisions about the relative importance of the “new” variable (LeBreton, Hargis, Griepentrog, Oswald, & Ployhart, 2007). This issue identifies the need to assess the relative importance each predictor makes to the  $R^2$ , considering both its unique contribution and its contribution in the presence of other predictors (Johnson & LeBreton, 2004). A variant of dominance analysis (Azen & Budescu, 2003; Budescu, 1993), *relative weights* address issues of multicollinearity using a variable transformation approach (Johnson, 2000, 2001; Johnson & LeBreton, 2004). This approach is based on recommendations from Gibson (1962), which involve first creating a new set of uncorrelated predictor variables that are maximally correlated to the original set of predictor variables. The criterion is then regressed on the new uncorrelated predictor variables, yielding standardized regression coefficients (Johnson, 2000, 2001). Relative weights are computed for each predictor and can be used to rank order variables in terms of their relative importance (LeBreton et al., 2007), with rescaled

relative weights yielding the percentage of predicted criterion variance attributed to that variable.<sup>3</sup> To test our hypotheses, both incremental validity and relative weights are assessed in a model including EMA, GMA, and the Big Five personality traits. We employ a two-study design, with each study testing all the hypotheses, as well as additional analyses comparing EMA to EI as well as EMA to the other three dimensions of EI.

## Study 1

### *Participants and Procedures*

The sample in Study 1 consisted of 220 current employees who were attending MBA and undergraduate classes at a university located in the U.S. South. Of the participants, 55% were female and 84% were Caucasian. The participants averaged 23 years of age, had an average of 6 years of full- and part-time job experience, and worked on average 24 hours per week. From a pool of approximately 900 students across a variety of management courses, an initial screening survey was conducted to identify current employment status and willingness to provide supervisor contact information. In addition, participants were asked to indicate whether their jobs involve emotional labor. The 220 participants (24% response rate) who were employed and willing to provide supervisor contact information and who indicated *agreement* (4) or *strong agreement* (5) on a 1-to-5 scale that their jobs involve “a high degree of interpersonal interaction” were then asked to voluntarily complete a survey in exchange for extra credit, consisting of demographic variables, the Big Five personality traits, and other related variables. Two weeks later, participants were asked to complete the online version of the MSCEIT. With participants’ written permission, ACT and SAT scores were obtained from the university registrar approximately 3 months after the study began. Thus, in line with Joseph and Newman (2010), only high emotional labor jobs were included in the study. Jobs spanned a variety of industries (as classified by O\*NET) including business, management, and administration (22%); hospitality and tourism (18%); finance (12%); marketing, sales, and service (11%); education and training (11%); and various other industries, thereby increasing the generalizability of the results. Example jobs include law firm office manager, sales associate, account representative, restaurant manager, public relations assistant, business manager, dental assistant, and restaurant server. Participants completing all surveys were entered into a drawing for monetary prizes as an additional incentive to participate. Supervisor data were collected through a combination of Internet, postal mail, and telephone surveys. Supervisor-rated job performance was obtained from the supervisors of 102 study participants, revealing a 46% response rate. To assess response bias, we conducted a series of *t* tests. There were no significant differences across all demographic characteristics (i.e., gender, age, and work experience) between those employees with and those without supervisor ratings. Of participants in this subsample, 63% were female and 88% were Caucasian; they averaged 23 years of age, had an average of 6 years of full- and part-time job experience, and worked on average 25 hours per week.

The selection methods of the various organizations employing the respondents are unknown. It is likely that personality and/or cognitive ability testing occurs in some portion

of the sample, leading to an unknown amount of direct range restriction. In addition, indirect range restriction occurs in all selection systems (Schmidt, Oh, & Le, 2006), indicating the possibility of an underrepresentation of the relationship between both personality and cognitive ability with job performance.

### *Measures*

*Emotion management ability.* EMA was measured using the Managing Emotions subscale of the MSCEIT (Version 2.0; Mayer, Salovey, & Caruso, 2002). The Managing Emotions subscale of the MSCEIT is measured by having test takers choose from among more or less effective means to manage emotions in internal and interpersonal situations. The EMA has 21 items, is conducted online, and is scored automatically. Internal consistency reliability (alpha) was .79.

*General mental ability.* Cognitive ability scores were obtained from the university registrar in the form of ACT and SAT scores. For participants lacking ACT scores, SAT scores were converted to equivalent ACT scores for analysis. ACT and SAT scores have been shown to be highly correlated with measures of cognitive ability (Koenig, 2008) and have been used as a proxy for cognitive ability in organizational research (e.g., Bell & Kozlowski, 2008).

*Big Five.* We measured personality using 150 items from the International Personality Item Pool (IPIP), with 30 items for each of the Big Five (Goldberg et al., 2006). The IPIP was designed to measure the same constructs and facets as the Revised NEO Personality Inventory. Sample items include “I have frequent mood swings” (emotional stability), “I feel comfortable around people” (extraversion), “I enjoy hearing new ideas” (openness), “I accept people as they are” (agreeableness), and “I am always prepared” (conscientiousness). Internal consistency reliability coefficients ranged from .93 for emotional stability to .79 for openness to experience.

*Task performance, citizenship, and deviance.* To minimize the length of supervisor surveys, each of the five job performance measures was shortened by retaining the five items with the highest factor loadings reported in prior studies. Truncating measures in this fashion has been shown to produce relatively equivalent results. For example, Bordia, Restubog, and Tang (2008) found that a four-item reduced measure of individually directed deviance (DEV-I) and a five-item reduced measure of objectively measured deviance (DEV-O) correlated .90 and .93, respectively, with the full eight-item version. However, it should be noted that these reduced scales may produce coefficients that are more divergent in validity than are the full scales. Supervisor-rated task performance was measured with five items from Williams and Anderson’s (1991) study. Items include “Adequately completes assigned duties.” The internal consistency reliability was .86. Five items were taken from Lee and Allen’s (2002) study to measure each dimension of organizational citizenship behavior: OCB-I (directed at individuals) and OCB-O (directed at the organization). Sample items included, “Helps others who have been absent” (OCB-I) and “Keeps up with developments

in the organization” (OCB-O). The internal consistency of the scores was .81 for OCB-I and .71 for OCB-O. The five DEV-I and DEV-O items with the highest factor loadings, respectively, were taken from Bennett and Robinson’s (2000) scale to measure both dimensions of deviance behavior. Sample items included, “Made fun of someone at work” (DEV-I) and “Come in late to work without permission” (DEV-O). The internal consistency of the scores was .73 for DEV-I and .74 for DEV-O.

*Demographic characteristics.* Prior EI literature has identified the relationship between ability-based EI and gender, age, and experience (i.e., Mayer et al., 1999). Thus, these characteristics have been added to the correlations table and to Stage 1 of all incremental validity analyses in both Study 1 and Study 2. Gender is coded 0 for men and 1 for women.

## Results

The correlations, means, standard deviations, and reliability coefficients for the Study 1 variables are reported in Table 1. Along with EMA, the other branches of EI were included in the analyses, as was the composite EI measure. The inclusion of this broader information allows us to compare and contrast EMA results with the other aspects of EI. EMA was significantly correlated with four of the five dependent variables, specifically task performance ( $r = .30, p < .05$ ), OCB-I ( $r = .25, p < .05$ ), OCB-O ( $r = .24, p < .05$ ), and DEV-I ( $r = -.23, p < .05$ ), as well as with emotional stability ( $r = .17, p < .05$ ), agreeableness ( $r = .20, p < .05$ ), conscientiousness ( $r = .26, p < .05$ ), and gender ( $r = .21, p < .05$ ). The broad, four-dimensional EI construct correlated significantly with task performance ( $r = .22, p < .05$ ) and DEV-O ( $r = -.21, p < .05$ ), while the perceiving emotions dimension of EI was significantly correlated with DEV-O ( $r = -.22, p < .05$ ).

Table 2 reports the rescaled relative weights and change in  $R^2$  values for three sets of analyses. The first set of analyses includes GMA, the Big Five, and EMA. Supplemental analyses include GMA, the Big Five, and composite EI. The final set of analyses includes the four branches of EI. When entered with GMA and the Big Five personality traits, EMA was the largest relative predictor of task performance (80%) and contributed significant incremental variance ( $\Delta R^2 = 12\%, p < .01$ ). Thus, Hypothesis 1 is supported. For OCB-I, EMA was the largest relative (58%) and incremental ( $\Delta R^2 = 6\%, p < .05$ ) predictor. For OCB-O, EMA was the largest relative (58%) predictor yet did not attain statistically significant incremental validity ( $\Delta R^2 = 4\%, ns$ ). These results provide support for Hypothesis 2. Regarding workplace deviance, EMA was the largest relative (39%) and incremental ( $\Delta R^2 = 6\%, p < .05$ ) predictor of DEV-I but not of DEV-O (39%,  $\Delta R^2 = 4\%, ns$ ), providing partial support for Hypothesis 3.

Supplemental analyses reveal that when entered with GMA and the Big Five personality traits, composite EI was the largest relative predictor of task performance (73%) and contributed significant incremental variance ( $\Delta R^2 = 9\%, p < .01$ ). Composite EI was not a stronger relative or incremental predictor of OCB-I or OCB-O. With deviant behavior, composite EI was not the largest relative predictor and did not contribute significant incremental variance for DEV-I. However, for DEV-O, EI was the largest relative predictor (57%) and

**Table 1**  
**Study 1 and 2: Descriptive Statistics and Correlations Among Study Variables**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
1. EMA		.51*	.52*	.28*	.77*	.28*	-.06	.09	.19	.05	.06	.27*	.23*	.21*	-.27*	.28*	.04	.26*	
2. EI understanding	.51*		.41*	.33*	.70*	.47*	.01	-.08	.30*	.03	-.28*	.18	.11	.14	-.29*	.13	-.14	.14	
3. EI using	.50*	.42*		.50*	.78*	.28*	-.06	-.05	.20	.09	-.08	.06	.01	-.07	-.18	.06	-.11	.09	
4. EI perceiving	.37*	.40*	.59*		.72*	.34*	.01	.01	.12	-.01	-.06	.09	.03	.03	-.12	.10	-.17	.00	
5. EI composite	.76*	.71*	.81*	.79*		.45*	-.04	.02	.26*	.06	-.10	.22*	.15	.12	-.26*	.23*	-.13	.17	
6. GMA	.10	.37*	.01	.03	.14*		.11	.07	.25*	.06	.00	.15	.13	.06	-.05	-.07	-.28*	-.03	
7. Emotional stability	.17*	.07	.14*	.12	.16*	.11		.32*	.13	.18	.37*	-.02	.15	.06	.19	-.11	-.08	.00	
8. Extroversion	.12	.08	.17*	.06	.13	.10	.41*		.37*	.52*	.44*	.02	.15	.06	.30*	.20	-.14	.12	
9. Openness	.11	.26*	.14*	.11	.18*	.15*	.06	.47*		.29*	-.01	.03	.17	.03	.02	.10	-.15	.09	
10. Agreeableness	.20*	.14*	.28*	.17*	.25*	-.11	-.02	.25*	.24*		.29*	.06	.20	.05	.27*	.28*	-.13	.15	
11. Conscientiousness	.26*	.06	.22*	.12	.21*	-.10	.23*	.36*	.18*	.46*		-.04	.03	-.04	.29*	.01	-.05	.02	
12. Task performance	.30*	.09	.20	.03	.22*	.03	.08	-.11	-.05	-.03	-.03		.77*	.83*	-.08	.07	-.21	.00	
13. OCB-I	.25*	.07	.12	-.03	.14	-.14	-.06	.08	.06	.13	.04	.59*		.84*	-.06	-.05	-.17	.00	
14. OCB-O	.24*	.08	.14	.01	.17	-.07	-.06	.12	.10	.12	.02	.51*	.75*		-.13	-.01	-.15	.12	
15. DEV-I <sup>a</sup>	-.23*	-.01	-.11	-.13	-.14	.04	-.13	.02	.22*	.05	-.08	-.30*	-.23*	-.28*		.01	-.08	-.12	
16. DEV-O	-.13	-.18	-.12	-.22*	-.21*	-.08	.10	.09	.11	.05	-.04	-.54*	-.41*	-.42*	.49*		-.08	.22*	
17. Gender	.21*	.14*	.11	.17*	.21*	-.03	-.16*	-.01	.00	.27*	.15*	.20	.16	.15	-.06	-.04			
18. Age	.03	.02	-.01	-.11	-.03	-.08	.07	-.12	.12	.02	.01	.20	.29*	.28*	-.11	-.22	-.08		
19. Job experience	.11	.02	-.01	-.01	.04	-.20	.05	-.11	.03	.05	.00	.16	.25*	.25*	-.13	-.17	-.04	.90*	
Study 1 descriptives																			
<i>M</i>	93.4	96.7	91.7	96.1	93.2	24.6	3.36	3.74	3.55	3.52	3.80	4.64	4.23	4.21	1.30	1.42	.63	22.7	6.2
<i>SD</i>	11.3	12.3	13.5	14.9	14.1	3.0	.57	.46	.35	.35	.44	.44	.56	.51	.41	.49	.49	4.9	4.5
Alpha	.79	.90	.87	.82	.94	—	.93	.91	.79	.85	.92	.86	.81	.71	.73	.74	—	—	—
Study 2 descriptives																			
<i>M</i>	94	90.8	96.6	97.7	93.4	20.5	3.7	3.6	3.2	3.8	4.0	3.9	3.7	3.9	1.14	.49	25.8	5.1	
<i>SD</i>	13.6	11.8	15.4	14.5	14.3	6.0	.46	.43	.46	.38	.48	.70	.62	.63	.35	.5	5.8	1.6	
Alpha	.73	.93	.81	.77	.77	—	.73	.75	.71	.66	.86	.90	.85	.88	—	—	—	—	

*Note:* Correlations for Study 1 are shown in the lower left diagonal, and those for Study 2 in the upper right diagonal. Sample size in Study 1 is  $n = 220$  (except for task performance,  $n = 102$ ), Sample size in Study 2 is  $n = 100$  (except for task performance, OCB-I, and OCB-O,  $n = 85$ ). EMA = emotion management ability; EI = emotional intelligence; GMA = general mental ability; OCB-I = organizational citizenship behavior directed at individuals; OCB-O = organizational citizenship behavior directed at the organization; DEV-I = individually directed deviance; DEV-O = objectively measured deviance.

<sup>a</sup>DEV-O in Study 2 is presented in the DEV-I column and row.

\* $p < .05$ .

**Table 2**  
**Study 1: Relative Weights and Incremental Validity Analyses**

Variable	<i>r<sub>xy</sub></i>	<i>β<sub>j</sub></i>	RW-RS	$\Delta R^2$	Variable	<i>r<sub>xy</sub></i>	<i>β<sub>j</sub></i>	RW-RS	$\Delta R^2$	Variable	<i>r<sub>xy</sub></i>	<i>β<sub>j</sub></i>	RW-RS	$\Delta R^2$
Dependent variable = task performance														
GMA	.00	-.04	.01	.00	GMA	.00	-.04	.01	.00	EI perceiving	-.09	.03	.03	.01
EmSt	-.08	-.09	.05	.01	EmSt	-.08	-.05	.05	.00	EI using	.14*	.20	.24	.02
Ext	-.11	-.10	.07	.01	Ext	-.11	-.13	.12	.01	EI understanding	-.10	.09	.06	.01
Ope	-.05	-.02	.02	.00	Ope	-.05	.00	.02	.00	EMA	.31*	.30*	.67	.07*
Agr	-.03	-.10	.04	.01	Agr	-.03	-.10	.05	.01					
Con	-.03	.01	.01	.00	Con	-.03	.04	.01	.00					
EMA	.30*	.37*	.80	.12*	EI	.22*	.29*	.73	.09*					
(Total $R^2 = .13\ddagger$ )					(Total $R^2 = .08$ )					(Total $R^2 = .11^*$ )				
Dependent variable = organizational citizenship behavior directed at individuals (OCB-I)														
GMA	-.16	-.16	.24	.03	GMA	-.16	-.15	.41	.02	EI perceiving	-.03	-.12	.08	.01
EmSt	-.06	-.10	.06	.01	EmSt	-.06	-.07	.08	.00	EI using	.12	.07	.12	.00
Ext	.08	.07	.04	.00	Ext	.08	.06	.06	.00	EI understanding	.07	-.07	.06	.00
Ope	.06	-.01	.01	.00	Ope	.06	.01	.03	.00	EMA	.25*	.29*	.74	.06*
Agr	.13	.03	.06	.00	Agr	.13	.05	.13	.00					
Con	.04	-.03	.01	.00	Con	.04	-.02	.01	.00					
EMA	.25*	.27*	.58	.06*	EI	.14	.13	.28	.02					
(Total $R^2 = .11$ )					(Total $R^2 = .06$ )					(Total $R^2 = .08^+$ )				
Dependent variable = organizational citizenship behavior, directed at the organization (OCB-O)														
GMA	-.10	-.10	.11	.01	GMA	-.10	-.09	.16	.01	EI perceiving	.01	-.08	.04	.00
EmSt	-.06	-.13	.09	.01	EmSt	-.06	-.10	.11	.01	EI using	.14	.09	.18	.01
Ext	.12	.14	.11	.01	Ext	.12	.12	.16	.01	EI understanding	.08	-.06	.06	.00
Ope	.10	.01	.05	.00	Ope	.10	.03	.08	.00	EMA	.24*	.25*	.72	.04*
Agr	.12	.01	.05	.00	Agr	.12	.03	.08	.00					
Con	.02	-.07	.02	.00	Con	.02	-.05	.02	.00					
EMA	.24*	.25*	.58	.04	EI	.17	.16	.40	.02					
(Total $R^2 = .10$ )					(Total $R^2 = .06$ )					(Total $R^2 = .07$ )				
Dependent variable = individually directed deviance (DEV-I)														
GMA	.02	.05	.01	.00	GMA	.02	.05	.01	.00	EI perceiving	-.13	-.11	.15	.01
EmSt	-.13	-.12	.11	.01	EmSt	-.13	-.15	.16	.02	EI using	-.11	.01	.07	.00
Ext	.02	-.03	.04	.00	Ext	.02	-.01	.05	.00	EI understanding	-.01	.18	.12	.02
Ope	.22	.30*	.37	.06*	Ope	.22*	.28*	.46	.05*	EMA	-.23*	-.29*	.66	.06*
Agr	.05	.08	.04	.01	Agr	.05	.07	.05	.00					
Con	-.08	-.06	.03	.00	Con	-.08	-.08	.05	.00					
EMA	-.23*	-.28*	.39	.06*	EI	-.14	-.20	.22	.03					
(Total $R^2 = .15^*$ )					(Total $R^2 = .12\ddagger$ )					(Total $R^2 = .08\ddagger$ )				
Dependent variable = objectively measured deviance (DEV-O)														
GMA	-.06	-.06	.06	.00	GMA	-.06	-.05	.03	.00	EI perceiving	-.22*	-.18	.55	.03
EmSt	.10	.13	.18	.01	EmSt	.10	.12	.10	.01	EI using	-.12	.03	.07	.00
Ext	.09	.03	.08	.00	Ext	.09	.06	.06	.00	EI understanding	-.18	-.10	.27	.01
Ope	.11	.10	.15	.01	Ope	.11	.09	.10	.01	EMA	-.13	-.04	.11	.00

*(continued)*

**Table 2 (continued)**

Variable	<i>r<sub>xy</sub></i>	$\beta_j$	RW-RS	$\Delta R^2$	Variable	<i>r<sub>xy</sub></i>	$\beta_j$	RW-RS	$\Delta R^2$	Variable	<i>r<sub>xy</sub></i>	$\beta_j$	RW-RS	$\Delta R^2$
Agr	.05	.09	.07	.01	Agr	.05	.13	.07	.01					
Con	-.04	-.11	.08	.01	Con	-.04	-.12	.06	.01					
EMA	-.13	-.18	.39	.04	EI	-.21*	-.28*	.57	.08*					
(Total $R^2 = .06$ )					(Total $R^2 = .10$ )					(Total $R^2 = .02$ )				

Note: *r* = zero-order correlation;  $\beta$  = standardized regression coefficient; RW-RS = rescaled relative weights;  $\Delta R^2$  = change in  $R^2$ ; GMA = general mental ability; EI = emotional intelligence; EMA = emotion management ability; EmSt = emotional stability; Ext = extraversion; Ope = openness; Agr = agreeableness; Con = conscientiousness. Incremental validity analyses include the control variables of gender, age, and work experience. None were statistically significant.

\* $p < .05$ .

contributed significant incremental variance ( $\Delta R^2 = 8\%$ ,  $p < .01$ ). Thus, when comparing composite EI and managing emotions in regard to relative and incremental prediction, EMA was stronger than the broad EI construct in the prediction of task performance, OCB-I, OCB-O, and DEV-I. Upon comparing the four branches of EI, EMA was found to be the largest relative predictor and contributed significant incremental variance for task performance (67% and 7%, respectively), OCB-I (74% and 6%, respectively), OCB-O (72% and 4%, respectively), and DEV-I (66% and 6%, respectively), but not for DEV-O, in which the perceiving emotions branch of EI was the strongest relative predictor (55%).<sup>4</sup>

## Study 2

### *Participants and Procedures*

Participants included 100 individuals newly hired as treatment staff members at a large residential treatment center in the U.S. Midwest. The job entails direct supervision and management of approximately 12 juvenile delinquent youth. The job of treatment staff is highly stressful and requires a high level of interpersonal interactions and has many crisis situations involving interpersonal conflict with and between clients; therefore, it is a job requiring a high degree of emotional labor. Of the 100 participants, 49% were female and 78% were Caucasian; they averaged 26 years of age and had 5 years of full-time work experience. Of the 100 participants, 16 had no college, 60 had some college, and 24 had at least a bachelor's degree.

At the time of hire, representatives from the organization's human resources department asked approximately 120 employees in treatment positions to voluntarily complete a variety of paper-and-pencil tests, which took approximately 30 minutes to complete and were placed into a sealed envelope and sent directly to the first author. The packet included a written assurance of confidentiality and corresponding consent form, the Wonderlic Personnel Test (WPT), the NEO Five-Factor Inventory (NEO-FFI) measure of personality, and a demographics questionnaire. Participants then were asked to complete the online version of the MSCEIT, which took approximately 40 minutes to complete. At 3 months of tenure with the company, the employee's supervisor was asked to rate job performance and OCB. Due to



employee turnover between the time of hire and the supervisor-rated performance at 3 months of tenure, task performance and OCB data were collected for all 85 remaining study participants by 21 supervisors. Again, to assess nonresponse bias, we conducted a series of *t* tests for all non-supervisor-rated study variables. There were no significant differences between those employees with and those without supervisor ratings. Of participants in this subsample, 48% were female and 78% were Caucasian; they had an average age of 26 years and had approximately 5 years of full-time work experience. Deviant behavior was tracked for a period of 1 year. Thus, we have a predictive rather than a concurrent validity design.

Organizational selection procedures include a job application, an unstructured interview, and background and reference checks. Thus, direct range restriction with cognitive ability and personality tests is minimized, but indirect range restriction occurs in selection systems such as this in all cases (Schmidt et al. 2006), indicating the possibility of an underrepresentation of the relationship between both personality and cognitive ability with job performance. The possibility of range restriction exists if those low in EI more prevalently left the organization. Follow-up analysis indicated that separated employees indeed had approximately a 2-point lower EI score than those who remained at the time of the supervisor performance assessments (although not statistically significant according to *t* test results), indicating the possibility of our results underrepresenting the impact of EI on job performance.

## *Measures*

*Emotion management ability.* EMA was measured with the MSCEIT (Mayer et al., 2002), as in Study 1. The internal consistency reliability was .73.

*General mental ability.* Intelligence was measured using the WPT (Wonderlic & Associates, 2002). The WPT is a short measure of GMA consisting of 50 verbal, quantitative, and spatial questions, and it takes 12 minutes to complete. This test has been used extensively as a valid measure of GMA (Stone, Stone, & Gueutal, 1990).

*Big Five.* Personality was measured using the NEO-FFI. The NEO-FFI provides a measure of the five domains of adult personality: emotional stability, extraversion, openness to experience, agreeableness, and conscientiousness (Costa & McCrae, 1992). The instrument consists of 60 items (12 per dimension) measured using a 5-point scale. The internal consistency reliability coefficients for the NEO-FFI range from .66 for agreeableness to .86 for conscientiousness.

*Task performance.* Task performance was measured with a five-item scale (Kluemper, Little, & DeGroot, 2009) and was designed based on job-requirements-job-analysis in a prior data collection effort in this organization. Supervisors were asked to describe the performance of their subordinates on performance dimensions, such as “Engages responsibly in meetings and work-group activities,” using a 5-point response scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The internal consistency reliability of the scale was .90.

*Organizational citizenship behavior.* OCB was measured with a 12-item scale based on Coleman and Borman's (2000) measure. Six items assessed OCB directed at individuals (OCB-I; e.g., "Is altruistic in helping individual organizational members") and six items assessed OCB directed at the organization (OCB-O; e.g., "Endorses, supports, or defends organizational objectives"). Supervisors were asked to describe the performance of their subordinates on these dimensions, using a 5-point response scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The internal consistency reliability coefficients of the scales were .85 for OCB-I and .88 for OCB-O.

*Workplace deviance behavior.* According to Robinson and Bennett (1995), workplace deviance is described as voluntary behaviors that represent an "unacceptable violation" of the rules, policies, and procedures espoused by management. Supervisors use disciplinary actions in response to unacceptable (deviant) behaviors (Trahan & Steiner, 1994). Examples of deviant behaviors that may result in disciplinary action are absenteeism, theft, sexual harassment (Robinson & Bennett, 1995), and physical assault (Griffin & Lopez, 2005). Objective measures of these behaviors have been used previously in the academic literature. For example, to test a "deviance model" of absenteeism, Johns (1994) used company records to determine attendance violations for the 12 months preceding a survey. More directly, Bordia, Restubog, and Tang (2008) assessed archival personnel records as a measure of workplace deviance. For the current study, after a period of 1 year from hire, we were given access to employee personnel files. Deviant behavior was assessed by tracking individuals who had been formally disciplined by the organization for a variety of deviant behaviors, ranging from extensive absenteeism to various organizational rule violations. In total, 14% of employees had been formally reprimanded by the organization after 1 year. Due to the dichotomous nature of deviant behavior, logistic regression was used for these analyses.

## Results

The correlation coefficients, means, standard deviations, and reliability coefficients for the Study 2 variables are reported in Table 1. EMA was significantly correlated with all four dependent variables, specifically task performance ( $r = .27, p < .05$ ), OCB-I ( $r = .23, p < .05$ ), OCB-O ( $r = .21, p < .05$ ), and workplace deviance ( $r = -.27, p < .05$ ). In addition, EMA was correlated with GMA—though more weakly than the understanding emotions dimension and overall EI ( $r = .28, p < .05$ ), gender ( $r = .28, p < .05$ ), and job experience ( $r = .26, p < .05$ ). The higher order EI construct was correlated significantly with task performance ( $r = .22, p < .05$ ) and workplace deviance ( $r = -.26, p < .05$ ), while the understanding emotions dimension of EI was significantly correlated with workplace deviance ( $r = -.29, p < .05$ ). It should also be noted that agreeableness ( $r = .27, p < .05$ ) and conscientiousness ( $r = .29, p < .05$ ) are significantly *positively* related to workplace deviance. Though few studies use objective measures of deviance, these results are counterintuitive.

Given concerns about socially desirable responding, we measured impression management with a five-item scale drawn from Reynolds's (1982) work ( $\alpha = .64$ ). Correlation results reveal significant correlations between impression management and each Big Five

trait, specifically emotional stability ( $r = .21, p < .05$ ), extroversion ( $r = .36, p < .05$ ), openness ( $r = .26, p < .05$ ), agreeableness ( $r = .56, p < .05$ ), and conscientiousness ( $r = .25, p < .05$ ). As expected, EMA ( $r = .07, ns$ ) and GMA ( $r = -.05, ns$ ) were not correlated with impression management. This finding highlights an important aspect of EMA. As an ability-based measure, EMA is resistant to faking, while the Big Five is not.

Table 3 reports the Study 2 rescaled relative weights and change in  $R^2$  values for three sets of analyses. The first is GMA, the Big Five, and EMA. Next, GMA, the Big Five, and composite EI are included in the analyses. The final set of analyses consists of the four EI dimensions. When entered with GMA and the Big Five personality traits, EMA was the largest relative predictor of task performance (72%) and contributed significant incremental variance ( $\Delta R^2 = 5\%, p < .05$ ). Thus, Hypothesis 1 is supported. For OCB-I and OCB-O, EMA was the largest relative predictor (39% and 68%, respectively) but attained statistical significant incremental validity only for OCB-I (6%,  $p < .05$ ). Thus, Hypothesis 2 is partially supported. Regarding workplace deviance, EMA was the largest relative (36%) and incremental (pseudo  $\Delta R^2 = 10\%, p < .05$ ) predictor, providing support for Hypothesis 3.

When entered with GMA and the Big Five personality traits, composite EI did not predict task performance, OCB-I, or OCB-O. With deviant behavior, composite EI was the largest relative predictor (31%) but did not contribute significantly to incremental validity. When comparing the four branches of EI, EMA was found to be the largest relative predictor and contributed significant incremental variance to task performance (69% and 5%, respectively), OCB-I (76% and 6%, respectively), and OCB-O (52% and 6%, respectively), but not for deviance. Consistent with Study 1, when comparing composite EI and EMA in regard to relative and incremental prediction, EMA was stronger than the broad EI construct in each instance. When comparing the four EI dimensions, EMA was the strongest relative and incremental predictor in three of the four analyses.

## Discussion

Despite calls to evaluate the incremental validity of the broad ability-based EI construct as a predictor of job performance (e.g., Jordan et al., 2008), results have largely failed to demonstrate a nontrivial relationship. Emotions researchers have called for the study of the independent branches of the broad EI domain (e.g., Elfenbein, 2008; Joseph & Newman, 2010; Lopes et al., 2004). This approach has been successfully employed in other domains, such as with the Big Five personality traits. For example, Dudley, Orvis, Lebiecki, and Cortina (2006) found that narrow personality traits predict job performance above their higher order counterparts, particularly in certain occupations. Further, Joseph and Newman (2010) found empirical support for EMA as a predictor of task performance in high emotional labor jobs, calling for future research to address this issue. Drawing on theories of emotional regulation (e.g., Gross, 1998b) and emotional labor (e.g., Grandey, 2000), we answer the call from Joseph and Newman to replicate a link-to-task performance, and we extend prior research beyond task performance to include OCB and workplace deviance in jobs requiring emotional labor.

Results for task performance reveal incremental and relative prediction for EMA beyond GMA and the Big Five in both studies. Supplementary analyses also find significant

**Table 3**  
**Study 2: Relative Weights and Incremental Validity Analyses**

Variable	<i>r<sub>xy</sub></i>	$\beta_j$	RW-RS	$\Delta R^2$	Variable	<i>r<sub>xy</sub></i>	$\beta_j$	RW-RS	$\Delta R^2$	Variable	<i>r<sub>xy</sub></i>	$\beta_j$	RW-RS	$\Delta R^2$
Dependent variable = task performance														
GMA	.15	.10	.17	.01	GMA	.15	.08	.23	.01	EI perceiving	.09	.05	.04	.00
EmSt	-.02	.01	.01	.00	EmSt	-.02	-.01	.01	.00	EI using	.06	-.13	.07	.01
Ext	.02	-.04	.01	.00	Ext	.02	-.02	.01	.00	EI understanding	.18	.07	.20	.00
Ope	.03	-.07	.01	.00	Ope	.03	-.07	.02	.00	EMA	.27*	.29*	.69	.05*
Agr	.06	.13	.05	.01	Agr	.06	.10	.07	.01					
Con	-.04	-.09	.04	.01	Con	-.04	-.05	.03	.00					
EMA	.27*	.26*	.72	.05*	EI	.22*	.19	.64	.02					
(Total $R^2 = .09$ )					(Total $R^2 = .02$ )					(Total $R^2 = .09$ )				
Dependent variable = organizational citizenship behavior, directed at individuals (OCB-I)														
GMA	.13	.04	.06	.00	GMA	.13	.05	.09	.00	EI perceiving	.03	.03	.02	.00
EmSt	.14	.15	.15	.02	EmSt	.14	.13	.18	.01	EI using	.01	-.16	.12	.02
Ext	.15	-.01	.07	.00	Ext	.15	.01	.10	.00	EI understanding	.11	.01	.10	.00
Ope	.17	.05	.10	.00	Ope	.17	.06	.15	.00	EMA	.23*	.30*	.76	.06*
Agr	.20 <sup>†</sup>	.18	.21	.02	Agr	.20 <sup>†</sup>	.16	.29	.02					
Con	.03	-.10	.02	.01	Con	.03	-.07	.02	.00					
EMA	.23*	.22 <sup>†</sup>	.39	.06*	EI	.15	.11	.17	.01					
(Total $R^2 = .12$ )					(Total $R^2 = .01$ )					(Total $R^2 = .07$ )				
Dependent variable = organizational citizenship behavior, directed at the organization (OCB-O)														
GMA	.06	-.01	.02	.00	GMA	.06	-.01	.05	.00	EI Perceiving	.03	.06	.04	.00
EmSt	.06	.12	.10	.01	EmSt	.06	.10	.16	.01	EI Using	-.07	-.28*	.29	.05*
Ext	.06	.05	.05	.00	Ext	.06	.08	.13	.00	EI Understanding	.14	.08	.15	.01
Ope	.03	-.07	.01	.00	Ope	.03	-.06	.02	.00	EMA	.21 <sup>†</sup>	.29*	.52	.06*
Agr	.05	.06	.03	.00	Agr	.05	.04	.06	.00					
Con	-.04	-.14	.10	.01	Con	-.04	-.11	.15	.01					
EMA	.21 <sup>†</sup>	.23 <sup>†</sup>	.68	.03	EI	.12	.13	.44	.01					
(Total $R^2 = .07$ )					(Total $R^2 = .03$ )					(Total $R^2 = .09+$ )				
Dependent variable = Workplace deviance														
GMA	-.09	.05	.03	.00	GMA	-.09	.30	.03	.00	EI perceiving	-.12	.00	.04	.00
EmSt	.14	.05	.02	.00	EmSt	.14	.00	.03	.00	EI using	-.18 <sup>†</sup>	-.02	.11	.00
Ext	.31*	2.70	.26	.04	Ext	.31*	2.19	.28	.04	EI understanding	-.29*	-.20	.47	.04
Ope	.03	.11	.01	.00	Ope	.03	.00	.02	.00	EMA	-.27*	-.16	.38	.02
Agr	.22*	.15	.09	.00	Agr	.22*	.46	.12	.01					
Con	.28*	2.43	.23	.04 <sup>†</sup>	Con	.28*	1.09	.22	.02					
EMA	-.27*	8.31*	.36	.10*	EI	-.26*	5.42*	.31	.07					
(Total pseudo $R^2 = .42^*$ )					(Total pseudo $R^2 = .40^*$ )					(Total pseudo $R^2 = .17^*$ )				

Note: *r* = zero-order correlation;  $\beta$  = standardized regression coefficient; RW-RS = rescaled relative weights;  $\Delta R^2$  = change in  $R^2$ ; GMA = general mental ability; EI = emotional intelligence; EMA = emotion management ability; EmSt = emotional stability; Ext = extraversion; Ope = openness; Agr = agreeableness; Con = conscientiousness. Workplace deviance analyses were conducted via logistic regression.  $R^2$  and  $\Delta R^2$  are Nagelkerke values. Incremental validity analyses include the control variables of gender, age, and work experience. None were statistically significant.

\* $p < .05$ .<sup>†</sup>  $p < .10$ .

incremental validity for the broad EI construct in one of the two studies, though the percent of variance explained was less than that found for EMA. We attribute these EI results to the high degree of emotional labor necessary in these jobs, as prior studies have not found incremental validity for the broad EI construct. It should be noted that EMA and composite EI correlated at .76 in Study 1 and .77 in Study 2. This strong correlation is due to the fact that EMA is one of the four dimensions comprising the composite EI construct. The high correlations between EI and EMA in conjunction with the superior prediction of performance for EMA, rather than the composite EI measure, demonstrates the value of EMA independent from the broad EI construct. In addition, EMA was the only significant incremental predictor among the four branches of EI. For OCB, both OCB-I and OCB-O were evaluated. Results in both studies show that OCB-I, but not OCB-O, demonstrated incremental and relative prediction. With workplace deviance, Study 1 assessed DEV-I and DEV-O independently. The second study added the use of an objective measure of employee deviance. Results reveal that DEV-I, but not DEV-O, demonstrated incremental and relative prediction. In Study 2, the objective measure of deviance also demonstrated incremental and relative prediction beyond GMA and the Big Five. Though differences between DEV-I and DEV-O could not be assessed with this measure, the objective nature of the measure contributes to the study. Specifically, the effect of EMA on supervisor-rated outcomes could, in part, result from rater bias due to a more favorable impression by the supervisor of those high in EMA. The objective measure of deviance provides initial support that the effect of EMA extends beyond mere supervisor impressions. Although there are numerous potential causes of workplace deviance, relatively consistent results across two studies using divergent measurement approaches and across two distinct samples makes a strong case for the generalizability of the effects of EMA. Thus, EMA predicts multiple job performance outcomes, specifically task performance, OCB-I, and DEV-I in jobs involving a high level of emotional labor. In this increasingly relevant organizational context, EMA predicts these important outcomes even beyond the established constructs of GMA and the Big Five personality traits, clearly distinguishing EMA as a unique and organizationally relevant concept.

These studies are not without limitations. Both studies used relatively small sample sizes to predict job performance. Study participants were relatively young adults. It is well established that EI and EMA increase with age, which helps to explain below-average mean EI and EMA ratings in both samples. Further, many participants in both studies worked part time. Any of these factors could have implications for the results and the interpretation of these results. In addition, Study 1 used ACT and SAT scores as a proxy for GMA. This yielded a nonsignificant correlation of .10 with EMA. In Study 2, the correlation between GMA using the WPT and the EMA was statistically significant ( $r = .28, p < .05$ ). In addition to GMA, relationships between EMA and the Big Five varied across the two studies. Also, the correlations between GMA and some personality traits with job performance are lower than expected. For the Big Five traits, social desirability, like that found in Study 2, has been shown to harm personality test validity (Tett & Christiansen, 2007). For GMA in Study 1, this may be attributed to the limited value of ACT and SAT scores as a proxy for GMA. It is unknown if the differences across the two studies are due to differences in the measures of GMA and the Big Five, differences in the samples, or an unknown cause.

In Study 2, the correlation between objectively measured workplace deviance and the control variables extraversion, agreeableness, and conscientiousness is positive. For agreeableness and conscientiousness, in particular, these correlations are expected to be in the negative direction (Berry, Ones, & Sackett, 2007). It should be noted, however, that objective measures of workplace deviance have received little attention in the literature (Berry et al., 2007), which may lead to somewhat different results than more widely used self-reported measures. In addition, Tett and Burnett (2003) identify nine empirical articles that report significant meaningful negative relationships between conscientiousness and job performance, indicating that personality traits can at times be negatively related to job performance. However, it is a counterintuitive finding that newly hired employees who are more agreeable and more conscientious would be more likely to receive disciplinary actions for organizational rule violations. Perhaps the chaotic and stressful environment of beginning a job with a large group of juvenile delinquents has an adverse effect on those who are pleasant and accommodating in social situations compared with those cautious about others' agendas (agreeableness) or those who like order and perfection compared with those who are more laid back (conscientiousness), leading to poor perceptions of job fit. As low levels of person–job fit have been shown to lead to strain and intention to quit (Kristof-Brown, Zimmerman, & Johnson, 2005), those new hires with poor perceptions of job fit may withdraw, leading to tardiness, absenteeism, and other rule violations.

Future research may benefit from further evaluation of EMA, supporting the use of the managing emotions branch over the higher order ability-based EI construct in certain contexts. In fact, assessing EMA exclusively has the potential to reduce the 30- to 45-minute MSCEIT (141 items) to a 5- to 10-minute test (21 items) of managing emotions. This may prove more useful for both researchers and practitioners. The potential implications of this finding open the door for the use of EMA in employment selection. Unlike EMA, GMA and the Big Five personality traits have been well studied in employment selection. Despite strong validity evidence across occupations (Hunter & Hunter, 1984), GMA has been criticized in selection situations due to the threat of adverse impact. The Big Five has also been shown to predict job performance (Barrick & Mount, 1991) but has been criticized for the potential of applicants to fake self-reports in selection situations. EMA, measured with an ability test, does not appear to be influenced by either the racial differences, which cause adverse impact, or susceptibility to test faking. Though in its academic infancy, the practical and academic potential of EMA is worthy of more extensive study, either in combination with or independent from GMA and the Big Five.

This is not to say that the other three branches of EI should be ignored. Depending on job-specific responsibilities, there may be jobs in which other branches of EI may be as important as EMA. For example, Rubin et al. (2005) studied the impact of emotion recognition in the employment context. In addition, there may be jobs in which being high in one branch of EI may compensate for being low on another, or there may be situations where it is necessary to be high on multiple branches simultaneously. Therefore, future research should assess the other branches of EI in various job contexts as well as potential interaction effects among the branches.

Prior EI literature has identified the relationship between ability-based EI and gender, age, and experience (i.e., Mayer et al., 1999). Thus, these characteristics were included as



control variables in the incremental validity analyses. However, as the workers in our samples were generally young, inexperienced, and predominantly working part-time, these factors could have impacted our results. Future research should further evaluate the impact of these and other worker differences on the EMA-to-performance relationship.

The ability to control emotions refers to an individual's capability to effectively manage emotions both internally (self) and in the context of interpersonal relationships (others). It is important to draw theoretical distinctions between self-emotion management and other-emotion management (Pietroni, Van Kleef, De Dreu, & Pagliaro, 2008). For example, Staw, Sutton, and Pelled (1994) propose that positive affect impacts job performance via both intrapersonal effects on productivity and motivation as well as interpersonal effects in which coworker positive affect leads to favorable reactions in peers to benefit performance. The ability to manage emotions in one's self is linked to self-control and allows oneself to effectively utilize a wide variety of emotion regulation strategies (Totterdell & Parkinson, 1999) to improve one's mood (Gross, 1998b), thereby resulting in increased levels of motivation (Erez & Isen, 2002). As all individuals do not self-regulate their emotions in the same manner (Totterdell & Parkinson, 1999), they differ in their ability to regulate emotions (e.g., Catanzaro & Mearns, 1990). Thus, it is plausible that individuals higher in EMA have the ability to get themselves out of a bad mood (Totterdell & Parkinson, 1999), thereby allowing themselves to function more effectively (Gross, Richards, & Oliver, 2006). The ability to control emotions in others enables workers to utilize these emotion regulation strategies to influence the emotions of others (Williams, 2007), thereby leading to developing positive work relationships, working effectively in teams, building social capital (Lopes, Grewal, et al., 2006), communicating more effectively, and influencing others to get what they want (Lopes, Côté, et al., 2006). Future research should explore possible theoretical differences between EMA in self and EMA toward others.

The job context may also determine whether or not EMA is related to job performance. It is likely that EMA will continue to predict job performance in some jobs but not in others. The jobs selected for this study involve a high level of emotional labor in which effectively managing emotions in self and others should positively impact job performance. Further, Joseph and Newman (2010) found a negative partial correlation between EI and job performance when emotional labor was low. However, in Joseph and Newman's study, emotional labor was coded by PhD students based on job titles. In our Study 1, high emotional labor jobs were self-identified by respondents indicating agreement or strong agreement that their jobs involve "a high degree of interpersonal interaction." Future research should incorporate validated measures of emotional labor as a moderator of the EMA-to-job performance relationship. Until more is known about these relationships, these job factors should be considered carefully when making the determination of what sample is most appropriate for EMA research. Future research should also assess potential differential effects between EMA in self and EMA in others, as well as the degree to which job factors must be present in establishing a link between EMA and job performance. In addition, related factors should be considered beyond interpersonal interaction, such as the level of stress associated with one's job and the intensity of specific emotional interactions on job performance. Finally, the current study assessed the impact of EMA on that employee's job performance. Future research should assess the effect of EMA on others' job performance and on team performance, as



some of the effects of EMA theoretically extend to others within the organization such that those high in EMA improve the performance of those they interact with.

Critics of EI research have pointed out that EI has not shown unique predictive ability above established constructs—that criticism drove the purpose of this study and, when considering EMA as a theoretically relevant branch of EI in jobs that require high levels of interpersonal interaction, has been dulled by these results. This study is the first to conclude that EMA predicts multiple job performance outcomes after accounting for the effects of GMA and the Big Five. Although many questions remain, this question of incremental validity is perhaps one of the most important for the future of this line of research.

## Notes

1. Before describing the theoretical mechanisms relating to our proposed relationships, we want to clarify our use of the term *emotional intelligence* (EI) as an ability. Ashkanasy and Daus (2005) identify three streams of EI research. *Stream 1* refers to research based on the Mayer and Salovey (1997) model and uses ability-based measures, such as the Mayer-Salovey-Caruso Emotional Intelligence Test (Mayer, Salovey, & Caruso, 2002). The ability-based model of EI has begun to emerge, arguably, as the most valid model of EI to date (Ashkanasy & Daus, 2005; Daus & Ashkanasy, 2005; Van Rooy & Viswesvaran, 2004; see Daus and Ashkanasy, 2005, for a more comprehensive overview of the psychometric development of Stream 1 measures of EI). *Stream 2* refers to self- and peer-reported measures based on the Mayer and Salovey model (e.g., Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006). *Stream 3* refers to models that substantially depart from the Mayer and Salovey model (e.g., the Emotional Quotient Inventory; Bar-On, 1997). When using the term *EI*, we refer specifically to Stream 1.

2. Côté and Miners (2006) tested and found no evidence that EI predicted job performance differently in jobs with different emotional demands. However, Joseph and Newman (2010) did find that emotion management ability (EMA) predicts task performance in jobs requiring emotional labor. Thus, we rely on theoretical and empirical research specific to EMA, which suggests that EMA is relevant in jobs that require emotional labor.

3. We used the SPSS macro and instructions provided by James M. LeBreton on his website (<http://www1.psych.purdue.edu/~jlebreto/relative.htm>). For a thorough review of relative importance indices in organizational research, see Johnson and LeBreton (2004).

4. Côté and Miners (2006) found evidence for an interaction between EI and general mental ability (GMA). Specifically, the association between EI and job performance becomes more positive as GMA decreases. The sample used in Côté and Miners's work consisted of university employees in jobs that vary in their level of emotional demands, with much of the sample including jobs with minimal to moderate requirements for emotional labor. Based on jobs that involve a high level of emotional labor, we do not theorize a compensatory model between EI and GMA. In other words, GMA does not likely compensate for EMA in these kinds of jobs. However, we tested the interactions between EI and GMA, as well as between the dimensions of EI and GMA. Study 1 results indicate only a marginally significant interaction between EI and GMA for individually directed and objectively measured deviance (DEV-I and DEV-O). When assessing the individual dimensions of EI, the using emotions branch of EI did significantly interact with GMA to predict DEV-I. In addition, EMA interacted with GMA to predict organizational citizenship behavior directed at organizations (OCB-O). For Study 2, EI and GMA were marginally significant for organizational citizenship behavior directed at individuals (OCB-I) and OCB-O. When assessing the dimensions of EI, the perceiving emotions dimension significantly interacted with GMA to predict task performance, OCB-I, and OCB-O. Future research should further assess these relationships.

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