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Does emotional intelligence moderate the relationship between mental health and job performance? An exploratory study

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KEYWORDS

Emotional intelligence;
Mental health;
Job performance

Summary Hitherto, scholars have examined the direct effects of emotional intelligence on health-related outcomes or performance. Yet, attempts to explore any interactive effects of emotional intelligence on these variables are conspicuous by their absence. Using a multi-source design (i.e., team members and supervisors, $n = 57$, total $N = 137$) and instruments with different scoring protocols (i.e., ability and self-reported data), findings from a UK public sector questionnaire survey suggest that emotional intelligence only partly moderates the relationship between mental health and some – but not all – aspects of job performance. Implications for management theory and practice are discussed.

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Introduction

To date scholars have examined the direct effects of emotional intelligence on health-related outcomes (Bastian, Burns, & Nettelbeck, 2005; Gohm, Corser, & Dalsky, 2005; Martins, Ramalho, & Morin, 2010) or performance (Blickle et al., 2009; Joseph & Newman, 2010; O'Boyle Humphrey, Pollack, Hawver, & Story et al., 2011). Emotional intelligence has been succinctly defined as the ability "to carry out accurate reasoning about emotions and the ability to use emotions and emotional knowledge to enhance thought" (Mayer, Roberts, & Barsade, 2008, p. 518). However, no empirical work has been undertaken to date to examine the moderating role of emotional intelligence in the relationship between health outcomes

and performance. Since the "identification of important moderators of relations between predictors and outcomes indicates the maturity and sophistication of a field of inquiry" (Frazier, Tix, & Barron, 2004, p. 116), the aim of this study is to explore the interactive effects of emotional intelligence on mental health and performance (see Figure 1).

The pursuit of this aim is germane for one significant reason. That is, emotional intelligence researchers have consistently overlooked that individuals and organizations may not, of necessity, converge on the same objectives (cf. Schein, 1968). Some scholars have interpreted this along the following question: Does "the individual benefit from high EI (emotional intelligence) *or*... the organization?" (Lindebaum, 2009, p. 230, italics added). However, rather than envisaging such a dichotomous view, a meaningful extension would be to consider the very real necessity to reconcile individual interests (e.g., good mental health) and organizational benefits (e.g., high performance). After

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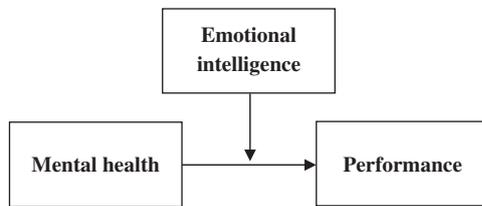


Figure 1 Model highlighting the interactive effect of emotional intelligence on mental health and performance.

all, individuals are more likely to perform well over longer periods of time if they are in good mental health (Judge & Kammeyer-Mueller, 2008). It is thus pertinent to explore whether individuals use emotional intelligence to safeguard their mental health *and* perform well. In other words, is mental health associated with performance also in interaction with high emotional intelligence?

For the sake of clarity, the following definitions of mental health and performance are adopted, respectively. While health has also been defined in terms of its physical, social functioning, or role functioning components (see Gross & Muñoz, 1995; Ware, 1987, for reviews), a specific focus upon mental health is more relevant for this study. This is attributed to a mounting concern over increased mental health problems in the working population (WHO, 2002). Thus, mental health is defined as being able “to work creatively and productively... to feel comfortable when alone, usually be developing a rich and fulfilling inner life” (Gross & Muñoz, 1995, p. 155). This also implies a feeling of integration and self-cohesion, which may contribute to resilience and can help prevent drifting into destructive relationships (Gross & Muñoz, 1995). In this respect, the personality trait of neuroticism offers an appropriate theoretical lens through which to study mental health in the present context. It is characterized by “a broad dimension of individual differences in the tendency to experience negative, distressing emotions and to possess associated behavioral and cognitive traits” (Costa & McCrae, 1987, p. 301). Myriad empirical studies show that neuroticism is related to poorer mental health, including negative affect (Bagby & Rector, 1998; Hull, Tedlie, & Lehn, 1995), anxiety (Gershuny, Sher, Rossy, & Bishop, 2000), and a dispositional factor for depression (Petersen, Bottonari, Alpert, Fava, & Nierenberg, 2001)¹.

In terms of performance at work, how individuals perform habitually refers to the degree to which they help organizations reach their goals. Yet, studies have shown that performance should be further distinguished into task as well as contextual performance (see Law, Wong, & Song, 2004). Specifically, task performance is defined as “proficiency in job-specific tasks”, whereas contextual performance is defined as “a set of interpersonal and volitional behaviors that support the social and motivational context in which organizational work is accomplished” (Van Scotter & Motowidlo, 1996, p. 525).

¹ Of course, not being neurotic does not entail good mental health a priori. After all, someone may lack neurotic tendencies, but still be in poor mental health due to another condition, such as bipolar personality disorders.

Although these findings must be regarded as preliminary for reasons detailed later, they will be intrinsically relevant to scholars and practitioners in the field of management due to their longstanding interest in health issues and how they can affect individual performance at work (e.g., Walsh, 2011).

Emotional intelligence

In the recent years, theoretical developments in ability emotional intelligence research have advanced considerably (Fiori, 2009; Joseph & Newman, 2010; Lindebaum, 2012; Mayer, Roberts, et al., 2008; Mayer, Salovey, & Caruso, 2008). Whilst some have centered on broader conceptualizations of emotional intelligence, especially the four-branch ability model by Mayer and co-workers (Mayer, Roberts, et al., 2008; Mayer & Salovey, 1997), others have theorized around narrower sampling domains (Blickle et al., 2009; Schmidt-Atzert & Bühner, 2002) to reflect closely the conceptual bedrock of emotional intelligence theory. Therefore, following the definition of emotional intelligence offered above, this conceptualization sets ability emotional intelligence theory clearly apart from what has come to be known as trait emotional intelligence theory, which is concerned with “emotion-related dispositions and self-perceptions” (Petrides, Pita, & Kokkinaki, 2007, p. 273). This theorizing typically refers to preferred or typical ways of behavior (Mayer & Salovey, 1997; Zampetakis, Beldekos, & Moustakis, 2009).

This study follows the narrower conceptualization of ability emotional intelligence for several reasons. First, a narrower focus implies a better fit with the intelligence domain, as the ability to understand emotions is most closely related to cognitive ability (Kluemper, DeGroot, & Choi, in press). Second, ability emotional intelligence implies the ability to tap into intra-psychic experiences and to configure mental processes at maximum capacity (Mayer & Salovey, 1997). This ability to configure mental processes may be critical in environments where potentially opposing objectives have to be reconciled, such as considerations for one’s mental health and performance imperatives.

Emotional intelligence as a moderator between mental health and performance

Previous theoretical debates have identified that potential beneficiaries of high emotional intelligence are rarely distinguished, and that it may be necessary to examine whether emotional intelligence is either related to individual health *or* performance (Lindebaum, 2009). Underlying this is the view that organizations and individuals often do not converge on the same objectives (Schein, 1968), which is particularly relevant when the pursuit of individual benefits (e.g., enjoying good mental health) or organizational interests (e.g., individual performance) can be diametrically opposed (Lindebaum & Fielden, 2011). However, an extension of this thinking is to argue that emotional intelligence moderates the relationship between mental health and performance (i.e., an interactive as opposed to direct effect exists). To explicate this, this study assumes that emotional intelligence is a resource that can be used to ob-

tain valued ends by way of facilitating the development and use of other resources such as influence, status, and networks (Winkel, Wyland, Shaffer, & Clason, 2011). In consequence, conservation of resources theory (COR) constitutes the theoretical mainstay of this article. This theory holds that “people strive to retain, protect, and build resources and that what is threatening to them is the potential or actual loss of these valued resources” (Hobföll, 1989, p. 516). According to COR theory, individuals employ the resources they possess to manage stressful experiences. These resources can facilitate the development and use of other resources – in this case, one’s ability to use emotions and emotional knowledge is employed in order to be mentally healthy and perform well at work. Underlying this is the tendency that emotionally intelligent individuals are more tolerant of stressful situations owing to their adaptive ability to process emotional information, as well as being able to manage negative emotions and cognitions successfully (Salovey, Bedell, Detweiler, & Mayer, 1999).

Thus, emotional intelligence may moderate the above relationship as it can assist individuals in getting the balance ‘right’ when expending mental energy with regard to sustaining their mental health at work and performing well (i.e., in terms of task and contextual performance). To get the balance right appears pivotal given that “... sick and depressed employees are not likely to be great performers (Judge & Kammeyer-Mueller, 2008, pp. 140–141). At the same time, Fisher (2003) shows that well-performing employees derive a sense of well-being from so doing. The core argument would appear to be this; in order to perform well at work, one must be in possession of adequate mental health. Conversely, individuals also pursue success at work to boost their confidence and self-esteem (Hough, 2003), suggesting that mental health and performance often mutually dependent upon each other.

With regard to task performance, several more specific reasons suggest why emotional intelligence may moderate its relationship with mental health. To begin with, being emotionally intelligent implies being adept at processing emotional data at maximum capacity (Mayer, Caruso, & Salovey, 1999). Emotions, in turn, can facilitate or hinder psychological adaptation (Lazarus, 2006). For instance, the perceived threat-based anxiety that one is overburdened with task assignments may result in stress (see Matthews et al., 2006), which can impair accurate task performance. In this respect, Bastian et al. (2005) show that low emotional intelligence predicts up to 6% variance in a measure of anxiety. Furthermore, research has shown that low emotional intelligence incrementally predicts (over personality factors) pre-task distress and worry and post-task worry and avoidance coping, though it does not predict task-induced changes in stress state (Matthews et al., 2006). Therefore, one’s ability to reason with and understand emotion has been suggested to be linked to lower stress levels. Lower levels of anxiety, in turn, may aid in performing better on job-related tasks. One potential reason for this is that individuals high in emotional intelligence may perceive environmental stressors and obstacles more as a challenge rather than a source of stress, ultimately leading to less aversive outcomes for individuals (Salovey, Mayer, & Caruso, 2002). Past research supports this view, suggesting that emotionally intelligent tend to center upon

those strategies that proved effective in the past, such as recalling positive memories whilst refraining from using ineffective ones, such as avoiding problems (Ciarrochi, Chan, & Caputi, 2000). Therefore, some suggest that this can aid individuals to promote motivation and eventually performance on various tasks at work (see also Joseph & Newman, 2010).

In a similar vein, emotions are not only “key components of thinking and cognition... emotions can enhance [an individual] thinking” (Caruso & Salovey, 2004, p. 43). In consequence, being closed-off to one’s emotions may contribute to a failure to adaptively use one’s emotions to reason with and about emotions (Mayer et al., 1999). Individuals engulfed in positive moods tend to be more optimistic, which prompts them to perceive that positive events are more likely to come about than negative ones. Conversely, negative moods propel individuals toward a more pessimistic outlook, in which negative events are more likely to come about than positive ones (Bower, 1981). Thus, by evaluating the same opportunities and problems with varying moods, a wider spectrum of alternatives manifests itself (see George, 2000, for a review). These more numerous alternatives can then enable individuals to find adaptive and beneficial strategies to reconcile the need to remain in adequate health while perform well on assigned tasks. Thus, it is hypothesized that:

Hypothesis 1a. Emotional intelligence moderates the relationship between mental health and task performance. That is, mental health is related to task performance when emotional intelligence is high, but not low.

On the other hand, emotional intelligence may also moderate the relationship between mental health and contextual performance. Again, emotional intelligence is assumed to be a resource that can be used to balance conflicting interests at work, which can differ considerably between individuals and organizations. As noted earlier, contextual performance implies both interpersonal and volitional behaviors supporting the social and motivational parameters in which organizational work is achieved. Of note, performance at work is often contingent upon the support, advice and access to resources provided by others (Kelley & Caplan, 1993). In order to react to social situations appropriately, individuals often have to understand the emotions of others, as well as their attitudes, motives, and behavioral intentions, and needs conveyed by those emotions (Caruso & Salovey, 2004). In consequence, the quality of social interactions plays a decisive role in determining whether one can draw on such a supportive network at work (Caruso & Salovey, 2004). The presence of emotional intelligence can influence this process in manifold ways. For instance, being adept at using and understanding emotions can help nurture positive social interactions and exchanges at work, and, in consequence, may facilitate employee performance (O’Boyle et al., 2011). As Mayer and Salovey (1997, p. 22) note, “using the emotions as one basis for thinking, and thinking with emotions themselves, may be related to important social competencies and adaptive behavior”.

In addition, the ability to reason with and understand emotions may enable individuals to gauge appropriately

how much energy they need to invest in their contextual performance without experiencing negative health effects. This is because emotional intelligence implies the interaction between emotion and cognition, leading to adaptive functioning (Salovey & Grewal, 2005). Therefore, it would appear that it enables them to invest enough mental and emotional energy in order to perform well at work, bearing in mind that any energy expended beyond that level is likely to impair their mental health in undesirable or dysfunctional ways. In other words, if one is too dedicated at work over long periods of time, individuals pay a price in terms of physiological and psychological costs (Sparks, Cooper, Fried, & Shirom, 1997). For instance, working long hours or emotional investment turning into obstinate and passionate commitment to a particular course of action irrespective of consequences are very real manifestations at work, and their detrimental health implications are well-documented (Staw & Ross, 1989). Likewise, when employees are persistently required to be dedicated at work and be effective by working closely with colleagues they find difficult to work with, they may experience an over-taxing that can lead to negative health effects when situational demands exceed individual resources (Zapf, Seifert, Schmutte, Mertini, & Holz, 2001). In fact, it has been theorized that emotional intelligence may enable individuals to balance both their health and organizational interest (i.e., being seen as a high performer) up to the point when the individual cannot cope with the demands of the job any further (i.e., there is a curvilinear relationship, see Lindebaum, 2012). In light of these arguments, Salovey and Grewal (2005) plausibly discuss the benefits of emotional intelligence with regard to better psychosocial functioning. Therefore, it is hypothesized that:

Hypothesis 1b. Emotional intelligence moderates the relationship between mental health and contextual performance. That is, mental health is related to contextual performance when emotional intelligence is high, but not low.

Method

Procedure and sample

Access was sought to two public sector organizations in the UK between mid 2009 and 2010. The first organization is a City Council, and participants were administrators from a range of social services, while the HR department of a University constituted the second participating organization. Having secured support from the several departmental managers in both organizations, they were asked how many participants (i.e., target individuals plus supervisors rating their performance) they believed would volunteer to partake in this study, yielding 50 sets of questionnaires from the former, and 51 from the latter (i.e., a total of 101 clusters were sent out, equaling 202 questionnaires). 137 paper-based questionnaires were returned (37 from the city council, and 100 from the university), yielding a response rate of 67.8%. Precisely put, 67 team members and 70 line managers returned their questionnaires (*n*

of matched pairs: 57). Of the 67 team member, 20 were male and 47 female. Age ranged from 22 to 63 years. Overall, the response rate is well within the range of published studies in the management literature (Mitchell, 1985), especially when multi-rater studies are considered. Demographic data (i.e., age and weekly hours worked) as well as reliability and correlation coefficients are given in Table 1.

Method variance was limited by collecting predictor and outcome variables from different sources (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) in addition to employing different scoring protocols (i.e., Likert-type scale vs. performance-based test). The use of self-reported data with identical scoring protocols has been a major criticism leveled at studies on emotional intelligence (Antonakis, 2004). The line managers provided all performance measures, since they know best how their team members' behavior contributes to the overall targets of the organization (Lawler, 1967). The team members provided an ability-based rating of their emotional intelligence, as well as scores on the mental health measure.

Measures

Emotional intelligence

The test of emotional intelligence (TEMINT – see Schmidt-Atzert & Bühner, 2002) was used in this study. This questionnaire-based test is increasingly adopted to assess the ability of emotional reasoning and understanding in the fashion of performance-based tests (Beblo et al., 2010; Blickle, Momm, Liu, Witzki, & Steinmayr, 2011; Blickle et al., 2009). That is, responses to test items can be reliably distinguished as correct or incorrect. In the scale, situations experienced by various target individuals are outlined, and the test taker is asked to rate the target persons' potential emotional experiences. An example would be the case of a 24-year-old female student: "I have failed an important exam and therefore have to retake it". The test taker is then asked to put him/herself in the position of the student to indicate to what extent (i.e., either "not at all or very weak", or "weak to medium", or "strong to very strong") the target individual felt dislike, anger, fear, unease, sadness, guilt, happiness, pride, affection, and surprise. The more accurate the test taker is in determining the target individual's original response, the higher the emotional intelligence of the test taker. Thus, any "hit" will get a score of 0, whilst any deviation may earn a score of 1 and 2, respectively. Due to the scoring protocol, a low score on the TEMINT indicates high emotional intelligence. Being an ability measure, the TEMINT has to demonstrate convergent and discriminant validity with measures of GMA and personality (Brody, 2004). As reported in Blickle et al. (2009), these criteria have been met. This measure has yielded satisfactory reliability estimates of .76 (Amelang & Steinmayr, 2006) and .77 (Schmidt-Atzert & Bühner, 2002), respectively. There is thus evidence to suggest that the TEMINT is "a thoughtfully developed and promising measure of Ability EI" (Amelang & Steinmayr, 2006, p. 467), exhibiting encouraging support of construct validity.

Table 1 Means, standard deviations, reliability coefficients and correlations.

| | | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|--------------------------------|-------|-------|--------|--------|-------|---------|--------|--------|-------|
| 1 | Age | 43.33 | 9.76 | — | | | | | | |
| 2 | Weekly working hours | 37.16 | 5.35 | .10 | — | | | | | |
| 3 | Emotional intelligence | 34.63 | 10.26 | .18* | .13 | (.84) | | | | |
| 4 | Crown–Crisp experiential index | 26.01 | 10.05 | .06 | -.21** | -.04 | (.85) | | | |
| 5 | Task performance | 12.51 | 1.84 | -.22 | .07 | -.09 | -.36*** | (.84) | | |
| 6 | Inter-personal facilitation | 28.86 | 4.76 | -.16 | .06 | -.08 | -.02 | .34*** | (.89) | |
| 7 | Job dedication | 33.16 | 5.27 | -.30** | .30** | -.03 | -.36*** | .74*** | .60*** | (.88) |

Note: $n = 67-68$ (number 1–4), $n = 57-70$ (number 5–7): Estimated reliability coefficients in diagonal all Cronbach's alphas, except for number 4, which is split-half reliability coefficient corrected by Spearman–Brown.

* $p < .1$.

** $p < .05$.

*** $p < .01$ (one-tailed).

Mental health

To examine mental health of participants, the Crown and Crisp Experiential Index was used (CCEI) was administered. The measure is designed to measure six different kinds of neurotic psychopathology, yielding an overall score of neuroticism (Crown & Crisp, 1979). Note that this study operationalizes mental health via its proxy neuroticism, as defined earlier. Past research has shown that it is an impediment to functioning well in everyday live (Cropley, Step-toe, & Joeques, 1999). The manual states explicitly that it is also designed to examine samples from industry. In fact, it has been widely operationalized as a measure of mental health in management studies (Cartwright & Cooper, 1993; Cooper, Rout, & Faragher, 1989; Robertson, Cooper, & Williams, 1990). Low scores suggest the absence of neurotic psychopathology. Given that neurotic psychopathology can debilitating effects on how individuals can perform at work (Kohut, 1971), the aforementioned definition of mental health as referring to being one's ability to work creatively and productively, amongst others, constitutes a suitable theoretical foundation for this study. This measure is a self-rated scale comprising six subscales, intended to measure six different kinds of neurotic psychopathology: (i) free-floating anxiety, (ii) phobic anxiety, (iii) obsessiveness, (iv) somatic anxiety, (v) depression, and (vi) hysteria. Each subscale consists of eight questions, which are followed by two or three possible answers (i.e., scores of 0 indicate good mental health, whereas 1 and 2 gradually indicate poorer mental health). These scales were combined to form an overall score of mental health as recommend in the literature (e.g., Birtchnell, Evans, & Kennard, 1998). Note that meta-analytic evidence supports the validity and reliability of this measure (Alderman, Mackay, Lucas, & Spry, 1983). Reliability coefficients are calculated using split-half reliability, as items are non-homogeneous. The global score complied with acceptable levels of internal consistency (i.e., .85).

Task performance

This was assessed with three items from a general performance measure (Farh, Dobbins, & Bor-Shiuan, 1991). These items are as follows: (i) "What do you think of his/her qual-

ity of work? Are his/her work outcomes perfect, free of error, and of high accuracy?", (ii) "What do you think of his/her work efficiency? What is your assessment of his/her work speed or quantity of work?", and (iii) "What do you think of his/her work performance? Is he/she able to complete quality work on time?". This scale is rated on a 5-point Likert-type scale, where 1 indicates very low quality and 5 excellent quality.

Contextual performance

This was assessed using a scale developed by van Scotter and Motowidlo (1996). The scale comprises 15 items that reflect two dimensions, namely, interpersonal facilitation and job dedication. Seven items are used to capture interpersonal facilitation, an example being "How likely is he/she to praise co-workers when they are successful?" Eight items tap into job dedication, one example item being "How likely is he/she to work harder than necessary"? The scale is rated on 5-point Likert-type scale, where a score of 1 indicates very a negative evaluation, and a score of 5 a very positive one.

Control variables

Past research has shown that emotional intelligence is related to gender (coded here 1 = female, and 2 = male) and age (Brackett & Mayer, 2003; Kafetsios, 2004), while mental health has been shown to be affected by working long hours (Sparks et al., 1997). In addition, it has been argued that types of organization may also affect the predictive validity of emotional intelligence (Jordan, Dasborough, Daus, & Ashkanasy, 2010). Therefore, these variables were included as control variables.

Results

Table 1 features the mean values, standard deviations, correlations and reliability coefficients for this study, though the nature of the hypotheses implies that hierarchal moderation analyses is employed to test them (Aiken & West, 1991).

Baron and Kenny (1986) describe a moderator variable as a "variable that affects the direction and/or strength of the

Table 2 Moderated regression analysis.

| Independent variables | Task performance | | | | Job dedication | | | | Interpersonal facilitation | | | |
|--|------------------|-----|----------------|-----------------|----------------|-----|----------------|-----------------|----------------------------|-----|----------------|-----------------|
| | B | SE | R ² | ΔR ² | B | SE | R ² | ΔR ² | B | SE | R ² | ΔR ² |
| <i>Step 1: Main effects</i> | | | .14* | | | | | .13* | | | | |
| Crown–Crisp experiential index | -.06** | .02 | | | -.18** | .06 | | | .02 | .06 | .06 | .01 |
| Emotional intelligence | -.02 | .02 | | | -.02 | .06 | | | -.04 | .06 | .06 | |
| <i>Step 2: Two-way interaction</i> | | | .02 | | | | | .08* | | | | |
| Crown–Crisp experiential index | -.06** | .02 | | | -.18** | .06 | | | .00 | .06 | .06 | |
| Emotional Intelligence | -.02 | .02 | | | -.02 | .06 | | | -.04 | .06 | .06 | |
| Crown–Crisp experiential index × Emotional intelligence | .01 | .00 | | | .02* | .01 | | | .01 | .01 | .01 | |

* $p < .05$.** $p < .01$, $n = 54-57$.

relation between an independent or predictor variable and a dependent or criterion variable'' (p. 1174). Following recommendations in the extant literature (Aiken & West, 1991; Frazier et al., 2004), the predictor (i.e., mental health as measured by the CCEI) and moderator variables (i.e., emotional intelligence as measured by the TEMINT) were centered to perform hierarchical moderation regression. The newly centered variables were used to compute an interaction term (e.g., CCEI × emotional intelligence). The centered total mental health measure and total emotional intelligence score were entered in the first step, followed by the same variables plus interaction terms in the second step (Frazier et al., 2004). The presence of a significant change in the R^2 in the second step, along with significant B weights for the interaction between the moderator (emotional intelligence) and predictor (mental health), would indicate the presence of moderator effects (Johnson & Spector, 2007). As indicated in Table 2, emotional intelligence only moderates the relationship between mental

health and job dedication (as a dimension of contextual performance ($\Delta R^2 = .08$, $B = .02$, p for both $< .05$)). Hence, additional 8% of the variance are explained by the whole moderated model ($F(3(53)) = 4.67$, $p < .01$). Yet, it does not appear to moderate any other relationship examined here.

A representative slope for the significant moderation effects is depicted in Figure 2.

The simple slope represents the relationship between mental health and job dedication at one standard deviation in emotional intelligence above (i.e., low emotional intelligence) and below (i.e., high emotional intelligence) the mean. Whilst the relationship between job dedication and mental health rarely changes in the case of low emotional intelligence, there is a significant change of the slope when it is high.

The regressions were repeated whilst controlling for the two different organizations, gender, age and weekly hours worked. However, the significant effects of the overall mod-

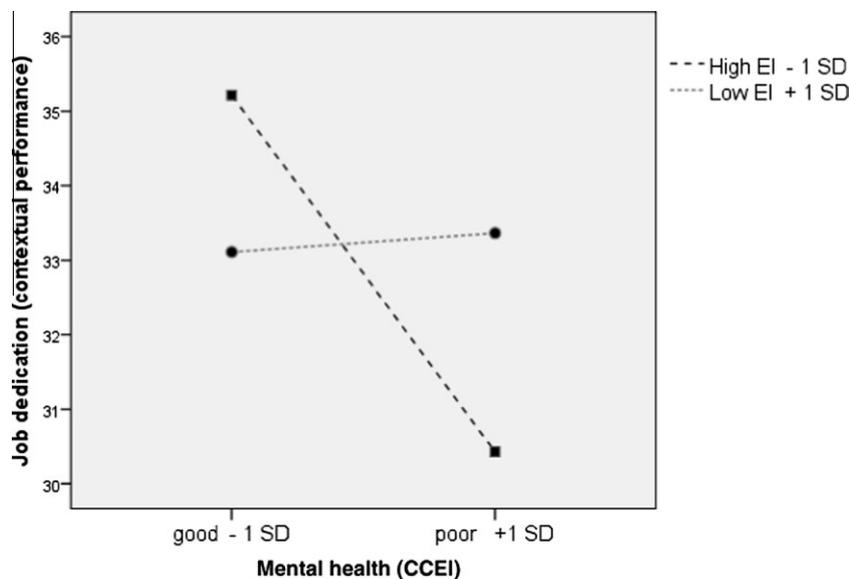


Figure 2 Graph on the interactive effect of emotional intelligence on job dedication and mental health.

el disappeared when the controls were applied ($F(7(48)) = 2.95, p = .01, R^2 = .30, p = .16$). Thus, whilst there is some evidence that emotional intelligence plays a moderating role between mental health and performance (job dedication only), it is noteworthy that the effects disappear when the above control variables are used. From there, while there is no support for Hypothesis 1a, support for Hypothesis 1b has been mixed when the control variables are entered into the model. While not part of the hypotheses testing, it is noteworthy that emotional intelligence neither correlates significantly with mental health nor performance. However, mental health correlates significantly with task performance and job dedication (as one dimension of contextual performance).

Post hoc analysis

A post hoc analysis was conducted to examine whether any of the CCEI subscales predict significant variance when all control variables are entered into the model. Only when somatic anxiety and emotional intelligence are used as predictor variables for job dedication, the total model remained significant ($R^2 = .33, \Delta R^2 = .06 < .05, F \text{ change} = 4.11, p < .05$). All other subscales did not predict significant variance even without the control variables being entered into the model.

Discussion

The basic premise of this paper was based upon the neglected issue in emotional intelligence studies that individuals and organizations do not always converge on the same objectives, and that emotional intelligence may be harnessed to serve individual interests *and* organizational benefits. However, the moderating role of emotional intelligence in the relationship between mental health and performance has only been partly supported in this analysis. That is, while emotional intelligence moderates the relationship between mental health and job dedication, the effect disappears when the control variables are entered into the model. However, the post hoc analysis showed that one subscale still predicted significant variance after the control variables were considered. In total, therefore, findings of this study must be regarded as preliminary rather than conclusive. Nevertheless, they may have the potential to meaningfully inform theory and practice in the realm of management research, especially if future replication studies corroborate these results.

Implications for future management research

Several scholars have cautioned against the 'extraordinary' claims associated with the predictive power of emotional intelligence in management research (Antonakis, Ashkanasy, & Dasborough, 2009). In fact, scholars have maintained that it must account for incremental linear effects (over and above GMA and personality) to justify its use in applied workplace settings as a predictor of job performance (e.g., Brody, 2004). Findings of this study open up the possibility to consider an alternative option, namely, that emotional intelligence may predict mental health and job

performance not in an incremental linear fashion (cf. Hough, 2003), but in an interactive one. The implications for theory are such that scholars need to recognize that individuals often face conflicting interests at work, like the need to perform emotional labor to do well at work and the resultant negative consequences for one's health (Humphrey, *in press*; Lindebaum & Fielden, 2011). The fact that almost all studies in the realm of emotional intelligence have either focused upon health-related outcomes or job performance entails that scholars may have potentially overlooked this important line of research. It is for this reason that the preliminary evidence on the moderating effect of emotional intelligence in the relationship between mental health and job performance is an important first step en route to further theorizing and empirical verification.

With a view to task performance, there are several possible explanations as to why no support for hypothesis 1a was found. For instance, the theoretical examples provided earlier on the link between task performance and threat-based anxiety may not be as distinct in *this* sample as assumed. That is, if individuals working in the public sector do not experience anxiety in response to executing job-related tasks (since they do not stretch them excessively, for example), then the conflict between concern for one's mental health and performing well may not be that acute. As stated above, individuals high in emotional intelligence may perceive environmental stressors and obstacles more as a challenge in lieu of stress, thus leading to less aversive outcomes for individuals (Salovey et al., 2002). In the absence of environmental stressors and obstacles, then, the role of emotional intelligence may be diminished.

With regard to contextual performance, the theorizing outlined earlier has been only partly supported in terms of its sub-dimension job dedication. Since being too dedicated at work (e.g., working long hours or obstinate emotional investment) can have detrimental health implications (Staw & Ross, 1989), findings suggest that emotional intelligence enables individuals to get the balance right in terms of being dedicated enough in order to perform well at work, bearing in mind that any energy expended beyond that level is likely to impair their health in undesirable or dysfunctional ways. Bear in mind, however, that the control variables entered into the model partly absorbed the significant effects at the total mental health score, but not at one subscale.

Contrary to expectations, however, emotional intelligence does not moderate the relationship between the sub-dimension interpersonal facilitation of the contextual performance measure and mental health. Neither does emotional intelligence correlate significantly with interpersonal facilitation, albeit this has not been part of the hypotheses testing. This is an unexpected result in light of the item wording of this scale. Most of them tap into altruistic behaviors toward others (e.g., "support or encourage a co-worker with a personal problem"). Note that emotional intelligence has been mostly conceptualized as an altruistic concept within the positive psychology tradition (Van Rooy, Whitman, & Viswesvaran, 2010). Findings of this study contradict this notion, and highlight that, whilst mental health is related to job dedication (i.e., a performance dimensions where individuals may exert discretion in terms of how much energy they invest to attain immediate personal

gains) when emotional intelligence is high, this effect does not appear to extend to the collaborative outcomes of the interpersonal facilitation scale. By extension, this would imply that emotional intelligence may be employed, in the first place, to secure a competitive edge over colleagues by way of gauging their job dedication over time in such a way that they do not experience negative health consequences. Thus, Kilduff, Chiaburu, and Menges's (2010) theorizing about the potential dark side of emotional intelligence in form of pursuing self-serving benefits receives some preliminary empirical support.

Implications for future management practice

There are some important implications for management practice that flow from this study. First, albeit emotional intelligence partly moderates the relationship between mental health and job dedication, it does not moderate any other relationship. In particular, practitioners should note the possibility that emotional intelligence may not, in cases when individuals have to collaborate with colleagues even though personality clashes potentially cause distress, facilitate interpersonal interactions at work to the extent assumed so far. Second, findings have important consequences for recruiting and developing a healthy and productive and workforce, as screening and developmental processes should be sensitive to the fact that individuals face often competing interests at work, especially in light of role-prescriptions and emotional labor demands at work (Humphrey, *in press*; Lindebaum & Fielden, 2011). Studying the role of emotional intelligence relative to individual mental health and performance in isolation runs the risk of producing misleading results, as the latter two often mutually depend upon each others. Therefore, only when the results obtained are correct and trustworthy should they be used to inform recruitment and development policies. The significance of this cannot be overstated given that a multi-million emotional intelligence 'training' industry has evolved (Kunannatt, 2004).

Limitations and future research

Whilst method variance has been limited, there are some limitations that must be recognized in this study. First, it would have been desirable to rely upon a larger sample size in order to increase the statistical power of the analysis (Huck, 2004). This would enable a more robust analysis of whether the significant effect sizes would remain after the control variables are included in the model. Likewise, even though the emotional intelligence measure used in this study predicts variance in job performance over and above GMA and personality in another study (Blickle *et al.*, 2009), future studies should incorporate these important control variables as well. However, the fact that the significant effects partly vanished after largely demographic controls were entered signals a major challenge for future research on the topic. Second, the context in which this study was embedded may potentially reduce the generalizability of findings, inasmuch as working conditions in the public sector can deviate from those in the private sector (Rainey & Bozeman, 2000). Likewise, there is considerable

contextual variance (e.g., construction, banking, health care) within the private sector that can also affect the generalizability of findings. As Johns notes, "context is likely responsible for one of the most vexing problems in the field: study-to-study variation in research findings" (2006, p. 389).

These limitations invariably inform important avenues for future research. First, to more robustly examine the moderating role of emotional intelligence in the relationship between mental health and performance, there is a pressing need to replicate this study using a larger sample with pertinent control variables, as detailed above. If this would be designed as a comparative study (i.e., private vs. public sector), most limitations of this study could be overcome. Second, if emotional intelligence exercises a moderating influence on the relationship between a predictor and outcome variable within certain ranges (i.e., one standard deviation below and above the mean), it may be perfectly possible that it has differential effects on outcome variables depending upon what percentile of the distribution is considered. That is, future research could explore to what extent it predicts outcomes using the upper, medium, and lower third of the distribution. A recent exchange also makes this point rather clear, suggesting that individuals may suffer from the 'curse of emotions', as they are too perceptive to the needs and feelings of others (Antonakis *et al.*, 2009). This would indicate the possible existence of curvilinear effects (Tabachnick & Fidell, 2007). Lastly, there is a preponderance of studies in the emotional intelligence arena that apply a positivist approach to examining its effects. Whilst conducive in examining some research questions, such an approach is of limited value when one seeks to explore the lived experiences of individuals in terms of their maximum capacity to process emotional information across their life span. Specifically, did they engage with, and attempted to make sense of, emotionally challenging events in life (e.g., bereavements or being treated unfairly) and, if so, did this exercise lead to the emotional growth that lies at the heart of the ability model of emotional intelligence? In this respect, qualitative research may be a beneficial avenue to pursue here because it allows individuals to reflect upon the meaning they attach to the phenomenon under investigation (Dey, 1993).

Conclusion

This study found preliminary evidence that emotional intelligence moderates the relationship between mental health and job performance (i.e., job dedication as one dimension of contextual performance). In other words, there is a positive relationship between mental health and job dedication when emotional intelligence is high, but not low. However, when controlling for the two different organizations, gender, age and weekly hours worked, the significant effects disappeared. On the whole, the fact that the post hoc analysis also yielded a significant effect despite the controls applied underlines both the preliminary nature of the findings, and the imperative to replicate this study to be able to draw firmer conclusions. In light of the resources that organizations potentially squander by ignoring that individuals often

have to balance concerns for their mental health and performance, this study offers some meaningful initial steps en route to further empirical investigation to either falsify or verify these findings.

Acknowledgements

I would like to extend my thanks to Lothar Schmidt-Atzert for making the TEMINT instrument available for this research project.

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