A meta-analysis of emotional intelligence effects on job satisfaction mediated by job resources, and a test of moderators

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ABSTRACT

This paper examines whether job resources act as a mediator in the emotional intelligence (EI)—job satisfaction relationship, and examines possible moderators, including gender, age, tenure, and job level. We conducted a meta-analysis to explore these relationships. The meta-analysis demonstrated that: First, EI is positively related to job resources ($k = 15$, $N = 4151$; overall EI: $\hat{\rho} = 0.27$; ability EI: $\hat{\rho} = 0.24$; self-report EI: $\hat{\rho} = 0.27$; mixed EI: $\hat{\rho} = 0.28$). Second, job resources mediate the relationship between EI and job satisfaction. Third, the relationship between EI and job satisfaction does not differ across gender, age, and tenure, meaning that regardless of whether an employee is male or female, young or old, or having short or long tenure, they equally benefit from EI. The moderator effect of job level is only significant for self-report EI—job satisfaction and this relationship is stronger in non-managerial jobs than in managerial jobs. Yet, the moderator effect of job level is not significant for ability EI—job satisfaction and mixed EI—job satisfaction meta-analytic distributions. These results indicate that EI aids employees by helping them obtain job resources, and that both job resources and EI have practical implications in terms of employee job satisfaction.

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1. Introduction

Salovey and Mayer (1990) are widely credited with developing the first modern definition of emotional intelligence (EI), and they conceptualized EI as the ability to perceive emotions and to regulate emotions, both with regard to oneself and to others. Goleman popularized EI in his internationally best-selling books (Goleman, 1995; Goleman, Boyatzis, & McKee, 2002), and scholars began to argue that EI is essential to organizational success (Cherniss, 2001). Ashkanasy and Daus (2005) reviewed the emerging research on EI and classified the measures of EI into three types; these are stream 1 ability EI, stream 2 self-report EI, and stream 3 mixed EI measures. For simplicity's sake, we refer to them as ability EI, self-report EI, and mixed EI. Ability measures emphasize that EI is a type of intelligence, and they measure EI the way cognitive intelligence is usually measured, with objective right and wrong answers on tests. For example, Mayer and his coauthors (Mayer, Salovey, Caruso, & Sitarenios, 2003, p. 99) developed the MSCEIT V2.0, "a 141-item scale designed to measure the following four branches (specific skills) of EI: (a) perceiving emotions, (b) using emotions to facilitate thought, (c) understanding emotions, and (d) managing emotions." In contrast, many scholars in the self-report category regard EI as a type of trait, and they measure it with self-report items consistent with how traits are often measured. For example, Petrides and his colleagues defined EI as "a constellation of behavioral dispositions and self-perceptions concerning one's ability to recognize, process, and utilize emotion-laden information." (Petrides, Frederickson, & Furnham, 2004, p. 278). Finally, mixed EI measures incorporate a broader range of emotion-related skills and competencies than do stream 2 self-report measures, and they conceptualize EI in broader terms. Some popular measures in this category include the Bar-On Emotional Quotient Inventory (EQ-i) (Bar-On, 2000, 2002) and the Emotional and Social Competency Inventory (Boyatzis, Brizz, & Godwin, 2011).

Researchers have found that mixed EI measures overlap with measures of other personality traits, in particular with the Big Five measures of personality, and that this may account for some of the correlations between mixed EI and outcomes such as job performance (Joseph, Jin, Newman, & O'Boyle, 2015). Petrides and his colleagues believe that trait EI encompasses the "emotion-related facets of personality" (Petrides, Pita, & Kokkinaki, 2007, p. 287). Support for this position is provided by a comprehensive meta-analysis that investigated the associations between ability and trait EI with the "general factor of personality" (van der Linden et al., 2017). The authors conclude that trait EI may be tantamount to the social effectiveness dimension of personality and to the general factor of personality (van der Linden et al., 2017).

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Moreover, they noted that trait EI has demonstrated incremental validity over Big Five measures for a variety of outcomes. This research suggests that EI may aid employees in gaining resources, such as support from coworkers, supervisors, and subordinates, because of their greater social effectiveness.

The concept of EI has garnered enormous amounts of attention from researchers and scholars (e.g., Andrei, Siegling, Aloe, Baldaro, & Petrides, 2016; Ashkanasy & Daus, 2005; Boyatzis & Goleman, 2002; Boyatzis et al., 2011; Goleman, 1995; Mayer & Salovey, 1997; Miao, Humphrey, & Qian, 2016a, 2016b; O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011; Petrides & Furnham, 2000, 2001, 2003, 2006; Petrides, 2009a, 2009b; Petrides et al., 2016; Salovey & Mayer, 1990; Walter, Cole, & Humphrey, 2011). Meta-analyses have confirmed that EI predicts a series of important outcomes. For example, two meta-analyses have found that EI is related to physical, mental, and psychosomatic health (Martins, Ramalho, & Morin, 2010; Schutte, Malouff, Thorsteinsson, Bhullar, & Rooke, 2007). To address the concerns regarding the uniqueness of EI, O'Boyle et al. (2011) meta-analysis demonstrated that EI contributed significant incremental validity and relative importance in predicting job performance in the presence of cognitive ability and Big Five personality traits. Recent meta-analyses (e.g., Andrei et al., 2016; Miao et al., 2016a, 2016b) further confirmed EI's uniqueness in predicting additional criteria beyond job performance after common covariates that are considered to overlap with EI were controlled.

Miao et al. (2016b) performed a meta-analysis on EI and work attitudes and found that EI not only predicts job satisfaction, organizational commitment, and turnover intentions, but also demonstrates incremental variance and relative importance above and beyond cognitive ability and Big Five personality traits. Likewise, using similar controls, Miao, Humphrey, and Qian (2017) found that self-report EI and mixed EI are positively related to organizational citizenship behavior and negatively correlated to counterproductive work behavior. There are a few areas that still require further exploration. First, three mediators were identified in Miao et al.'s (2016b) meta-analysis, which are: state positive affect, state negative affect, and job performance. We argue that another prominent type of mediator should be tested, which is job resources. Since emotionally savvy individuals can harness their EI to facilitate social interactions with other organizational members and to garner social support from their peers and supervisors (Byron, 2007; Kafetsios & Zampetakis, 2008), this may lead to positive perceptions of job resources that will engender job satisfaction. This potential theoretical mechanism (EI → job resources → job satisfaction) has been implied but not examined in prior studies. Hence, the investigation of this mediator could make a significant theoretical contribution to EI literature. We will integrate a job demand-resources (JD-R) model (Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) with the EI literature and explore how EI relates to job resources, which in turn leads to job satisfaction. Hence, the first purpose of this meta-analysis is to test whether job resources mediate the relationship between EI and job satisfaction.

Second, Miao et al.'s (2016b) meta-analysis only analyzed one moderator, namely the emotional labor demand of jobs, whereas many other potential moderators related to subjects' demographics and job type have not yet been investigated. These moderators deserve examination because the use of EI has been theorized by some to be influenced by gender, age, tenure, and job level; as such, these potential moderators may condition the relationship between EI and job satisfaction. Thus, the second purpose of this meta-analysis is to explore how the aforementioned moderators condition the relationship between EI and job satisfaction.

2. Theory and hypotheses

2.1. Job demand-resources model and the mediating role of job resources

The JD-R model (Bakker, Demerouti, de Boer, & Schaufeli, 2003; Bakker & Demerouti, 2007; Demerouti et al., 2001) assumes that

whereas every occupation has its own specific risk factors related to job stresses, these factors can be classified into two general categories – job demands and job resources – that constitute an overarching model that may be applicable to various occupational settings, regardless of the particular resources and demands involved (Crawford, LePine, & Rich, 2010; Nahrgang, Morgeson, & Hofmann, 2011). Job demands refer to "those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs", whereas job resources are defined as "those physical, psychological, social, or organizational aspects of the job that are either/or: functional in achieving work goals; reduce job demands and the associated physiological and psychological costs; stimulate personal growth, learning, and development" (Bakker & Demerouti, 2007, p. 312). According to conservation of resources (COR) theory (Hobfoll, 2001), humans are motivated to protect, maintain, and accumulate resources. Job demands cause resources to be depleted as individuals respond to demands, thus gradually draining one's energy and, over time, leading to burnout (Crawford et al., 2010). Conversely, job resources trigger a motivational process that helps individuals accomplish their goals, stimulate their personal growth/development, and reduce job demands, therefore leading to positive outcomes such as engagement and satisfaction (Crawford et al., 2010; Nahrgang et al., 2011).

We propose that EI should be positively associated with job resources, and job resources should partially mediate the relationship between EI and job satisfaction. A positive social relationship with supervisors and co-workers is one key type of job resources (Bakker & Demerouti, 2007). EI is essential to facilitate social interaction and to establish and maintain social relationships (Goleman, 1995; Lopes et al., 2004; Schutte et al., 2001). Emotionally savvy individuals are sensitive to not only their own but also to others' feelings and emotions (Johnson & Spector, 2007); accordingly, they can harness their emotion perception and regulation abilities in order to foster better social relationships with their coworkers and supervisors, which allows them to acquire job resources from their coworkers and supervisors through productive social exchanges (Wong & Law, 2002). For instance, emotionally intelligent persons can infer their coworkers' and/or supervisors' intentions from their emotional cues and thus communicate more effectively with them (Lopes et al., 2004). Interactions based on positive social exchanges allow emotionally intelligent people to accumulate job resources over time (e.g., coworkers' and/or supervisors' support, feedback, and job autonomy, etc.) because their exchange partners (e.g., coworkers and/or supervisors) may feel obligated to reciprocate all the benefits associated with their pleasurable social exchanges.

Job satisfaction is derived from not only one's feeling towards a job but also one's rational/cognitive appraisal of a job (Judge & Kammeyer-Mueller, 2012). Job satisfaction has a cognitive component, suggesting that one's job satisfaction hinges on one's beliefs or thoughts about the job (e.g., job characteristics, coworker relationship, supervisor relationship, etc.) and this belief/thought is developed from learning, reading, seeing, and hearing about the attitude object (Judge & Kammeyer-Mueller, 2012). Job resources should positively impact one's cognitive assessment of the job and enhance one's job satisfaction because they offer various physical, psychological, social, or organizational benefits to employees. Meta-analytic findings support a positive relationship between job resources and job satisfaction (Nahrgang et al., 2011). Taken together, EI helps one to acquire job resources, and the acquisition of job resources in turn positively influences one's job satisfaction, suggesting the mediating role of job resources in the relationship between EI and job satisfaction. Thus, the following hypotheses can be claimed:

Hypothesis 1. EI is positively related to job resources.

Hypothesis 2. Job resources mediate the relationship between EI and job satisfaction.