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The Work Engagement and Job Performance Relationship: Exploring the Mediating Effect of Trait Emotional Intelligence

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THE WORK ENGAGEMENT AND JOB PERFORMANCE RELATIONSHIP:
EXPLORING THE MEDIATING EFFECT OF TRAIT EMOTIONAL INTELLIGENCE

A Thesis

Presented to

The Faculty of the Department of Psychology Studies

San José State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Lisa Jackson

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THE WORK ENGAGEMENT AND JOB PERFORMANCE RELATIONSHIP:
EXPLORING THE MEDIATING EFFECT OF TRAIT EMOTIONAL INTELLIGENCE

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ABSTRACT

THE WORK ENGAGEMENT AND JOB PERFORMANCE RELATIONSHIP: EXPLORING THE MEDIATING EFFECT OF TRAIT EMOTIONAL INTELLIGENCE

By Lisa Jackson

This cross-sectional study examined the mediating effect of affect-related traits on the relationship between work engagement and job performance. Specifically, a sample of 225 students from a large state university was used to examine the effect of trait emotional intelligence (EI) on work engagement and both in-role and extra-role performance. It was found that work engagement directly impacted both in-role and extra-role performance, indicating that engaged workers are more likely to perform well both on job-related tasks (in-role performance) and also on going above and beyond what was expected of them in their job role (extra-role performance). In addition, work engagement was predictive of trait EI, indicating that engaged workers were more likely to use affect-related traits in the workplace than those less engaged. Further, trait EI was predictive of both in-role and extra-role performance, suggesting that effectively managing one's emotions, exhibiting strong social skills, demonstrating self-control, and displaying a general sense of well-being (i.e., trait EI) can lead to improved performance on the job. Lastly, work engagement and both in-role and extra-role performance were partially mediated by trait EI. This study provides new information about trait EI and its effect on job-related behaviors in an applied setting.

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Introduction

To thrive in today's highly competitive and often tumultuous economic environment, organizations must employ a workforce that is proactive as well as committed to performing at high standards, both at the individual and organizational level (Chughtai & Buckley, 2011). Work engagement can provide organizations with a competitive advantage (Bakker, Schaufeli, Leiter, & Taris, 2008). Most notably, employers who are focused on building and maintaining an engaged workforce may experience beneficial outcomes such as increased business-unit performance, strong financial returns, and a positive corporate image (Durán, Extremera, & Rey, 2010). In addition, the crossover of engagement among members of the same work team may prove valuable for organizational performance (Bakker et al., 2008). Given these advantages, organizations may want to implement programs that promote engagement as they may lead to positive outcomes in the form of retention and performance (Demerouti & Cropanzano, 2010; Halbesleben & Wheeler, 2008).

Work engagement is predictive of a variety of job-related outcomes such as in-role performance, extra-role performance, and active learning (Bakker, Demerouti, & ten Brummelhuis, 2012a; Christian, Garza, & Slaughter, 2011; Dalal, Baysinger, Brummel, & LeBreton, 2012; Halbesleben, & Wheeler, 2008). However, despite the popularity of work engagement and its relationship with performance in organizations, there remains a dearth of empirical research on engagement in the academic literature with respect to employee performance on the job (W. Kim, Kolb, & T. Kim, 2012). Moreover, some have speculated that the link between work engagement and performance is not straight

forward but rather complex in the sense that various intervening mechanisms may account for this relationship (Chughtai & Buckley, 2011; Demerouti & Cropezano, 2010). Consequently, the goal of this study was to expand the scope of research surrounding work engagement, its relationship with job-related outcomes, and various mechanisms that may affect this relationship.

The earlier work of Demerouti (2006) has indicated that personality traits (e.g., goal directedness, conscientiousness) may serve as instrumental in qualifying the relationship between work engagement and job performance. Specifically, it has been reported that employees who experience “flow” at work (i.e., absorption, enjoyment, and dedication) are able to positively impact their performance levels but only those with certain personality traits (e.g., conscientiousness). More recent studies have reported similar findings—that individuals who are inclined to be hard-working, reliable, self-disciplined (i.e., conscientiousness), and optimistic are able to translate their work engagement into increased individual job performance (Bakker et al., 2012a).

One personality construct that has recently gained attention in well-being research is trait emotional intelligence (EI), defined as a collection of emotion-related self-perceptions situated at the lower levels of personality hierarchies (Petrides, Pita, & Kokkinaki, 2007). As emotionally intelligent individuals are more likely to manage their emotions effectively, develop strong relationships with others, and experience positive affect as well as optimism (Koydemir, Şimşek, Schütz, & Tipandjan, 2013), it may be worth exploring the benefits of this construct with regards to its relationship with engagement and, subsequently, job performance.

Consequently, the current research aimed to investigate the role of trait emotional intelligence as a mechanism through which work engagement affects one's level of job performance. First, in order to test this effect, the relationship between work engagement and both in-role and extra-role performance was examined. As there remains a discrepancy between academic research and an organizational need for effective performance improvement measures (Kim et al., 2012), this study provided warranted testing of the engagement-performance relationship. Second, as research has demonstrated that work engagement is more often experienced by emotionally intelligent people (de Clercq, Bouckennooghe, Raja, & Matsyborska, 2013; Inceoglu & Warr, 2011), this study offered a summary of trait EI along with an analysis of its relationship with work engagement. Third, this study examined the relationship between trait EI and job-related outcomes, specifically in-role and extra-role performance. Lastly, the indirect effect of work engagement on job performance through trait EI was tested in order to identify whether engaged employees utilize affect-related traits as a resource to improve their performance on the job.

Work Engagement and Job Performance

Work engagement is often defined as "...a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, González-Romá, & Bakker, 2002; Bakker, Tims, & Derks, 2012b). As implied in its definition, engagement represents three separate dimensions. Its first dimension, vigor, can be defined as high levels of energy and stamina employees may exhibit on the job. The second dimension, dedication, is characterized by individuals who are highly

involved in their work and experience a sense of meaning, passion, and challenge (Sweetman & Luthans, 2010). The third characteristic of engagement, absorption, can be defined as a state of being fully engrossed in one's job, whereby time passes quickly and one has difficulty separating oneself from work. It is believed engaged workers are able to outperform those who are less engaged, largely because they 1) create their own job and personal resources (e.g., peer/supervisory support); 2) experience positive emotions (e.g., enthusiasm, happiness); and 3) are often psychologically and physically healthier (Bakker et al., 2008), each of which will be discussed in greater detail in the following sections.

Job resources. A growing number of studies using a variety of theoretical frameworks have demonstrated a positive, albeit modest, relationship between work engagement and job performance (e.g. Kim et al., 2013). Much of the empirical work on this subject has indicated that people experience engagement on the job when presented with the appropriate job resources such as supervisory support, performance feedback, autonomy, and learning opportunities (Leiter & Bakker, 2010) which, in turn, positively impacts their job performance. Job resources are believed to elicit a motivational process that provides employees with a means to achieve important work-related goals and also stimulate employees' learning, growth, and development (Bakker et al., 2012b).

This relationship between job resources and work engagement is supported by the job demands-resource (JD-R) model, a well-established theoretical framework used in understanding how certain job characteristics—such as demands and resources—contribute to explaining variance in both in-role and extra-role performance through work

engagement (Bakker, Demerouti, & Verbeke, 2004). Specifically, in-role performance refers to those activities that are linked to one's formal job role (Chughtai & Buckley, 2011), whereas extra-role performance involves discretionary behaviors displayed by an employee that are linked to the effective functioning of the organization (Bakker et al., 2012a).

Support for the job resources and work engagement relationship has been reported by Bakker and Bal (2010), who found among their sample of 54 Dutch teachers that weekly work engagement was positively related to both in-role and extra-role performance. Moreover, it was reported that work engagement mediated the relationship between job resources and in-role and extra-role performance, indicating that teachers who were given the autonomy to make decisions in their job and opportunities for development were more engaged, and as a consequence, they displayed high levels of job performance. Such findings indicate that employees who are presented with job-related resources (e.g., autonomy) are engaged in their work, which in turn makes them not only perform well in their designated job, but also go above and beyond their personal roles and participate in activities that are advantageous to the organization (i.e., extra-role behaviors). Similarly, Xanthopoulou, Baker, Heuven, Demerouti, and Schaufeli (2008) demonstrated the importance of job resources to work engagement and consequently performance. Using a sample of 44 flight attendants, these researchers demonstrated that colleague support and self-efficacy were both related to job performance through work engagement, demonstrating the importance of job resources (colleague support) for employees to achieve work-related goals and perform well.

Positive emotions. Research has demonstrated that, in addition to resources, positive emotions may also explain the link between work engagement and performance. Drawing from the broaden-and-build theory (Frederickson, 2001), experiences of positive emotions broaden an individual's "momentary thought-action repertoires," which, in turn, serves to build his or her enduring personal resources and trigger upward spirals toward emotional well-being (Bakker & Demerouti, 2008; Frederickson, 2001). In other words, certain positive emotions can broaden one's attention, cognition, and action which may stimulate the accumulation of resources (Frederickson, 2001), and also improve one's physical and psychological health.

Several studies have found evidence supporting the broaden-and-build theory. For instance, Frederickson and Branigan (2005) found among their sample of 104 college students that those who experienced positive emotions exhibited broader scopes of attention and had more "thought-action" urges than individuals experiencing no emotion. Similarly, Frederickson and Losada (2005) reported that high performing teams that experienced positive emotions displayed a broad range of inquiry (e.g., asking questions) and encouragement towards their colleagues during business meetings. In addition, Langelaan, Bakker, van Doornen, Wilmar, and Schaufeli (2006) found in their study of 572 Dutch employees that work engagement was associated with high extraversion and low neuroticism, each of which was strongly associated with positive and negative affect, respectively.

Drawing from the broaden-and-build theory described above, it is believed that through these positive emotions engaged workers are able to mobilize resources in order

to deal with demands of the job, develop strong relationships, and perform well (Bakker & Bal, 2010). Additionally, engaged workers are more likely to demonstrate certain personality traits on the job (e.g., extraversion) that are specifically associated with positive emotions, such as enthusiasm, energy, and happiness, which can positively impact their work performance.

Health and well-being. Several studies have also found that workers who are engaged tend to report less psychosomatic complaints compared to their non-engaged counterparts, indicating that engaged workers may perform well partly due to good physical health (Bakker & Demerouti, 2008). Research with Hobfoll's (2001) conservation of resources (COR) theory has shown that employees strive to protect and collect a wealth of resources which are likely to reinforce employees' resilience and beliefs in their abilities. It is with these beliefs that employees experience positive personal outcomes such as better coping, adaptation, and better physical health (Salanova, Schaufeli, Xanthopoulou, & Bakker, 2010). Support for the link between engagement and health has been demonstrated in several research studies. For instance, Demerouti, Bakker, de Jonge, Janssen, and Schaufeli (2001) found in their study among 381 insurance company employees that work engagement was negatively related to psychosomatic health complaints (e.g., headaches, chest pains). Likewise, Schaufeli, Taris, and van Rhenen (2008) showed that engaged workers reported fewer psychosomatic complaints than their non-engaged counterparts. Further, Schaufeli and Bakker (2004) demonstrated that among their four independent occupation samples

(totaling 1,698 participants), engaged workers reported less health-related issues such as headaches, cardiovascular problems, and stomach aches.

In summary, research has demonstrated the importance of resources for employees in that they are instrumental to achieving work goals and performing well on the job (Bakker et al., 2008). Moreover, engaged employees are likely to experience positive emotions which can broaden their cognitive ability to interpret complex material, resulting in the accumulation of increased resources that may be used to enhance well-being and, consequently, job performance (Bakker & Bal, 2010, Frederickson, 2001). Given such findings, it is expected that engaged employees have the necessary resources to perform well in their job and successfully complete tasks which are outlined in their formal job description (i.e., in-role performance). Further, engaged employees are positioned to build a wealth of job and personal resources, allowing them the needed time and energy to go beyond their formal job requirements and exhibit the extra-role behaviors that are advantageous to the organization. Accordingly, the following hypothesis was tested:

Hypothesis 1 (a-b): *Work engagement predicts (a) in-role performance and (b) extra-role performance.*

Trait EI

As one of the objectives of this study is to expand the scope of research surrounding trait EI and its impact on work engagement and performance-related behaviors, this section provides a brief overview of the construct, along with its relationship with other important psychological variables. Currently, the literature on EI

describes two principle models, trait EI (or trait emotional self-efficacy) (Petrides & Furnham, 2001) and ability EI (or cognitive-emotional ability) (Mayer & Salovey, 1997). Trait EI, measured through self-report questionnaires, is conceptually distinct from ability-based EI which encompasses actual emotion-related abilities and is measured with maximum performance tests similar to those used in the operationalization of standard cognitive ability (Frederickson, Petrides, & Simmonds, 2012). Moreover, trait EI is believed to lie outside the domain of human cognitive ability, with several studies demonstrating near-zero, or even negative correlations between trait EI questionnaires and IQ tests (Petrides, 2009a).

Although some argue that trait EI is related to the basic personality dimensions and often fails to account for the variance in a criterion variable over and above them (Petrides & Furnham, 2006), studies have repeatedly demonstrated that trait EI accounts for additional variance above and beyond the Big Five personality domain and the Giant Three (Psychoticism, Extraversion, and Neuroticism) (see Petrides & Furnham, 2006; Saklofske, Austin, & Minski, 2003; Van der Zee & Wabeke, 2004; Van der Linden, Tsaousis, & Petrides, 2012). In addition, research has demonstrated trait EI's significant relationship with a variety of important outcomes including academic performance, scholastic achievement and deviant school-related behaviors, burnout, cognitive appraisal of stressful events, and body image (Andrei & Petrides, 2013).

Through a content analysis of early emotional intelligent models (e.g., alexithymia [the inability to identify and describe emotions in the self], affective communication, emotional expression, empathy), Petrides (2009b) derived the first

sampling domain of trait EI, which includes four-interrelated factors: emotionality (ability to perceive and express emotions effectively and sustain close relationships); self-control (maintaining a healthy degree of control over urges and desires); sociability (ability to socially interact, clearly communicate and listen to others); well-being (feeling positive, happy, and fulfilled); as well as a global trait EI score (a broad index of general emotional functioning) (Petrides, 2009a). In general, research has demonstrated that these factors are positively associated with extraversion, conscientiousness, positive mood, and job motivation, and negatively associated with neuroticism, somatic complaints, anxiety, and depression (Petrides, 2009a).

In addition, trait EI has been linked to several positive psychology variables, including core self-evaluation (Ahmetoglu, Leutner, & Chamorro-Premuzic, 2011; Montasem, Brown, & Harris, 2013), resilience (Saklofske, Nordstokke, Prince-Embury, Crumpler, Nugent, Vesely, & Hindes, 2013) and life satisfaction (Liu, Wang, & Lü, 2013). For instance, a recent study conducted by Di Fabio and Saklofske (2014) reported that together the Big 5 personality factors followed by self-reported EI were the most powerful predictors of self-evaluation, resilience, and life satisfaction over ability EI and fluid intelligence. These findings indicate that those reportedly higher in trait EI are likely to experience greater levels of self-esteem, self-efficacy, internal locus of control, and lower levels of pessimism than those who experience lower levels of trait EI.

Work Engagement and Trait EI

Although some research has demonstrated that work engagement is associated with identifiable personality features such as optimism, self-esteem, and confidence

(Inceoglu & Warr, 2011), researchers have yet to examine this construct and its relationship with emotion-related personality traits. This is a surprising omission considering the recent research which has demonstrated that positive emotions (e.g., optimism, happiness, joy) associated with high levels of work engagement are more frequently experienced by emotionally intelligent people (de Clercq et al., 2013). Moreover, Inceoglu and Warr (2011) found that emotional stability and conscientiousness accounted for much of the variance in job engagement, indicating that workers who were engaged in their job were more likely to be more emotionally stable, socially proactive, and achievement-oriented. As those who are more or less engaged in their work are bound to differ in certain personality traits, this study examined whether engaged workers draw upon affect-related personality traits to protect against job stressors, accumulate job resources, and achieve work-related goals.

As the aforementioned COR theory is used in support of the engagement-performance relationship, this theoretical framework is also applied when studying work engagement and its dynamics over time (Weigl, Hornung, Parker, Petru, Glaser, & Angerer, 2010). The COR model is based on the premise that individuals strive to protect, retain, and accumulate valued resources (e.g., free time, accomplishing one's goals, peer support) which are instrumental in attaining higher-order goals or desired future states (Demerouti, Bakker, & Leiter, 2014; Weigl et al., 2010). The COR theory has successfully predicted a variety of stress-related outcomes in organizational and health contexts, traumatic events, and the wake of everyday stressors (Hobfoll, 2001). In addition, the COR theory operates on several premises: (a) individuals are concerned

more with resource loss than resource gain, (b) people are required to invest resources to prevent resource loss and promote resource gain, and (c) those with greater resources are less vulnerable to job stressors than those with less resources (Hobfoll, 2001).

Individuals who have already expended a vast amount of resources may have difficulty gaining new resources to manage work demands and perform successfully. By investing resources more efficiently, workers may protect themselves against future resource loss, help recover from such loss, and ultimately gain new resources (Demerouti et al., 2014).

According to the COR theory, personality can serve as a personal resource, allowing employees to better react to situational job demands and attain additional resources, thereby improving personal well-being (Hobfoll, 2001). Personal resources are considered positive characteristics of the self which allow individuals to control and influence their environment successfully (Xanthopoulou, Bakker, & Fischbach, 2013). Personal resources include social (relationships with co-workers), material (physical environment and resources), and psychological (self-esteem, optimism, adaptability) aspects (Weigl et al., 2010). Research has demonstrated that employees high in personal resources are more likely to invest energy in order to experience accord between their expectations and their goals (Xanthopoulou et al., 2013), a state of high involvement that promotes the development of work engagement. More notably, recent longitudinal studies have reported that the relationship between work engagement and job and personal resources are not unidimensional as previously believed, but rather reciprocal (Weigl et al., 2010). That is, job and personal resources are not only predictive of how engaged one is in his or her job, but also are resultant of one's level of work engagement.

As previously discussed, engaged workers experience positive emotions and are psychologically and physically healthy (Bakker & Demerouti, 2008). It is believed that positive emotions (e.g., joy, happiness, pride, love) share the ability to expand individuals' thought-action repertoires and build enduring intellectual, physical, and social resources (Frederickson, 2001). Moreover, engaged workers are able to draw upon personality-related traits such as optimism and self-esteem which can be useful when employees look to gain resources and prevent resource loss. As research has demonstrated that positive emotions (optimism and happiness) along with healthy emotional functioning are experienced by emotionally intelligent people (de Clercq et al., 2013), engaged workers are expected to display affect-related traits (i.e., trait EI) to accumulate resources such as increased social capital, greater job autonomy, and free-time. Notably, individuals high in trait EI tend to perceive and express emotions effectively, build healthy and meaningful relationships with others, use strong communication skills, and have an overall sense of wellbeing and health in the workplace. It is with these capabilities that engaged workers are able to build a strong social network to increase productivity and well-being, and also negotiate and influence others to gain additional resources. It is with this argument that the following hypothesis was tested:

Hypothesis 2: *Work engagement predicts trait EI.*

Trait EI and Job Performance

Empirical evidence suggests that employee personality characteristics affect job-related behaviors and impact organizational performance (Le, Oh, Robbins, Ilies,

Holland, & Westrick, 2011). Although general mental ability is branded as one of the strongest predictors of job performance, personality inventories have become quite useful for organizations in selecting potential high-performing employees (Barrick & Mount, 2009; Kramer, Bhawe, & Johnson, 2014). Specifically, research has demonstrated that of the aforementioned Big Five personality dimensions, both conscientiousness and emotional stability serve as the most valid predictors of individual performance outcomes across a variety of jobs (Barrick & Mount, 2009). It is believed that conscientious employees are hard-working, dependable, responsible, organized, and careful, and these are the traits which generate positive motivational propensities at work and contribute to enhanced performance. Similarly, individuals with low emotional stability tend to be nervous, high-strung, stress prone, moody, and exhibit low self-esteem, a plethora of characteristics which can negatively affect one's ability to both develop adequate coping strategies and focus on job tasks, leading to poor performance.

In establishing a theoretical relationship between trait EI and job performance, it is worth discussing the link between the Big 5, global trait EI and its four factors. Research suggests that the overlap between trait EI and the Big Five surpasses 50% (Petrides, Vernon, Schermer, Ligthart, Boomsma, & Veselka, 2010), and that the association between these two personality domains are strong and replicable (Pérez-González & Sanchez-Ruiz, 2014). Notably, a recent study by Pérez-González and Sanchez-Ruiz (2014) demonstrated that trait EI positively correlated with two factors from the Big 5, specifically Alpha which consists of dimensions agreeableness, conscientiousness, and neuroticism, and Beta, which consists of extraversion and

openness, each of which is believed to represent valuable personality traits which are linked to the processes of socialization and personal growth. Such findings suggest that, similar to the Alpha factor, trait EI entails intra-personal adjustment which is represented in the trait EI subdimensions of emotion regulation, stress management, self-esteem, and self-motivation. Moreover, those who score high on Alpha/Stability are less likely to experience negative worldviews which is similar to high trait EI scorers, as trait EI entails subdimensions of optimism and happiness (Petrides, 2009a).

Other research has demonstrated a link between the personality traits mentioned above (i.e., conscientiousness and emotional stability), self-report EI, and job performance. Notably, Joseph and Newman (2010) proposed a theoretical model in which emotion perception predicted emotion understanding, which predicted emotion regulation, which in turn predicted job performance. Specifically, the authors suggested that conscientiousness was related to both emotion perception and emotion understanding, and emotional stability to emotion regulation. For instance, individuals who are high in conscientiousness are better equipped to understand social norms than those less conscientious because they are able to read others' emotional cues more accurately. Likewise, individuals who are emotionally unstable (i.e., high in neuroticism) use ineffective regulatory tactics such as withdrawal and emotion-focused coping strategies. According to this model, it is believed that neuroticism affects job performance only through emotion regulation, indicating that individuals who may be emotionally unstable are still able to perform well if they are able to effectively regulate and manage the emotions of themselves and others.

Extrapolating from the discussion above, employees who effectively regulate their emotions, accurately perceive social norms, and use problem-focused coping strategies are likely to perform well in their job. As in-role performance concerns the effectiveness with which workers perform job duties that contribute to the organization's technical core (Devonish & Greenidge, 2010), employees high in trait EI perform well because they are able to effectively manage job stress and are also self-motivated—two features that are important for the successful completion of job tasks (Barrick & Mount, 2009). In addition, employees who are emotionally stable and experience positive emotions such as optimism and happiness (i.e., individuals high in trait EI) are more likely to accumulate additional resources (e.g., social support) to not only complete job activities required of them, but also engage in discretionary behaviors that are believed to promote the effective functioning of an organization (Bakker et al., 2012a). As the impact of trait EI on both in-role and extra-role performance was predicted regardless of one's level of work engagement, the following hypothesis was tested:

Hypothesis 3 (a-b): Trait EI predicts (a) in-role performance and (b) extra-role performance while holding work engagement constant.

Mediating Effect of Trait EI on Work Engagement and Job Performance

Based on the theorizing for the previous hypotheses, a mediated relationship between work engagement and both in-role and extra-role performance was expected. It was posited that work engagement would lead to the use of affect-related traits which in turn would lead to improved performance. This mediated relationship is consistent with both the COR theory (Hobfoll, 2001) and the broaden and build theory (Frederickson,

2001) previously discussed. Specifically, engaged workers can use certain personality traits as personal resources in order to manage job demands, attain additional resources, and improve overall well-being. In addition, workers engaged in their job experience positive emotions and are also psychologically and physically healthy which broadens their cognition and builds enduring intellectual, physical, and social resources (Frederickson, 2001). As trait EI represents the ability to effectively perceive and manage emotions, clearly communicate, maintain a sense of self-control, and also experience positive emotions such as happiness, joy, and fulfillment, it is expected that engaged workers are able to draw upon such affect-related traits as personal resources to achieve work related goals, which will ultimately impact both their in-role and extra-role performance.

As the description above provides clear theoretical support for this mediation effect, it is unclear as to whether the relationship between work engagement and in-role and extra-role performance is fully mediated by trait EI (it has a mediated effect but no direct effect) or partially mediated by trait EI (it has a mediated effect and direct effect on both in-role and extra-role performance). As previously mentioned, work engagement may have a direct effect on performance because engaged individuals experience positive emotions, are psychologically and physically healthy, and also accumulate resources which enhances job performance (Hypothesis 1). However, this study has presented various personality traits (e.g., the Big Five dimensions) which could also affect the work engagement-job performance relationship. Thus, examining such alternative hypotheses

to answer these questions fulfills a critical gap in literature. Accordingly, the following hypotheses were tested:

Hypothesis 4 (a-b): *Trait EI fully mediates the relationship between work engagement and (a) in-role and (b) extra-role performance.*

Hypothesis 5 (a-b): *Trait EI partially mediates the relationship between work engagement and (a) in-role and (b) extra-role performance.*

Method

Participants

A total of 225 college students from a large university in California participated in this study as part of a course requirement. Demographic information of the study's sample is listed in Table 1. The sample consisted of 87 males (38.7%) and 138 females (61.3%), with ages ranging between 18 and 42 ($M = 21.0$, $SD = 4.01$). In regards to ethnicity, 41.3% of the participants were Asian ($n = 93$), 29.0% Hispanic or Latino ($n = 65$), 19.6% Caucasian ($n = 44$), 3.1% African-American ($n = 7$), and 7.0% other ($n = 16$). A total of 37.8% of participants' household income was reported as less than \$20,000, 10.2% between \$20,000 and \$39,999, 12.0% between \$40,000 and \$74,999, and 40.0% \$75,000 or above. With respect to the marital state of respondents, a majority were single ($n = 199$), 13 married, 6 living with a partner, 3 divorced, and 4 who reported "other" as a marital status. Participants held positions in a variety of industries, including Food Preparation and Serving ($n = 65$), Sales ($n = 44$), Business and Financial, Management, and Financial Operations ($n = 34$), Education, Training, and Library Occupations ($n = 14$), Office and Administrative Support ($n = 10$), Healthcare, Personal Care, and Service Occupation ($n = 14$), Arts, Design, Entertainment, Sports, and Media ($n = 7$), Community and Social Services ($n = 4$), and Other ($n = 33$).

Table 1
Descriptive Statistics for Participant Demographics

Variables	<i>n</i>	%
Age	Mean (SD)	21.02 (4.01)
Gender		
Male	87	38.7%
Female	138	61.3%
Ethnicity		
African American	7	3.1%
Asian/Pacific Islander	93	41.3%
Caucasian	44	19.6%
Latino or Hispanic	65	29.0%
Other	16	7.0%
Highest Education Level		
High school	64	28.5%
Some college	144	64.0%
Associates Degree	3	1.3%
Bachelor's degree	14	6.2%
Marital Status		
Single	199	88.4%
Married	13	5.8%
Divorced	3	1.3%
Living with a partner	6	2.7%
Other	4	1.8%
Household income		
Less than \$20,000	85	37.8%
\$20,000-\$39,999	23	10.2%
\$40,999-\$74,999	27	12.0%
Greater than \$75,000	90	40.0%
Occupation Categories		
Arts, Design, Entertainment, Sports, and Media	7	3.1%
Business, Management and Financial Operations	34	15.1%
Community and Social Services	4	1.8%
Education, Training, and Library Occupations	14	6.2%
Food Preparation and Serving	65	28.9%
Healthcare, Personal Care and Service Occupation Support	10	4.4%

Office and Administrative Support	10	4.4%
Sales	44	19.6%
Other	37	16.4%

Measures

All measures, if not indicated otherwise below, used a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Work engagement. Work engagement was measured using the 9-item short version of the Utrecht Work Engagement Scale (UWES-9; Schaufeli, Bakker, & Salanova, 2006). This scale measured the three sub-dimensions of work engagement: vigor (e.g. “At my work, I feel bursting with energy”), dedication (e.g. “I am proud on the work that I do”) and absorption (e.g. “I am immersed in my work”). The internal consistency (α) reported for the aggregated scale used in this study to measure work engagement was .90.

Trait emotional intelligence. Trait EI was measured using the 30-item TEIQue-SF which has been designed to measure global trait EI. The TEIQue-SF is derived from the full version of the TEIQue (Petrides & Furnham, 2003), which lists 15 different facets. Based primarily on the item correlations with the corresponding total subscale scores, two items from each of the 15 facets were used in the short form (e.g., “expressing my emotions with words is not a problem for me”; “I often find it difficult to see things from another person’s viewpoint”). Items were answered using a seven point Likert scale ranging from 1 (*completely disagree*) to 7 (*completely agree*). High levels of internal consistency for past studies have been reported for global trait EI ($\alpha = .89$ for

men; $\alpha = .88$ for women) (Cooper & Petrides, 2010). The internal consistency reliability reported for this scale was .90.

In-role job performance. In-role job performance was measured using nine items developed by Goodman and Svyantek (1999). Examples of these items include “achieves the objectives of the job” and “demonstrates expertise in all job-related tasks.” The scale’s aggregated internal consistency was .88.

Extra-role job performance. Extra-role performance was measured using eight items developed by Williams and Anderson (1991) which measured organizational citizenship behaviors (e.g., help others who have been absent, attendance at work is above the norm). The overall internal consistency for this scale was .72.

Procedure

Data was collected on-line for this study. Students were recruited through the University’s on-line human subject pool management database SONA system. In order to participate in this study, students had to be employed at the time of data collection (working more than five hours per week). Those who did participate in this study received credits which counted towards their course requirement. Participants were required to access the University’s SONA System, and were presented with a brief description of the study’s purpose, criteria for inclusion (i.e., that they must be working more than five hours per week), the amount of credits which would be awarded should they complete the study, and also the names and contact information of the researcher and the principal investigator of this study.

If students met the criteria for inclusion and chose to sign up for the study, they were asked to click on a link which took them directly to the external site of the survey. Students were then presented with a more detailed description of the study which included the type of questions that would be presented. Participants were also informed that the survey should take no more than 10 minutes to complete. In addition, participants were informed that their responses to the survey questions would remain anonymous and confidential, and that only members of the research project team would have access to the survey responses. Further, participants were reminded that at no time should they experience any physical or emotional discomfort while answering the survey questions, and that they had the right to refuse any question they did not wish to answer and were free to withdraw at any time. Once participants read the disclaimer and agreed to participate in the study, they were then required to answer a screening question which asked them the amount of hours they worked per week. If participants indicated that they worked five hours per week or less, they were taken to the end of the survey. Participants who met the screening criteria were asked to answer the survey questions regarding work engagement, trait EI, job performance behaviors, and basic demographic information.

Results

Descriptive statistics

Table 2 presents the means and standard deviations for each of the study's variables and the correlations among the variables. Overall, participants reported moderate levels of engagement in their job ($M = 3.25$, $SD = 0.85$). In addition, participants reported high levels of trait EI ($M = 5.11$, $SD = 0.80$). Concerning job performance behaviors, respondents viewed themselves as consistently able to meet the demands of their job and perform well on basic tasks ($M = 4.21$, $SD = 0.66$). Participants also reported moderate levels of extra-role behaviors such as helping new employees or taking a personal interest in others at work ($M = 3.97$, $SD = 0.59$).

Table 2

Means, Standard Deviations, and Correlations Among Variables

Variable	<i>M</i>	<i>SD</i>	1	2	3	4
1. Work engagement	3.25	.85	(.90)			
2. Global trait emotional intelligence	5.11	.80	.27**	(.90)		
3. In-role performance	4.21	.66	.22**	.47**	(.88)	
4. Extra-role performance	3.97	.59	.27**	.35**	.56**	(.72)

Note. $N = 225$.** $p < .01$ (two-tailed).

Cronbach alpha reliabilities for observed variables are in parentheses in the diagonal.

Inter-correlations Among the Variables Studied

As can be seen in Table 2, work engagement was significantly and positively related to both in-role performance ($r = .22, p < .001$) and extra-role performance ($r = .27, p < .001$). Such findings suggest that the more engaged employees were in their work, the better they performed. In addition, work engagement was also positively related to trait EI ($r = .27, p < .001$), indicating that employees who were more engaged in their work were more likely to demonstrate effective emotion management, sociability, self-control, and psychological and physical health on the job. Further, a positive and significant relationship was found between trait EI and both in-role performance ($r = .47, p < .001$) and extra-role performance ($r = .35, p < .001$). These findings indicate that those who displayed more trait EI behaviors (e.g., effectively manage emotions) reported that they performed better in their job role and were also more likely to go above and beyond on the job.

Test of Hypotheses

Hypothesis 1a and 1b stated that work engagement would significantly affect in-role performance (H1a) and extra-role performance (H1b), respectively. In order to test H1a, a linear regression was performed where work engagement was entered as the predictor and in-role performance as the outcome variable. As shown in Table 3, the results of this analysis demonstrated that work engagement was a significant predictor of in-role performance and accounted for 5% of the variance of in-role job performance (adjusted $R^2 = .05, F(1, 222) = 11.73, p < .01$). These results indicate that the more

engaged individuals were in their job, the more successfully they completed work-related tasks.

Similarly, for H1b, work engagement was entered as the predictor and extra-role performance as the outcome variable. As shown in Table 3, the results indicated that work engagement significantly predicted extra-role performance and accounted for 7% of variance in extra-role performance (adjusted $R^2 = .07$, $F(1, 222) = 16.85$, $p < .001$). These findings indicate that the more engaged workers were in their job, the more likely they went above and beyond what was expected of them in their job role. Thus, these results provided support for Hypothesis 1 (a-b).

Hypothesis 2 stated that work engagement would predict trait EI, and was tested with a linear regression. As shown in Table 3, work engagement significantly predicted trait IE and accounted for 7% of the variance of trait EI (adjusted $R^2 = .07$, $F(1, 207) = 16.50$, $p < .001$). These results indicate that the more engaged individuals were in their job, the more likely they were to demonstrate high levels of well-being, sociability, self-control, and effective emotion-management (i.e., trait EI). These findings provided support for Hypothesis 2.

Table 3

Results of the Linear Regression Analyses of Work Engagement Predicting In-Role Performance, Extra-Role Performance, and Trait EI.

Variables	In-role performance			Extra-role performance			Trait EI		
	R^2	β	SE	R^2	β	SE	R^2	β	SE
Work engagement	.05 *	.22 *	.05	.07 **	.27 **	.05	.07 **	.27 **	.06

* $p < .01$, ** $p < .001$.

Hypothesis 3a stated trait EI would predict in-role performance and Hypothesis 3b stated that trait EI would predict extra-role performance while holding the effect of work engagement constant. In order to determine whether trait EI would predict both in-role performance (H3a) and extra-role performance (H3b), a multiple regression analysis was conducted. Referring to Table 4, it was found that work engagement and trait EI significantly impacted in-role performance and accounted for 25% of the variance (adjusted $R^2 = .24$, $F(2, 206) = 33.50$, $p < .001$). Trait EI predicted in-role performance ($\beta = .44$, $t = 7.04$, $p < .001$) holding the effect of work engagement constant. These results showed that individuals who effectively managed their emotions on the job, were social, and demonstrated high levels of well-being were more likely to successfully complete job tasks, holding the effect of work engagement constant.

In addition to the above, a multiple regression analysis was also conducted to determine whether trait EI significantly impacted extra-role performance while holding work engagement constant (Hypothesis 3b) (see Table 4). Similar to the previous model, it was shown that work engagement and trait EI accounted for 15% of the variance of extra-role job performance (adjusted $R^2 = .14$, $F(2, 205) = 17.57$, $p < .001$). Trait EI predicted extra-role performance ($\beta = .29$, $t = 4.37$, $p < .001$) holding the effect of work engagement constant. These results indicated that the more workers who effectively managed their emotions, demonstrated strong social skills and self-control, and maintained psychological and physical health were more likely they are to go above and beyond what is expected of them in their job role, holding the effect of work engagement constant. Thus, these results demonstrated support for Hypothesis 3 (a-b).

Table 4

Results of the Multiple Regression Analysis of Trait EI Predicting In-Role and Extra-Role Performance.

Variable	In-role performance			Extra-role performance		
	<i>B</i>	<i>SE</i>	β	<i>B</i>	<i>SE</i>	β
Work engagement	.10	.05	.13 *	.13	.05	.18 **
Trait EI	.36	.05	.44 ***	.22	.05	.29 ***
R^2		.25 ***			.15 ***	
F		33.50			17.57	

* $p < .05$, ** $p < .01$, *** $p < .001$.

Hypothesis 4 (a-b) stated that the relationship between work engagement and both in-role and extra-role performance would be fully mediated by trait EI. In order to test for this effect, four conditions must be met as proposed by Baron and Kenny (1986) (see Figure 1): 1) X significantly predicts Y (path c), 2) X significantly predicts M (path a), 3) M significantly predicts Y controlling for X (path b), and 4) the direct effect of X on Y after controlling for M must not be statistically different from zero (path c'). When the effect of work engagement on in-role and extra-role performance decreases to zero after controlling for trait EI, full mediation is said to have occurred whereas when the effect of work engagement on in-role and extra-role performance decreases by a non-trivial amount, but not to zero, partial mediation is said to have occurred.

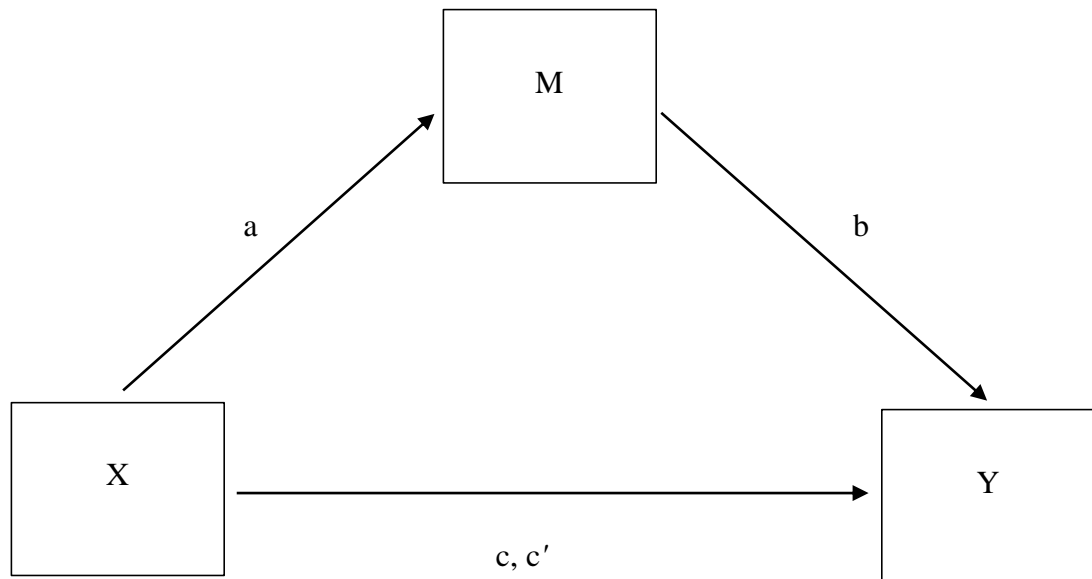


Figure 1: Baron and Kenny's (1986) Simple Mediation Model.

In order to test Hypothesis 4 (a-b), a hierarchical multiple regression analysis was conducted (Loi, Hang - Yue, & Foley, 2006). Table 5 lists the unstandardized regression coefficients, standard errors, and p values for this mediation analysis. For Hypothesis 4a, it was found that the first three steps to establish full mediation as proposed by Baron and Kenny (1986) were satisfied: work engagement predicted in-role performance ($b = .17, t = 3.43, p = .001$) and extra-role performance ($b = .19, t = 4.11, p < .001$) (path c) (Hypothesis 1 a-b); work engagement predicted trait EI ($b = .26, t = 4.06, p < .001$) (path a) (Hypothesis 2), and trait EI predicted in-role performance ($b = .36, t = 7.04, p < .001$) and extra-role performance ($b = .22, t = 4.37, p < .001$) after controlling for work engagement (path b) (Hypothesis 3 a-b).

However, based on this analysis, the fourth condition to establish mediation was not met (see Figure 2), such that the direct effect of work engagement on in-role

performance after controlling for trait EI was statistically different from zero ($b = .10, t = 2.10, p < .05$), thus rejecting Hypothesis 4a. In addition, the direct effect of work engagement on extra-role performance after controlling for trait EI was also statistically different from zero ($b = .13, t = 2.66, p < .05$) (see Figure 3), indicating that trait EI did not fully mediate work engagement and job performance. These results show that Hypothesis 4b was not supported.

Table 5

Results for the Mediated Effects of Trait EI on the Relationship between In-Role and Extra-Role Performance.

Model Tested	Path a	Path b	Path c	Path c'
Work engagement-Trait EI-In-role performance	.26 *** (.06)	.36 *** (.05)	.17 *** (.05)	.10 * (.05)
Work engagement-Trait EI-Extra-role performance	.26 *** (.06)	.22 *** (.05)	.19 *** (.05)	.13 ** (.05)

Note. This table displays unstandardized regression coefficients with standard errors.

* $p < .05$, ** $p < .01$, *** $p < .001$.

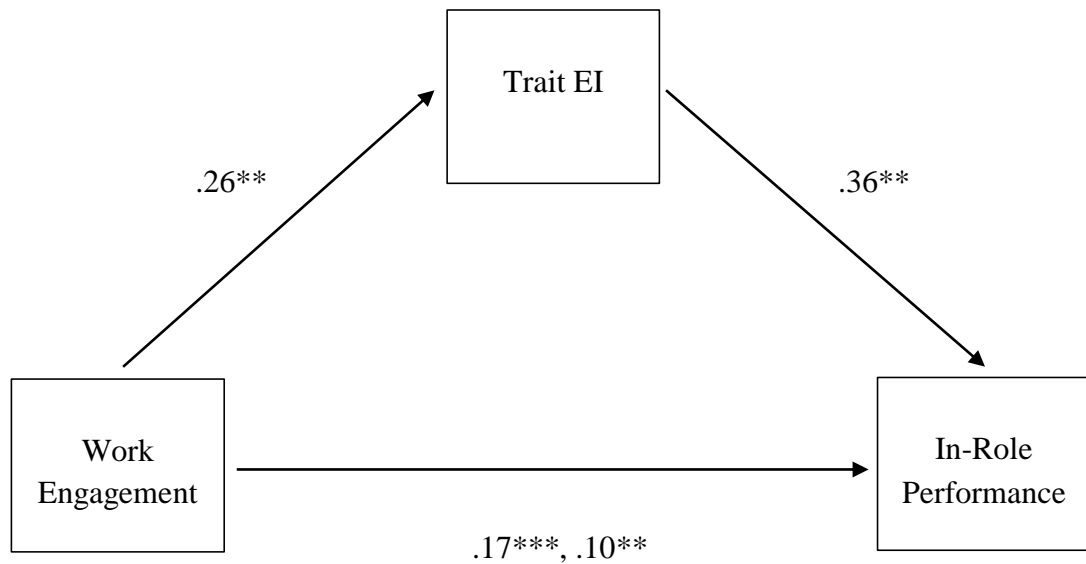


Figure 2. The mediated role of Trait EI for Work Engagement on In-role Job Performance.
 Note. * $p < .05$, ** $p < .01$, *** $p < .0$

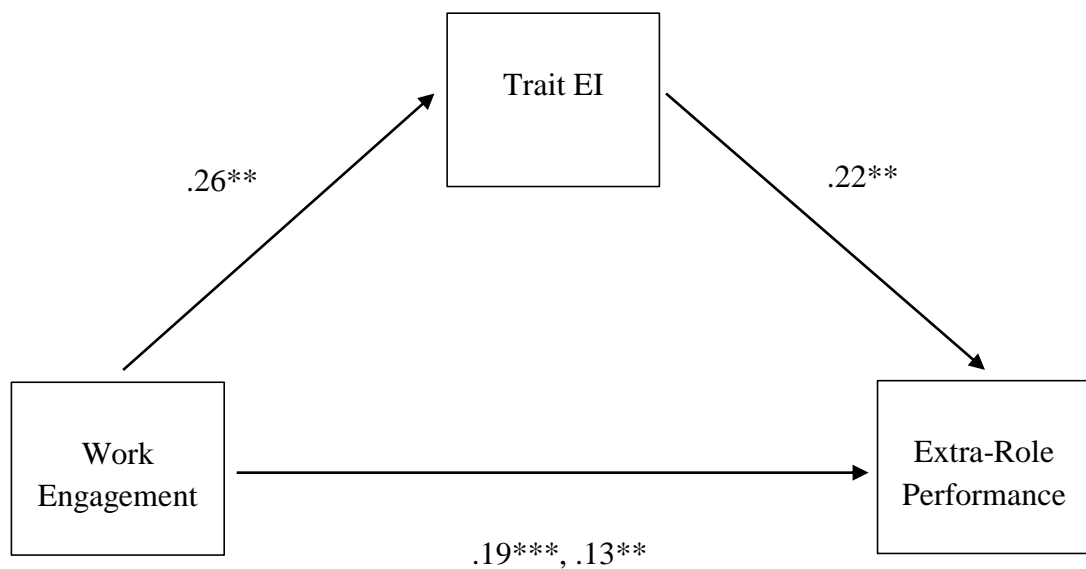


Figure 3. The mediated role of Trait EI for Work Engagement on Extra-role Job Performance.
 Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

As previously mentioned, in order to determine whether partial mediation occurred (Hypothesis 5 a-b), the direct effect (path c') must reduce by a non-trivial amount, but not to zero. As shown in Table 5, the results demonstrated that the unstandardized coefficient of work engagement was reduced by a small amount ($b = .17$ for path c, $b = .10$ for path c'), indicating that trait EI partially mediated the relationship between work engagement and in-role performance. In addition, similar results were found such that the unstandardized coefficient of work engagement was also reduced by a small amount ($b = .19$ for path c, $b = .13$ for path c'), indicating that work engagement and extra-role performance was partially mediated by trait EI. These findings indicate that it is partially through trait EI behaviors (e.g., effectively managing emotions, strong social skills) that engaged workers are able to improve both in-role and extra-role performance behaviors.

As critics have argued that the method proposed by Baron and Kenny (1986) above does not actually test the indirect effect of X on Y through M (path ab, see Figure 1), and that their method suffers from low statistical power (Preacher & Hayes, 2004), the Sobel test was conducted. This test produced an estimate of the indirect effect of trait EI on work engagement and both in-role and extra-role performance. According to the Sobel test results, work engagement significantly impacted both in-role job performance ($z = 3.49, p < .001$) and extra-role performance ($z = 2.94, p < .01$) through trait EI, indicating that it is partially through affect-related traits (effectively managing emotions, strong social skills, self-control and well-being) that individuals who are engaged in their job are able to improve both their in-role as well as extra-role performance behaviors.

Discussion

The ultimate goal of this study was to supplement the current literature by investigating the potential mechanisms through which work engagement affects job performance behaviors. Albeit the current research which suggests that certain personality variables (e.g., conscientiousness, optimism) serve as a conduit through which engaged workers can positively impact their job performance, researchers have yet to examine how affect-related traits may at least partly account for this relationship. First, drawing from the broaden and build theory of positive emotions (Frederickson, 2001), it was expected that because engaged workers are more likely to experience more positive emotions than those less engaged (Bakker et al., 2008), such individuals would be able to accumulate a wealth of resources used to achieve work-related goals, and ultimately improve job performance. Moreover, based on the COR theory (Hobfoll, 2001), it was predicted that personality traits such as trait EI can be used as personal resources to combat job stressors, gain additional resources, and improve important job-related outcomes, most notably, in-role and extra-role performance behaviors.

In order to test the potential mediating effects of trait EI on work engagement and both in-role and extra-role performance, it was necessary to first establish a significant relationship between work engagement and in-role and extra-role performance, work engagement and trait EI, and trait EI and both in-role and extra-role performance while holding work engagement constant (Baron & Kenny, 1986). As it was first purported that work engagement would significantly predict both in-role and extra-role performance, the results of this study demonstrated support for this supposition.

Specifically, individuals who reported high levels of work engagement were more likely to perform task-related behaviors (e.g., job-related tasks that are outlined in one's job description), as well as extra-role behaviors (e.g., helping a co-worker on a project to meet a deadline) at a high level.

The results of this study also indicated that work engagement significantly predicted trait EI, such that individuals engaged in their job were more likely to demonstrate effective emotion management of themselves and others, self-control, strong social skills, and a general sense of well-being. Furthermore, the relationship between trait EI and both in-role and extra-role performance were also reported as statistically significant, such that individuals who reported high levels of trait EI were more likely to perform well in regards to general tasks and also going above and beyond what is expected of them in their job role. Lastly, the results of this study identified trait EI as a partial mediator of the relationship between work engagement and in-role and extra-role performance. That is, it is partially through effectively managing one's emotions, utilizing self-control, developing strong relationships along with a strong sense of well-being (i.e., trait EI) that engaged workers can enhance both in-role and extra-role performance behaviors.

Theoretical and Practical Implications

Overall, the results of this study supplement the extant research surrounding the work engagement and job performance relationship. As noted earlier, researchers have reported similar findings of this study, such that work engagement does in fact positively

impact both in-role and extra-role performance (Bakker et al., 2012b; Kim et al., 2012; Xanthopoulou et al., 2008), and that the accumulation of job resources (Bakker et al., 2004; Leiter & Bakker, 2010), the experience of positive emotions (Frederickson, 2001; Frederickson & Branigan, 2005), and psychological and physical health (Salanova et al., 2010) make this relationship possible. In addition, the more recent work of Alessandri, Borgogni, Schaufeli, Caprara, and Consiglio (2014) reported a significant relationship between work engagement and performance (i.e., ratings obtained from supervisors), and also found work engagement to mediate the relationship between positive orientation (e.g., viewing and facing reality in a positive view) and performance. Such findings not only demonstrate the utility of engagement as an indicator of one's success at work, but also the influence that one's positive outlook on life (i.e., positive orientation) can have on the engagement-performance relationship.

In addition to the above, this study provided a novel perspective on work engagement and how this relates to trait EI. Specifically, the results indicated that engaged workers are more likely to report high levels of trait EI, suggesting that work engagement is indeed associated with specific affect-related personality traits that could be used as a personal resource in the workplace. These findings align with the COR theory (Hobfoll, 2001), which postulates that individuals strive to protect and retain valued resources, and that it is through certain personality traits (e.g., trait EI) that individuals are able to handle job stressors effectively and also obtain resources. The COR theory also proposes that one's positive personal orientation is the "key resource" in ultimately attaining successful performance on the job (Alessandri et al, 2014; Hobfoll,

2001). As research has demonstrated that engaged workers are more likely to display positive emotions (Bakker & Demerouti, 2008), it is through the use of these trait EI (i.e., effective emotion management, strong social skills, self-control, healthy well-being) that engaged workers can manage work demands, achieve work-related goals, and accumulate resources when necessary.

As research has suggested that personality characteristics can affect organizational performance (Le et al., 2011; Barrick & Mount, 2009), a dearth of studies have focused directly on emotion-related traits and how this may affect both in-role and extra-role performance behaviors on the job. As expected, the results of this study demonstrated that high levels of trait EI can impact job performance, supporting the work of Joseph and Newman (2010) who purported that it was generally through effective emotion management that one is able to positively impact performance. Moreover, employees who are reportedly high in trait EI can successfully manage work demands and are more likely to be self-motivated, which is important for successfully completing job-related tasks (i.e., in-role performance behaviors). In addition, employees who experience positive emotions such as happiness and optimism are more likely to accumulate resources, such as social support from peers, which provide the means to successfully perform additional tasks that are not necessarily expected of an employee (i.e., extra-role performance behaviors).

In regards to the mediating effects of trait EI, it was not clear whether the results would indicate trait EI as a full or partial mediator of work engagement and both in-role

and extra-role performance. Surprisingly, this study is the first to examine the mediating effect of trait EI on the work engagement-performance relationship in an applied setting. The results indicated that emotions of individuals who are engaged in their job can have an impact on important job outcomes, particularly in relation to job performance (in-role and extra-role performance). As previously discussed, this study indicated that engaged workers may be more likely to exhibit positive emotions (Bakker et al., 2008; Frederickson, 2001) and also use personality traits as personal resources to combat job stress and accumulate additional resources when needed to achieve work-related goals (Hobfoll, 2001). It is believed that these engaged workers can use emotion-related personality traits such as emotionality, self-control, sociability, and a healthy well-being to maintain their engagement levels, acquire additional resources, and consequently improve their in-role and extra-role performance behaviors.

It is important to note the findings listed above do indicate other mechanisms through which work engagement can affect job performance. As previously noted, the Big-5 traits and trait EI are strongly related (Pérez-González & Sanchez-Ruiz, 2014; Petrides et al., 2010), signifying that engaged workers may also draw upon other personality characteristics (e.g., emotional stability, conscientiousness) to positively impact job performance. For example, a study conducted by Medlin and Green (2009) who, among a sample of 426 part and full-time US workers, found that goal setting was predictive of work engagement, which in turn predicted workplace optimism, which then led to increased individual performance. This provides yet another example of a positive

personality trait which can serve as a mechanism through which engaged workers are able to impact their performance levels on the job.

The findings of this study provide important implications for organizations, particularly concerning selection and training initiatives. First, as this study indicated emotion-related traits can lead to marked improvements in job performance, organizations can supplement self-report inventories used for selection purposes with items that measure trait EI, particularly for job positions that are high in emotional labor (e.g., a customer service position where employees are expected to always greet customers with a smile) (Duke, Goodman, Treadway, & Breland, 2009). Currently, most self-report tests measure the Five-Factor Model which include conscientiousness and emotional stability, the two most valid predictors of overall work performance, followed by extraversion (Barrick, Field, & Gatewood, 2011). Albeit critics who have opposed the use of emotional intelligence for selection purposes (Barrick et al., 2011), this study suggests that this construct may be a potentially valid predictor of job performance. In addition, organizations can administer training to increase engagement levels among employees (as this is shown to directly impact performance levels). This can be accomplished through job-redesign approaches in which the employer focuses on increasing job and personal resources, or through more of a bottom up approach such as individual job crafting (see Berg, Dutton, & Wrzesniewski, 2008; Demerouti, Bakker, & Leiter, 2014). Further, employers can design interventions to promote individual resources and positive development through education opportunities to increase trait EI (Di Fabio & Saklofske, 2014).

Strengths, Limitations, and Future Research

This study was the first of its kind to examine trait EI as a mediator of both work engagement and job performance. This is an important first step in identifying the value that emotional intelligence as a personal resource can bring to an organization and its potential impact on performance, both at the individual and organizational level. As this provides great promise to the future research surrounding trait EI, this study is not without limitations, thus warranting future research. First, as the sample of this study was of psychology and business students, it is recommended for future research to use a sample of which working professionals from a variety of organizations and industries are selected, as this would improve the generalizability of the study's results. In addition, this study relied solely on self-report measures. For future studies, objective measures should also be used, particularly in measuring job performance (e.g., supervisor and peer ratings, financial data, and performance evaluation data) as this can ameliorate the potential issue of "faking", a bias that can affect the validity of the data (Barrick et al., 2011). It may also be worth adding additional mediators to the model tested in this study (e.g., the Big Five, workplace optimism) as this may provide additional explanatory power in regards to both in-role and extra-role performance. Lastly, due to the cross-sectional design of this study, it is not possible to draw any definite conclusions about causality. As such, it is recommended for future research to empirically test the research model of this study using a longitudinal research design as this may prove more beneficial in establishing causal links between work engagement, trait EI, and in-role and extra-role performance.

Conclusion

As the mediating effect of trait EI on the work engagement and job performance relationship has not yet been the topic of extensive research, this current study provides noteworthy information on affect-related traits and how these may serve as a mechanism through which engaged employees can improve performance-related behaviors.

Moreover, this study adds to previous research by emphasizing that work engagement is an important factor in predicting job-related behaviors, specifically in-role and extra-role performance. It is important for future research to examine additional mechanisms that may affect the work engagement and job performance relationship as this can provide invaluable information to organizations on how to improve their workforces' performance and thus the company's bottom line. In addition, gauging applicants' level of emotional intelligence before hiring might prove useful, particularly for job positions that are emotionally demanding (i.e., high in emotional labor). Future research may also want to consider supplying employees with emotion-related training and educational opportunities as this can serve as a useful intervention to increase emotional intelligence.

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Appendix

Questionnaire

Demographic questions:

What is your gender?

What is your age (in years)?

To which racial or ethnic group(s) do you most identify?

What is the highest level of education you have completed?

What is your current marital status?

What is your current household income?

Job-related questions:

Please select what best describes your current employment situation:

What is your current job title?

Work engagement:

At my job, I feel bursting with energy.

At my job, I feel strong and vigorous.

I am enthusiastic about my job.

My job inspires me.

When I get up in the morning, I feel like going to work.

I feel happy when I am working intensely.

I am proud of the work that I do.

I am immersed in my work.

I get carried away when I'm working.

Trait Emotional Intelligence:

Expressing my emotions with words is not a problem for me.

I often find it difficult to see things from another person's viewpoint.

On the whole, I'm a highly motivated person.

I usually find it difficult to regulate my emotions.

I generally don't find life enjoyable.

I can deal effectively with people.

I tend to change my mind frequently.

Many times, I can't figure out what emotion I'm feeling.

I feel that I have a number of good qualities.

I often find it difficult to stand up for my rights.

I'm usually able to influence the way other people feel.

On the whole, I have a gloomy perspective on most things.

Those close to me often complain that I don't treat them right.
I often find it difficult to adjust my life according to the circumstances.
On the whole, I'm able to deal with stress.
I often find it difficult to show my affection to those close to me.
I'm normally able to "get into someone's shoes" and experience their emotions.
I normally find it difficult to keep myself motivated.
I'm usually able to find ways to control my emotions when I want to.
On the whole, I'm pleased with my life.
I would describe myself as a good negotiator.
I tend to get involved in things I later wish I could get out of.
I often pause and think about my feelings.
I believe I'm full of personal strengths.
I tend to "back down" even if I know I'm right.
I don't seem to have any power at all over other people's feelings.
I generally believe that things will work out fine in my life.
I find it difficult to bond well even with those close to me.
Generally, I'm able to adapt to new environments.
Others admire me for being relaxed.

In-role performance:

I help others who have been absent.
I take the time to listen to co-worker's problems and worries.
I take a personal interest in other employees.
I go out of the way to help new employees.
I give advanced notice when unable to come to work.

Extra-role performance:

My attendance at work is above the norm.
I tend to take undeserved work breaks.
I adhere to informal rules devised to maintain order.
I fulfill all the requirements of my job.
I demonstrate expertise in all job-related tasks.
I could manage more responsibility in my job than is typically assigned to me.
I feel I appear suitable for a higher level role.
I am competent in all areas of my job, handling tasks with proficiency.
I perform well in my overall job by carrying out tasks as expected.