

**THE ROLE OF EMOTIONAL INTELLIGENCE AND JOB EMOTIONAL
REQUIREMENTS IN JOB ATTITUDES AND BEHAVIOR**

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ABSTRACT

A recent focus on understanding emotions in organizations has resulted in increased attention to the role of Emotional Intelligence (EI). Emotional Intelligence (EI) is a type of intelligence that helps individuals to perceive, assimilate, understand, and manage emotions (Mayer & Salovey, 1997). The aim of this study is to understand the role of EI on individual attitudinal and performance outcomes. Specifically, this paper argues that EI may be an important determinant of employee job satisfaction, turnover intention, and performance. Further, these effects are expected to be most pronounced in job functions with higher emotional requirements. Data collected from 278 law enforcement and healthcare employees provide no support for these propositions. These findings, their implications, and potential future studies are discussed.

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CHAPTER I: INTRODUCTION

The renewed interest in studying the role of emotions in the workplace has been so dynamic and extensive that it has been characterized as a paradigm shift in organizational behavior (Barsade, Brief, & Spataro, 2003). This resurgent interest has been relatively nascent, thus comprising a number of areas where further theoretical extensions and empirical analyses are not only recommended but required (Brief & Weiss, 2002). One such area covers the multitude of skills and behaviors that stem from individual differences relating to emotions. This study investigates the effect of one such individual difference--Emotional Intelligence.

Recent research has examined the role of cognitive, self-regulatory mechanisms that deal with emotional information. Since the publication of a seminal article by Thorndike (1920), scientists have debated and studied whether individuals can be distinguished based on their inherent ability to identify, differentiate, and manage emotions. Emotional Intelligence (EI) was proposed as one such ability by Salovey and Mayer (1989). EI is defined as the ability of individuals to identify, assimilate or use (in thought), understand, and manage emotions both in themselves and in others (Mayer & Salovey, 1997; Mayer, Salovey, & Caruso, 2004). Studies have shown that individuals with higher levels of this ability can process affective information better (Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006). This suggests that individuals with higher levels of EI have the ability to tolerate--even productively use--high levels of both positive and negative emotions.

This ability to identify, assimilate, understand, and manage emotions can have at least two important effects on individuals. First, in the cacophony of emotions that are produced in the workplace, EI can help individuals feel and express more positive emotions. This, in turn, allows them to develop more positive work-related attitudes. Secondly, EI can help individuals

perceive, understand, and manage the emotional requirements of jobs themselves, allowing them to perform at a higher level than individuals with lower EI. For example, a salesperson that can perceive, understand, and work with the emotions of customers is more likely to make sales. Police officers on patrol who can “read” the emotions of domestic dispute calls are more likely to deal with them productively. These abilities are even more crucial in certain occupations (e.g. law enforcement, healthcare, search and rescue) than others (e.g., software programming, accounting; Johnson et al., 2005). Individuals in the former occupations tend to encounter more emotionally demanding situations and stress than other occupations.

In spite of the close connection between Emotional Intelligence, job emotional requirements, and outcomes (Jordan, Ashkanasy, & Hartel, 2002), very few studies have examined their roles together. Even more rare are attempts to study all three constructs together in law enforcement and healthcare. The aim of this study was to address this gap in the literature by examining in detail the role of Emotional Intelligence in the relationship between emotional components of the job and work attitudes and workplace outcomes using a sample of law enforcement and healthcare employees.

CHAPTER II: LITERATURE REVIEW

This review will cover a number of research areas regarding the role of Emotional Intelligence in the workplace. First, I will introduce and review the construct of Emotional Intelligence (EI). Second, I will elaborate on the effect of EI on job attitudes and behavioral outcomes. Through these reviews and elaborations, I will offer hypotheses designed to extend our knowledge about the role played by EI in the formation of work attitudes and outcomes.

Emotional Intelligence

Traditionally, not much attention has been given to abilities dealing with emotions. Scientists began looking at such abilities closely after the proposition of social intelligence. Social intelligence was described as an ability of an individual to socially interact with other people (Thorndike, 1920). This proposition came at a time when the focus of intelligence-researchers was on the traditionally studied, abstract intelligence. The proposition of a different ability than the abstract intelligence aroused the interests of many researchers. It was interesting to study social intelligence because it offered an addition to abstract intelligence and dealt more with interpersonal interactions. However, the fact that this ability was conceptualized in the realm of interpersonal, social interactions also made it difficult for psychologists to clearly conceptualize and measure (Salovey & Mayer, 1989). In spite of these challenges, psychologists have continued their research on this construct because of the enormous amount of interest generated in the field.

In an effort to refine the concept of social/interpersonal ability and to afford accurate measurement, Salovey and Mayer (1989) proposed the construct of Emotional Intelligence (EI). EI, according to them, constitutes a set of abilities within the subset of social intelligence

specifically related to emotions. Since its first appearance, several models of EI have been proposed (Mayer, Salovey, Caruso, & Sternberg, 2000; Zeidner, Matthews, & Roberts, 2004; Zeidner, Roberts, & Matthews, 2004). Broadly, these models have been classified into ability-based models and mixed models (Mayer et al., 2000). The ability-based and mixed approaches differ in two ways: (1) in their conceptualization, and consequentially (2) in the way the construct is measured. The ability-based model defines EI as a collection of abilities specifically and directly dealing with emotions whereas the mixed models define EI as being a mixture of abilities, behaviors, and behavioral tendencies related to emotions and emotion-related constructs (e.g., optimism). The differences in conceptualizations also drive the differences in the measurement of EI. The measures associated with the ability-based model are mostly performance-based. This method is similar to the way intelligence (General Mental Ability; GMA) is measured. Here, respondents' EI is determined by their performance on emotion-based problems. Past research suggests that theoretically and empirically, EI is best measured using performance-based measures (Brackett & Mayer, 2003; Brackett et al., 2006; MacCann, Roberts, Matthews, & Zeidner, 2004). Moreover, because they deal mostly with behaviors and behavioral tendencies, most of the mixed models of EI are measured using self-report scales. Mayer and Salovey's (1997) model of EI and its corresponding measure is the most aligned and appropriate (Brackett & Mayer, 2003) to the original ability-based proposition of EI. Therefore, I will be following this model in this study (Mayer et al., 2000). In the discussion to follow, I will first provide an overview of that model. I will then explore the role played by EI by examining the two basic expressions¹ of EI: The ability to perceive, assimilate, understand, and manage emotions in oneself and in others.

¹ By expressions, I am referring to the target or location where the abilities of EI are directed. This will be explained in the next section.

Emotional Intelligence: The ability-based model

The original ability-based conceptualization developed by Salovey and Mayer (Mayer & Salovey, 1993; Mayer & Salovey, 1997; Mayer et al., 2004; Salovey & Mayer, 1989) defines EI as “the ability to perceive accurately, appraise and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth” (Mayer & Salovey, 1997, p. 10). Together, these four skills form the four corresponding branches of the ability-based framework (Mayer & Salovey, 1997; Mayer et al., 2004).

Branch 1 (perception of emotions) helps the individual to recognize his/her own emotions, emotions in events, those expressed by other people, and/or those in other visual stimuli. For example, some individuals might be better able to recognize that his/her friend is sad. It is this recognition or identification ability that is included in Branch 1.

Branch 2 (facilitation of thought by emotions) helps the individual to arrange, prioritize, and accomplish tasks with the help of observed or expressed emotions (e.g., anxiety leading to prioritizing the accomplishment of a work-related task over a vacation). This branch can be characterized as the “feeling” component of EI (Mayer et al., 2004, p. 199). For example, feeling a particular emotion such as happiness can prompt an individual to do a work-related task while feeling good, rather than a daily chore.

Branch 3 (understanding) helps individuals to better evaluate the complexities of certain emotions. This ability also can be directed at either an individual’s own emotions or others’ emotions. Some emotions (e.g., shame, embarrassment, guilt) are seen as being very complex and tightly embedded in the social characteristics of a situation. As a consequence, they require a more fine-grained understanding and higher levels of this ability (Adolphs, Tranel, & Buchanan,

2005; Shaw et al., 2005). The ability associated with this branch, then, helps individuals to understand a complex emotion (e.g., embarrassment as a combination of fear towards a social response and sadness). This branch also includes abilities related to knowing the trends associated with how emotions transition from one state to another. For example, perceived unfairness in the workplace might prompt an individual to first feel sad and then angry. Individuals with higher Branch 3 ability should be able to anticipate this change (i.e., from sadness to anger).

Branch 4 (managing) helps individuals to modify emotions for productive purposes (e.g., using sadness as a motivator to enhance task performance). Specifically, emotion management “is in the context of the individual’s goals, self-knowledge, and social awareness” (Mayer et al., 2004, p. 199). For example, a police officer in a SWAT team could use his/her abilities to motivate his or her team members to perform even under stressful conditions by modifying their emotions from fear or anger to calmness. This branch is also crucial in leadership situations where a leader has to change his or her followers’ emotions to both increase his or her influence and to achieve the goal at hand.

Although there is debate about how the branches are related and whether the four-branch structure is truly retrievable through factor analyses (Davies, Stankov, & Roberts, 1998; Gignac, 2005; Palmer, Gignac, Manocha, & Stough, 2005), sufficient evidence exists to use the four-factor ability based structure in research (Brackett, Salovey, & Geher, 2004; Cote & Miners, 2006). However, previous studies do suggest that the four dimensions are correlated to each other. For example, Mayer et al. (2003) tested and found support for one-, two- and four-factor models. Their study showed that Branches 1 and 2 together form an *experiential area*, whereas

branches 3 and 4 form a *strategic area*. To summarize, EI could be described as a four-, two-, or one-factor construct, with correlating components.

Two Unique Effects of Emotional Intelligence

Emotional Intelligence (EI) has at least two broad effects. The first is the ability to perceive, assimilate, understand, and manage one's own emotions. The second is the ability to perceive, assimilate, understand, and manage others' emotions.

First, the ability to perceive and deal with one's own emotions could influence attitudes (Brackett & Mayer, 2003). Broadly, attitudes can be described as an aggregation of affect and cognitions. Crano and Prislin (2006) define attitude as "evaluative judgments (of an individual) that integrate and summarize cognitive/affective reactions in relation to an attitude object" (p. 347). Because attitude formation involves the aggregation of affective experiences, the ability to perceive, facilitate, understand, and manage an individual's own emotions should be important. Previous studies, for example, suggest that EI could play an important role in affecting general attitudes towards life (life satisfaction: Brackett & Mayer, 2003). In this study, I examined the effect of EI on attitudes specifically related to jobs, i.e., job satisfaction.

EI's second effect is through a different pathway, i.e., dealing with emotions in other people and objects when jobs are closely associated with emotions. Here, EI functions as a "task facilitator" similar to cognitive ability in problem solving. EI helps individuals solve the emotional problems that arise directly in connection with the work activities they are doing. For example, a police officer could read the emotion of a suspect while questioning in order to understand the suspect's intentions or thoughts. As such, the intent of the present study was to understand the role of EI in affecting job attitudes such as job satisfaction and turnover

intentions, and job outcomes such as job performance. I address these constructs and their relation to EI next (see Figure 1).

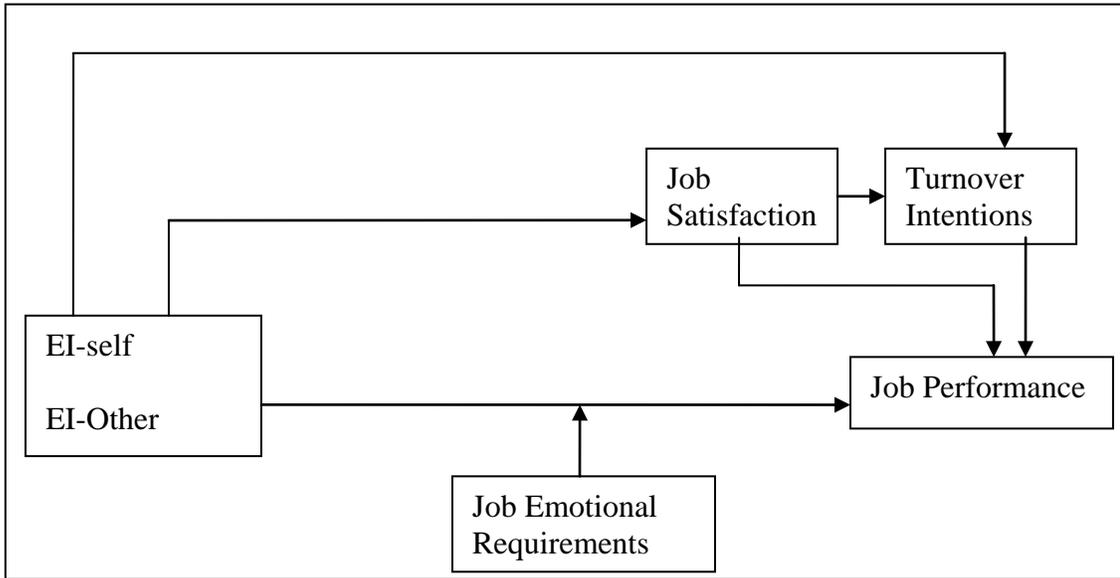


Figure 1: Model showing the effect of EI on job satisfaction, turnover intentions, and job performance. The moderating role of Job embedded emotional requirements is also shown.

Job Satisfaction

Job satisfaction may well be the most frequently studied job attitude. Job satisfaction has been defined as “multidimensional psychological responses to one’s job” having three components: “cognitive (evaluative), affective (or emotional), and behavioral” (Hulin, Judge, Borman, Ilgen, & Klimoski, 2003, p. 255). The *cognitive* component is formed by the individual’s evaluations of his or her job characteristics and job environment using some “standard” or “frame of reference” (Hulin et al., 2003, p. 267). The *affective* component consists of the overall pleasant or unpleasant feelings towards the job-object accumulated over time. The *behavioral* component includes the specific intentions and behaviors occurring as a result of the

formation of an attitude. All three components result in the formation and functioning of a job attitude.

Recently, research studies have demonstrated the importance of emotions in the formation of attitudes. This is likely the case because of the fact that attitudes like job satisfaction do have an affective component to them. Because previous studies have suggested that positive and negative affect biases an individual's cognitive judgments, it is also reasonable to assume that emotion would have a congruent influence on the individual's appraisal or evaluation of the job.

Weiss and Cropanzano (1996) have proposed that affect or emotion can be particularly crucial in the formation of attitudes. Their proposition included in the Affective Events Theory (AET), states that events occurring in the workplace lead to emotions. Such emotions directly and indirectly influence workplace outcomes, such as the formation of job-related attitudes. Positive emotions elicited in the workplace, for example, will lead to higher levels of job satisfaction and, consequently lower turnover intentions, whereas, negative emotions have the opposite effect (Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003). Because job attitudes are formed by the interaction and reciprocal influences of an individual's cognition, emotion, and behavior, the tendency of an individual to experience positive or negative affect would impact the person's beliefs and thoughts about his/her job.

Because of the purported dual-effects of Emotional Intelligence on cognition and emotion, I propose that it will specifically play an important role in the formation of an individual's job satisfaction. As discussed earlier, EI allows individuals to cognitively process affective information. Individuals having higher levels of EI-related abilities (perceiving, cognitively facilitating, understanding, and managing their emotions) should, therefore, be able

to better utilize their cognitive skills to deal with emotions emerging from their jobs and their job contexts and use them to form a more favorable appraisal about their job. EI makes the job seem better by mitigating the impact of negative emotions. The four branches of EI should also have unique but related effects on job satisfaction.

The perception branch (Branch 1) of EI should help individuals to recognize and identify emotions being elicited at the workplace. This includes emotions elicited by the social situations they face as well as their own emotions elicited as a result of an event. Once emotions are identified, individuals should then be able to use their ability to facilitate their thoughts and priorities at the workplace using those emotions. This is part of the second branch of EI, i.e., cognitive facilitation. As soon as an emotion is identified and used in thoughts, the individual may also use his/her ability to understand the finer details of emotions (Branch 3). For example, if the individual has encountered an event eliciting negative emotion at the workplace, he or she would be able to understand how sadness could give way to calmness over time. Individuals should also be able to use their emotion modification ability (Branch 4 of EI) to change their negative emotions into positive ones. Hence, to the extent that the individual uses his or her affective experiences to inform his or her cognitive evaluations, EI should have a direct positive effect on job satisfaction. Therefore:

Hypothesis 1: Emotional intelligence will directly and positively influence job satisfaction.

Turnover Intention

Turnover intention is defined as “one’s desire or willingness to leave an organization” (Thoresen et al., 2003). Turnover intention is a component of withdrawal behavior (Hulin, Roznowski, & Hachiya, 1985; Lee & Mitchell, 1994) and has long been associated with negative

job attitudes such as job dissatisfaction (Hulin et al., 1985; Mobley, 1977). Studying turnover intention is important as it is still considered to be one of the strongest predictors of actual turnover (Griffeth, Hom, & Gaertner, 2000).

Similar to the formation of job satisfaction or dissatisfaction, turnover intention also develops over time. Several antecedents have been attributed to the formation of turnover intention. One of the commonly studied antecedents is affect or emotion. Specifically, studies suggest that negative affect increases the formation of turnover intentions, whereas positive affect reduces them. For example, a recent meta-analysis found that positive affect ($r=-0.17$) and negative affect ($r=0.22$) influenced turnover intention accordingly (Thoresen et al., 2003). It has also been suggested that stressors frequently associated with negative affect increase turnover (Sonnentag, Frese, Borman, Ilgen, & Klimoski, 2003). Emotional Intelligence, an ability that helps individuals to deal with emotions, should thus play an important role in affecting turnover intention. Specifically, an individual's EI-abilities would act productively on emotions-related information that emerges from the workplace. This information is first perceived (Branch 1) as negative or positive according to the specific event occurring in the workplace. The perceived emotion is assimilated (Branch 2) into their thoughts and this will further affect the formation of turnover intentions. People with higher levels of this ability will be able to prioritize their thoughts well and adjust to the changing emotions in the workplace and, in the end, form lower levels of turnover intentions. Research also suggests that individuals experiencing higher levels of conflicts between the emotions that they feel and the emotions that they have to display (emotional labor) would form higher levels of turnover intentions (Abraham, 1999; Shaw, 1999). This is where the ability of individuals to understand (Branch 3) the fine details of the emotions plays a role. Once the emotions are understood, the modification ability (Branch 4) helps

individuals to then change negative emotions to less negative or even positive emotions. In short, these specific EI-abilities help individuals form more positive (or less negative) affect-laden attitudes towards his/her job which in turn reduce turnover intentions. Hence, I propose that higher levels of Emotional Intelligence will result in lower levels of turnover intentions.

Therefore:

Hypothesis 2: Emotional intelligence will directly and negatively influence turnover intention.

In addition to EI, research also suggests that job dissatisfaction can lead to the formation of more turnover intentions. The logic behind the effect of job dissatisfaction on turnover intention is obvious: An employee who is dissatisfied with his/her job is naturally more inclined to quitting than an employee who is satisfied with his/her job. This proposition has been researched earlier (Freund, 2005; Hang-yue, Foley, & Loi, 2005; Harrison, Newman, & Roth, 2006; van Breukelen, van der Vlist, & Steensma, 2004). To confirm their findings, I hypothesize the following:

Hypothesis 3: Job satisfaction will be directly and negatively related to turnover intentions.

Because EI is expected to influence job satisfaction and job satisfaction to impact turnover intentions, it could be proposed that job satisfaction could act as a mediator. Therefore, I propose the following mediation hypothesis:

Hypothesis 3a: The effect of Emotional Intelligence on turnover intentions will be partially mediated by job satisfaction.

Job Performance

Job performance is one of the most widely studied constructs in organizational behavior. Job performance has been defined as “the total expected value to the organization of the discrete behavioral episodes that an individual carries out over a standard period of time” (Motowidlo, Borman, Ilgen, & Klimoski, 2003, p. 39). Job performance is the result of actual behaviors rather than intent to behave in particular ways. Although earlier studies distinguished between different performance-related behaviors (e.g., in-role versus extra-role behaviors or contextual performance versus task performance), recent findings suggest that they share a great deal of construct space. Because of this, performance sometimes has been referred to as a general factor or a “p-factor” (Viswesvaran & Ones, 2000; Viswesvaran, Schmidt, & Ones, 2005).

Viswesvaran and Ones (2000) came to this conclusion after finding out that rater errors alone could not account for the shared variance exhibited between the supervisor ratings on each of these different performance-related behaviors. Even so, while studying the effects of Emotional Intelligence on performance it will be beneficial to examine both categories of performance behaviors. Recent studies suggest that task-related performance behaviors and contextual performance behaviors incrementally and uniquely contribute to overall job performance (Van Scotter & Motowidlo, 1996). Several of the task and contextual related behaviors in the work place have elements or components which use affective information. For example, praising a co-worker for a job well done is a behavior classified under contextual performance behaviors. I propose, in this study, that in order for an individual to successfully engage in these two behaviors (task and contextual), he or she should also be skillful in reading other people’s emotions and understanding their needs for positive emotions. I propose that individuals higher in EI will engage in more effective performance behaviors. Therefore:

Hypothesis 4: Emotional Intelligence will be directly and positively related to job performance.

Hypothesis 4a: Emotional Intelligence will be directly and positively related to task performance.

Hypothesis 4b: Emotional Intelligence will be directly and positively related to contextual performance.

Emotional Intelligence, as explained earlier, processes emotional information to help achieve outcomes. Therefore, a necessary condition for Emotional Intelligence to affect performance outcomes is the level of importance of emotions on a particular job. Thus, I would like to introduce the construct of “job emotional requirements” (JER) of a job and comment briefly on how Emotional Intelligence might play a role in them.

A job’s JER are the sum total of emotions that are produced on the job and must be handled in some way by the job incumbent. Such emotions and emotional requirements come from at least four sources. The first source is elements of the job context that can elicit emotions (e.g., coworkers, supervisors, working conditions). The second source comes from emotional stressors in the job itself. These include job tasks that are inherently emotion-producing. The third source is from emotional dissonance, i.e., the dissonance caused by required displays of affect that are not consistent with one’s true affective state. The final source is “job-embedded emotion-requirements”. The presence of these requirements requires the job holder to deal with emotions outside one’s own to be effective. These are addressed in turn more fully below.

Elements of the job context include all elements outside of the job itself that can produce emotion. Research suggests, for example, that positive events in the work environment such as praise from the supervisor or from a coworker can lead to the production of positive affect.

Negative events such as a well-liked coworker leaving the unit or problems getting along with a supervisor, on the other hand, can lead to negative affect (Mignonac & Herrbach, 2004).

One classification of events by Basch and Fisher (2004; Basch, Fisher, Ashkanasy, Hartel, & Zerbe, 2000) suggests that emotion eliciting events include acts of colleagues and acts of customers. On the positive side, acts of colleagues include colleagues sharing goals, seeking assistance, and responding positively to challenges. On the negative side, acts of colleagues include not being available when needed and resenting requests for assistance. Although these contextual elements primarily address others as sources of affect, other components are also likely sources of affect, such as pay, working conditions, promotional decisions, and the like. Individually and as a whole, these contextual components address the importance of the job environment in arousing and shaping individuals' affective states. The formation and nature of experienced affective states, however, is contingent on the extent to which an individual has the skill to suppress, magnify, or manipulate such emotions in oneself--a skill such as Emotional Intelligence.

Emotional stressors in the job itself include job elements that, themselves, act as a source for positive or negative emotions. Basch et al. (2000)'s classification points to several aspects of the job that can lead to positive and negative emotions. Examples of job components that can lead to positive emotions are when personal goals are being met and when a new project is given. Those that can lead to negative emotions are when critical equipment breaks down when it is most needed and poor-quality resources. Because these stimuli originate from the job itself, certain kinds of jobs are likely to have a higher probability of possessing these characteristics than others. For example, a computer job requiring constant work on the frequent malfunctioning of software is more likely to elicit more negative emotions than a similar job where the software

functions smoothly. As with job context stressors, the extent to which individuals have the skill to suppress, magnify, or manipulate such emotions is likely to influence their job attitudes and other workplace outcomes.

Emotional dissonance is a term closely related to emotional labor. Emotional labor refers to the active regulation of emotional displays by individuals to follow organizational rules (Diefendorff & Gosserand, 2003). The reason why organizations have these display rules is to facilitate task performance and goal achievement. For example, a car salesperson can invoke positive feelings and more encouragement in customers and thus attain his or her sales quota faster if he or she displays positive emotions even when not feeling that way. However, this also presents a dilemma. If an individual's felt emotion differs from the display rule (e.g., an emotionally upset receptionist appearing very cheerful), emotional dissonance occurs. Dissonance between what the individual feels and what is required by the organization/job leads to cognitive and emotional tension that can result in stress and, over time, negative job attitudes (Lewig & Dollard, 2003; Zapf & Holz, 2006). As with the other sources of affect above, Rubin et al. (2005) suggests that EI can play an important role in reducing this kind of emotional dissonance.

Finally, *job-embedded emotional requirements* are job components that require skill in perceiving, assessing, analyzing, and using emotions to perform the job successfully. Of course, such requirements alone can be an emotional stressor like those discussed above; but these speak to a different issue--the extent to which a jobholder can work productively with the emotions of others. For example, creating a background score for a sad movie scene requires that a composer know the type of music and sounds that would elicit sadness in the audience at that particular point in a movie. The composer's performance effectiveness depends on how well he or she can

assess the audience's emotional state as it enters the scene and what sorts of music will move them from that state to another emotional state desired by the director. Similarly, a patrolling police officer's performance can be affected by how well he or she can identify and deal with emotions in a suspect or, say, parties to a domestic dispute.

Some jobs are inherently associated with higher amounts of the above-mentioned characteristics. Thus, they also consist of, or elicit, higher amounts of emotions. To the extent to which emotions are embedded in (e.g., car sales) or are closely related to (e.g., army patrol) those job tasks, the skills that individuals use to handle emotions will be highly important to successfully perform in such jobs (Miller, 2004). In this case, the individual directly uses EI-skills to read/understand others' emotions and subsequently manage the emotions in a positive way leading directly to higher performance. To continue with the example of a car salesperson, in order to perform well, he or she should be able to read and understand the potential customers' emotions. The salesperson should also be able to manage those emotions so that the customer, in the end, feels good about the purchase. Therefore, EI should have a greater effect on job performance the more job emotional requirements play a role in the job. The effect of EI on job performance, thus, could be moderated by the levels of JER.

Hypothesis 5: Job emotional requirements will moderate the effect of EI on task performance. The higher the level of JER, the higher will be the effect of EI on task performance.

Previous studies have also found that job satisfaction has a moderate effect on performance behaviors (Harrison et al., 2006; Judge, Thoresen, Bono, & Patton, 2001). Individuals who are satisfied with their jobs typically exert more effort and have fewer distractions while performing their jobs. This is also partly because of the positive affect associated with higher levels of job satisfaction. Previous research suggests that positive affect

and job satisfaction are closely related (Thoresen et al., 2003). Since positive affect is also suggested to increase effort and result in higher levels of performance (Seo, 2004; Seo, Barrett, & Bartunek, 2006), it would be reasonable to expect that higher levels of job satisfaction will be associated with higher levels of job performance. Therefore:

Hypothesis 6: Job satisfaction will be directly and positively related to job performance.

Hypothesis 6a: Job satisfaction will be directly and positively related to task performance.

Hypothesis 6b: Job satisfaction will be directly and positively related to contextual performance.

Because EI influences job satisfaction, the influence of EI on job performance could also be partially mediated by job satisfaction.

Hypothesis 7: The effect of EI on job performance will be partially mediated by job satisfaction.

Hypothesis 7a: The effect of EI on task performance will be partially mediated by job satisfaction.

Hypothesis 7b: The effect of EI on contextual performance will be partially mediated by job satisfaction.

Turnover intention, as explained earlier, is a subset of a broad “withdrawal” construct. Previous research suggests that increased turnover intentions can exert a negative influence on job performance (Harrison et al., 2006). This is explained as an effect caused by the formation of negative attitudes about the work and a reduction in the commitment towards the organization as well as the job. Therefore, I hypothesize the following:

Hypothesis 8: Turnover intentions will be directly and negatively associated with job performance.

Hypothesis 8a: Turnover intentions will be directly and negatively associated with task performance.

Hypothesis 8b: Turnover intentions will be directly and negatively associated with contextual performance.

Because EI has both an indirect effect (through job satisfaction) and a direct effect on turnover intentions, it is reasonable to hypothesize that the effect of EI on performance will be partially mediated by turnover intentions.

Hypothesis 9: The effect of Emotional Intelligence on job performance will be partially mediated by turnover intentions.

Hypothesis 9a: The effect of Emotional Intelligence on task performance will be partially mediated by turnover intentions.

Hypothesis 9b: The effect of Emotional Intelligence on contextual performance will be partially mediated by turnover intentions.

The Role of IQ and Personality

Several studies indicate that Intelligence Quotient (IQ), a measure of cognitive ability, correlates moderately with Emotional Intelligence (Mayer & Salovey, 1993; Cote & Miners, 2006). EI, according to its proponents, uses the same kind of cognitive processing mechanisms used in IQ. Just as the cognitive mechanisms in IQ process abstract ideas and concepts, EI uses such mechanisms to process emotional information (e.g., emotional knowledge such as the meaning of a smile as an expression of happiness). This similarity in basic mechanisms has been

acknowledged by Mayer and Salovey (1993) in description, analysis, and empirical studies. Studies have also suggested that IQ is a reliable predictor of job performance (Schmidt & Hunter, 1998). Because of the theoretical overlap and the similar predictive tendencies of IQ and EI, it would be a valuable contribution to the literature to evaluate the uniqueness of these two variables in predicting performance.

Previous studies suggest that EI-scores obtained based on the ability-based model do relate weakly (substantially less relation compared to self-reported measures of EI) (Brackett et al., 2006) to personality dimensions (Brackett & Mayer, 2003; Schulte, Ree, & Carretta, 2004). Depending on the sample/study, however, the magnitudes of the relationships have differed. This study proposes that EI impacts attitudes and outcomes because emotions are elicited and subsequently handled by EI in the workplace. My aim is also to understand whether EI contributed over and above the other individual differences already found to impact such attitudes and outcomes (Bono & Judge, 2003; Bono & Vey, 2007). Therefore, in this study, the positive and negative emotional aspects of personality, i.e., extraversion and neuroticism respectively, will be considered. Previous studies suggest that extraversion and neuroticism facilitate the formation and experience of positive and negative affect respectively and could also indicate underlying disposition for positive and negative affect (Higgins, 1997; Costa and McCrae, 1980). Recent studies also indicate that extraverted and neurotic individuals focus more on positive and negative information, thus leading to positive and negative affect respectively (Noguchi, Gohm, & Dalsky, 2006). Since my propositions about the effects of EI on job satisfaction, turnover intention, and job performance were based on the ability of individuals to use EI to reduce negative affect and enhance positive affect, these variables were relevant to be used as psychological controls. Therefore, extraversion and neuroticism will be potentially used

in hierarchical regression analyses with the goal of investigating if EI contributes over and above neuroticism and extroversion to job satisfaction, turnover intentions, and job performance.

CHAPTER III: METHODS

Participants

Participants were recruited from law enforcement and healthcare organizations. The law enforcement sample (91.36% of the total sample) included both sworn and non-sworn employees of nine police departments in two Mid-Atlantic states (Table 1).

Table 1: Organizations and response rates

Organization	Total sample (Number of employees invited)	Number of respondents	Response rate
<i>Police Departments (PD)</i>			
PD #1	13	10	76.92%
PD #2	427	78	18.27%
PD #3	6	6	100.00%
PD #4	191	18	9.42%
PD #5	460	39	8.48%
PD #6	34	10	29.41%
PD #7	12	5	41.67%
PD #8	35	15	42.86%
PD #9	100	73	73.00%
Healthcare System	220	24	10.91%
Total	1498	278	18.56%

The healthcare sample (8.63%) consisted of employees of a large healthcare organization in a Mid-Atlantic state. The sample make-up and response rates are provided in Tables 1 and 2.

Overall, the response rate was 18.56%. Together, the number of participating employees was 278. Among the participants, 76% were males. Among the law enforcement sample, the majority (62.3%; Table 2) consisted of patrolling police officers. In the case of the healthcare sample, 57.69% consisted of medical support personnel (Table 2). Participation was voluntary. The study

was approved by the Institutional Review Board at Virginia Tech and all data were kept confidential.

Table 2: Sample Characteristics

Characteristic	Percentage of Respondents
Job Type	
<i>Law Enforcement</i>	
Administrative	7.54%
Partially administrative	3.97%
Investigative	26.19%
Patrol	62.30%
Total	100.00%
<i>Healthcare Organization</i>	
Medical support staff (e.g., pharmacy employee)	57.69%
Administrative (e.g., benefits specialist)	42.31%
Total	100.00%
Gender	
Male	76.60%
Female	23.40%
Total	100.00%

Design and Procedure

A survey research design was used for this research. Subjects were recruited through contacts at the different organizations. The surveys and the directions were e-mailed or distributed in the paper-pencil format² to the respondents. The subjects completed the survey at a time convenient to them or during their work hours (contingent on permission from the organization). All responses were recorded on a secure site hosted by survey.vt.edu, submitted in person to the investigator, or mailed. All data were kept confidential with the primary investigator.

² The delivery format (regular mail/paper-pencil/e-mail) depended on organizational preferences.

Online Version: The online surveys had two parts. Part 1 included the Job Emotional Requirements (JER) measure and the EI measure (MSCEIT). Subjects who volunteered for the study were e-mailed survey invitations. The e-mail described that the study was about the role of emotions and emotional skills in the workplace. If the subject decided to participate, they clicked on a link which took them to the survey website. The survey had both demographic and organizational questions (e.g., identification, age, gender, name of the organization). Then, the respondent completed the JER. Once the JER was submitted, respondents were provided with an additional link to access the MSCEIT, the final survey in part 1. Part 2 of the survey was sent approximately 1 to 2 weeks after part 1. Part 2 was accessed (in the same way as part 1) by the subjects and contained measures of job satisfaction, turnover intention, and the personality survey. After they completed the survey, another link directed them to the Wonderlic's website. The respondents completed the wonderlic personnel test (WPT; measures GMA/IQ). The test was timed and the respondents had 12 minutes to complete.

Performance was measured using supervisory ratings. The procedures for collecting supervisory ratings were similar to that used for employees. An e-mail was sent to the supervisors informing them about the purpose of the study. Clicking on the survey link in the e-mail took them to the survey website and, like employees, they had to enter their demographic and organizational information. After that, the supervisors rated their subordinates on various performance behaviors. Often more than one employee under a supervisor participated in the survey. To accommodate this possibility, a link was provided at the end of the supervisor survey to rate the next participant. The names of the participating employees that work under them were provided in the e-mail.

Paper-pencil Version: This session was administered on-site by the author, mailed directly to employees who volunteered, or administered through a contact person. Subjects completed the survey in two parts. Part 1 consisted of a 12 minute timed paper-pencil version of the Wonderlic Personnel Test that was administered in a room. Part 2 consisted of the rest of the surveys: MSCEIT, Job Satisfaction, Turnover Intention, JER, and the personality survey. Around the same time, the supervisors also completed the surveys for the participants under them in the paper-pencil format. Additionally, paper-pencil surveys were mailed directly to some participants who requested that delivery option. Also, 9 participants received the surveys through a contact person at their respective organizations, again because of organizational and administrative preferences. Here, the contact person, who was assigned by the Chief of Police (e.g. administrative assistant), helped distribute the surveys to volunteers. Then, those volunteers filled those surveys at their own convenience, alone. To ensure confidentiality, self addressed, stamped envelopes were also provided so that the respondents could mail it directly back to me. However, in such situations, I was unable to administer the WPT. This was because the WPT can only be administered in person by the primary investigator and had to be timed.

Irrespective of the mode of administration, all efforts were made to stress the confidentiality of the surveys. In the case of mailed surveys, the respondents were provided with stamped, self-addressed envelopes facilitating the return of the survey without going through a contact person or intermediary.

Measures

Emotional Intelligence (EI) was measured by the Mayer Salovey Caruso Emotional Intelligence Test (MSCEIT v.2.0). This measure has been validated in previous studies. Farrelly

and Austin (2007) found that MSCEIT scores related to emotion-based tasks. Another study found that MSCEIT scores were related to interpersonal performance (Rode, Mooney, & Arthaud-Day, 2007). Other studies have shown that MSCEIT is related to social functioning (Brackett et al., 2006) and well being (Brackett and Mayer, 2003).

The test has eight types of tasks, two each for measuring the four branches (Mayer et al., 2003). The first branch (*perceiving*) was measured by the faces tasks (35 items) and the designs tasks (35 items). In these tasks, the respondent indicated the amount of the seven basic emotions expressed by the face or design shown in the item. The second branch (*cognitive facilitation*) was measured using facilitation (15 items) and sensation (15 items) tasks. In the facilitation task, the respondents indicated how an emotion would help them accomplish a task. In the sensation task, the respondents indicated how an emotion would help them feel another sensation (e.g., hot vs. cold). The third branch (*understanding*) was measured using blends (13 items) and progressions tasks (12 items). In the blends task, the subject identified individual emotions that constitute a complex emotion. In the progressions task, the respondent predicted the sequence of emotions. Branch 4 (*management*) was measured by two tasks. In the emotion management task (five parcels, four responses each), the respondent suggested the most appropriate action to elicit a particular emotion. In the emotional relationships task (three parcels, three responses), the respondents evaluated actions of one person to modify another person's feelings.

Different from intelligence tests, there is not an *objectively* correct answer for the ability-based EI tests. Consequently, researchers have developed at least three different ways to score such tests. They are *target*, *general (sample) consensus*, and *expert consensus* scoring methods. To explain these three different scoring methods, I will use the example of the faces task mentioned above. In the target scoring method, the person whose face is in the picture (target)

provides the correct answer (his or her expressed emotion). The test taker's response to the task is scored by how accurately it reflects the response of the target (Mayer & Geher, 1996). In the consensus scoring method, the test taker's response to this task is scored based on the proportion of individuals in a large sample of respondents that selected the same answer for the task. The rationale behind this method is that people have a commonly agreed upon way of expressing emotion (MacCann et al., 2004). In the expert scoring method, the consensus-answer of a small group of experts is used to score the same task. The rationale behind this method is that experts who are well versed in psychology and emotions would be better able to discern the amount and nature of emotions. Therefore, the test taker's answer to the task is scored by weighting the answer by the proportion of the experts that agree with that answer (Mayer & Salovey, 2003). With MSCEIT, expert and consensus scoring options are available (Mayer et al., 2003). In this study, the test was scored based on the expert consensus scoring method because previous studies show that while there is general similarity between expert and sample consensus, experts had better agreement and their responses converged more (Mayer et al., 2003). Standardized scores with 100 as the mean and a standard deviation of 15 (similar to the IQ scores) were used. The branch scores were then combined to form a total score (EI-Total). Employees completed this measure.

Job satisfaction was measured by 11 items. Job satisfaction, as mentioned earlier, is a job related attitude. Five items modified from Brayfield and Rothe (1951) were used. That measure has been used recently and was found to be very reliable (Judge, Scott, & Ilies, 2006; example of an item is "I feel fairly satisfied with my job"). These items measured the individual's satisfaction with the tasks related to the job. Additionally, satisfaction with supervisors and coworkers were also measured using six items developed for this study (e.g. "I find my coworkers pleasant to

work with”). Responses were on a 5-point Likert scale (Strongly Disagree to Strongly Agree). The full measure is given in Appendix A. Employees completed this measure.

Turnover intention was measured using five items taken from Wayne, Shore, and Liden, (1997). Turnover intention, as described earlier, is a negative job attitude included under withdrawal behaviors. The items were measured using 5-point Likert scales (Strongly Disagree to Strongly Agree). The measure used in Wayne, Shore, and Liden, (1997) included three items from Landau & Hammer (1986; e.g., “I am actively looking for a job outside this organization”) Two more items were taken from the Michigan Organizational Assessment Questionnaire (Jenkins, Nadler, Lawler, & Cammann, 1975; e.g., “I often think about quitting my job and I think I will be working in this company 5 years from now”; reverse scored). The full measure is given in Appendix B. Employees completed this measure.

Job performance: Job performance behaviors were measured using 16 items. This measure captures the various performance-related behaviors included under both task and contextual performance. Thirteen items were modified from Wayne et al., (1997); Hochwarter, Witt, Treadway, and Ferris (2006); Witt and Carlson (2006); and Van Scotter and Motowildo (1996). Additionally, three items were developed for this study. Eight items measured task performance (e.g., “This employee has been performing his/her job the way you would like it to be performed”). Eight items measured contextual performance (e.g., “This employee says things to make people feel good about themselves or the work group”). The full measures for all the performance dimensions are given in Appendix C. The items were measured using 5-point Likert scales (Strongly Disagree to Strongly Agree). The measure was completed by supervisors of participating employees.

Job emotional requirements: Items adapted from Miller (2004) were used to measure this variable (Appendix D & E). The items measured JER from the four sources described earlier. (1) Contextual source (e.g. “In this type of work, how important is it to know when client, customer/coworker is scared, angry or upset”); (2) Task source (e.g. “In this type of work, how important is it to be sensitive to how others are feeling”); (3) Emotional Dissonance (e.g. “In this type of work, how important is it to express emotions that are different from those you are actually feeling”); (4) Job source (e.g. “In this type of work, how important is it to help another person feel a certain emotion”). The original items developed by Miller (2004) categorized by the different sources of job emotional requirements used in this study and are given in Appendix E. This measure had 17 items that assessed the importance of each of the abilities related to EI to the particular job task. Ratings were obtained from the employees. The response options for this measure were: 1= not important, 2 = slightly important, 3=important, 4 = very important. Employees completed this measure.

Other Individual Difference Variables

General mental ability (GMA): Past research has shown that GMA is one of the strongest predictors of job performance (Schmidt & Hunter, 1998). Individuals use their GMA to process information about their jobs and also learn faster. The 50-item Wonderlic Personnel Test was used to measure cognitive ability. WPT is highly correlated to intelligence measured by the Weschler Adult Intelligence Scale and is a well established indicator of GMA (Grubb, Whetzel, & McDaniel, 2004). This measure was completed by the employees.

Personality: Most of the personality variables are related to job performance and attitudes (Barrick & Mount, 1991; Mount, Ilies, & Johnson, 2006). As explained earlier, personality variables such as neuroticism and extraversion are often argued to be similar to EI (Schulte et al.,

2004). Hence, they are frequently used as predictors in EI-studies (Cote & Miners, 2006; Matthews et al., 2006). Therefore, neuroticism and extraversion were measured (1) in order to see whether EI had unique effects on dependent variables over and above those two personality variables; and (2) to evaluate how each personality variable is related to the specific dimensions of EI. Extraversion and neuroticism were measured by 20-items from the International Personality Item Pool (IPIP; Goldberg, 2001). Each of the two factors was measured by 10 items. The employees completed the full IPIP survey which included neuroticism, extraversion, conscientiousness, openness to experience, and agreeableness.

Demographic Variables

Age, gender, job seniority, and educational attainment were also measured. Gender was coded as 0 for male and 1 for female. Job seniority was measured by the number of years on the job. Educational attainment was coded as follows: 1 = High school, 2 = Undergraduate degree; 3 = Graduate degree. Age has been suggested to play a role in the development of EI skills (Mayer et al., 2003). Empirical studies have also suggested the effect of age (Van Rooy, Viswesvaran, Bar-On, Maree, & Elias, 2007), especially that EI skills develop over time, peaking in middle-aged adults (Chapman & Hayslip, 2006; Kafetsios, 2004). The effect of gender on EI has been well supported (e.g., Schulte et al., 2004). Females have been shown to perform much better on EI tests than males (Van Rooy et al., 2007). Job seniority and educational attainment can also impact job performance. These demographic variables were measured for use as possible control variables.

CHAPTER IV: RESULTS

The results of this study were examined in three steps. First, I will discuss the handling of missing data. Missing data were handled by imputing data using maximum likelihood estimation. Second, I will present the analytical methods used to test the hypotheses and present the results. The third step will include further analyses of the statistically significant results derived from the second step.

Handling of Missing Data

A total of 278 people responded to one or more of my surveys. As with most field studies, there were several missing data points. Several factors contributed to the missing data. First, the study involved questionnaires that demanded approximately 60 to 75 minutes to complete. Some questionnaires (e.g., MSCEIT, WPT) were also cognitively demanding because they were problem-solving in nature. This demand resulted in many respondents not taking the survey or not completing it. Second, given that most of the respondents had active field-based law enforcement (e.g., patrol) or healthcare (e.g., nurse) duties, they had to often interrupt their participation. Additionally, because of the limitations of the survey software, it was not possible either to recover partially entered data or to come back and complete where respondents left off. However, from an EI-perspective, the very high-emotion, high-stress, and uncertain nature of the important work done by law enforcement and healthcare employees made it even more interesting to study. Because of the limited ability-based EI research done in such populations, the data they provide, however incomplete, are immensely valuable.

Missing data has been shown to be a common occurrence in research studies (Horton & Kleinman, 2007). In spite of its prevalence, empirical evidence suggests that most studies do not report the handling of missing data (Fichman & Cummings, 2003). In a classic article by Roth

(1994), it was found that a large percentage of articles in two prominent journals did not mention missing data (*Journal of Applied Psychology*-42%; *Personnel Psychology*-77% between 1989 and 1991). Missing data and the traditional listwise deletion methods to deal with them result in at least two problems: (1) loss of statistical power (Little & Rubin 2002 c.f. Horton & Kleinman, 2007), and (2) potential introduction of systematic bias (e.g., Fichman & Cummings, 2003). Statistical power is a function of sample size and the loss of data points results in a reduced capacity to isolate statistically significant relationships. Researchers often employ listwise deletion as a simple method to handle missing data. Using listwise deletion would reduce the number of data available for analyses in this study from 278 to 88³. In addition to the loss of power, this also increases the potential for the available data to be biased. This bias occurs because deleting cases with missing data points could lead to a data set that is systematically different from the whole sample that was surveyed. This could limit generalization of the results to the entire population.

In order to assess the possible bias due to missing values, it is necessary to first define the three conditions of missing data: missing not at random (MNAR; where the missingness depends on the missing values, also abbreviated as non-ignorable or NINR), missing completely at random (MCAR; where the missingness does not depend on the missing values or the observed values), and missing at random (MAR; where the missingness might depend on the observed values but not on the missing values)⁴. The MNAR/NINR condition is usually limited to a dataset in which the missing values cannot be predicted by any of the observed values for that respondent. In this case, it is difficult to impute data. If the data are MCAR, then, listwise deletion can be used since the deletion of data-points where there are missing values will not bias

³ This reduction is based on the inclusion of only the main variables enlisted in the main hypotheses.

⁴ For detailed reviews on this topic, please see Horton and Kleinman, 2007; Fichman and Cummings, 2003.

remaining data. This is because the missing values themselves are occurring at random. If the data are not found to be MCAR, then, it is possible that the data could meet the MAR condition. This can be confirmed through Little's (1988) test. When large amounts of observed data are available to be used to predict the missing values, methodologists suggest that imputation methods can be used after confirming that the data are not MCAR, and further making the assumption that the data are MAR (Fichman & Cummings, 2003).

First, a Missing Values Analysis (MVA) was conducted using the SPSS MVA module. Little (1988)'s test was performed to test whether the data were MCAR, which would indicate whether listwise deletion is appropriate or not. The test indicated that the MCAR assumption was not met ($\chi^2_{df=699} = 777.13; p=0.02$). Because the data were not missing completely at random, listwise deletion is not the best alternative. As explained earlier, listwise deletion will bias results (Fichman & Cummings, 2003).

Therefore, to facilitate efficient analyses and better accuracy in the estimation of parameters, data were imputed with Maximum Likelihood Estimation (MLE) using the Expectation Maximization (EM) algorithm in SPSS. These data were used in all subsequent correlation and regression analyses. The EM algorithm uses an iterative two step process to impute missing data. First, the program uses multiple regression equations to predict and input values using the data that are present. Second, the program uses the statistics calculated in the earlier step to further calculate means and covariances (Enders, 2001). Using these statistics, the program then estimates values for the missing data. This process is repeated several times until differences in covariances are lesser than a specified criterion (Enders, 2001). A comparison of the raw and imputed descriptive statistics and correlations can be done using tables 3, 4, 5, and 6. The reliabilities of all the measures, shown by the alpha levels are given on the diagonals.

Table 3: Means, Standard Deviations & Zero-order correlations (Raw data)

	M	S.D	1	2	3	4	5	6	7	8	9	10
1 Age	38.26	8.93	--									
2 Gender	-		.13	--								
3 Educational Attainment	1.73	.64	.24**	.19*	--							
4 Job seniority	2.41	1.17	.37**	-.02	.10	--						
5 IQ	105.07	10.97	.19	.08	.18	.06	(.91) ^a					
6 Neuroticism	2.15	.62	.33**	.22**	.15	.12	.06	(.77)				
7 Extraversion	3.46	.61	-.23**	-.08	-.10	-.07	-.13	-.28**	(.81)			
8 EI-Perception	98.84	17.97	.05	.17*	.09	-.03	.03	.11	.07	(.89)		
9 EI-Cognitive Facilitation	99.15	15.39	.10	.01	-.01	.07	.24**	.00	-.04	.38**	(.71)	
10 EI-Understanding	95.88	13.13	.19*	.26**	.14	-.06	.46**	.16	.01	.19**	.29**	(.65)
11 EI-Management	97.09	17.72	.12	.27**	.14	.02	.13	-.05	.14	.29**	.39**	.42**
12 EI-Total	96.33	15.67	.12	.26**	.12	-.04	.32**	.10	.06	.67**	.69**	.69**
13 JER-Experience	3.49	.48	.00	.06	-.01	.03	.14	.13	-.02	.16*	.11	.09
14 JER-Management	3.10	.68	.03	.06	-.07	.05	-.04	.12	.11	.17*	.19**	.04
15 JER-Perception	3.47	.46	.12	.27**	.12	.16*	.09	.09	-.16	.10	.23**	.14
16 JER-Self Control	2.62	.75	.19*	.23**	-.04	.10	-.19*	.09	-.07	-.09	.02	-.13
17 JER-Emotional Modification	3.21	.60	.05	.05	-.09	.15*	.07	.11	-.08	.06	.12	-.03
18 JER-Understanding	3.59	.47	.06	.15*	.05	.10	.14	.09	.03	.09	.24**	.13
19 JER-Total	3.28	.38	.10	.19**	-.02	.14*	.04	.16	-.04	.12	.23**	.05
20 Job Satisfaction	8.35	1.02	-.13	-.08	-.06	-.21**	-.07	-.35**	.15	-.04	-.03	-.11
21 Turnover Intention	1.91	.88	.02	.03	.07	.15	.00	.11	.02	-.09	-.07	.04
22 Task Performance	3.86	.69	.08	.07	.00	.03	.14	-.13	-.12	-.11	.05	.00
23 Contextual Performance	3.88	.64	.15	.06	.06	.12	.14	-.16	-.13	-.16	.04	.03
24 Job Performance	7.74	1.28	.12	.07	.03	.07	.15	-.15	-.13	-.14	.05	.01

Reliabilities are provided on the diagonals; * $p < 0.05$, ** $p < 0.01$. a. Reliability of WPT is presented as an average of the values reported in Wonderlic User Manual (0.88 & 0.94)

Table 3 (continued): Means, Standard Deviations & Zero-order correlations (Raw data)

	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1 Age														
2 Gender														
3 Educational Attainment														
4 Job Seniority														
5 IQ														
6 Neuroticism														
7 Extraversion														
8 EI-Perception														
9 EI-Cognitive Facilitation														
10 EI-Understanding														
11 EI-Management	(.77)													
12 EI-Total	.65**	(.89)												
13 JER-Experience	.07	.18*	(.57)											
14 JER-Management	.07	.18*	.57**	(.81)										
15 JER-Perception	.21**	.26**	.39**	.38**	(.56)									
16 JER-Self Control	-.02	-.12	.24**	.35**	.39**	(.58)								
17 JER-Emotional Modification	-.02	.03	.37**	.29**	.16**	.26**	(.67)							
18 JER-Understanding	.24**	.22**	.48**	.44**	.48**	.20**	.25**	(.75)						
19 JER-Total	.13	.18*	.74**	.78**	.66**	.59**	.60**	.68**	(.84)					
20 Job Satisfaction	.07	-.02	.07	.00	.01	.10	-.05	.16*	.06	(.85)				
21 Turnover Intention	.05	-.04	-.08	.04	-.03	.00	.07	-.15	-.02	-.52**	(.89)			
22 Task Performance	-.08	-.03	-.03	-.11	.12	.04	-.09	.10	-.02	.30**	-.23**	(.88)		
23 Contextual Performance	.00	-.03	-.04	-.09	.16	.07	-.15	.15	.00	.32**	-.27**	.86**	(.88)	
24 Job Performance	-.04	-.03	-.03	-.11	.15	.05	-.13	.13	-.01	.33**	-.26**	.97**	.96**	(.94)

Reliabilities are provided on the diagonals; * $p < 0.05$, ** $p < 0.01$. a. Reliability of WPT is presented as an average of the values reported in Wonderlic User Manual (0.88 & 0.94)

Table 4: Means, Standard Deviations & Zero-order correlations (Imputed data)

	M	S.D	1	2	3	4	5	6	7	8	9	10
1 Age	37.69	8.04	--									
2 Gender			.14*	--								
3 Educational Attainment	1.74	.53	.28**	.21**	--							
4 Job Seniority	2.40	1.16	.45**	-.02	.13*	--						
5 IQ	105.58	8.81	.27**	.07	.23**	.00	(.91) ^a					
6 Neuroticism	2.13	.48	.38**	.19**	.18**	.14*	.10	(.77)				
7 Extraversion	3.45	.46	-.24**	-.07	-.09	-.06	-.15*	-.27**	(.81)			
8 EI-Perception	98.78	15.15	.08	.16**	.14*	-.02	.09	.15*	.08	(.89)		
9 EI-Cognitive Facilitation	99.07	13.08	.19**	.03	.06	.08	.27**	.02	-.06	.39**	(.71)	
10 EI-Understanding	95.81	11.27	.29**	.25**	.17**	-.08	.59**	.18**	-.02	.21**	.32**	(.65)
11 EI-Management	96.89	15.07	.19**	.25**	.20**	.02	.25**	-.04	.09	.30**	.42**	.44**
12 EI-Total	96.21	13.50	.21**	.25**	.18**	-.04	.43**	.14*	.04	.68**	.69**	.71**
13 JER-Experience	3.49	.48	-.05	.06	-.01	.04	.17**	.21**	-.07	.19**	.14*	.11
14 JER-Management	3.11	.67	-.03	.06	-.09	.05	-.07	.19**	.11	.23**	.24**	.05
15 JER-Perception	3.48	.46	.19**	.28**	.16**	.17**	.11	.11	-.18**	.11	.27**	.14*
16 JER-Self Control	2.63	.75	.21**	.23**	-.03	.11	-.29**	.09	-.05	-.09	.05	-.14*
17 JER-Emotional Modification	3.21	.59	.02	.05	-.10	.14*	.06	.15*	-.11	.09	.15*	.00
18 JER-Understanding	3.59	.46	.05	.14*	.06	.11	.17**	.14*	.04	.12	.29**	.15*
19 JER-Total	3.29	.38	.08	.19**	-.02	.15*	.02	.23**	-.05	.17**	.28**	.07
20 Job Satisfaction	8.33	.81	-.16**	-.03	-.04	-.26**	-.09	-.36**	.15*	-.07	-.06	-.12*
21 Turnover Intention	1.92	.68	.02	.02	.08	.19**	-.03	.12*	.02	-.07	-.06	.04
22 Task Performance	3.86	.49	.11	.11	.08	.08	.13*	-.12*	-.09	-.09	.06	.02
23 Contextual Performance	3.88	.47	.21**	.07	.15*	.16**	.13*	-.16**	-.10	-.16**	.06	.04
24 Job Performance	7.75	.92	.16**	.09	.11	.12*	.13*	-.15*	-.10	-.13*	.06	.03

Reliabilities are provided on the diagonals; * $p < 0.05$, ** $p < 0.01$. a. Reliability of WPT is presented as an average of the values reported in Wonderlic User Manual (0.88 & 0.94)

Table 4 (continued): Means, Standard Deviations & Zero-order correlations (Imputed data)

	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1 Age														
2 Gender														
3 Edu. Attainment														
4 Job Seniority														
5 IQ														
6 Neuroticism														
7 Extraversion														
8 EI-Perception														
9 EI-Cognitive Facilitation														
10 EI-Understanding														
11 EI-Management	(.77)													
12 EI-Total	.66**	(.89)												
13 JER-Experience	.08	.20**	(.57)											
14 JER-Management	.11	.22**	.57**	(.81)										
15 JER-Perception	.25**	.28**	.39**	.39**	(.56)									
16 JER-Self Control	.01	-.11	.24**	.35**	.39**	(.58)								
17 JER-Emotional Modification	-.01	.07	.37**	.29**	.16**	.25**	(.67)							
18 JER-Understanding	.28**	.26**	.47**	.44**	.48**	.21**	.25**	(.75)						
19 JER-Total	.16**	.22**	.74**	.78**	.66**	.59**	.60**	.68**	(.84)					
20 Job Satisfaction	.05	-.06	.00	-.07	-.02	.15*	-.11	.19**	.02	(.85)				
21 Turnover Intention	.06	-.02	-.01	.14*	.01	.01	.12	-.19**	.04	-.56**	(.89)			
22 Task Performance	-.01	.00	-.06	-.13*	.15*	.10	-.09	.18**	.01	.37**	-.26**	(.88)		
23 Contextual Performance	.06	-.02	-.08	-.13*	.18**	.10	-.13*	.23**	.01	.40**	-.32**	.86**	(.88)	
24 Job Performance	.03	-.01	-.07	-.13*	.17**	.11	-.12*	.21**	.01	.40**	-.30**	.97**	.96**	(.94)

Reliabilities are provided on the diagonals; * $p < 0.05$, ** $p < 0.01$. a. Reliability of WPT is presented as an average reported in Wonderlic User Manual (0.88 & 0.94)

Hypothesis Tests

Prior to testing the hypotheses, I present the reliabilities of the measures. The MSCEIT (measuring EI), had a good overall reliability of .89. The individual branches also had good to acceptable reliabilities (EI-Perception: .89; EI-Cognitive Facilitation: .71; EI-Understanding: .65; EI-Management: .77). The job satisfaction measure had a reliability of .85, whereas turnover intention-measure had a reliability of .89. Task and contextual performance measures demonstrated reliability of .88 and the combined job performance measure demonstrated a reliability of .94. The JER measure had a reliability of .84. Overall, the measures demonstrated good or acceptable reliabilities.

Table 5: Descriptive statistics of raw and imputed data

Variables	Raw Data			Imputed Data		
	<u>Mean</u>	<u>N</u>	<u>S. D.</u>	<u>Mean</u>	<u>N</u>	<u>S.D.</u>
IQ	105.07	134	10.97	105.58	278	8.81
Neuroticism	2.15	152	.62	2.13	278	.48
Extraversion	3.46	152	.61	3.45	278	.46
EI-Perception	98.84	189	17.97	98.78	278	15.15
EI-Cognitive Facilitation	99.15	189	15.39	99.08	278	13.08
EI-Understanding	95.88	189	13.13	95.81	278	11.27
EI-Management	97.09	189	17.72	96.89	278	15.07
EI-Total	96.33	189	15.67	96.21	278	13.50
JER-Experience	3.50	273	.48	3.50	278	.48
JER-Management	3.10	273	.68	3.11	278	.67
JER-Perception	3.47	273	.46	3.48	278	.46
JER-Self Control	2.62	273	.75	2.63	278	.75
JER-Emotional Modification	3.21	273	.60	3.21	278	.60
JER-Understanding	3.59	273	.47	3.59	278	.46
JER-Total	3.28	273	.38	3.29	278	.38
Job Satisfaction	8.35	152	1.02	8.33	278	.81
Turnover Intention	1.91	152	.88	1.92	278	.69
Contextual Performance	3.88	123	.64	3.88	278	.47
Task Performance	3.86	123	.69	3.86	278	.49
Job Performance	7.73	123	1.28	7.74	278	.92

Table 6: Abbreviated correlation table showing hypothesized variables

	1	2	3	4	5	6	7
1 EI-Total	(.89)						
2 Job Satisfaction	-.06	(.85)					
3 Turnover Intention	-.02	-.56**	(.89)				
4 JER-Total	.22**	.02	.04	(.84)			
5 Task Performance	.00	.37**	-.26**	.01	(.88)		
6 Contextual Performance	-.02	.40**	-.32**	.01	.86**	(.88)	
7 Job Performance	-.01	.40**	-.30**	.01	.97**	.96**	(.94)

*Reliabilities are provided on the diagonals; * $p < 0.05$, ** $p < 0.01$.*

For testing hypotheses with EI as the independent variable, I examine main effects first and, if significant, go on to control for demographic and psychological variables using hierarchical regression analysis. Specifically, I will analyze the direct relationships between Emotional Intelligence and job satisfaction, turnover intentions, or job performance first. If significant I will go on to control for variables such as age, gender, educational attainment, job seniority, IQ, neuroticism, and extraversion using hierarchical regression procedures to determine if EI predicts the outcomes over and above the control variables.

Hypothesis 1 states that Emotional Intelligence will directly and positively influence job satisfaction. To test this hypothesis, the bivariate correlation between these two variables was examined (Table 6). Since the correlation ($r = -0.06$) was not significant, there is no support for hypothesis 1. Because EI was not significantly related to job satisfaction, further hierarchical regression analysis to examine the effects of EI over the control variables was not performed.

Hypothesis 2 states that EI will directly and negatively influence turnover intention. To test this hypothesis, the bivariate correlation between EI and turnover intentions was examined (Table 6). The correlation ($r = -.02$) was not significant. Hence there is no support for hypothesis

2. Because EI was not significantly related to turnover intention, further hierarchical regression analysis to examine the effects of EI over the control variables was not performed.

Hypothesis 3 states that job satisfaction will be directly and negatively related to turnover intention. Examining Table 6, the correlation ($r=-.56$; $p<.01$) was significant. Hypothesis 3a further states that the effect of Emotional Intelligence on turnover intention will be partially mediated by job satisfaction.

To test for mediation, Baron and Kenny's (1986) four conditions are to be applied. The four conditions are: (1) The independent variable should significantly predict the mediator (α); (2) The independent variable should significantly predict the dependent variable (τ); (3) The mediator should significantly predict the dependent variable (β); and (4) The effect of the independent variable on the dependent variable should reduce when the mediator is added (partial mediation; where τ' is the regression coefficient once the mediator is added to the equation). Additionally, to test for the significance of the mediator effects, Sobel (1982)'s formula could be used. This approach first calculates the standard error using the following formula:

$$\sigma_{\alpha\beta} = \sqrt{\alpha^2\sigma_{\beta}^2 + \beta^2\sigma_{\alpha}^2}$$

Where α = coefficient for the relationship between the independent variable and the mediator; β = the coefficient for the relationship between the mediator and the dependent variable; σ_{α} = standard error associated with α (MacKinnon, Lockwood, J. M., Hoffman, West, & Sheets, 2002).

The mediator effect $\alpha\beta$ is divided by $\sigma_{\alpha\beta}$. Then the result is compared to the standard normal distribution to test the Hypothesis $H_0: \alpha\beta = 0$ (Mackinnon, Lockwood, Hoffman, West & Sheets, 2002).

The first condition states that the independent variable (EI) should significantly predict the mediating variable (job satisfaction). This condition was not satisfied according to the analysis conducted to test hypothesis 1. Hence, hypothesis 3a was not supported.

Hypothesis 4 states that Emotional Intelligence will be directly and positively related to job performance. To test this hypothesis, the bivariate correlation between EI and job performance was examined (Table 6). The correlation ($r=-.01$) was not significant. Hypothesis 4a stated that EI will be directly and positively related to task performance. To test this hypothesis, the bivariate correlation between EI and task performance was examined (Table 6). The correlation ($r=.00$) was not significant. Hypothesis 4b states that EI will be directly and positively related to contextual performance. To test this hypothesis, the bivariate correlation between EI and contextual performance was examined (Table 6). The correlation ($r=-.02$) was not significant. Therefore, hypotheses 4a & 4b were not supported.

Table 7: Summary of Hierarchical Regression Analysis for Variables Predicting Task Performance (N = 278)

Variable	B	S.E. B	β
Step 1			
EI-Total	.01	.06	.01
Step 2			
EI-Total	.00	.06	.00
JER-Total	.02	.06	.03
Step 3			
EI-Total	.00	.06	.00
JER-Total	.02	.06	.03
Interaction (EI*JER)	.03	.06	.03

Note: $R^2 = .00$ for step 1; $\Delta R^2 = .00$ for step 2 ($p=.67$); $\Delta R^2 = .00$ for step 3 ($p=.64$); EI = Emotional Intelligence; JER = Job Emotional Requirements.

Because these primary relationships were not significant, follow up analyses controlling for demographic and psychological variables were not conducted.

Hypothesis 5 states that Job Emotional Requirements will moderate the effect of EI on task performance. The higher the level of JER, the higher will be the effect of EI on task performance. To test this hypothesis, a regression equation was formed with EI (independent variable), JER (moderator), and an interaction (product) term JER*EI (Table 7). The coefficient ($\beta=.03$) was not significant and thus hypothesis 5 was not supported.

Hypothesis 6 states that job satisfaction will be directly and positively related to job performance. To test this hypothesis, the bivariate correlation between job satisfaction and job performance was examined (Table 6). The correlation ($r=0.40$; $p<0.01$) was significant. Hence this hypothesis was supported. Hypothesis 6a states that job satisfaction will be directly and positively related to task performance. The bivariate correlation between job satisfaction and task performance ($r=0.37$; $p<0.01$) was significant and thus the hypothesis was supported (Table 6). Hypothesis 6b states that job satisfaction will be directly and positively related to contextual performance. The bivariate correlation ($r=0.40$; $p<0.01$) between the two variables was significant and thus the hypothesis was supported (Table 6).

Hypothesis 7 states that the effect of EI on job performance will be partially mediated by job satisfaction. Since the earlier hypothesis test revealed that EI did not have a direct association with job performance, the mediating hypothesis also was not supported.

Hypothesis 7a states that the effect of EI on task performance will be partially mediated by job satisfaction and hypothesis 7b states that the effect of EI on contextual performance will be partially mediated by job satisfaction. Because EI did not have a direct association with either task performance or contextual performance, hypotheses 7a and b were not supported.

Hypothesis 8 states that turnover intention will be directly and negatively associated with job performance. To test this hypothesis, the bivariate correlation between turnover intention and job performance was examined (Table 6). The correlation ($r=-0.30$; $p<0.01$) was significant. Hence the hypothesis was supported. Hypothesis 8a states that turnover intentions will be directly and negatively associated with task performance and hypothesis 8b states that turnover intentions will be directly and negatively associated with contextual performance. Both hypotheses were supported because the bivariate correlations of turnover intentions with task performance ($r=-0.26$; $p<0.01$) and contextual performance ($r=-0.32$; $p<0.01$) were significant (Table 6).

Hypothesis 9 states that the effect of Emotional Intelligence on job performance will be partially mediated by turnover intentions. Hypothesis 9a states that the effect of Emotional Intelligence on task performance will be partially mediated by turnover intentions. Hypothesis 9b states that the effect of Emotional Intelligence on contextual performance will be partially mediated by turnover intentions. Though the hypothesized mediator (turnover intention) had a significant effect on the dependent variables (job performance, task performance, and contextual performance), the independent variable (EI) did not have a significant effect on turnover intention ($r=-0.02$, ns), thus there was no support for hypotheses 9, 9a, and 9b (Table 6).

Since EI did not have a direct effect on job satisfaction, turnover intention, and job performance, the second step (analyzing the effect of EI over and above the demographic and the psychological control variables) was not performed.

Overall, results do not support the hypotheses that EI affects job satisfaction, turnover intention, or job performance. There was no evidence to support the moderating role of job emotional requirements in the relationship between EI and task performance as well. However,

job satisfaction was significantly related to turnover intention. Job satisfaction and turnover intention were positively and negatively related to job performance respectively.

CHAPTER V: DISCUSSION

In this study, there was no support for the role of Emotional Intelligence on job satisfaction, turnover intention, and job performance. Below, I will discuss those results as it relates to each of those dependent variables.

Job Satisfaction

The three component model of job satisfaction argues that there are affective, cognitive, and behavioral components to job satisfaction (Hulin et al., 2003). The argument and hypothesis that was offered regarding the potential effect of EI on job satisfaction relates to both the affective and cognitive components of job satisfaction.

I believed that the affect associated with or formed from the job could be spilling over and/or used by EI, thus contributing to the attitude formation process. This “infusion” of affect into one’s evaluation of an object or situation (here, the object is the job) was elaborated by Forgas (1995). The nature of affect would bias an individual’s social judgments--positive affect causing a favorable bias and negative affect causing an unfavorable bias. The assumption was that the affect thus formed would be processed in a positive way by the individual’s EI, thus leading him/her to be more satisfied with the job. Weiss and Cropanzano (1996: Affective Events Theory) suggested a framework that examined the influence of positive and negative affect in the formation of attitudes. In this sample, i.e., law enforcement and healthcare, it is possible that the day-to-day encounters with suspects and situations that have the potential to cause (or often result in) negative affect, could be impacting the formation of a job attitude such as job satisfaction. However, the results did not support the hypothesis that job satisfaction was influenced by EI. One reason for the lack of effect of EI on job satisfaction could be because of

the overlapping cognitive and emotional aspects of EI. As explained earlier, the principal difference between EI and GMA is that the abilities related to EI process emotional information. However, because of the cognitive abilities used in EI, the job elements that may not be likeable to the employee might cause them to form unfavorable attitudes, even though they have higher levels of EI. In effect, the negative emotional stimuli emerging from the parts of the job that are not liked by the employee would also be just as important and accurately processed just as the positive stimuli. These emotional stimuli will be perceived as an accurate indicator of the negative aspects of the job and thus reduce job satisfaction.

In short, these two (positive and negative emotional stimuli) might be cancelling their respective influence on the formation of job satisfaction. An indication for this effect could be found in the bivariate relationship between EI and the perceptions of employees about the importance of abilities related to EI on their jobs. This relationship (JER-Total, Table 8; $r = 0.22$; $p < 0.01$) indicates that EI may be helping individuals to be more sensitive and effective in understanding the role of emotions on the job. It is also possible that the EI affects the stability of job satisfaction over time. Previous research suggests that mood could affect job satisfaction within individuals over time (Judge, Scott, & Illies, 2006). Because EI could potentially stabilize the variation of emotions within individuals, it could also stabilize the variation of job satisfaction. Therefore, overall, though EI may not affect job satisfaction at a point in time, it may be affecting the within-individual variations in job satisfaction.

Turnover Intention

Turnover intention is frequently the subject of studies because it is one of the strongest predictors of actual turnover (Griffeth, Hom, & Gaertner, 2000). Because it is categorized as an

intention, it is also included under the broad class of (negative) attitudes. This study did not find support for the hypothesis that EI will have a negative effect on turnover intention. The hypothesis was based on the premise that individuals with higher EI will be able to better form positive attitudes and, moreover, be able to also modify the negative emotions to reduce turnover intention. There could be at least two explanations for why this result was not observed. The premise that the effect of positive and negative emotions emerging from the jobs could be correctly and effectively recognized, though true may not translate into an overall positive result of reducing turnover intention in individuals with higher EI as assumed here. For example, if the job is perceived as being too stressful, individuals with higher EI, because of their skill, will be able to accurately process the emotions, and conclude that the job is not a good fit for them. Thus, EI might also facilitate more quitting intentions, rather than reducing them. Second, there could be other factors that would be suppressing the tendency of law enforcement or healthcare employees to think about quitting. Due to possible self-selection, some individuals might have chosen this profession, expecting that law enforcement or healthcare jobs involve emotional stimuli. Because they expected to face those situations they could be more willing to stay on the job even though the job involves a lot of emotionally charged situations. This process could be happening in spite of the level of EI that they have.

The hypothesis that job satisfaction will have a negative impact on turnover intention was strongly supported in this study. Previous studies have shown that job dissatisfaction is a significant predictor of turnover intention (Griffeth et al., 2000; Van Dick et al., 2004). Higher levels of satisfaction could help individuals to feel motivated about his or her job. Such individuals could also be having more positive feelings and engaged in more positive behaviors in the workplace (Harrison et al., 2006; Thoresen et al., 2003). When their job satisfaction is

negatively affected, either by stressful events or components of the work that fail to motivate the employee, he or she could think more about quitting in order to resolve their dissatisfaction. Although several research studies in the past have suggested such a relationship, only a few have been conducted within the law enforcement milieu. Using a sample of police officers in New Zealand, Brough and Frame (2004) found that job satisfaction was negatively associated with turnover intention. A similar result was observed with probationary officers by Simmons, Cochran, and Blount, (1997). Studies have suggested, at a broader level, that constructs related to turnover are often negatively related to constructs like job satisfaction or organizational commitment. In a recent meta-analysis, Harrison et al. (2006) found that job satisfaction was positively associated with organizational commitment and negatively associated with turnover. Van Dick et al. (2004) also found that employee satisfaction, caused by the employee's identification with the organization was negatively related to their turnover intentions.

Performance

The hypothesis that Emotional Intelligence will have a positive impact on job performance (both task and contextual) was not supported in this study. A related hypothesis that the more the emotions involved with the job, the stronger will be the effect of EI on task performance was also not supported. These hypotheses were based on the premise that jobs in this sample, i.e., law enforcement and healthcare, had emotional aspects embedded into them (Job Emotional Requirements). Therefore, individuals with higher EI were expected to perform much better because they were expected to better handle those emotional parts of the job. There could be several reasons for not obtaining support for these hypotheses. Even though law enforcement and healthcare professions have highly emotion eliciting situations, individuals

working in these professions are also carefully and strictly trained to respond to such situations. Perhaps this trained method of responding to such situations could be mitigating the effect of EI on job performance because irrespective of the ability to handle emotions, the employees are trained to respond in a uniform manner. Additionally, the performance evaluation done by the supervisor also could be based on how well an employee handles the emotional situations based on the training requirements (e.g. how closely did the employee follow the rules?). This might not be related to how well the employee handled the emotions related to the job.

The hypotheses that job satisfaction and turnover intentions were positively and negatively related to job performance respectively were supported. These results imply that maintaining high levels of satisfaction and reducing the tendency to think about quitting in law enforcement and healthcare jobs is important to performing well.

The job satisfaction-job performance relationship has been a subject of scientists' curiosity and controversy⁵ for several years. A relatively recent meta-analysis by Judge et al. (2001) has sparked further interest, because it showed that the relationship was higher than earlier assumed (corrected correlation=0.3; Bowling, 2007). Recently, it has also been suggested that the job satisfaction-job performance relationship is spurious and not causal (Bowling, 2007). Previous research suggests that more satisfied employees engage in more of both task-related and contextual behaviors (Harrison et al., 2006). In this study, results also show that job satisfaction had a stronger association with contextual performance than on task performance.

Turnover intention had a negative association with job performance. The effect was also prevalent on both task and contextual performance behaviors. This has also been suggested by previous studies (Day & Carroll, 2004; Cropanzano, Rupp, & Byrne, 2003; Harrison et al.,

⁵ The debate surrounding job satisfaction and performance is about the causal ambiguity. For more details about this, readers are directed to Judge et al. (2001) and Bowling (2007).

2006). Turnover intention has often been tied to a broad class of “withdrawal” behaviors. As the term indicates, turnover intentions include thoughts and attitudes about quitting and/or withdrawing from work. This further leads to reduced performance because the employee no longer feels motivated to exert effort. Studies suggest that such negative attitudes are negatively related to motivational characteristics (Humphrey, Nahrgang, & Morgeson, 2007).

Limitations

Though all efforts were made to collect data as accurately as possible, there were limitations to the study as are naturally associated with most field studies.

The sample in this study was drawn from employees in law enforcement and healthcare. Because data were collected from different organizations, there were some differences in the approaches I took to recruit subjects. In some organizations, volunteers were recruited from designated departments, whereas in other organizations, all employees could volunteer to participate in the study. Additionally, because of organizational preferences, participants completed their surveys either through online or paper-pencil means. Though the surveys were substantively similar, the overall differences in the administration and procedures might have contributed to unexplained variance, and might have diluted the effects (if any) of EI on job satisfaction, turnover intentions, and/or job performance.

Another limitation of this study was the time involved in completing the surveys. The Emotional Intelligence test (MSCEIT) had 114 items, requiring approximately 45 minutes to 1 hour to complete. Together with the other items, the study consumed about 70 to 90 minutes of the employees’ time. Among employees that attempted to do the survey during their work hours, some could not complete them. One reason appears to be the lack of control over the work

environment. Because of the nature of the work (law enforcement and healthcare), it is reasonable to assume that emergency-related and stressful situations often occur and therefore might have affected the employees' ability to respond to questions as accurately as possible. Besides increasing the possibility of incomplete data, the work interruptions and the subsequent lack of focus could lead the respondents to answer questions inaccurately. For example, performance on the problem-solving questions that are part of the EI test could be affected negatively because of work interruptions. However, whenever possible, care was taken to make sure that the surveys were distributed at a time and place conducive to the successful completion of the survey. For the online surveys, the employees were notified about the time requirement before they began taking their surveys. However, even after taking these precautions, because of the nature of the work, it is quite natural that the employees were interrupted.

I was also aware of the potential for social desirability bias in the employees' responses. Because the surveys were taken in different parts (due to operational requirements and administrative convenience), I had to match up the different parts using the respondents' names or study codes. This meant that some respondents might have answered questions in a socially desirable way. To make sure that this was not a substantial effect, I reminded the respondents on several occasions about the confidentiality of the surveys. The supervisors and organizational contacts also assured the respondents that the data were directly collected by me.

It is also possible that substantial differences exist between the sample used in this study and the general population. Both law enforcement and healthcare industries are characterized by highly emotional and stressful situations, and also strict rules and guidelines that the employees follow. A limitation of this study was that it did not have a variable that captured the regulatory aspects of these professions. In future studies, this should be a consideration.

Conclusion

Overall, this study was designed to understand the role of Emotional Intelligence on job attitudes and job performance. Data were collected from over 250 respondents in law enforcement and healthcare. After testing a series of hypotheses related to the effects of Emotional Intelligence, I found that EI did not have any effect on job satisfaction, turnover intention, and job performance. Future studies could be done to understand the specific parts of the law enforcement or healthcare tasks that would need emotional skills to be used to succeed. These specific aspects would then help researchers identify the importance of EI in performing the job well. Another area of future studies involves MSCEIT (instrument used to measure EI). It is apparent that many respondents were not able to complete the measure as it took approximately 45 to 75 minutes to complete. Though this could be administered in an experimental setting, it could lead to a reduced response rate in a field setting. Hence, development of an ability-based, performance-based EI test which is shorter would be a substantial contribution to the study of EI. Further studies could also be initiated to understand the effects of emotions on law enforcement and healthcare employees. Because employees in many job roles in these professions face substantial emotional situations, it will be immensely valuable to understand the mechanisms through which EI-skills are used by employees to deal with the effects of those emotions. Though the hypothesized relationships in this study were not supported, some effects, such as those involving EI and employee perceptions of the importance of the various emotional skills, could be useful foundation on which future studies could be designed.

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APPENDIX A: JOB SATISFACTION MEASURE

1. I feel fairly satisfied with my job
2. I find real enjoyment in my work.
3. I definitely dislike my work (r)⁶.
4. I feel that I am happier in my work than other people.
5. I consider my job rather unpleasant(r).
6. I find my coworkers pleasant to work with.
7. I do not enjoy working with my coworkers(r).
8. I am fairly satisfied with my supervisor.
9. I am fairly satisfied with my coworkers.
10. I do not enjoy working with my supervisor(r).
11. I find my supervisor pleasant to work with.

Response Options:

Strongly agree, agree, neutral or undecided, disagree, strongly disagree

Items 1-5 taken from Brayfield & Rothe (1951); Items 6-11 developed by the author.

⁶ (r) = reverse scored

APPENDIX B: TURNOVER INTENTION MEASURE

1. I am actively looking for a job outside this organization.
2. As soon as I can find a better job, I'll leave this organization.
3. I am seriously thinking of quitting my job.
4. I often think about quitting my job.
5. I think I will be working in this company 5 years from now (r).

Response Options:

Strongly agree, agree, neutral or undecided, disagree, strongly disagree

Items modified from Wayne et al., 1997.

APPENDIX C: PERFORMANCE MEASURE

Items 1-8 will measure task-based performance and items 9-16 will measure contextual performance.

1. This employee has been performing his/her job the way you would like it to be performed.
2. If you entirely had your way, you would change the manner in which this employee is performing his/her job (r).
3. This employee finds creative and effective solutions to problems.
4. This employee creates effective working relationships with others.
5. This employee assumes a sense of ownership in the quality of personal performance.
6. This employee understands and responds to emotions of his/her co-workers.
7. This employee maintains his/her level of enthusiasm even if his/her work suffers setbacks.
8. This employee seems to have difficulties handling interactions with his/her coworkers (r).
9. This employee maintains a positive attitude when dealing with difficult customers and coworkers.
10. This employee maintains a sense of control and poise with demanding people.
11. This employee accepts instruction from supervisors without resentment.
12. This employee says things to make people feel good about themselves or the work group.
13. This employee encourages others to overcome their differences and get along.
14. This employee praises co-workers when they are successful.

15. This employee takes the initiative to solve a work problem.

16. This employee tackles a difficult work assignment enthusiastically.

Response Options:

Strongly agree, agree, neutral or undecided, disagree, strongly disagree

*Note: Source citations for Job Performance items: Items 1 and 2: Wayne et al. (1997);
Items 3, 4, and 5: Hochwarter et al. (2006); Items 6, 7, and 8: Developed by the author;
Items 9, 10 & 11: Witt and Carlson (2006); Items 12 through 16: Van Scotter and
Motowidlo (1996).*

APPENDIX D: JOB EMOTIONAL CHARACTERISTICS MEASURE

Emotional Expression (JER-Exp)

In this type of work how important is it to:

1. control how you express your emotions to another person.
2. express emotions that are different from those you are actually feeling.
3. know when and how to express an appropriate emotion.

Managing emotions of others (JER-MGT-O)

In this type of work how important is it to:

4. help another person feel a certain emotion.
5. help another person feel a certain way.
6. help control another person's emotion.

Emotion Perception (JER-Perc)

In this type of work how important is it to:

7. know when client/customer/coworker is scared, angry, or upset.
8. know how the client/customer/coworker is feeling.
9. be sensitive to how others are feeling.

Management of Self's Emotions (JER-Self)

In this type of work how important is it to:

10. try to make myself feel a certain emotion so my emotional expression is sincere and not faked.
11. work to try to make yourself feel the emotion that you want to show.

Emotional Suppression (JER-Sup)

In this type of work how important is it to:

12. hide your emotions from others.
13. not show your feelings in emotional situations.
14. suppress your feelings.

Understanding Emotion (JER-Und)

In this type of work how important is it to:

15. know how people may behave when they hear either positive or negative news.
16. understand how people react emotionally.
17. understand how people think when they hear news that may upset or excite them.

Response Options

Not important, slightly important, important, very important

APPENDIX E: JOB EMOTIONAL REQUIREMENTS MEASURE CATEGORIZED
BY SOURCES OF JOB AFFECT

In this type of work how important is it to:

Contextual source

1. know when client/customer/coworker is scared, angry, or upset.
2. know how the client/customer/coworker is feeling.

Task source

3. be sensitive to how others are feeling.
4. know how people may behave when they hear either positive or negative news.
5. understand how people react emotionally.
6. understand how people think when they hear news that may upset or excite them.

Emotional dissonance

7. control how you express your emotions to another person.
8. express emotions that are different from those you are actually feeling.
9. try to make myself feel a certain emotion so my emotional expression is sincere and not faked.
10. work to try to make yourself feel the emotion that you want to show.
11. hide your emotions from others.
12. suppress your feelings.
13. not show your feelings in emotional situations.

Job source

14. know when and how to express an appropriate emotion.
15. help another person feel a certain emotion.
16. help another person feel a certain way.
17. help control another person's emotion.

Response Options

Not important, slightly important, important, very important