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### **Emerald Article: Enhancing employee outcomes: The interrelated influences of managers' emotional intelligence and leadership style**

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# Enhancing employee outcomes

## The interrelated influences of managers' emotional intelligence and leadership style

Enhancing  
employee  
outcomes

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### Abstract

**Purpose** – The purpose of this paper is to examine the interrelated influences of managers' emotional intelligence, leadership styles and employee outcomes. In particular, this study aims to explore the potential mediating effects of managers' transformational leadership style on the relationships between managers' emotional intelligence and employee outcomes of: employee performance, job satisfaction, organisational commitment and job stress.

**Design/methodology/approach** – The study was conducted in two large organisations in Shanghai, China, on a sample of 323 participants, including both managers and subordinate employees. Emotional intelligence was measured by using the Wong Emotional Intelligence Scale (WEIS), and leadership style, using the Multifactor Leadership Questionnaire (MLQ-5x Short).

**Findings** – The results showed that managers' transformational leadership style fully mediates the relationship between managers' emotional intelligence and employee job satisfaction. However, no mediating effect of managers' transformational leadership style is found on the relationship between managers' emotional intelligence and employee performance, organizational commitment and job stress.

**Originality/value** – The results of this study contribute to current insights about the interrelationships on managers' emotional intelligence, leadership style and employee outcomes, showing that the power of managers' emotional intelligence on job satisfaction must be expressed through a third mediating variable, transformational leadership.

**Keywords** Emotional intelligence, Transformational leadership, Employee performance, Job satisfaction, Organizational commitment, Job stress

**Paper type** Research paper

### Introduction

Leadership style is a critically important characteristic of managers. The most effective leadership style has been identified as transformational rather than transactional. Burns, 1978 identified a transforming leader as one who “looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower [. . .] a relationship of mutual stimulation and elevation that converts followers into leaders” (Burns, 1978, p. 4). Burns further claimed that transformational leadership style occurs “when one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality” (Burns, 1978, p. 20). In 1985, Brown Bass built on Burns', 1978 work and declared that transformational leaders can motivate their followers to do more than they were originally expected to do.



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Transformational leadership is more positively correlated to higher emotional intelligence than transactional leadership (Gardner and Stough, 2002). Transformational leadership style has also been shown to be positively associated with organisational success (Eisenbach *et al.*, 1999), consolidated business-unit performance (Howell and Avolio, 1993; Geyer and Steyrer, 1998), team performance (Bass, 1990a), trust in the leader (Podsakoff *et al.*, 1990), subordinates' extra effort and satisfaction (Seltzer and Bass, 1990; Yammarino and Bass, 1990), and special attention to the needs of subordinates (Barling *et al.*, 2000). Thus, transformational leadership style is considered a significant quality of an organisation's leaders, producing a variety of positive outcomes. As a result of employees' interaction with their supervisors, the leadership style of supervisors can have a significant impact on the success of the organisation.

Many scholars have contributed to the definition and model development of emotional intelligence. The concept has its initial roots in studies of "social intelligence" by Thorndike in, 1920. A prominent emotional intelligence model was developed by Goleman. He defined emotional intelligence as "the capacity for recognising our own feelings and those of others, for motivating ourselves and for managing emotions well in ourselves and in our relationships" (Goleman, 1998a, p. 317). Studies have shown that emotional intelligence relates to various job-related outcomes, including job performance (Bachman *et al.*, 2000; Goleman, 1996; Tischler *et al.*, 2002), leadership success (Cooper and Sawaf, 1997; Gates, 1995; Goleman, 1998b; Higgs, 2003; Sivanathan and Fekken, 2002), citizenship behaviours (Day and Carroll, 2004), and quality problem solving (Rahim and Minors, 2003). Ciarrochi *et al.* (2002) suggested that emotional intelligence moderates the relationship between stress and mental health. In addition, research found that emotional intelligence is positively related to problem solving strategies and negatively related to bargaining strategies in conflict management (Rahim *et al.*, 2002). Collectively, emotional intelligence has been shown to exert a positive influence on employees' work attitudes, behaviours and performance.

While a great deal of research has been carried out on emotional intelligence, transformational leadership style and effects on individual employees, it has tended to analyse each of these three areas separately. Both emotional intelligence and transformational leadership appear to be associated with similar positive effects on employee outcomes and performance. Thus, it would be interesting to know whether both emotional intelligence and transformational leadership are necessary for the positive outcomes, or is each sufficient in itself. Thus, the main objective of this study is to explore the dynamic interplay among these three concepts, in particular, the potential mediating role of transformational leadership style on the relationship between managers' emotional intelligence and employee outcomes (employee performance, job satisfaction, organisational commitment and job stress)

## Literature review and hypotheses

### *Emotional intelligence*

Research shows that IQ alone only explains 4-10 percent of achievement at work (Sternberg, 1996). Emotional intelligence is twice as important as technical skills and intellectual intelligence for jobs at all levels; intellectual intelligence only contributes about 20 percent of the factors that determine life success, which leaves 80 percent to

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other forces (Goleman, 1996). Martinez (1997) even claimed that emotional intelligence likely accounts for the remaining 80 percent. Goleman (1998a, p. 92) further asserted that ‘IQ and technical skills do matter, but mainly as threshold capabilities [. . .] recent research clearly shows that emotional intelligence is the *sine qua non* of leadership. Without it, a person can have the best training in the world, an incisive, analytical mind, and an endless supply of smart ideas, but still will not make a good leader’.

Thorndike defined social intelligence as “the ability to understand and manage men and women, boys and girls – to act wisely in human relations” (Thorndike, 1920, p. 228). Following Thorndike, Gardner (1983) includes interpersonal and intrapersonal intelligences that are closely related to social intelligence in his theory of multiple intelligences. Although Gardner did not use the term emotional intelligence, his ideas of interpersonal and intrapersonal intelligences provided the basis for the concept of emotional intelligence. Intrapersonal intelligence is the ability to “symbolize complex and highly differentiated sets of feelings” while “interpersonal intelligence is the ability to “notice and make distinctions among other individuals and, in particular, among their moods, temperaments, motivations and intentions” (Gardner, 1993, p. 239). Put simply, intrapersonal intelligence is the ability to manage one’s own emotions and interpersonal intelligence is the ability to manage the emotions of others as well as dealing with others.

In 1990, psychologists Salovey and Mayer (1990, p. 189) first formally identified the term Emotional Intelligence (EI) and defined it as “the subset of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions”.

Interest in emotional intelligence has grown dramatically in the past decade. There are many definitions of emotional intelligence, with no simple, established and unique one. While many scholars have contributed to this topic, an influential emotional intelligence model developed by Goleman has received prominence. Goleman defined emotional intelligence as “the capacity for recognizing our own feelings and those of others, for motivating ourselves and for managing emotions well in ourselves and in our relationships” (Goleman, 1998a, p. 317). Boyatzis *et al.* (2000) refined Goleman’s, 1998a emotional intelligence model from five dimensions (self-awareness, self-regulation, motivation, empathy and social skills) down to four (self-awareness, self-management, social awareness and relationship management), to capture the full scope of emotional competencies. This has become a commonly used model of emotional intelligence.

Goleman (1996) and Bar-On (1997) identified self-awareness as the most important dimension of emotional intelligence. Self-awareness – “knowing one’s emotions, recognizing a feeling as it happens – is the keystone of emotional intelligence” (Goleman (1996, p. 43). If someone knows their internal states of emotion, it allows self-control and leads to empathy in others. Further, according to Goleman (1996), self-control or self-managing of our emotions can keep us away from anger, anxiety and gloom and, in turn, allow us to become active in our work and life.

Social awareness is recognising emotions in others, or the ability to know how another feels. Goleman (1996, p. 43) stated, “empathy, another ability that builds on emotional self-awareness, is the fundamental people skill”. Empathy is important in relationship management, the skill of managing emotions in others (Goleman, 1996,

p. 96). Based on Goleman's emotional intelligence model, Bradberry and Greaves (2002) defined emotional intelligence based on a connection between what a person sees and does with the self and with others as follows:

Focus on self:

- *Self-awareness* – ability to accurately perceive own emotions and stay aware of them as they happen. This includes keeping on top of how one tends to respond to specific situations and people.
- *Self-management* – ability to use awareness of emotions to stay flexible and positively direct own behaviour. This means managing emotional reactions to all situations and people.

Focus on contact with other people:

- *Social awareness* – ability to accurately pick up on emotions in other people and grasp what is really going on. This often means understanding what other people are thinking and feeling even if one does not feel the same way.
- *Relationship management* – ability to use awareness of own emotions and the emotions of others to manage interactions successfully. This includes clear communication and effectively handling conflict.

Rosete and Ciarrochi (2005) investigated why intelligent and experienced leaders are not always successful in dealing with environmental demands and with life in general, by examining the relationship between emotional intelligence, personality, cognitive intelligence and leadership. Their results revealed that higher emotional intelligence was associated with higher leadership effectiveness, and that emotional intelligence explained the variance not explained by either personality or IQ.

### *Leadership style*

One of the most prominent formats for classifying and studying leadership includes three styles – transformational, transactional and *laissez-faire* leadership.

*Transformational leadership*. “Leaders transform the needs, values, preferences and aspirations of followers from self-interests to collective interests. Further, they cause followers to become highly committed to the leader's mission, to make significant personal sacrifices in the interest of the mission, and to perform above and beyond the call of duty” (Shamir *et al.*, 1993, p. 577). There are four dimensions to describe transformational leadership – idealised influence (charisma), inspirational motivation, individual consideration, intellectual stimulation.

*Transactional leadership*. “Using a carrot or a stick, transactional leadership is usually characterized as instrumental in followers' goal attainment” (Bass, 1997, p. 133). There are three components in transactional leadership – Contingent reward, whereby subordinates' performance is associated with contingent rewards or exchange relationship; Active Management by exception, whereby leaders monitor followers' performance and take corrective action if deviations occur to ensure outcomes achieved; Passive Management by exception, whereby leaders fail to intervene until problems become serious (Bass, 1997).

*Laissez-faire leadership*. This style of leadership can be described as non-leadership or the avoidance of leadership responsibilities. Leaders fail to follow up requests for assistance, and resist expressing their views on important issues (Bass, 1997).

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Based on previous studies, the transformational leadership style is considered the most effective. The theory of transforming leadership was developed primarily by Burns in 1978. He defined a transforming leader as someone who “looks for potential motives in followers, seeking to satisfy higher needs, and engages the full person of the follower” (Burns, 1978, p. 4). Based on the work of Burns (1978), Bass (1990a) developed a model of transformational and transactional leadership. Rouché *et al.* (1989) defined transformational leadership in terms of the ability of a leader to influence the values, attitudes, beliefs, and behaviours of others by working with and through them in order to accomplish the organisation’s mission and purpose. Shamir *et al.* (1993, p. 577) showed that “transformational leaders cause followers to become highly committed to the leader’s mission, to make significant personal sacrifices in the interest of the mission, and to perform above and beyond the call of duty”.

Bass (1997, p. 131) established four clear components of transformational leadership:

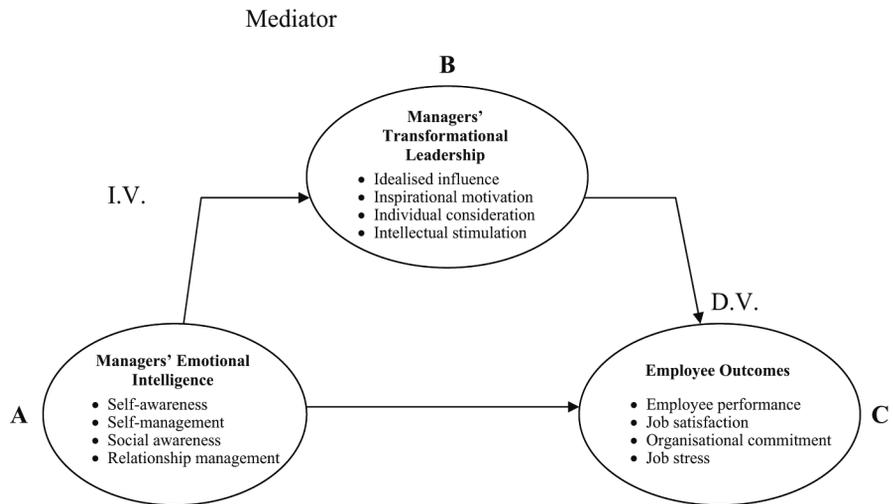
- (1) *Idealised influence (charisma)*. Leaders display conviction, emphasise trust, take stands on difficult issues, present their most important values, and emphasise the importance of purpose, commitment, and the ethical consequences of decisions. Such leaders are admired as role models generating pride, loyalty, confidence, and alignment around a shared purpose.
- (2) *Inspirational motivation*. Leaders articulate an appealing vision of the future, challenge followers with high standards, talk optimistically with enthusiasm, and provide encouragement and meaning for what needs to be done.
- (3) *Intellectual stimulation*. Leaders question old assumptions, traditions, and beliefs, stimulate new perspectives and ways of doing things, and encourage the expression of ideas and reasons.
- (4) *Individualised consideration*. Leaders deal with others as individuals, consider their unique needs, abilities, and aspirations, listen attentively, further their development, advise, teach and coach.

### *Effects on employee outcomes*

In this study, the indicators to measure employee outcomes comprised work performance, job satisfaction, organisational commitment and (low) job stress. Significant research has demonstrated a positive relationship between job satisfaction and organisational commitment (Agho *et al.*, 1992; Clark and Larkin, 1992; Deconinck and Bachman, 1994; Fletcher and Williams, 1996; Igbaria and Guimaraes, 1993; Liou, 1995; Meyer *et al.*, 1989; Ward and Davis, 1995; Yousef, 2000). The evidence is that job satisfaction is positively related to organisational commitment and negatively related to job stress (Mathieu and Zajac, 1990). From the organisation’s perspective, increasing employees’ job satisfaction and organisational commitment while decreasing employees’ job stress is important for individual work outcomes.

### **Proposed model**

Figure 1 describes a model encompassing proposed relationships among emotional intelligence, leadership style, and effects on employee outcomes (employee performance, job satisfaction, organisational commitment and job stress). The rationale for this model follows.



**Figure 1.**  
Conceptual framework

*Managers' emotional intelligence and transformational leadership (AB)*

Many studies have found a positive relationship between emotional intelligence and transformational leadership style (Barling *et al.*, 2000; Duckett and Macfarlane, 2003; Leban and Zulauf, 2004; Palmer *et al.*, 2001; Sivanathan and Fekken, 2002). Palmer *et al.* (2001, p. 8) asserted that “the inspirational motivation and individualized consideration components of transformational leadership were significantly correlated with both the ability of emotional monitoring and management in oneself and others”. Leaders who motivated and inspired subordinates to work toward common goals (inspirational motivation), and paid special attention to the achievement and developmental needs of subordinates (individualised consideration), reported that they monitored and managed emotions both within themselves and others.

In a study of 49 managers and 187 subordinates, emotional intelligence was associated with three aspects of transformational leadership – idealised influence, inspirational motivation, and individual consideration, as emotionally intelligent leaders were inclined to use a transformational leadership style (Barling *et al.*, 2000). The study also showed that, overall, emotional intelligence was correlated with the transformational leader behaviour component of inspirational motivation, and the individualised consideration components of transformational leadership were significantly correlated with both strategic emotional intelligence and understanding emotions. Other research results have shown that emotional intelligence contributes to transformational leadership and subsequent actual project performance (Leban and Zulauf, 2004). Gardner and Stough (2002) investigated whether emotional intelligence predicted transformational, transactional and *laissez-faire* leadership styles. Emotional intelligence correlated highly with all components of transformational leadership, and the components of understanding of emotions and emotional management were the best predictors of transformational leadership style. Moreover, transformational leadership is more emotion-based compared to transactional leadership, involving heightened affect levels (Yammarino and Dubinsky, 1994). In summary, based on

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previous empirical studies, emotional intelligence could positively account for transformational leadership style.

*Managers' emotional intelligence and employee outcomes (AC)*

There is evidence that managers' emotional intelligence positively accounts for differences in employee outcomes. Studies show that emotional intelligence is positively related to employee's performance (Higgs, 2004). Managerial emotional intelligence influences team satisfaction (Langhorn, 2004). Leaders in positive affective states may energise the people they manage, causing them to approach tasks actively and enthusiastically, as they have high levels of confidence in their ability to succeed (George, 1995). Kupers and Weibler (2006, p. 380) in reporting Gardner and Stough's (2002, p. 77) study, emphasised that "recognising and expressing feelings enables leaders to take advantage of and use their positive emotions and emotional information to facilitate organisational performance, including prioritising demands and solving problems".

Scholars have found that managers' self-awareness, the most important dimension of emotional intelligence, has the ability to alter team members' responses to their actions (Eisenberg and Fabes, 1992). Thus, managers' self-awareness possesses the ability to guide subordinates' interactions to meet desired goals (Miller and Leary, 1992). "Supervisors with high emotional intelligence are more likely to use supportive behaviour and treat their followers with psychological benefits, as they are more sensitive to feelings and emotions of themselves and their followers. This, high emotional intelligence and emotional maturity should have a positive effect on the job outcomes of supervisors" followers (Wong and Law, 2002, p. 250). Wong and Law also found that the emotional intelligence of managers has a causal effect on the job satisfaction and organisational citizenship behaviour of their subordinates. Research has demonstrated that subordinates whose supervisors have higher emotional intelligence are more committed to the organisation (Giles, 2001). Goleman (1996) claimed that knowing one's internal states of emotion allows for self-control and leads to empathy to others. He also suggested that people who have a high level of emotional intelligence are very honest with themselves and others and try to avoid unrealistic hope. Abraham (1999) and George (2000) suggested that self-awareness allows individuals to set priorities and set aside inconsequential issues, so more important and urgent issues can be addressed. Based on all this evidence, it is logical to argue that managers with high self-awareness will set demands that are more reasonable and establish realistic priorities and expectations for subordinates, avoiding inappropriate criticism. Consequently, this can enhance employees' job satisfaction and organisational commitment and reduce subordinates' job stress level. This may explain how managers' emotional intelligence could account for positive effects on employee outcomes (employee performance, job satisfaction, organisational commitment and job stress).

*Managers' transformational leadership and employee outcomes (BC)*

The beneficial effect of transformational leadership on employees has been recognised. Studies have found that employees are willing to exert more effort and to increase standards for transformational leaders (Seltzer and Bass, 1990; Yammarino and Bass, 1990). It has been suggested that transformational leadership has a positive influence

on employees' effort and satisfaction (Bass and Avolio, 1990; Bycio *et al.*, 1995; Kirkpatrick and Locke, 1996; Parry, 2000) as well as on subordinate performance (Avolio *et al.*, 1988; Barling *et al.*, 1996; Yukl, 1998).

Consistent with previous studies, Fu *et al.* (2001) found a positive correlation between managers' consideration behaviour and employees' job satisfaction in mainland China. Managers with transformational leadership demonstrated more concern for others' feelings, which led to positive work related outcomes. In a leadership study conducted in China, the US, the Netherlands, Singapore, the UK and Japan. Bass (1997) showed that transformational leadership was positively related to leader effectiveness and employees' satisfaction. Other scholars have also suggested that transformational leadership is positively and significantly associated with employees' job satisfaction (Ross and Offermann, 1997). Studies have found that transformational leadership enhances the organisational commitment of followers (Barling *et al.*, 1996; Goodwin *et al.*, 2001). Moreover, transformational leadership can have a causal effect on employees' job performance, job satisfaction and organisational commitment (Bono and Judge, 2003; Bycio *et al.*, 1995; Hater and Bass, 1988; Judge and Bono, 2000; Krishnan, 2005; Walumbwa and Lawler, 2003; Walumbwa *et al.*, 2005).

Kottraba (2003) suggested that transformation leaders are more effective at controlling employees' stress level in the workplace. Other studies also show that it is not the effort and volume of pressures that lead to job stress, but rather the behaviour of leaders (Alimo-Metcalf, 1995; Hogan and Hogan, 2001). David and Kim (1998) argue that "dissatisfying relationships with a direct manager or supervisor are prime causes of job stress among workers. These encountered stressors result directly from abrasive, non-fulfilling relationships" (p. 103). Moreover, employees have enhanced job satisfaction and organisational commitment when managers treat them with psychological benefits such as approval, respect, esteem and affection (Hollander, 1979). In summary, managers' transformational leadership has been shown to account for various employees' outcomes (positively related to employees' performance, job satisfaction, organisational commitment, and negatively related to employees' job stress).

#### *The mediating role of managers' transformational leadership*

The current literature has supported separately the relationships between:

- managers' emotional intelligence and transformational leadership style (AB);
- managers' emotional intelligence and employee outcomes (AC); and
- managers' transformational leadership style and employee outcomes (BC).

A number of authors (Barling *et al.*, 2000; Brown and Moshavi, 2005; Cooper and Sawaf, 1997; Goleman, 1998b) have theorised that emotional intelligence is antecedent to transformational leadership. There are three reasons why individuals high in emotional intelligence would be more likely to use transformational behaviours (Barling *et al.*, 2000). First, they link self-awareness and self-management to idealised influence as "leaders who know and can manage their own emotions, and who display self-control and delay of gratification, could serve as role models for their followers, thereby enhancing followers' trust in and respect for their leaders. This would be consistent with the essence of idealized influence" (Barling *et al.*, 2000, p. 157). Second, they link social awareness to inspirational motivation as "with its emphasis on

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understanding others' emotions, leaders high in emotional intelligence would be ideally placed to realise the extent to which followers' expectations could be raised, a hallmark of inspirational motivation" (Barling *et al.*, 2000, p. 157). Third, they link relationship management to individualised consideration as "a major component of individualized consideration is the ability to understand followers' needs and interact accordingly. With its emphasis on empathy and the ability to manage relationships positively, leaders manifesting emotional intelligence would be likely to manifest individual consideration" (Barling *et al.*, 2000, p. 157). Three EI level groups served as the covariate in all the Barling *et al.* (2000) analyses, where the four components of transformational leadership – idealised influence, inspirational motivation, intellectual stimulation and individualised consideration – served as the dependent variables. Results show that all yielded significant univariate effects, except intellectual stimulation. They concluded that emotional intelligence might predispose individuals to different leadership behaviours. Goleman (1998a, b) also claimed that emotional intelligence is a prerequisite for successful leadership.

The findings of previous authors show that emotional intelligence is a building block for emotional competence, combining or interacting with other factors, leading to enhanced performance (Brown *et al.*, 2006). Thus, it can be assumed that emotional intelligence should occur before transformational leadership. This paper proposes that a factor working in interaction with emotional intelligence is leadership style, notably, transformational leadership. Emotional intelligence on its own is unlikely to result in superior employee outcomes without transformational leadership, and the relationship between emotional intelligence and employee outcomes (employee performance, job satisfaction, organisational commitment and job stress) is more likely to occur in the context of highly emotionally intelligent leaders.

According to Baron and Kenny (1986), the first condition of a mediator is that variations in levels of the independent variable significantly account for variations in the presumed mediator (i.e. managers' emotional intelligence can predict transformational leadership style), as the mediator accounts for the dependent variable (i.e. employee outcomes – employees' performance, job satisfaction, organisational commitment and job stress). This is how a manager's transformational leadership may play a mediator role in the relationship between that manager's emotional intelligence and employee outcomes.

Therefore, the following are hypothesised:

- H1.* Managers' transformational leadership style mediates the positive relationship between managers' emotional intelligence and employees' performance.
- H2.* Managers' transformational leadership style mediates the positive relationship between managers' emotional intelligence and employees' job satisfaction.
- H3.* Managers' transformational leadership style mediates the positive relationship between managers' emotional intelligence and employees' organisational commitment.
- H4.* Managers' transformational leadership style mediates the negative relationship between managers' emotional intelligence and employees' job stress.

**Research methodology**

*Sample*

As per Table I, the sample for this study included all the managerial and non-managerial employees of two construction companies in Shanghai, China with a total of 746 participants. Of the 709 questionnaires distributed, 347 employees responded, giving a 48.94 percent response rate. Of the returned questionnaires 24 were excluded from the analysis because of missing pages. This left a valid sample of 323 participants. A total of 54 teams were involved in the study. The average number of respondents per team was 6.7. Of the sample, 72.4 percent was male. Within the non-manager group, the age of respondents ranged from 19 to 65 and the mean was 36.16 years old, with 22.9 percent in the 28- to 32-year-old age group. Within the managers' group, the age of respondents ranged from 23 to 67 and the mean was 44.12 years old, with 19.5 percent in the 33- to 37-year-old age group. Of the non-managers, 47.1 percent had a secondary education. Of the managers, most participants were at completed Diploma level (54.2 percent). Of the non-managers, the highest percentage of work experience was within the range six to ten years (26.4 percent). Within the managers' sample, the highest percentage of work experience was within the range of 31 years or above (20.8 percent).

*Procedure*

The survey instruments were administered in the target companies during office hours. The data were collected through hard copy questionnaires. Each subject was assured of the confidentiality of his/her anonymous responses. Based on the information provided by the top management of the companies, a coding system on the surveys was used to associate employees with their direct manager in pairs. Thus, one manager was identified in each team with their employees. Although this person may have a different position title, such as team coordinator, manager, supervisor or executive, they were all defined as "manager" in this study. The survey instruments were administered in Chinese. The scoring of the questions was completed following the method provided by the initial authors. Most of them are calculated by averaging their score with the number of items. The only exception is for the emotional intelligence measure, which is calculated by the sum of the scores.

	<i>N</i>	Mean	SD
Managers' emotional intelligence	50	24.28	5.33
Transformational leadership	323	2.40	0.63
Employee's gender	273	1.27	0.45
Employee's age	273	36.16	9.10
Employee's education level	273	2.57	0.69
Employee's work experience	273	3.01	1.76
Managers' gender	50	1.3	0.46
Managers' age	50	44.12	10.14
Managers' education level	50	2.77	0.69
Managers' work experience	50	4.38	1.90

**Table I.**  
Samples, means and  
standard deviations of  
main variables

**Notes:** Gender: 0 = Female, 1 = Male; Education level: 1 = Primary, 2 = Secondary, 3 = Diploma, 4 = Bachelor, 5 = Master or above; Work experience: 1 = 1-5 years, 2=6-10 years, 3 = 11-15 years, 4 = 16-20 years, 5 = 21-25 years, 6 = 26-30 years, 7 = 31 years or above

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### Measures

*Wong Emotional Intelligence Scale (WEIS).* The Wong *et al.* (2004) 40-item forced choice emotional intelligence measure for Chinese respondents was used in this study to assess the level of emotional intelligence in managers. Managers completed this self-report emotional intelligence measure scale to assess their own emotional intelligence level. An example WEIS item is: “When you are very down, you will: A. Try to do something to make yourself feel better. B. Just ignore it because you know your emotion will be back to normal naturally”. The internal consistency reliability (Cronbach’s alpha) for this scale in this study is 0.66.

*Transformational leadership style.* The Multifactor Leadership Questionnaire (MLQ-5x Short) (Bass and Avolio, 1997) is considered a widely accepted measurement of transformational, transactional and *laissez-faire* leadership styles. However, only the 20 item scale for transformational leadership style was employed in this study. The MLQ-5x has been used before to study leadership across two large sample groups from the People’s Republic of China and Australia (Steane *et al.*, 2003). The MLQ-5x is a five-point Likert-type frequency scale measure that asks the respondents to state the frequency with which a number of statements apply to them, as: 0 = Not at all; 1 = Once in a while; 2 = Sometimes; 3 = Fairly often; 4 = Frequently, if not always. This part of the questionnaire included both self and other rater versions. Part A assesses leadership style as measured by managers themselves. Part B assesses the leadership style of managers as judged by subordinates’ perception of their immediate managers. An example of these items for the self-rated version for managers is: “I consider an individual as having different needs, abilities, and aspirations from others”. An example of these items for subordinates rating their immediate managers is: “My immediate supervisor considers me as having different needs, abilities, and aspirations from others”. The internal consistency reliability (Cronbach’s alpha) for the transformational leadership styles scale in this study is 0.90. Rating managers’ leadership through assessments by both the managers views of themselves and their direct subordinates’ view of them was followed the protocol of a number of previous studies (Barling *et al.*, 1996; Brown *et al.*, 2006; Ozaralli, 2003; Rosete and Ciarrochi, 2005).

### Employee outcomes measures

Employee’s performance was measured by a five-item scale was developed by Williams (1988) to measure overall employee’s performance. This scale has been used in China on a number of occasions (Hui *et al.*, 1999; Wong and Law, 2002). Respondents were requested to choose the number that best described their agreement with each of five statements concerning their feelings about their overall performance. It is a Likert-type seven-point scale ranging from 1 = Strongly disagree to 7 = Strongly agree. An example of these items is: “I meet all the formal performance requirements of the job”. The internal consistency reliability (Cronbach’s alpha) for this scale in this study is 0.86.

*Job satisfaction* – A three-item questionnaire for overall job satisfaction measure was developed by Cammann *et al.* (1983). This questionnaire was translated into a Chinese version and used by Chan *et al.* (2008). It is a Likert-type seven-point scale ranging from 1 = Strongly disagree to 7 = Strongly agree. An example of these items is: “All and all, I’m satisfied with my job”. The internal consistency reliability (Cronbach’s alpha) for this scale in this study is 0.65.

*Organisational commitment* – A six-item scale developed by Meyer *et al.* (1993) was used to measure affective commitment. This measure was translated into a Chinese version and used in China (Chen and Francesco, 2003). It is a Likert-type seven-point scale ranging from 1 = Strongly disagree to 7 = Strongly agree. An example item is: “I really feel as if this organisation’s problems are my own”. The internal consistency reliability (Cronbach’s alpha) for this scale in this study is 0.89.

*Job stress* – A four-item scale developed by Keller (1984) was used to measure job stress. The scale for job stress, originally written in English, was translated into Chinese, and then validated by back-translation to English by two academy scholars to ensure equivalence of meaning. It is a Likert-type seven-point scale ranging from 1 = Strongly disagree to 7 = Strongly agree. An example item is: ‘I experience tension from my job’. The internal consistency reliability (Cronbach’s alpha) for this scale in this study is 0.62.

Each employee completed this self-report measure scale to assess his/her own performance, job satisfaction, organisational commitment and job stress level.

*Control variables.* Past studies showed that demographic variables such as gender, age, education level and work experience may be correlated to emotional intelligence and transformational leadership style as well as employee outcomes (employee’s performance, job satisfaction, organisational commitment and job stress). Thus, these variables comprised control variables in this study.

## Results

Table II presents the inter-correlations of the variables in the study. Managers’ emotional intelligence is positively correlated to transformational style ( $r = 0.23, p < 0.01$ ). In addition, managers’ emotional intelligence is positively correlated to employees’ performance ( $r = 0.16, p < 0.01$ ), job satisfaction ( $r = 0.26, p < 0.01$ ) and negatively related to job stress ( $r = -0.12, p < 0.05$ ). However, managers’ emotional intelligence does not show any correlation with organisational commitment.

Managers’ transformational leadership is correlated to all of the employee outcomes, including positively related to employee performance ( $r = 0.31, p < 0.01$ ), job satisfaction ( $r = 0.36, p < 0.01$ ), organisational commitment ( $r = 0.26, p < 0.01$ ) and negatively related to job stress ( $r = -0.11, p < 0.05$ ).

### *Hypothesis testing*

Mediated regression analysis. Table III presents the results of the mediated regression analysis. Following the three-step process described by Baron and Kenny (1986), model 1 regressed the mediator (managers’ transformational leadership style) on the control variables (gender, age, education level and work experience) and the independent variable (managers’ emotional intelligence). In model 2, the outcomes (employee’s performance, job satisfaction, organisational commitment and job stress) were separately regressed on the control variables and managers’ emotional intelligence. Lastly, in model 3, the outcomes were separately regressed on the control variables, managers’ emotional intelligence and transformational leadership style.

Model 1 shows that managers’ emotional intelligence is significantly related to managers’ transformational leadership style ( $\beta = 0.05, p < 0.01$ ) in a positive way. Model 2 shows that managers’ emotional intelligence is significantly related only to job

Variables	1	2	3	4	5	6	7	8	9	10
Managers' emotional intelligence	(0.66)									
Transformational leadership	0.23**	(0.90)								
Employee's performance	0.16**	0.31**	(0.86)							
Job satisfaction	0.26**	0.36**	0.43**	(0.65)						
Organisational commitment	0.10	0.26**	0.46**	0.61**	(0.89)					
Job stress	-0.12*	-0.11*	0.03	-0.02	0.04	(0.62)				
Gender	-0.07	0.07	0.11*	0.03	0.01	0.08	(N/A)			
Age	0.25**	-0.04	0.25**	0.22**	0.26**	-0.01	0.05	(N/A)		
Education level	0.06	0	0.14*	0.11**	0.09	0.03	0.19**	-0.01	(N/A)	
Work experience	0.16**	0.04	0.26**	0.18**	0.19**	0.04	0.07	0.85**	0.06	(N/A)

**Notes:** Cronbach's alpha values are provided along the diagonal in parentheses; N/A not applicable; \* correlation is significant at 0.05 level (two-tailed); \*\* correlation is significant at 0.01 level (two-tailed)

**Table II.**  
Descriptive statistics and  
inter-correlations

**Table III.**  
Mediating regression  
analysis of  
transformational  
leadership on employee  
outcomes

Variables	Model 1		Model 2		Model 3				
	Transformational leadership $\beta$	Employee's performance $\beta$	Job satisfaction $\beta$	Organisation commitment $\beta$	Job stress $\beta$	Employee's performance $\beta$	Job satisfaction $\beta$	Organisation commitment $\beta$	Job stress $\beta$
<i>Controls</i>									
Gender	0.15	0.44**	0.19	0.27	0.16	0.37	0.09	0.21	0.19
Age	-0.01	0.03	0.04*	0.05**	-0.02	0.03	0.04**	0.06**	-0.02
Education level	-0.01	0.21	0.03	0.17	-0.08	0.22	0.04	0.17	-0.08
Work experience	-0.01	-0.05	-0.12	-0.15	0.15	-0.04	-0.11	-0.15	0.15
<i>Main effect</i>									
Managers' emotional intelligence	0.05**	0.04	0.07**	0.02	-0.05**	0.01	0.04	0	-0.04
<i>Mediating effect</i>									
Transformational leadership						0.48**	0.69**	0.36**	-0.25
Overall $R^2$	0.14	0.15	0.14	0.12	0.07	0.22	0.25	0.16	0.08
Overall adjusted $R^2$	0.11	0.13	0.12	0.10	0.04	0.20	0.23	0.13	0.06
$\Delta R^2$	6.66**	7.64**	7.02**	6.05**	2.96	10.06**	12.04**	6.62**	3.22**
F									

**Notes:** \*Correlation is significant at 0.05 level (two-tailed); \*\* correlation is significant at 0.01 level (two-tailed)

satisfaction ( $\beta = 0.07, p < 0.01$ ). Managers' emotional intelligence is not significantly related to employees' performance and organisational commitment. In addition, the  $F$  value for the model of job stress is not significant. Lastly, model 3 shows that the relationship between managers' emotional intelligence and job satisfaction becomes non-significant when the managers' transformational leadership style (the mediator) is presented. All of the  $F$ -values for the previous models are significant at the 0.01 level. This suggests that managers' transformational leadership style fully mediates the relationship between managers' emotional intelligence and job satisfaction. However, no mediating effect of managers' transformational leadership style is found on the relationship between managers' emotional intelligence and employees' performance, organisational commitment and job stress since it does not meet the condition that managers' emotional intelligence should be statistically significant related to employees' performance, organisational commitment and job stress at model 2. Thus,  $H2$  is accepted and  $H1, H3$  and  $H4$  are rejected.

The three employee outcomes (employees' performance, organisational commitment and job stress) were run again on a multiple regression analysis independently without combining the managers' emotional intelligence as had been done in model 3 (see Table III). The results in Table IV show that managers' transformational leadership was directly related to employee's performance and organisational commitment, but did not influence job stress. Thus, it can be concluded that employee's performance and organisational commitment are directly affected by managers' transformational leadership, without invoking emotional intelligence.

The results in the study show that neither managers' emotional intelligence nor transformational leadership showed any influence or causal effect on employees' job stress.

### Conclusions and recommendations

This study examined the interrelated influences of managers' emotional intelligence, leadership styles and employee outcomes in Chinese respondents in Shanghai, based on Goleman's emotional intelligence model and Bass's leadership styles model. It extends existing knowledge by studying the possible interrelationships between the

Variables	Employee's performance $\beta$	Organisational commitment $\beta$	Job stress $\beta$
<i>Controls</i>			
Gender	0.36	0.21	0.23
Age	0.04**	0.06**	-0.02
Education level	0.22	0.17	-0.09
Work experience	-0.04	-0.15	0.13
<i>Main effect</i>			
Transformational leadership	0.52**	0.36**	-0.35**
Overall $R^2$	0.22	0.16	0.06
Overall adjusted $R^2$	0.20	0.14	0.04
$F$	11.94**	7.99**	2.93

**Notes:** \*Correlation is significant at 0.05 level (two-tailed); \*\*correlation is significant at 0.01 level (two-tailed)

**Table IV.**  
Result of multiple regression analysis: managers' transformational leadership and three employee outcomes effects

concepts of managers' emotional intelligence and transformational leadership style with employees' performance, job satisfaction, organisational commitment and job stress. It first examines the mediating role transformational leadership plays between managers' emotional intelligence and certain kinds of employee's outcomes. The results show that transformational leadership can explain the dynamics by which managers' emotional intelligence affects employees' job satisfaction. This implies that the power of managers' emotional intelligence on employees' job satisfaction must go through a third variable, transformational leadership. Thus, managers' emotional intelligence would have no direct relationship with subordinates' job satisfaction, and any relationship between the two could only be because of the mediating effect of transformational leadership. Managers' emotional intelligence on its own will not lead to subordinates' job satisfaction unless it is expressed through transformational leadership. This new model is different from those in previous studies that focus only on the direct relationship and the causal influence of managers' emotional intelligence on subordinates' job satisfaction. Thus, this finding is not to reject existing knowledge where managers' emotional intelligence accounts directly for employees' job satisfaction. Rather, this study offers an explanation and shows that the power of managers' emotional intelligence on job satisfaction must go through transformational leadership. Based on this finding, it further develops current emotional intelligence and leadership literature.

The study revealed that managers' emotional intelligence could be a characteristic that directly influences the development and maintenance of transformational leadership. It is believed that emotional intelligence not only builds and nourishes transformational leadership, but also transfers to leaders' thoughts and behaviours. Therefore, emotionally intelligent managers who easily understand and manage the emotions of themselves and others employ a transformational leadership style that ultimately enhances employees' job satisfaction. Thus, the mediating effect can explain the process of "how" or "why" managers' emotional intelligence predicts or causes this outcome variable, since a mediator is the mechanism through which a predictor influences an outcome variable (Baron and Kenny, 1986). Although managers with high emotional intelligence are more sensitive to their own and other's emotions, unless this sensitivity has transferred to some kind of leadership behaviour through which employees can feel the manager's concern for them, this positive outcome may not occur.

As discussed previously, no mediating effect of managers' transformational leadership style was found on the relationship between managers' emotional intelligence and employees' performance, organisational commitment and job stress. However, the results show that managers' transformational leadership directly accounts for employees' performance and organisational commitment. In these two instances, we discover that emotional intelligence plays no part in the positive outcomes of employee's performance and organisational commitment. Thus, it can be concluded that employee's performance and organisational commitment are directly affected by managers' transformational leadership. It follows that in order to increase employee's performance and organisational commitment, managers' transformational leadership must be enhanced.

The fact that the findings were not uniform across the four employee outcome variables is interesting. It implies that there are different mechanisms operating, whereby, in some instances, transformational leadership style translates from

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emotional intelligence, and in others, it operates independently of emotional intelligence. This indicates that the composition of transformational leadership and the ways in which it is expressed is not unitary. For some effects, aspects of transformational leadership related to emotional intelligence may come to the fore, whereas for others, these are muted.

Although these findings are based on samples drawn from China, certain generalisations appear warranted. There is no evidence that the validity of emotional intelligence and leadership styles model and definitions, as presented in this study should vary across cultures. There is universality in the transformational leadership paradigm, explaining that “the paradigm is sufficiently broad to provide a basis for measurement and understanding that is as universal as the concept of leadership itself. Here, universal does not imply constancy of means, variances, and correlations across all situations, but rather explanatory constructs good for all situations” Bass (1997, p. 130). Bass believed that differences in cultural beliefs, values and norms moderate leader-follower relations. Moreover, there are two fundamental cross-cultural issues. Etic phenomena are common to all cultures, or at least to all cultures studied to date; emic phenomena are culture-specific that occurs in only a subset of cultures (House *et al.*, 1999). Despite the fact that the Chinese culture is significantly different to Western cultures, the results of this study do not diminish the generalisability, since the variables dealt with are of the “etic” type, according to the Bass (1997) paradigm.

This generalisability contention finds support in cross-cultural research conducted by Kirkman *et al.* (2009) on relationships involving transformational leadership, power distance orientation, procedural justice and organisational citizenship behaviour in the US and China. Their results support the generalisability of the findings across the two countries. Their study demonstrated that the cross-level impact of transformational leadership on procedural justice and organisational citizenship behaviour is similar in both the US and China. Their findings show clearly that they did not detect country-level differences in transformational leadership effects. Moreover, within and across countries, individual-level power distance orientation moderated reactions to transformational leaders. This supports the Kirkman *et al.* (2009) study and is in line with Bass’s (1997) arguments for the universality of the transformational leadership paradigm. Therefore, notwithstanding differences in cultural beliefs, generalisations from the results appear warranted.

Practically, this study also explores the Chinese work context in terms of emotional intelligence and leadership styles. In 2002, China surpassed the USA as the largest foreign direct investment (FDI) recipient in the world. Increasingly, foreign enterprises are actively pursuing business opportunities in China. The results of this study not only provide information to improve our understanding of the interrelated influences of managers’ emotional intelligence, leadership style and employee’s outcomes, but also provide valuable information for foreign investors to better deal with Chinese corporations and to function more efficiently in this attractive market. In addition, the results also provide useful information for Chinese organisations to understand their own strengths and weaknesses in the areas of emotional intelligence and leadership style.

It has been suggested that emotional intelligence can be learned, taught and improved through continuous reinforcement in adulthood (Bar-On, 1997; Goleman, 1996, 1998a). Similarly, transformational leadership is teachable; it also can be

enhanced through training and feedback (Bass, 1995; Barling *et al.*, 1996; Kelloway *et al.*, 2000; Mind Garden, 2002; Pounder, 2003). This implies that the selection or training of emotionally intelligent and transformational managers will be of great benefit to the organisation. Since high emotional intelligence enhances transformational leadership, it should be a criterion for selection for transformational leadership training, as a way of facilitating the success of the training.

In addition, this study demonstrates that transformational leadership plays a mediator role in job satisfaction. This implies that managers' emotional intelligence can predict better job satisfaction through transformational leadership. In other words, it would be greatly beneficial to organisations to combine both managers' emotional intelligence and transformational leadership styles to lead to a desirable outcome.

With respect to training and development, organisations could allocate resources to enhance the level of emotional intelligence and transformational leader style. Team structure may affect who should receive transformational leadership training (Dionne *et al.*, 2004; Pawar and Eastman (1997). Moreover, timing of a transformational leadership training program should be developed early in the team's life cycle as a crucial factor (Salas *et al.*, 1992). It usually takes about six months to a year to improve transformational leadership (Bass, 1995).

The transformational leadership style seems to be the most effective leadership style. Nonetheless, different types of organisational circumstances, situational factors and employees might need different types of leadership styles. Den Hartog *et al.* (1997) in reporting the research of Brown Bass (1985) and Bryman (1992), claimed that transformational and transactional are separate dimensions. Leaders can hold and use both transformational and transactional leadership in different circumstances with different employees. Studies have shown that transactional contingent reward style has positively predicted unit performance (Bass *et al.*, 2003), followers' commitment, satisfaction and performance (Avolio *et al.*, 1988; Bycio *et al.*, 1995; Chen *et al.*, 2005; Podsakoff *et al.*, 1990) and organisational citizenship behaviour (Goodwin *et al.*, 2001). More specifically, Steane *et al.* (2003) found that for Chinese leaders, extra effort, effectiveness and satisfaction are all predicted by both transformational and transactional contingent reward. There may be some situations where a transactional leadership style serves a purpose, when tasks require high levels of uniformity. In some cases, even a *laissez-faire* style might be suitable, when "several subordinate, task, and, organisation characteristics reduce the importance of leadership. A less active role of leaders could also lead to 'empowerment' of followers" (Den Hartog *et al.* 1997, p. 21). It may also be the case that *laissez-faire* leadership may be more suitable among highly motivated groups of professionals and equals.

Altering the employees' need levels on Maslow's five level hierarchy may also be an effective way of implementing the appropriate leadership style to suit different subordinates' needs successfully. For instance, if they are looking for the physiological and safety needs, transactional contingent reward leadership might suffice. However, after their two basic requirements are fulfilled, and more transcendental needs come into play, transformational leadership might be more effective. Meanwhile, managers may also need to be aware of their followers' cultural values and adjust their leadership behaviours accordingly. This implies that rather than treating all individuals in their groups similarly, leaders should deal with each employee individually and flexibly.

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There are many structural factors which can affect high organisational receptivity to transformational leadership:

- organisational emphasis on adaptation orientation;
- dominant boundary-spanning function;
- adhocracy or simple organisational structure; and
- clan mode of governance.

It is proposed by Pawar and Eastman (1997) that simple structure and adhocracy will be more receptive to transformational than to other forms of leadership

This study had several limitations. The construct and measures of emotional intelligence have been the subjects of some debate (Davies *et al.*, 1998). In addition, self-report measures of emotional intelligence and employee's performance, job satisfaction, organisational commitment and job stress were used to assess a person's self-perception of those variables rather than the actual variables themselves. Thus, common method biases may have occurred in this study (Podsakoff *et al.*, 2003). Performance in particular could be more objectively assessed instead of self-reporting in future studies. However, in some circumstances, performance-based measures have limitations, and self-report is a better way of capturing employees' own sense of how they are doing.

It is impossible to eliminate completely all forms of common method biases in a particular study (Podsakoff *et al.*, 2003). However, this study tried to minimise and remove this bias by the following methods. To reduce any social desirability bias, the emotional intelligence measure employed a forced choice instrument for Chinese respondents (Wong *et al.*, 2004). Then, to eliminate the common method biases, for the questionnaire design, some reversed questions were set. In addition, some measures were obtained from different sources. For instance, managers' leadership style was tested using both a self and a rater-evaluation method, i.e. that of their subordinates to provide objectivity, so there was no common method bias in this instance. Moreover, a careful choice of assessment instrument and the elimination of item ambiguity can help to control common method bias (Podsakoff *et al.*, 2003; Van de Vijver and Tanzer, 2004). Thus, applicable and valid instruments were chosen carefully in this study.

This research on transformational leadership is strongly suggestive in specifying the developmental mediating processes between managers' emotional intelligence and the job satisfaction element of employee outcomes. Future research could replicate the current study in different samples and different industries, as well as other national cultures. Moreover, types of task such as front line versus back office tasks might have a moderating effect, as employees may require higher emotional intelligence levels to perform certain high pressure front line tasks. Wong and Law (2002) claimed that emotional labour moderates the relationship between emotional intelligence and a variety of outcomes. Therefore, in order to contribute a clearer picture in this area, it is suggested that a model for combining moderation and mediation should be tested. Also, a follow-up to this study could take a finer-grained approach to examine how the individual components of emotional intelligence – self-awareness, self-management, social awareness and relationship management – and of transformational leadership – idealised influence, inspirational motivation, intellectual stimulation, individualised consideration – interact to produce employees' positive outcomes.

In addition, as previously discussed, managers' emotional intelligence did not account directly for employee's performance, organisational commitment and job stress. This suggests that these outcomes may be caused by many complicated factors, such as job nature, workloads, working environment, personal high levels of emotional intelligence or an interaction of their managers' emotional intelligence and their subordinates' own emotional intelligence, instead of being influenced only by their managers' emotional intelligence. Further studies should explore emotional intelligence and transformational leadership alongside these employee characteristics and contextual factors. Thus, the inclusion of other contextual and personal variables may provide an even richer model of the relationships between emotional intelligence, transformational leadership and employee outcomes. This study has provided some solid evidence, but more longitudinal and continual studies invoking more variables should be conducted.

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