Emotional intelligence and leadership abilities

H. H. Herbst

Tswane University of Technology Pretoria, South Africa e-mail: herbstt@tut.ac.za

J. G. Maree

University of Pretoria Pretoria, South Africa

E. Sibanda

Tshwane University of Technology Pretoria, South Africa

Abstract

While exceptional leaders share certain qualities like a strong personal ethic and a compelling vision of the future, research has failed to provide conclusive 'proof' of the link between a leader's effectiveness and his/ her emotional intelligence (defined from a cognitive perspective, as a set of abilities). Given the increased recognition of the importance of the role of emotions in the leadership literature, the question arises whether the concept of emotional intelligence has significance for leadership effectiveness. In a pioneering study in the South African context, we examined the possible relationship between four possible facets of emotional intelligence (defined as a multi-faceted ability) and five possible practices of exemplary leaders in the context of leadership in a Higher Education Institution. The sample comprised 138 managers within a Higher Education Institution. The findings provide some evidence that support a positive correlation between emotional intelligence and leadership effectiveness.

INTRODUCTION

Education systems are being transformed globally, giving rise to immense challenges. According to Bharwaney (2006), many employees are 'drowning' in organizations that employ them without the skills needed to survive in these organisations. Moreover a shortage of skilled leadership and lack of management capacity have been identified by various authors as some of the major failings of South African higher education also delaying its effective transformation (Seale 2004; Jansen 2004; Kotecha 2003; Badat 2002; Jansen, 2002; Cloete, Bunting and Kulati 2000; Council for Higher Education 2000). As key players in advancing the transformation agenda, the potential of sound leadership to exert a positive influence on this process and impact on student and institutional performance has been highlighted by a number of authors (Brennan 2005; Jansen 2004; Hargreaves

and Fink 2003; Retallick and Fink 2002; Hoachlander, Alt and Beltranena 2001). Jansen (2002) identifies the need for university leaders who are not only credible scholars but also effective leaders. However, the question regarding the nature of personal attributes underlying effective leadership has not been answered satisfactorily yet. Nor has the possible relationship between facets of leadership and facets of emotional intelligence (EI), defined from an ability-based vantage point, been researched satisfactorily.

Johnson and Cross (2004, 55) express the view that organisations are 'healthy or not healthy to the degree that people in the system believe it is a responsive institution'. These authors assent that people tend to feel disempowered or powerless in cases where there is a lack of effective intellectual and academic leadership. They conclude that change (needs to be) a process of 'educational interaction and negotiation among interest groups' (Johnson and Cross, 2004, 55). After having evaluated salient aspects of managerial skills in national education authorities, Froneman (2003) expresses his concern about the management acumen in educational leadership. He concurs with Pretorius (in Froneman, 2003) who concludes that 'the need for managing change in HEI is enormous', partly because management in higher education institutions concentrates mainly on structural changes needed, by and large ignoring challenges posed by the new century. After reviewing institutional management trends and challenges, Nolte (2004) concludes that the major challenge for institutional managements may be to find the niche that is most attuned to institutions' inherent strengths, in conjunction with possible opportunities that (already) exist in these surroundings.

It should be clear from the above that a great need exists to investigate South African leadership in higher education from a new perspective. We hope that our article, in focusing on emotional leadership and leadership abilities, will provide a pioneering overview of these matters.

The term emotional intelligence (IQ) was coined by Dr. Reuven BarOn in 1985 to describe his approach to assessing this aspect of general intelligence. According to BarOn (1996), broadly speaking, emotional intelligence addresses the emotional, personal, social, and survival dimensions of intelligence, vitally important in daily functioning. This less cognitive part of intelligence is concerned with understanding oneself and others, relating to people, and adapting to and coping with our immediate surroundings. These factors increase our ability to be more successful in dealing with environmental demands. Emotional intelligence is tactical and immediate, and as such reflects a person's 'common sense' and ability to get along in the world

Interest in emotional intelligence revolves around a number of hinges, two of which being its potential value to predict success as a leader and to help explain the difference between outstanding and average levels of leadership performance. Traditional estimates of intelligence seem to predict success as a leader to a certain extent. After all, to assume a position of leadership in the 21st century workplace requires a high level of cognitive ability or IQ in order to process the complexity of

information that leaders face daily. This is especially true for the higher education environment, where given levels of IQ can be regarded as a 'threshold' competence, a minimal capability that all managers must have in order to get and keep their job (Spencer and Spencer, 1993; McClelland, 1973). However, these estimates have not been able to account for a large portion of the variance in work performance and career success, especially among top managers and senior leaders (Emmerling and Goleman 2003). Merely having an IQ in the able, effective and efficient range or a post-graduate degree, does not in itself guarantee that these managers or leaders will become superior deans, heads of departments, or leaders.

The main focus of EI literature has been on the hypothesized value of EI to affect individual success (Higgs and Dulewicz 1999; Goleman 1998), and some empirical support has been established for a positive association between EI and work performance (Donaldson-Feilder and Bond 2004, 190). Salovey and Mayer (1990) and Mayer and Salovey (1995) hypothesise that higher levels of EI result in better psychological and physical well-being, and that EI, measured as an ability predicts a variety of important outcomes. According to Mayer, Salovey and Caruso (2004, 209–210), individuals with a high EI 'might also be more adept at describing motivational goals, aims, and missions'. Nonetheless, exactly how and to what extent EI accounts for effective leadership is as yet unknown.

As can be gleaned from what has already been stated, in recent years, the concept of EI has gained popularity as a potential primary attribute of effective leadership. However, despite the growing interest in relating EI to effective leadership, little empirical research has been published that explicitly examines this relationship. According to Davies, Stankov and Roberts (1998) many of the popular claims about the predictive value of emotional intelligence are viewed by psychologists as ill-defined, unsupported, and improbable.

The question arises as to whether knowledge regarding exactly how EI, measured as a set of abilities, may be related to leadership in such a way as to facilitate significant advances in leadership training and development programmes, and the ability to select potentially effective leaders. Our main aim is to explore the nature of this relationship in the context of leadership effectiveness in a higher education institution. One of the objectives of the present study was to find out if emotional intelligence could be used to predict leadership effectiveness among staff in management positions.

The research in this article therefore sets out to explore the relationship between emotional intelligence and effective leadership. Since the ability model of emotional intelligence proposed by Mayer and Salovey (1997) and the transformational leadership model by Kouzes and Posner (1987) provide the conceptual framework from which we intend to examine the relationship between emotional intelligence and effective leadership, these models will now be discussed briefly.

THE CHANGING CONTEXT OF HIGHER EDUCATION LEADERSHIP: THE ROLE OF EMOTIONS

In South Africa in the 21st century, as elsewhere in the world, education systems are being reformed and restructured, emphasising the need for strong leadership, which, especially in times of change, often becomes a highly emotionally laden activity. According to Fried (1995), leading people is fundamentally an emotional activity. By that same token, people working in leadership positions are constantly immersed in the emotional demands placed on them by their peers, students and members of the community.

Attention is increasingly given to the emotional aspects of organizational life (Fineman 1997). The spotlight does not only fall on an unwavering commitment to mere rational thought processes, command and control management styles, but to an ever increasing extent the importance of characteristics such as feelings, trust, relationship building, knowledge sharing and cultural awareness are taking centre stage (Goffee and Jones 2000; Higgs and Dulewicz 1999; Fineman 1993;). There is general agreement about the need to include the role of emotions in research on educational leaders (Beaty 2000; Blackmore 1999; Hargreaves 1998(b)). Hargreaves' (1998(a), 319) research supports the claim that leadership is not merely a cognitive action, but also an emotional endeavour and a form of emotional labour that involves emotional understanding. Consequently, during the first few years of the 21st century, the emergence of the concept of emotional intelligence is challenging traditional views of what it takes to be an effective leader.

Recent research reviewed by Goleman, Boyatzis and McKee (2002) shows that the more senior the leader becomes, the more critical his or her emotional competencies turn out to be. However, Goleman's (1995) assertion that emotional intelligence accounts for more than 85 per cent of top leaders' exceptional performance is refuted by research carried out by, for example, Harris, Day, Hopkins, Hadfield, Hargreaves and Chapman (2003, 27).

In the current study, we are keenly interested to see how ability-based EI relates to transformational leadership behaviour, which is regarded as crucially important for organisational success (Lowe and Kroeck 1996). Consequently, the concept of transformational leadership will now be explicated.

DEFINING EMOTIONAL INTELLIGENCE (EI)

There is still little consensus about the exact nature of emotional intelligence (Salovey and Mayer 1990). A variety of alternative models of this construct exists (e.g. BarOn 1997; Goleman 1995; Salovey and Mayer 1990). Many of these models focus on the non-cognitive and emotional facets of EI, defining EI in terms of behaviours and skills, including stress management skills (e.g. stress tolerance and impulse control), self-management skills (e.g. self-control, conscientiousness and adaptability), as well as social skills (e.g. conflict management, leadership and

communication) (e.g. BarOn 2000; BarOn, Brown, Kirkaldy and Thome 2000; Boyatzis, Goleman and Rhee 2000; Higgs and Dulewicz 1999; Goleman 1998). Salovey and Mayer (1990) and Mayer and Salovey (1997; 1995), on the other hand, conceptualise EI as a cognitive ability that involves the processing of emotion. These authors express the opinion that tasks that tap into the various abilities that underlie emotional intelligence are likely to have more validity than self-report measures (Mayer, DiPaolo and Salovey 1990), and that the relationship between EI and effective leadership may be better established with ability-based rather than self-report measures. According to Mayer and Salovey (1997) and Mayer, Salovey and Caruso (2000, 401), EI refers to 'the ability to perceive and express emotions, assimilate emotions in thought, understand and reason with emotion, and regulate emotion in self and others'. The authors of this article accepted this definition as our operational definition for the term EI. We concur with the view that EI can be regarded as 'an intelligence that operates on, and with emotional information' (Mayer et al. 2004, 209).

It should be stressed, though, that the authors of the current article in no way suggest that one model is superior to another. Instead, the BarOn model, for instance, is regarded to be an exceptional model to conceptualise EI. The BarOn Emotional Quotient Inventory (EQ-i) (BarOn, 1996) can be employed in many ways and in a variety of settings. It is appropriate for use in corporate, clinical, educational, medical and research settings. Potential users of the BarOn model (BarOn, 1996) include human resources professionals, organizational development consultants, career counsellors, guidance counsellors, psychologists, psychiatrists, physicians, and social workers. The BarOn EQ-i (BarOn, 1997, 1996) can be used by organizations for screening as part of the recruiting process to aid in identifying potentially successful employees. It can also be employed in identifying those emotional and social skills that are important to develop in employee training programmes, team building, and in enhancing managerial competencies at work.

Our aim is to study a given phenomenon in different ways. Our primary intention with the research is not to 'prove' that any particular approach or definition of EI is the 'only' (viable) or even the best or a better method that needs to be implemented, but rather to investigate the possible use of the different EI instruments in South African contexts. We remain acutely aware of the possible shortcomings inherent to the different designs and approaches.

Mayer and Salovey (1997; 1996) arranged the four branches of EI from basic processes (i.e., identifying emotions and using emotions) to higher level mechanisms (i.e., understanding and managing emotions). According to Mayer et al. (2004, 199) 'The order of the branches represents the degree to which the ability is integrated within the rest of an individual's major psychological subsystems – that is, within his or her overall personality. The four branches within this model are summarized below (Caruso, Mayer and Salovey 2002, 306–307).

The first branch, *Identifying emotions*, includes the ability to accurately perceive emotions in oneself, others and objects (e.g. art and stories) and to express

emotions accurately. Branch Two, *Emotional facilitation of thought* (or *Using emotions*), includes 'the ability to use emotions to redirect attention to important events, to generate emotions that facilitate decision making, to use mood swings as a means to consider multiple points of view, and harness different emotions to encourage different approaches to problem solving' (Caruso et al. 2002, 307).

The third branch, *Understanding emotions*, represents the ability to understand how emotions combine to form more complex emotions and how emotions change from low to high intensity, as well as the ability to recognize the causes and consequences of emotions. Branch Four, *Managing emotions*, is the most advanced emotional ability, and includes the ability to stay open to feelings, whether negative or positive and to manage emotion in oneself and others, without necessarily suppressing negative emotions.

THE KOUZES AND POSNER MODEL OF TRANSFORMATIONAL LEADERSHIP

Many definitions of leadership exist. Furthermore, the literature on effective leaders seems to suggest that effective leaders tend to be 'transformational' rather than 'transactional' (Harris et al. 2003, 29) and that transformational leadership is critical to meeting educational challenges in a changing environment. Burns (1978, 20) asserts that transformational leadership occurs when the individuals involved 'raise one another to higher levels of motivation and morality'.

Transformational leadership contains four components, viz. idealized influence, inspirational motivation, intellectual stimulation and individualized consideration (Bass 1998, 1985; Bass and Avolio 1993). Various studies indicate that, apart from being associated with organisational performance, transformational leadership enhances subordinates' satisfaction with, and trust in leadership, as well as employees' emotional commitment to organisations (Barling, Slater and Kelloway 2000, 157). Transformational leaders characteristically nurture group and personal improvement, share inspiring organisational visions, and foster commitment and motivation towards important goals (Kouzes and Posner 1987; Bass 1985). Transformational leadership theory suggests that emotional attachment occurs between transformational leaders and their followers to such an extent that followers tend to identify with transformational leaders and are inclined to go beyond the call of duty to achieve an organisation's mission (Bass 1998; Yammarino and Bass 1990; Bass 1985). This occurrence revolves around 'a reciprocal relationship between those who choose to lead and those who decide to follow' (Kouzes and Posner 1993, 1).

In the current study, we investigated whether ability-based emotional intelligence might predispose leaders to demonstrate transformational leadership behavioural patterns, facilitating more effective leadership. The conceptual framework for the research is provided by Kouzes and Posner's (1987) leadership model comprising five key transformational leadership behaviours. According to these authors transformational leadership behaviours can be assessed by means of

the Leadership Practices Inventory (LPI) (Kouzes and Posner 1988). Kouzes and Posner (1988) based this model, which was generated by means of in-depth interviews and research on reported case studies of people's personal, or 'best practices' in leadership on the notion that certain practices are common to successful leaders. According to Kouzes and Posner (2001), successful transformational leaders' five distinct practices of leadership comprise the following 10 strategies, which outstanding leaders use to affect employees' and organisational performance:

- Challenging the process:
 - Search for opportunities
 - Experiment and take risks
- Inspiring a shared vision:
 - Envision the future
 - Enlist others
- Enabling others to act:
 - Foster collaboration
 - Strengthen others
- Modelling the way:
 - Set an example
 - Achieve small wins
- Encouraging the heart:
 - Recognise individual contributions
 - Celebrate accomplishments

In the current study we regarded effective leaders as those who demonstrated these five practices of transformational leaders. The Kouzes and Posner transformational leadership model was chosen for the following two reasons:

Firstly, this model emphasizes the relational and personal aspects of leadership in particular and demonstrates an essential involvement of emotions in the practices of exemplary leaders. Consequently, it is assumed that those processes by which leaders create a shared vision, motivate and encourage others are probably based on the intelligent use of emotion and the integration of feelings with thinking.

Secondly, the Kouzes and Posner leadership model has been used extensively to measure leadership behaviours across a variety of organisations, disciplines and demographic backgrounds (Kouzes and Posner 1987).

PROCEDURE

Prior to the administration of the test, testees were allowed to ask questions about it. The test administrators assured the testees that their responses would be treated with extreme confidentiality and that their anonymity would at all times be safeguarded. The test administrators next explained to the participants how to complete the questionnaire. On average, the completion of the test took 35 minutes. In view of the fact that the questionnaire may have aroused questions and anxieties, testees were encouraged to make an appointment with the test administrators to discuss their feelings and questions. Testees were assured that general feedback on the results would be provided within one month. Feedback was subsequently provided approximately five weeks after the initial assessment and testees' questions had been handled professionally by the test administrators. Testees received their reports in sealed envelopes.

ETHICAL ASPECTS

Permission to conduct the research, to publish the research results and to incorporate the above case studies in this article, was obtained from the institution and its managers that were involved. For the purpose of confidentiality, all recognisable data have been carefully disguised or omitted. Ethical measures to ensure the research participants' wellbeing were implemented throughout the study. Due to the extremely sensitive nature of the information, feedback was provided to each research participant individually, which allowed for no deception by the researchers. The research findings were released in an accurate and scientifically accountable manner.

LIMITATIONS OF THE STUDY

Some of the major limitations of this study can be summarised as follows:

- The measures involved have not been standardised on a South African population. North American norms were used to calculate respondents' scores and these scores have to be interpreted with extreme circumspection.
- The range/scope of the study is limited because only one institution was involved. Due to the high costs involved in the administration and scoring of the measure used in this study, it was decided, *inter alia*, to limit the current research to one institution only.
- The possibility of inference or generalisation is likewise limited, since the single institution study is not representative of the full population of South African managers in higher education.
- The subjective interpretation of the researchers can also be seen as limiting the study, as the results may well be interpreted differently by other researchers.
- The staff members participating in this study cannot be considered a random sample and hence generalisation cannot be made. The reasons why some staff

members decided not to participate remain unknown. In terms of their EI scores, non-participants may very well differ from those who participated.

METHOD

Participants

In order to explore the relationship between leadership and EI, the whole population of staff in management positions (N=204) at a higher education institution was approached to participate in the project on a voluntary basis. A total of 138 (68%) completed both assessments (93 males and 45 females; mean age = 46.0 years). Of these participants 12.3 per cent (17) held a senior management position (deans, chief directors), 80 per cent (111) were middle-level managers (heads of departments) and 7.2 per cent (10) were supervisors (divisional heads). All participants were guaranteed anonymity in respect of their individual scores.

Assessment instruments

Two separate instruments, namely the MSCEIT and the LPI, which are described more fully below, were administered on the sample of 138 managers.

The MSCEIT

The Mayer-Salovey-Caruso (2002; 2000) Emotional Intelligence Ability Test, Version 2.0 (MSCEITV2.0) was used in this research to measure the EI of participants. The test was developed from an intelligence-testing tradition that was largely informed by the emerging scientific understanding of emotions and their function. Responses to the MSCEIT represent actual abilities to solve emotional problems. The face and content validity of the MSCEIT has been proven to be adequate. Furthermore, the MSCEIT's overall reliability coefficient is r = .91 or .93 (depending on whether expert or general consensus scoring is employed), with area reliabilities of r = .90 for the experiential area and r = .85 for the strategic area. The branch reliabilities range from r = 0.74 to r = .89 (Mayer et al. 2004, 202). Mayer et al. (2002, 43) opine that 'on the basis of the foregoing validities, and our theory of EI, we believe the evidence for construct validity for the MSCEIT V2.0 is excellent, and that it already surpasses by far that of any other scale in the area of EI'. A more detailed description of the psychometric properties of this measure and how it was developed can be found in the MSCEIT user's manual (Mayer et al. 2002).

Persons who completed the study had to complete eight tasks, grouped in dyads; two to measure each of the four branches or abilities of EI. The following scores are calculated (Mayer et al. 2002, 17):

• Total Emotional intelligence score:

Provides a single overall index of the respondent's emotional intelligence.

Area scores

- An Experiential Emotional Intelligence (branch one and two) score which
 provides an index of the respondent's ability to perceive emotional
 information, to relate it to other sensations such as colour and taste, and
 to use it to facilitate thought.
- A Strategic Emotional Intelligence (branch three and four) score provides an index of the respondent's ability to understand emotional information and use it strategically for planning and self-management
- Branch scores: The four-branch or ability model as described above consists of the following tasks (Mayer et al. 2004, 200):

Branch 1: Perceiving emotions

- Faces, which measures the person's ability to identify the emotions in faces.
- *Pictures*, which measures the person's ability to identify the emotions conveyed by landscapes and designs.

Branch 2: Facilitating thought/Using emotions

- *Sensations*, in which participants have to compare emotions to other tactile and sensory stimuli.
- Facilitation, where participants have to identify the emotions that would best facilitate a type of thinking (e.g. planning a party).

Branch 3: Understanding emotions

- *Changes*, which measures the person's ability to understand how emotional intensity lessens and increases and how one emotional state transition into another.
- *Blends*, for which participants have to identify the emotions that are involved in more complex affective states.

Branch 4: Managing emotions

- *Emotional management*, where hypothetical scenarios are presented to the participants and asking them how they would maintain or change their feelings.
- *Emotional relations*, where participants are asked how to manage others' feelings so that a desired outcome is achieved.

Raw scores for each of the tasks are automatically converted to standard scores (m = 100; s = 15). Individual reports contain descriptors for each of the four branches or abilities and tasks, and scores are categorized as Consider developing, Competent or High performance.

The Leadership Practices Inventory (LPI)

Both the self and the observer forms of the LPI (Kouzes and Posner 1988) are 30-item leadership inventories, assessing the use of the five transformational leadership practices discussed earlier. Each practice is measured by six behavioural descriptions, rated on a ten-point Likert scale anchored by 1 = Almost never and 10 = Almost always. Validation studies conducted consistently over a 10-year period have confirmed its reliability and validity (both face validity and predictive validity) (Kouzes and Posner 1995). Both the LPI Self and the LPI Observer forms were used in the current study. While leaders completed the LPI Self form to rate their own behaviour, six observers were included for each participant and a total of 828 LPI Observer forms were sent out. LPI-Observer forms were completed and returned by 603 (73% response rate) of the observers, that is, a mean number of 4.4 observers per participant. Observers included the participant's manager, subordinates and peers. Ratings from all observers for a given participant were averaged to develop mean LPI-observer scores for that participant.

STATISTICAL ANALYSIS

A statistical software programme, SAS version 9 (SAS 1996) was used for the analysis of the data. As an initial step, all the variables were tested for normality, using the Shapiro-Wilk test. In all the cases a *p* value of more than 0.05 was obtained. This indicated that the data are from a normally distributed population. The correlations between the Leadership Practices Inventory and the Emotional Intelligent scores were determined.

Regression analysis was utilised to investigate the extent to which facets of the Leadership Practices Inventory (dependent variables) can be predicted by combinations of the Biographical data and the EI scores (independent variables). The stepwise method was applied for the selection of predictor variables, with the significant level of p = 0.1 The stepwise selection procedure provides a useful and effective way of independent variable selection (Hosmer and Lemeshow 2000). Lastly, a paired t-test was also conducted to test for the difference between the self and the observed scores.

RESULTS

Stepwise regression analyses were applied to each of the five practices of effective leaders as the dependent variable and demographic variables, as well the four abilities of emotional intelligence with its respective tasks measured by the MSCEIT as potential predictors (independent variables).

Table 1: Correlation coefficients indicating the correlation between emotional intelligence and leadership effectiveness for all groups combined (N = 138)

	Leadership Practices Inventory (LPI)						
MSCEIT	Challenging the process	Inspiring a shared vision	Enabling others to act	Modelling the way	Encouraging the heart		
Age	0.17699*	0.26132*	0.10103	0.10193	0.12769		
MSCEIT Total	0.16777	0.07704	0.03079	0.03301	0.02802		
Experiential El							
Identifying emotions	0.03111	-0.07010	-0.05709	-0.00965	-0.04171		
Using emotions	0.08330	0.01380	-0.01153	-0.04384	-0.02959		
Strategic El	Strategic El						
Understanding emotions	0.15212	0.11245	0.09822	0.05091	0.07539		
Managing emotions	0.21310*	0.18812*	0.07511	0.12201	0.09897		

^{*} $p \leq 0.05$

Table 2: Correlation coefficients indicating the correlation between emotional intelligence and leadership effectiveness for the Management level (N = 111)

	Leadership Practices Inventory (LPI)					
MSCEIT	Challenging the process	Inspiring a shared vision	Enabling others to act	Modelling the way	Encouraging the heart	
MSCEIT Total	0.18329	0.09413	0.05017	0.05022	0.05320	
Experiential EI	0.11788	0.01221	-0.01720	-0.02673	-0.00680	
Identifying emotions	0.04182	-0.07899	-0.08316	-0.04199	-0.04812	
Using emotions	0.09735	0.03555	0.04055	0.00183	0.00883	
Strategic El	0.21300*	0.17503	0.12231	0.13260	0.12109	
Understanding emotions	0.14619	0.11456	0.10931	0.08492	0.10166	
Managing emotions	0.21246*	0.19247*	0.08259	0.13746	0.09784	

^{*} $p \leq 0.05$

To explore the extent to which the various facets of emotional intelligence and those leadership effectiveness for all groups combined (Table 1), and managers (Table 2) are related, Pearson product moment correlation coefficients were calculated.

Table 3: Paired (two-sided) t-test comparisons between managers' (self-score) scores and observers (subordinates) scores (n = 134)

Variable	м	SD	SE	Т	P (Effect size (d) be- tween brackets)	95 per cent confidence interval of the difference		
						Lower	Upper	
Self	49.035	5.201	0.449			48.146	49.924	
Obs	44.689	5.788	0.500			43.700	45.678	
Difference (effect size)	4.346	7.334	7.57	6.86	<0.001* (0.574**)	3.092	5.599	

 $P \le 0.05$

**: Medium effect size

For the purposes of our analysis, the following criteria were applied (Ellis 2005):

a. d = .2: Small effect size.

b. d = .5: Medium effect size

c. d = .8: Large effect size

Average scores of the managers versus the observers

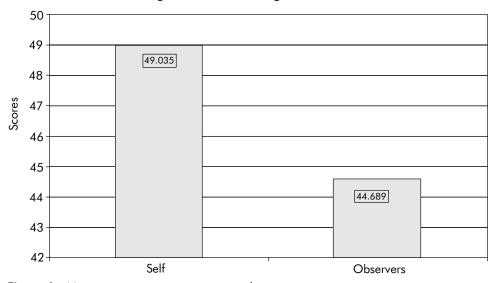


Figure 1: Mean scores: mangers versus obseervers

From Table 1 it is evident that no significant correlation could be found between the EI total score and any one of the five leadership practices for all management levels combined. However, significant relationships between selected components of the LPI and the EI sub-scales were found. For all groups combined

Table 4:	Stepwise Regression Model of facets of the Leadership Practices Inventory
	(dependent variables) and the Biographical data and El scores (indepen-
	dent variables)

			Coefficient of Determination			
Field		Parameter Estimate	Partial R ²	Model/ Cumulative R ²	F	р
v29	vv8	-2.97006	0.0468	0.0468	6.47	0.01*
	v17	0.15323	0.0494	0.0962	7.17	0.00*
v30	v5	0.16810	0.0320	0.0320	4.36	0.00*
v31	vv8	-2.20997	0.0252	0.1096	3.68	0.05*
	v5	0.17068	0.0527	0.0527	7.34	0.00*
	v21	0.11164	0.0317	0.0844	4.54	0.03*
TotalSelf	v5	0.60686	0.0253	0.0253	3.43	0.06*
	v17	0.47471	0.0233	0.0486	3.21	0.07*
TotalEvr	v5	0.96768	0.0325	0.0325	4.44	0.00*

^{*} p < 0.05

significant positive correlations were also found between age and Challenging the process (p < 0.05) and Inspiring a shared vision (p < 0.05). Although not significant (p < 0.05) the EI total score correlates positively with Challenging the process (p < 0.05) for all management levels combined. Managing or regulating emotions was the only EI ability that significantly correlated positively with Challenging the process (p < 0.05) and Inspiring a shared vision (p < 0.05) for all management levels combined.

Table 2 indicates a positive correlation between the *EI ability* Managing emotions and the *Leadership abilities* Challenging the process (p < 0.05) and Inspiring a shared vision (p < 0.05). A positive relationship was also found between the Strategic emotional intelligence score (branch three and four), and Challenging the process (p < 0.05).

As can be seen in Table 3, paired t-tests revealed a highly significant difference between the mean levels of the self and observers scores (p < 0.0001). Managers' (self score) scores and observers' (subordinates) subscores were compared and analyzed using a paired samples t-test. The sample means, displayed in figure 1 shows that the mean of the self scores were significantly higher than the observed mean, p < 0.001.

We started out from the tentative position that a high total EI score would predict leadership effectiveness as measured by the LPI. Although the total EI scores did not emerge as a significant predictor for any of the facets of the LPI, some of the EI subscales emerged as significant predictors for some of the five leadership practices. It is clear from Table 4 that qualification level (vv8) and

Strategic EI score (v17) emerged as significant predictors (p < 0.05) in the case of v29 (Challenging the process, Self score). Whereas age (v5) emerged as the only significant predictor (p < 0.05) of Inspiring a shared vision (v30), three variables, viz. level of qualification (vv8), age (v5) and Managing emotions (v21) emerged as significant predictors (p < 0.05) in the case of Inspiring a shared vision (mean of Observer score). While qualification level (v5) and Strategic EI score (v17) emerged as significant predictors in the case of TotalSelf ($id\ est$, total Self score on the LPI), age (v5) emerged as the only significant predictor in the case of Total Evr (total score on the LPI, that is, sum of scores of Self and Others).

Managers' scores

Multiple regression revealed that while some facets of EI (as measured by the MSCEIT) make a significant contribution to facets of leadership effectiveness (measured by the LPI), this trend was not maintained throughout. Furthermore, leaders' ability to Understand and Manage their own emotions best predicts the ability to Inspire a shared vision in those who follow. As far as overall leadership ability is concerned, experience, coupled with the ability to Understand and Manage their own and others' emotions, whether negative or positive, without necessarily suppressing negative emotions, emerged as significant predictors for leadership ability.

Observer scores

Data obtained from Observers suggested that qualification level, coupled with the ability to Understand and Manage their own and others' emotions, whether negative or positive, without necessarily suppressing negative emotions, best predicted managers' ability to Challenge processes. Furthermore, Qualifications and years of Experience as well as the ability to manage their own as well as others' emotions (v21) best predicted managers' ability to Inspire a shared vision in others.

Mean scores; managers and observers

In summary, our findings suggest that, based on the mean scores of *managers and followers*, the best predictor for effective leadership is *Experience*.

We will now discuss some of the results in more detail.

DISCUSSION

In the first part of this article, it was shown that emotions play an important part in leadership behaviour. However, little empirical evidence has hitherto been presented that investigate the nature of that the nature of possible relationships between EI and leadership. This article has explored the relationship that may exist

between individual emotional intelligence and effective leadership in a higher education institution, as described by the five practices of exemplary leaders. Summarised, the findings of the current study suggest that EI as measured by the MSCEIT may in some way be linked to some of the abilities of effective leaders measured by the LPI and that facets of emotional intelligence may be useful predictors of transformational leadership behaviours. The results provide some evidence that managers with a high Strategic EI (branch three and four) the ability to understand and manage emotions – are more effective in Challenging the process and Inspiring a shared vision. Furthermore, the ability to manage their own as well as the emotions of other people (branch four) emerged as a strong predictor of leadership effectiveness in general. However, in the current study, EI (as measured by the MSCEIT) or facets thereof did not emerge as significant predictors in the case of three of the five leadership practices in the LPI, viz. Enabling others to act, Modelling the way, and Encouraging the heart.

Although the exploratory nature of the current study makes replication of these findings mandatory, the findings of the current study provide some preliminary evidence for the relationship between EI and effective leadership. Understanding better how EI relates to effective leadership may increase the understanding of effective leadership and help develop potentially authoritative instruments for the selection, training and development of leaders, potentially enhancing organisational wellness and performance. Knowledge gained from this research may also provide a deeper understanding of those emotion-based skills, which could be used in leadership development programmes to enhance leadership effectiveness in higher education institutions. Bharwaney (2006) suggests that instituting emotional intelligence by means of the concept of 'coaching' could go a long way towards providing the crucial EI skills needed to survive in organisations. Boyatzis (2006) maintains that there are millions of managers working in organizations throughout the world, who want to be better managers and leaders, but do not receive the necessary training to achieve this outcome. According to Boyatzis (2006), these budding managers attend training programs with the very best of intentions, obtain sought-after qualifications (e.g. Master's in Business Administration), and acquire the professional services of consultants and coaches. Yet, time and again the degree of change is small. Inevitably, more resources are thrown into training; often, too, a belief sets in that great managers and leaders are born and not made. This confirms our hypothesis that researchers (in higher education and indeed elsewhere) need to establish an emotional intelligence research agenda.

It seems clear that leaders can and need to be trained to achieve the twin outcomes of intellectual and emotional maturity. According to Wolfe (2006), successful EI training facilitates an understanding by all parties concerned (e.g. leader, manager, owner or employee) that how persons at all employment levels feel and experience matters exert an influence on their perceptions, choices, decisions and actions. Furthermore, these persons gain knowledge about the fact that to be successful on an interpersonal level requires identifying feelings of all

persons involved, and especially the feelings of key personnel. Wolfe (2006) contends that one's capacity to bring together emotional intelligence and cognitive intelligence facilitates decision-making and improved performance. He concludes that what he refers to as 'emotion based planning and problem solving process' has been proven to yield excellent results in numerous organisations, even though, currently, quantitative research results to support the effectiveness of this approach is still lacking. However, current research supports the idea that managers can be trained to use transformational leadership behaviours (Barling et al. 2000; Kouzes and Posner 1995). Future research should also focus on ways in which these emotional intelligence abilities can be developed through training and development programmes.

RECOMMENDATIONS

We strongly suggest that this study be replicated in contexts similar to the one described here. We believe that more systematic work needs to be undertaken on the area of emotional intelligence and emotional leadership within higher education institutions, especially during periods of restructuring and change. Our results seem to suggest that effective leadership cannot be accomplished by the simple adoption of a rational planning model. It seems clear that leadership comprises both intellectual and emotional intelligence facets and that both these facets need to be attended to during the training of leaders to equip them with sufficient management (and, indeed, survival) skills. This may be especially true in times of change and transformation (which are often characterised by turbulence) and its regular concomitant sprout, namely the need for adjustment.

The results are, however, exploratory in nature and require replication with a sample from a diverse range of industries across both private and public sectors. Ideally, this study needs to be replicated with a bigger sample of senior and supervisory levels to investigate the question as to whether EI could be linked to effective leadership in a broader range of industries and at different leadership levels. Likewise, in-depth interviews need to be conducted with selected participants to explore the relationship between EI and effective leadership in more depth to triangulate the findings of the study.

To this end some areas for future investigation might include the impact that the emotional intelligence of managers has on the emotional intelligence of staff members and the organisational culture. These areas of study could provide a more complete picture of the emotional dynamics that constitute effective leadership within higher education institutions.

ACKNOWLEDGEMENTS

The authors would like to thank Drs. Kouzes and Posner for permission to use the LPI instrument, the TUT management for their support, and the respondents for taking part in the research.

REFERENCES

- Badat, S. 2002. Transforming South African higher education, 1990–2003: Goals, policy initiatives and critical challenges and issues. Unpublished paper. African Higher Education Partnership meeting, 16–18 March 2002, Nigeria. Available at:
 - www.che.ac.za/che_secretariat/ceo_papers/2003/SA-Transform_Dec2003.pdf. Accessed on 3 July 2006.
- BarOn, R. 1996. A brief description of Reuven BarOn's EQ Inventory. Toronto: Multi-Health Systems.
- —. 1997. BarOn emotional quotient inventory. Toronto: Multi-Health Systems.
- ——. 2000. Emotional and social intelligence: insights from the emotional quotient inventory. In *The handbook of emotional intelligence*, ed. R. BarOn and J. D. Parker. San Francisco: Jossey-Bass.
- BarOn, R., J. M. Brown, B. D. Kirkaldy and E. P. Thome. 2000. Emotional expression and implications for occupational stress: an application of the Emotional Quotient Inventory (EO-I). *Personality and Individual Differences* 28:1107–1118.
- Barling, J., F. Slater and E. K. Kelloway. 2000. Transformational leadership and emotional intelligence: an exploratory study. *Leadership and Organization Development Journal* 21 (2): 157–161.
- Bass, B. M. 1985. Leadership and performance beyond expectations. New York: Free Press.

 ——. 1998. Transformational leadership: Industry, military and educational impact. Mahwah, NJ: Erlbaum.
- Bass, B. M. and B. J. Avolio. 1993. Transformational leadership: A response to critiques. In *Leadership theory and research: Perspectives and directions*, ed. M. M. Chermers and R. Anyman. New York: Free Press.
- Beaty, B. R. 2000. The emotions of educational leadership: breaking the silence. *International Journal of Leadership in Education* 3 (4): 331–357.
- Bharwaney, G. 2006. Coaching executives to enhance emotional intelligence and increase productivity: Concrete evidence. In *Educating people to be emotionally intelligent*, ed. R. BarOn, J. G. Maree and M. Elias. New York: Praeger/ Heinemann.
- Blackmore, J. 1999. *Troubling women: feminism, leadership and educational change.* Buckingham: Open University Press.
- Boyatzis, R. E. 2006. Developing emotional intelligence through coaching for leadership, professional and occupational excellence. In *Educating people to be emotionally intelligent*, ed. R. BarOn, J. G. Maree and M. Elias. New York: Praeger/ Heinemann.
- Boyatzis, R. E., D. Goleman and K. S. Rhee. 2000. Clustering competence in emotional intelligence: insights from the emotional competence inventory. In *The handbook of emotional intelligence*, ed. R. BarOn and J. D. A. Parker. San Francisco: Jossey-Bass.
- Brennan, G. 2005. Developing a dynamic school culture: The role of the school principal. Unpublished Masters thesis, University of Calgary: Calgary.
- Burns, J. M. 1978. Leadership. New York: Harper and Row.

- Caruso, D. R., J. D. Mayer and P. Salovey. 2002. Relation of an ability measure of emotional intelligence to personality. *Journal of Personality Assessment* 79 (2): 306–320.
- Cloete, N, I. Bunting and T. Kulati. 2000. *Leadership and institutional change in higher education*. Pretoria: Centre for Higher Education Transformation (CHET).
- CHE, see Council on Higher Education (CHE).
- Council on Higher Education. 2000. Report of the council on HE's shape and size task team. Pretoria. Available at: http://www.che.ac.za. Accessed on 3 July 2006.
- Davies, M., L. Stankov and R. D. Roberts. 1998. Emotional intelligence: In search of an elusive construct. *Journal of Personality and Social Psychology* 75:989–1015.
- Donaldson-Feilder, E. J. and F. W. Bond. 2004. The relative importance of psychological acceptance and emotional intelligence to workplace well-being. *British Journal of Guidance and Counseling* 32 (2): 187–203.
- Ellis, S. M. 2005. Information given to Prof. J. G. Maree during a personal communication in 2005.
- Emmering, R. and D. Goleman. 2003. Emotional intelligence: Issues and common misunderstandings. Consortium for Research on Emotional Intelligence in Organizations. Available at: www.eiconsortium.org.
- Fineman, S. 1993. Emotion in organisations. Sage Publication: London.
- —. 1997. Emotion and management learning. *Management Learning* 28 (1): 13–15.
- Fried, R. 1995. The passionate teacher. Boston: Beacon Press.
- Froneman, L. 2003. Managing change in higher educational institutions in South Africa: some challenges. *Acta Commercii* 3:39–55.
- Goffee, R. and G. Jones. 2000. Why should anyone be led by you? *Harvard Business Review* September–October:63–70.
- Goleman, D. 1995. *Emotional intelligence: Why it can matter more than IQ*. Bloomsbury Publishing: London.
- —. 1998. Working with emotional intelligence. London: Bloombury.Goleman, D., R. Boyatzis and A. McKee. 2002. Primal leadership: Realizing the power of emotional intelligence. Boston: Harvard Business School Press.
- Hargreaves, A. 1998(a). The emotional politics of teaching and teacher development: With implications for educational leadership. *Leadership in Education* 1 (4): 315–336.
- Hargreaves, A. and D. Fink. 2003. *The seven principles of sustainable leadership*. International Centre for Educational Change, Ontario Institute for Studies in Education, University of Toronto: Toronto.
- Harris, A., C. Day, D. Hopkins, M. Hadfield, A. Hargreaves and C. Chapman. 2003. *Effective leadership for school improvement*. RoutledgeFalmer: New York and London.
- Higgs, M. and V. Dulewicz. 1999. Making sense of emotional intelligence. Windsor: ASE.
- Hoachlander, G., M. Alt and R. Beltranena 2001. *Leading school improvement: What research says*. Southern Regional Education Board: Atlanta. Available at: http://www.sreb.org/main/Leadership/pubs/LeadingSchool Improvement.asp. Accessed on 30 June 2006.
- Hosmer, D. W. and S. Lemeshow. 2000. *Applied logistic regression*. New York: John Wiley and Sons.
- Jansen, D. 2002. Seven major challenges facing higher education. Keynote Address, Council for Higher Education (CHE) Consultative Conference IV. Johannesburg.

- —... 2004. Race, education and democracy after ten year: How far have we come? Prepared for the Institute for Democracy in South Africa (IDASA). Available at: http://www.chet.org.za/issues/raceedudemoc.doc. Accessed on 3 July 2006.
- Johnson, B. and M. Cross. 2004. Academic leadership under siege: possibilities and limits of executive deanship. *South African Journal of Higher Education* 18 (2): 34–58.
- Lowe, K. B. and K. G. Kroeck. 1996. Effectiveness correlates of transformational and transactional leadership: a meta-analytic review. *Leadership Quarterly* 7:385–426.
- Kotecha, P. 2003. Leadership, identity and the state in South African higher education. Unpublished paper presented at the Association of Commonwealth Universities Conference, Belfast, 31 August 4 September 2003.
- Kouzes, J. and B. Posner. 1987. *The leadership challenge: How to get extraordinary things done in organizations*. Jossey-Bass: San Francisco.
- —. 1995. Development and validation of Leadership Practices Inventory. *Educational and Psychological Measurement* 48:483–496.
- ——. 2001. *The Leadership Practices Inventory (LPI)*. Facilitator's Guide 2nd ed. Jossey-Bass/Pfeiffer: San Francisco.
- Mayer, J. D., M. T. DiPaolo and P. Salovey.1990. Perceiving affective content in ambiguous visual stimuli: A component of emotional intelligence. *Journal of Personality Assessment* 54:772–781.
- Mayer, J. D. and P. Salovey. 1995. Emotional intelligence and the construction and regulation of feelings. *Applied and Preventative Psychology* 4:197–208.
- —. 1997. What is emotional intelligence? In *Emotional development and emotional intelligence: Implications for educators*, ed. P. Salovey and D. Sluyter. New York: Basic Books.
- Mayer, J. D., P. Salovey and D. R. Caruso. 2000. Models of emotional intelligence. In *Handbook of human intelligence*, ed. R. J. Sternberg. New York: Cambridge.
- —. 2002. MSCEIT user's manual. Multi-Health Systems Inc: Toronto, Canada.
- ——. 2004. Emotional Intelligence: Theory, findings, and implications. *Psychological Inquiry* 15 (3): 197–215.
- McClelland, D. C. 1973. Testing for competence rather than intelligence. *American Psychologist* 28:1–14.
- Nolte, D. A. 2004. Higher education system and institutional management trends and challenges. *Journal for New Generation Sciences* 2 (2): 116–137.
- Retallick, J. and D. Fink. 2002. Framing leadership: Contributions and impediments to educational change. *International Journal of Leadership in Education* 5 (2): 91–104.
- SAS Institute Inc., 1996. SAS STAT User's Guide, Version 9, Cary, NC: SAS Institute Inc.
- Salovey, P. and J. D. Mayer. 1990. Emotional intelligence. *Imagination, Cognition and Personality* 9 (3): 185–211.
- Seale, O. 2004. Rooting for management capacity in South African higher education. Paper presented at the HESDA Staff Development Conference, 4 November 2004. Available at: www.hesda.org.uk/activities/ events/sdev2004/workshop7.doc. Accessed on 3 July 2006.
- Spencer, L. M. Jr. and S. M. Spencer. 1993. *Competence at work: Models for superior performance*. New York: Wiley.

- Wolfe, C. J. 2006. The practice of EI coaching in organizations: a hands-on guide to successful outcomes. In *Educating people to be emotionally intelligent*, ed. R. BarOn, J. G. Maree and M. Elias. New York: Praeger/ Heinemann.
- Yammarino, F. J. and B. M. Bass. 1990. Transformational leadership at multiple levels of analysis. *Human Relations* 43:975–995.