An Exploration of the Utility of a Self-Report Emotional Intelligence Measure

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Abstract

The purpose of this research was to address the need for evidence regarding the practical utility of the Swinburne University Emotional Intelligence Test (SUEIT, Palmer & Stough, 2001). More specifically, the predictive, as well as incremental validity of Emotional Intelligence (EI) over personality in leadership competence was explored.

The EI, personality and Assessment Centre (AC) leadership competency constructs were operationalised through the SUEIT, Occupational Personality Questionnaire (OPQ32i) and leadership AC technology, respectively. EI data was collected with an online version of the SUEIT from a sample of 111 middle managers from a life assurance company in South Africa. The OPQ32i and AC data was extracted from archival records of the company. Correlational and multivariate data analysis procedures were employed.

The results revealed significant relationships between various EI dimensions and the Customer Focus, Building Working Relationships, Gaining Commitment, Developing Others, Problem Solving and Stress Tolerance leadership competencies. Various dimensions of the SUEIT demonstrated incremental validity above personality in predicting variance in numerous leadership competencies (e.g. Building Working Relationships, Developing Others etc.). The results are discussed and recommendations for further research are made.

Keywords: Emotional Intelligence; Personality; Leadership Competencies; SUEIT; OPQ32i; Assessment Centres; Predictive and Incremental Validity.

Introduction and Theoretical Framework

Introduction

In recent years, considerable research attention has been dedicated in search of traits of effective leaders and identifying leadership potential (e.g. Thornton & Byham, 1982). More recently it has been asserted that irrespective of the model of leadership that is being examined, successful leadership is largely underpinned by the need of leaders to possess emotional intelligence (EI; Goleman, 1998). Palmer, Gardner and Stough (2003a) furthermore pointed out that EI is increasingly becoming popular within industrial and organisational psychology as a determinant of occupational success. Much of this popularity stems from the notion that EI may underlie various aspects of workplace performance that could not be accounted for by IQ or personality (Goleman, 1998). However, unlike intelligence and personality, which are considered to be relatively fixed throughout working life, it has been claimed by Goleman that well developed training programmes could enhance emotional abilities (contained in EI) within, and amongst employees, and thus positively influence overall organisational performance and success. These claims by Goleman were however somewhat premature and unsubstantiated. Many researchers, however, have criticised Goleman for departing from the scholarly sense of EI, stating that the empirical basis for the claimed predictive validity of his EI model and the Emotional Competence Inventory could be questioned (Gardner & Stough, 2003; Matthews, Zeidner & Roberts, 2003).

In spite of an intense interest in the EI construct, there are still many viewpoints about what exactly comprises the domain of EI and hence variation in measurement approaches and terminology used to describe the construct abound (Ciarrochi, Chan & Caputi, 2000; Davies, Stankov & Roberts, 1998; Dulewicz & Higgs, 2000; Lopes, Salovey & Straus, 2003; Rozell, Pettijohn & Parker, 2002). Different views emerged with regards to how the EI construct should be used and measured, as is evident in the distinction between ability, trait and mixed models of EI (Mayer, Salovey & Caruso, 2000b). Some researchers claimed that confusion was created by the different conceptualisations and as a result EI has been branded as an elusive construct with fuzzy boundaries (Stough, Palmer, Gardner, Papageorgiou & Redman, 2002). Most would, however, agree that EI refers to the competence to identify and express emotions, understand emotions, assimilate emotions in thought and regulate both positive and negative emotions in the self and others (Matthews et al., 2003).

Given the ambiguous perspectives relating to the EI construct, Stough et al. (2002) identified the need to develop the Swinburne University Emotional Intelligence Test (SUEIT) to provide an assessment of the most definitive dimensions of the construct by incorporating the predominant models and measures of EI at the time when they developed the measure (e.g., models and measures developed by Bar-On, 1997; Bagby, Taylor & Parker, 1994; Mayer, Salovey, & Caruso, 1999; Schutte, Malouff, Hall, Haggerty, Cooper, Golden, & Dornheim, 1998; Tett et al. cited in Palmer & Stough, 2001).

The Incremental Validity of EI

A series of studies on EI have found moderate and in some cases large correlations between various EI measures and personality traits (Dawda & Hart 2000; Newsome, Day & Catano, 2000; Petrides & Furnham, 2000; Schutte, Malouff, Hall, Haggerty, Cooper,
EI and Organisational Leadership

The relationship between EI and organisational leadership has largely been studied (Barbuto & Burbach, 2006; Downey & Papageorgiou, 2006; Sivanathan & Fekken, 2002) in terms of different styles of leading encapsulated in the Multifactor Leadership Theory (Bass & Avolio, 2000). The theory includes the transformation, transactional and laissez-faire leadership styles, with the transformational style being largely associated with leadership success (Gardner & Stough, 2002). However, other than defining leadership in terms of the different styles of leading encapsulated in the Multifactor Leadership Theory, leadership success can also be defined and assessed in terms of leadership competencies identified and required of leadership in an organisation to ensure that it gains and retains a sustainable advantage in industry (Higgs & Aitken, 2003). Such competencies could typically be assessed via simulation exercises during a leadership Assessment Centre (AC), where activities are developed that are intended to elicit the behaviours deemed most crucial for leadership success in the organisation.

A growing body of research attests to the importance of studying the role of EI in successful leadership (Carmeli, 2003). The central notion underlying this research is the view that people with high EI competencies are more likely than less emotionally intelligent people to display leadership success in the workplace. O’Connor and Little (2003) also provide arguments in support of the potential value of EI for improving a leader’s professional and personal life. They support the notion that suggests that EI is a more effective predictor of success in a leadership role and life achievement, than general intelligence. According to Stuart and Paquet (2001) EI is a vital factor in determining one’s ability to succeed in life and directly influences one’s psychological wellbeing or overall degree of emotional health, leading them to propose that emotional health should also have some impact on the presence or absence of leadership ability (Stuart & Paquet, 2001).

Gardner and Stough (2003) also acknowledged the fact that much of the popular management literature on EI has described the construct as an underlying attribute of leadership success, and that it has been proposed that screening for EI in the recruitment process may aid in the identification of potentially more successful leaders. Up to date only a few studies have investigated the utility of the SUEIT as a self-report measure of EI. In order to investigate whether EI underlies leadership success Palmer et al. (2003a) examined the relationship between scores on the SUEIT and scores on the Multifactor Leadership Questionnaire (MLQ, Bass & Avolio, 2000) in a sample of 231 senior executives. It was expected that EI would have a positive relationship with transformational leadership and a negative relationship with laissez-faire leadership. To determine whether this variance in leadership behaviour was accounted for by EI, over and above that accounted for by personality, the relationship between scores on the SUEIT and the NEO Five Factor Personality Inventory (NEO FFI) were also determined (Palmer et al., 2003a). The stepwise regression results indicated that all dimensions on the SUEIT scale accounted for variance in transformational leadership. However the most important predictor was Understanding Emotions, accounting for 41% of the transformational leadership variance. These results indicated that EI, as measured by the SUEIT, accounted for variance in transformational leadership over and above dimensions of personality (operationalised by the NEO-FFI, Palmer et al., 2003a). Palmer et al., however, concluded that a great deal more research is needed in order to substantiate and better understand the role EI plays in various aspects of working life.
Higgs and Aitken (2003) operationalised EI by means of the EI Questionnaire - Managerial (Dulewicz & Higgs, 2000) and investigated the extent to which an individual’s EI predict an assessment of leadership potential obtained through using AC methodology (Higgs & Aitken, 2003). Their results indicated various correlations between several leadership competencies and EI dimensions (e.g. the Building Relationships leadership competency, and the EI dimension Self Awareness, \( r = .351, n = 40, p < .05 \); the leadership competency, Building Relationships and the EI dimension Intuitiveness, \( r = .491, n = 40, p < .05 \); and the Leading Capability Building leadership competency and Intuitiveness, \( r = .344, n = 40, p < .05 \); as well as Conscientiousness and Integrity, \( r = .475, n = 40, p < .05 \)).

**Aim, Objectives and Hypotheses**

The aim of this study was to provide support for the utility of the SUEIT (i.e., predictive and incremental validity) as a measure of EI, by firstly investigating whether variance in predicted leadership competence (as indicated by AC technology results), is explained by SUEIT scores. Therefore, the first objective was to establish whether EI predicts leadership competence and it was therefore hypothesised that,

**Hypothesis 1** There will be a significant relationship (i.e., significant correlations) between the five EI dimensions measured by the SUEIT and the leadership competency scores obtained through leadership AC simulation exercises.

The second objective was to investigate the incremental validity of EI over personality traits in the prediction of leadership competence and it was therefore hypothesised that,

**Hypothesis 2** Scores obtained on the SUEIT dimensions (measuring EI) will explain additional variance in predicted leadership competence, as measured by the AC technology, over variance explained by the OPQ32i scores (measuring personality).

In the following section, the research methodology will be discussed. A brief overview of the research design, measurement instruments and sample are included.

**Method**

**Materials**

SUEIT EI was measured with the SUEIT (Palmer & Stough, 2001), a self-report instrument specifically designed for use in the workplace. It indexes individuals’ perceptions of the way they feel, think and act at work, with emotions, on the basis of emotional information. The SUEIT provides an overall score that indicates individuals’ general workplace EI as well as five sub-scale scores that indicate individuals’ EI according to the five dimensions of the model, namely Emotional recognition and expression (in oneself) – the ability to identify one’s own feelings and emotional status, and the ability to express those inner feelings to others; Emotions direct cognition – the extent to which emotions and emotional knowledge are incorporated into decision-making and/or problem solving; Understanding of emotions external – the ability to identify and understand the emotions of others and those that manifest in external stimuli; Emotional management – the ability to manage positive and negative emotions within both oneself and others and Emotional control – how effectively emotional states experienced at work, such as anger, stress anxiety and frustration are controlled.

Research with the SUEIT indicated High Internal Consistency, ranging from .70 for the Emotions to Direct Cognition subscale to .91 for the Emotional Recognition and Expression subscale (Palmer et al., 2003b). High Test-Retest Reliability was also found over a one-month period with stability coefficients ranging from a low of .82 for the Emotional Recognition and Expression subscale to a high of .92 for the Understanding Emotions subscale (Palmer & Stough, 2001). Reliability analysis of the SUEIT for the current study indicated Cronbach Alpha’s ranging from .77 (Emotional Recognition and Expression) to .87 (Understanding Emotions External).

**Assessment Centre (AC) Technology**

The leadership AC was developed and operated by the sponsoring organisation. Competencies (critical to success at middle management level) were identified through job analysis and included, Analysis, Building Working Relationships, Continuous Learning, Customer Focus, Gaining Commitment, Initiating Action, Developing Others, Planning and Organising and Stress Tolerance (e.g. the ability to deal with stress or opposition in a way that is acceptable to the organisation). Simulation exercises were designed to provide a means of observing the participants in situations where the behaviour, specified by the competencies, is required. A set of Behavioural Anchored Rating Scales (BARS) were used, enabling assessors to display the assessment results on a five-point Likert - type scoring scale, providing a measurement of the gap between actual and desired performance.
Occupational Personality Questionnaire (OPQ32i)
The OPQ32i is designed to assess the typical or preferred behaviour along 32 dimensions (e.g. Outgoing, Social Confidence, Innovative, Worrying), inherent to the personality traits individuals possess in a way that is relevant to the world of work (Saville, Cramp & Henley, 1994). The questionnaire is available in a normative and ipsative version. The latter is thought to be more effective in controlling for distortion due to response bias (Saville et al., 1994) and was used in this study. Critics of ipsative questionnaires argue that it is impossible to analyse or interpret data obtained through ipsative questionnaires, using standard procedures. “They (ipsative scales) cannot be used for comparing individuals across scales, and therefore they are inappropriate in selection” (Dakin, Nilakant & Jensen, 1994, p. 6). Proponents, however, argue that it provides a useful alternative to norm-referenced questionnaires and their inherent fakeability. Baron (1996) however proposes that the artificial interdependence between ipsative scores does affect their psychometric properties but, with 30 plus scales (a criteria the OPQ incorporates), it does provide interpretable psychometric parameters.

Participants and Procedure
The overall sample consisted of a total of 111 middle managers from a corporate life insurance organisation in South Africa. Employees that have attended the relevant leadership AC were considered for inclusion in the study. The mean age of the sample was 35.68 (SD = 6.44), 49.5% of the respondents being female and 50.5% male, with education levels that varied from a grade 12 school qualification to post graduate tertiary qualifications. Data sources were twofold. Firstly, data was drawn from archival records. This data consisted of the leadership competency scores obtained during assessment centres at the sponsoring organisation, as well as the OPQ32i personality questionnaire scores. Due to the fact that archival data was used, missing data per cases unfortunately caused the sample size to vary between the different analyses. Secondly, the EI data was collected on a separate occasion through an online version of the SUEIT (matching the respondents with available archival OPQ32i and AC scores).

Results and Discussion
The first objective of the study was to establish whether EI significantly predict leadership competency scores. It was therefore firstly investigated whether EI (the SUEIT scores), have significant relationships with leadership competencies (AC scores), through calculating the Pearson Product-Moment correlations. The results are discussed per leadership competency dimension.

Table 1: Means and Standard Deviations for Emotional Intelligence and Leadership Competencies

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N = 111

Predictive Validity

Customer Focus There was a small but significant positive correlation between the EI dimension, Understanding Emotions External and the leadership competency, Customer Focus (r = .24, n = 111, p < .05).

Therefore, it could be argued that individuals who are highly capable of perceiving and understanding the emotions of their customers and are able to “read” the emotions that they convey will be more competent in taking action according to their customers’ needs and thus develop more productive and satisfying customer relations. Nel and De Villers (2004) and Langhorn (2004) conducted similar studies to investigate the relationship between EI and Customer Focus. Nel and De Villiers (2004) investigated the relationship between EI (operationalised by the Emotional Competence Inventory/ECI of Hay/McBer, 2002) and performance in call centers (characterised by client centeredness and the ability to maintain good customer relations). The evidence obtained in the current study replicates the results found by Nel et al. (2003) in that a positive relationship was indicated between EI (measured by the ECI) and performance in the client services call centre.
Table 2: Correlations of Emotional Intelligence and Leadership Competencies

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N = 111, * = p < .05, ** = p < .01

EREXP = Emotional Recognition and Expression; EDC = Emotions Direct Cognition; UEX = Understanding Emotions External; EM = Emotional Management; EC = Emotional Control; CL = Continuous Learning; CF = Customer Focus; BWR = Building Working Relationships; GC = Gaining Commitment; DO = Developing Others; A = Analysis; PS = Problem Solving; IA = Initiating Action; PO = Planning and Organising; ST = Stress Tolerance
The emotional competency clusters of the ECI, referring to managing one’s internal states and Social Skills ($r = .53, n = 135, p < .001$) referring to the effective handling of interpersonal relationships to induce desirable responses in others (the latter partially conceptually related to the Understanding Emotions External dimension) showed the largest correlations with job performance in the call centre environment. The correlation between the total EI and Client Services job performance scores ($r = .56, n = 135, p < .001$) also pointed towards the importance of EI in a client services work environment requiring a customer focus orientation (Nel & De Villiers, 2004). Further confirmation of the abovementioned findings are evident in a study by Langhorn (2004) where the emotional competencies of individual general managers (measured with the Bar-On EQ-i) were related to the key performance outputs (e.g. customer satisfaction scores) under their direct control. Support was found for the hypothesised relationship between customer satisfaction and general mood (e.g. happiness and optimism). Hence, the author concluded that the ability to project a happy and optimistic outlook would seem to be beneficial in the development of customer satisfaction, once again corroborating the utility of EI in customer focus and satisfaction (as found in the current study).

Building Working Relationships A moderate significant positive correlation emerged between the EI dimension, Understanding Emotions External, and the leadership competency, Building Working Relationships ($r = .31, n = 111, p < .01$). These results can be interpreted to indicate that individuals with the ability to understand the emotions of their colleagues at work, as well as the impact that emotions have on the workplace, are more adept at developing and using collaborative relationships to facilitate the accomplishment of work goals. Individuals that are able to “read” the emotional overtones of workplace environments and discussions (e.g. staff meetings) will be able to proactively build effective relationships and reach work goals in a collaborative fashion, through giving recognition and empathising appropriately as well as effectively mediating conflict within the group. This finding partially affirms previous research by Gardner and Stough (2002), where they report a positive relationship between the Contingent rewards dimension of Transactional Leadership (operationalised by the Multifactor Leadership Questionnaire; Bass & Avolio, 2000), and the Understanding Emotions External SUEIT dimension ($r = .56, n = 110, p < .01$). Transactional leaders typically address the current needs of subordinates by focusing on recognition and punishment to obtain objectives (contingent rewards; Bass & Avolio, 2000). This abovementioned dimension of transactional leadership shows similarities with the definition of the Building Working Relationships leadership competency, where namely Self Management ($r = .54, n = 135, p < .001$; recognition and empathy are utilised as a means to reach work goals. Therefore, the relationship found between Understanding Emotions External and Building Working Relationships in this study, partially replicates the finding (between Contingent Rewards and Understanding Emotions External) of Gardner and Stough (2002).

Furthermore, Gardner and Stough (2002) report that the Understanding Emotions External EI dimension predict an outcome of leadership, namely Satisfaction, which is achieved when the individual is collaborating with other team members in a satisfying way. To this end it is argued that the relationship found between Understanding Emotions External and Building Working Relationships (which is partially defined as the building of relationships in order to collaborate effectively with team members in order to achieve work related goals) replicates the finding of Gardner and Stough (2002), that leaders high on the Understanding Emotions External EI dimension are more likely to collaborate and facilitate high satisfaction, also in a team environment.

A small but significant positive correlation between the EI dimension, Emotional Control and the leadership competency, Building Working Relationships ($r = .21, n = 111, p < .05$) is also reported. This result suggests that leaders with high scores on this EI dimension should be able to control their emotions (specifically strong emotions) more effectively, preventing it from overriding their capacity to think and act appropriately. They will therefore not generally provoke anger, resentment or confusion by strong displays of emotion, but rather deal constructively with, for example, conflict and through that build collaborative relationships to facilitate the accomplishment of work goals. The correlation between Emotional Control and Building Working Relationships found in this study, partially replicates a research finding by Higgs and Aitken (2003). They report a small relationship ($r = .28, n = 40, p > .05$) between the leadership competency, Building Relationships and the EI dimension Emotional Resilience. The Emotional Resilience dimension measures the ability to perform consistently when under pressure. This partially relates conceptually to the Emotional Control dimension of the SUEIT, as Emotional Control refers to the capacity to not let strong emotions (e.g. anger, stress) interfere with the ability to perform effectively in the workplace (also referred to as emotional “highjacking” by Goleman, 1998).

Gaining Commitment There was a small but significant positive correlation between the EI dimension, Understanding Emotions External and the leadership competency, Gaining Commitment ($r = .19,$
n = 111, p = < .05). This result could indicate that individuals, who are able to perceive and understand the emotions and emotional responses of others, could be more competent at using the appropriate interpersonal styles and techniques to gain acceptance of their ideas or plans. Through having an understanding of the impact of individuals’ emotions and the collective emotions of a team on the way they act and think, such a leader should be able to modify his or her behaviour to accommodate the situation and individuals involved, whilst obtaining commitment from employees.

This corroborates with the result of the study Gardner and Stough (2002) who found a strong relationship (r = .59, n = 110, p < .01) between Understanding Emotions External (the SUEIT) and the Individualised consideration dimension of Transformational Leadership (MLQ; Bass & Avolio, 2000). Individualised consideration is defined as the behaviour of treating individuals as important contributors to the workplace, in order to generate commitment within them and motivate them to do more than is expected of them. Hence this dimension was considered to be conceptually similar to the Gaining Commitment leadership competency in this study.

**Developing Others** A small but significant positive correlation was found between the EI dimension, Understanding Emotions External and the leadership competency, Developing Others (r = .24, n = 111, p < .01). Hence it would seem that leaders with an enhanced ability to understand the context in which the emotions of their subordinates arise, as well as the appropriateness of emotional responses and behaviours, seem to be able to more accurately observe possible blind spots and other areas of weakness in the employee. Henceforth, leaders with this capability would more easily facilitate a process to gain insight into these development areas in a constructive manner. This result is a partial replication of a finding reported in a study by Gardner and Stough (2002). They report a relationship between the Understanding Emotions External (SUEIT dimension) and Individualised Consideration (Transformational Leadership dimension of the MLQ; r = .59, n = 110, p < .01) and the Extra Effort leadership outcome dimension (r = .51, n = 110, p < .01). These results partially corroborate the view that transformational leaders are known to understand followers’ needs and to react accordingly as well as motivate employees to do more than is expected (Gardner & Stough, 2002). This is in accordance with the definition of the Developing Others leadership competency, which is concerned with understanding the development needs of individual subordinates, and motivating them to do more than is expected of them by providing the necessary development opportunities to equip them to fulfill future responsibilities more effectively.

A small but significant positive correlation emerged between the EI dimension, Emotional Recognition and Expression and the leadership competency, Developing Others (r = .20, n = 111, p < .05). This suggests that leaders scoring high on the Emotional Recognition and Expression EI dimension might be more capable to accurately recognise and constructively express their feelings about a subordinate’s performance and/or non-performance, as well as communicating insight about the subordinate’s strengths and weaknesses in a way that should motivate and enhance current and future performance. A small but significant correlation was also found between the EI dimension, Emotional Control and Developing Others (r = .20, n = 111, p < .05). This could indicate that leaders who are able to express their feelings about their subordinates’ development areas and lack of performance in these areas in a more constructive fashion, by keeping strong negative emotions under control, could be more successful in facilitating insight into, and growth in, the subordinate’s areas of development. Gardner and Stough (2002) reported significant correlations obtained between the Individual consideration dimension of the MLQ (Bass & Avolio, 2000) and the Emotional Recognition and Expression (r = .33, n = 110, p < .01) and Emotional Control (r = .39, n = 110, p < .01) dimensions respectively. As the Developing Others competency is conceptually related to the Individualised consideration dimension of the MLQ (i.e., followers and colleagues are developed to successively higher levels of potential) the results of this study are a partial replication of previous research.

**Problem Solving** In the sponsoring organisation (as a result of the industry the organisation operates in), it is required of leaders to thoroughly and accurately identify, define and analyse problems in order to select the most appropriate course of action once alternatives have been generated and assessed in terms of practicality, effectiveness and possible implications. In the light of this requirement, it could be argued that the organisation encourages the use of predominantly analytical processes in problem solving with emotional information to be taken into account to a lesser extent. The emphasis is therefore on the use of facts and logic in order to derive solutions to complex problems, rather than considering and possibly including emotional information in reasoning and problem solving. This argument could explain the lack of a correlation between the Problem Solving competency and Emotions Direct Cognition SUEIT dimension, as emotional information is most probably not taken into account in daily reasoning and decision-making. Solutions to problems are perceived as effective when it can be motivated logically, all the details are taken into account and relevant criteria are used.
Stress Tolerance Small but significant negative correlations emerged between the EI dimensions, Emotions Direct Cognition ($r = -.19, n = 111, p < .05$) and Emotional Control ($r = .30, n = 111, p < .01$) and the leadership competency Stress Tolerance. Based on this it can be argued that leaders, who incorporate emotional information into their daily reasoning to a large degree (high on Emotions Direct Cognition), might find it more difficult to maintain stable performance under pressure or opposition and to handle stress in a manner that is acceptable to the sponsoring organisation, for rational and logical reasoning and subsequent behaviour are considered to be effective in this context. In addition, it could also be argued that leaders who display the ability to effectively control strong emotional states experienced at work, such as anger, anxiety and frustration should be able to more effectively maintain stable performance when they are under pressure (Stress Tolerance). Salovey, Mayer, Goldman, Turvey and Palfai (1995) investigated the relationship between EI (by means of the TMMS) and recovery of positive mood following a stressful event induced in a laboratory. The results of their study suggested that excessive attention to negative moods leads to rumination (Salovey et al., 1995) where rumination is defined as passively and repetitively focusing on one’s symptoms of distress and the circumstances surrounding those symptoms. Henceforth it could possibly be argued that if a person is able to control potentially strong emotional states more effectively, less rumination should take place which should assist the individual to maintain stable performance more easily (i.e., the person is able to tolerate stress).

In summary, the results revealed that several of the five different EI dimensions did have significant relationships to six of the respective leadership competencies. For these, hypothesis one could be accepted. EI did not have any significant relationships to four of the leadership competencies, namely Continuous Learning, Analysis, Initiating Action, as well as Planning and Organising.

Incremental Validity

The second objective of this study was to investigate the incremental validity of EI over personality traits in the prediction of leadership competence. Firstly, a series of Hierarchical Regression analyses per leadership competency were conducted to determine whether scores obtained on the SUEIT dimensions explained additional variance in predicted leadership competence, as measured by the AC technology, over variance explained by the OPQ32i scores. Only the results of a selection of the analyses are reported. As the goal of these analyses were to explore the incremental validity of EI over and above personality in the prediction of leadership competency scores, the significant OPQ32i dimensions were first entered into the regression equation, followed by the significant EI dimensions. By following this procedure, the amount of additional variance that EI accounts for in leadership competency scores when the personality dimensions are controlled, was determined (adjusted $R^2$ is reported). Regression Analyses were not conducted with the leadership competencies that did not correlate significantly with both the SUEIT and OPQ32i dimensions (namely, Planning and Organising, Initiating Action, Analysis and Continuous Learning). Secondly, the relationships between the dimensions of the OPQ32i, measuring personality traits, and the SUEIT were explored through calculating the Pearson Product-Moment Correlation (a selection of the results is discussed in the text below). Where correlations emerged between the dimensions of the two instruments, conceptual similarity and henceforth overlap is indicated in the measurement of the underlying latent constructs, adding more understanding to the question of the utility of EI within the specific context. The results are discussed and where applicable comparisons with previous research are highlighted.

Customer Focus

A hierarchical regression analysis was conducted with the leadership competency, Customer Focus as dependent variable. When entering the OPQ32i dimensions (Outgoing, Affiliative and Emotionally Controlled) first, EI (the Understanding Emotions External dimension) and the OPQ32i together accounted for 30% of the variance in the Customer Focus competency scores. The OPQ32i significantly predicted Customer Focus with $R$ for regression significantly different from zero, $F (3, 49) = 8.30, p < .01$. The standardised coefficients indicated that the OPQ32i dimension, Affiliative, made the largest only significant unique contribution to explaining the variance in Customer Focus ($β = .39, p < .05$). At closer inspection it is evident that a moderate correlation emerged between the Understanding Emotions External EI dimension, and OPQ32i dimension Affiliative ($r = .36, n = 54, p < .01$) which could explain why EI as measured by the SUEIT accounted for only .04% additional variance in Customer Focus when personality traits (the OPQ32i dimensions) were controlled for ($R$ for regression significantly different from zero, $F (4, 48) = 6.6, p < .05$) in the Hierarchical Regression. Due to the degree of overlap between the EI and personality dimension found to predict Customer Focus, EI (Understanding Emotions External) was therefore only able to predict a very small amount of additional variance in Customer Focus, and hence evidence for incremental validity of EI in the Customer Focus leadership competency in this instance is lacking.
Building Working Relationship A Hierarchical Regression Analysis was performed with the leadership competency, Building Working Relationships as dependent variable. As independent variables, the EI dimension Emotions External and OPQ32i dimensions Independent Mindedness, Decisive, Persuasiveness, Affiliative, Socially Confident, Emotionally Controlled, Democratic, and Behavioural were included in the analysis. When entering the OPQ32i dimensions first, both groups of independent variables together accounted for 44.3% of the variance in Building Working Relationships, with $R$ for regression significantly different from zero, $F(8, 45) = 4.82, p < .01$. The standardised coefficients indicated that the EI dimension, Understanding Emotions External, made the largest significant unique contribution ($\beta = .31, p < .05$), while the OPQ32i dimension, Democratic ($\beta = .28, p < .05$) was the only other variable that also made a significant contribution to explaining the variance in Customer Focus.

It was also noted from the EI and personality correlation results that there were correlations of a moderate degree between some of the significantly predicting EI (Understanding Emotions External) and OPQ32i dimensions Affiliative ($r = .36, n = 54, p < .01$), Socially Confident ($r = .31, n = 54, p < .05$), Democratic ($r = .33, n = 54, p < .05$), Behavioural ($r = .41, n = 54, p < .01$) and Emotionally Controlled ($r = .38, n = 54, p < .01$). Hence, moderate overlap in the measurement of the underlying latent constructs through the abovementioned dimensions of the SUEIT and OPQ32i are evident, and raises the question of the discriminant validity of this EI dimension from the respective OPQ32i dimensions.

In order to compare the findings in the current study (with regards to the overlap between EI and personality traits) with previous research where the NEO-FFI was used (Gardner & Stough, 2003; Palmer et al., 2003a) conceptual linkages between the relevant OPQ32i dimensions and the dimensions of the NEO-FFI is highlighted and incorporated into the discussion. For example, when comparing the OPQ32i dimensions with the dimensions of the NEO-FFI it is evident that the OPQ32i Behavioural dimension can conceptually be linked to the Openness dimension of the NEO-FFI. The Behavioural OPQ32i dimension refers to a person’s inclination to be introspective and analyse his or her own and others feelings and incorporate it into decision-making (Saville et al., 1994). Similar to this, individuals scoring high on the Openness dimensions of the NEO-FFI are also generally more introspective, perceptive and analytical when it comes to their own and others’ feelings (McCrae, 2000). The finding of the current study, demonstrating partial overlap between Understanding Emotions External (the SUEIT dimension) and the OPQ32i Behavioural dimension, thus partially confirm previous research results of Gardner and Stough (2003). They reported an overlap of a moderate degree ($r = .42, n = 231, p < .01$) between the Understanding Emotions External SUEIT dimension and the Openness dimension of the NEO-FFI.

From the regression results it is evident that the OPQ32i dimensions together accounted for 36.6% variance in the Building Working Relationships competency scores. When EI was added to the regression equation, the model significantly predicted Building Working Relationships, with $R$ for regression significantly different from zero, $F(10, 43) = 5.21, p < .01$ and accounted for an additional 7.7% variance in Building Working Relationships competency scores after the OPQ32i dimensions were controlled for. This result indicates that in the prediction of variance in terms of this leadership competency, Building Working Relationships, EI explains a significant additional amount of variance, over and above the personality variables entered into the regression model. This finding provides evidence for the incremental validity of EI (more specifically, the Understanding Emotions External dimension), specifically related to the Building Working Relationships leadership competency.

Developing Others The results of the Hierarchical Regression for the Developing Others leadership competency (after entering the Emotional Recognition and Expression, Understanding Emotions External, Emotional Control EI dimensions, as well as the Outgoing, Democratic, Relaxed and Tough Minded OPQ32i dimensions) revealed that after entering the OPQ32i dimensions first, all independent variables (SUEIT and OPQ32i dimensions) accounted for 31.2% variance in Developing Others competency scores ($R$ for regression was significantly different from zero, $F(4, 44) = 5.45, p < .01$). Small correlations were however also found between some of the EI and OPQ32i dimensions entered into the regression (i.e., the Emotional Control EI dimension and Tough Minded; $r = .28, n = 54, p < .05$) from the OPQ32i; as well as the EI dimension, Understanding Emotions External and the OPQ32i dimension Democratic ($r = .33, n = 54, p < .05$). Once again, these correlations can be interpreted to point towards an overlap in the SUEIT and OPQ32i in the measurement of these underlying latent constructs.

In a Standard Regression, when entering the same independent variables as in the Hierarchical Regression, the Standardised Coefficients indicate that Tough Minded made the largest unique contribution ($\beta = .39, p < .05$) to the model. This variable was followed by, in order of size of significant unique contributions, Emotional Control ($\beta = .34, p < .05$), Outgoing ($\beta = .31, p < .05$) and Democratic ($\beta = .29, p < .05$).
The OPQ32i dimensions accounted for 27% variance in Developing Others competency scores. When entering the EI dimensions into the model, R for regression was significantly different from zero $F(7, 41) = 4.12, p < .01$. Henceforth, EI accounted for an additional 4.2% variance in Developing Others competency scores after the OPQ32i dimensions were controlled for. The results indicate that in the prediction of variance in terms of the leadership competency, Developing Others, EI explains a significant additional amount of variance, over and above the personality variables entered into the regression model. This provides evidence for the incremental validity of EI, specifically related to the Developing Others competency.

**Problem Solving** The significantly correlated dimension of EI (Emotional Management) and the OPQ32i dimensions (Controlling, Tough Minded and Evaluative) were entered as independent variables in the Hierarchical Regression for this leadership competency. When entering the OPQ32i dimensions first, all the independent variables (EI and personality) together accounted for 27.3% of the variance in Problem Solving competency scores, with R for regression significantly different from zero $F(3, 50) = 6.07, p < .01$. The OPQ32i variables accounted for a unique 22.3% of the variance in Problem Solving competency scores. When adding EI, R for regression was significantly different from zero, $F(4, 49) = 5.98, p < .01$, with EI accounting for an additional 5% variance in Problem Solving competency scores after the OPQ32i dimensions were controlled for. The Standardised Coefficients indicated that the OPQ32i dimension, Controlling made the largest unique contribution to the regression model ($\beta = .29, p < .05$), followed by the EI dimension, Emotional Management ($\beta = .29, p < .05$). The results indicate that in the prediction of variance in terms of the leadership competency, Problem Solving, EI explained a significant additional amount of variance, over and above the personality variables entered in to the regression model. This provides some evidence for the incremental validity of EI, specifically related to the Problem Solving competency.

**Stress Tolerance** A Hierarchical Regression Analysis was conducted with the leadership competency, Stress Tolerance, as dependent variable. EI (including the Emotional Control and Emotions Direct Cognition dimensions) and the OPQ32i dimensions (Independent Mindedness, Emotionally Controlled, Behavioural and Worrying) were entered as independent variables in the model. When entering the OPQ32i first, the two independent groups of variables together accounted for 18.5% of the variance in Stress Tolerance, with R for regression significantly different from zero, $F(4, 49) = 3.84, p < .01$.

The OPQ32i alone accounted for 17.7% variance in Stress Tolerance competency scores. When entering EI into the equation R for regression was significantly different from zero, $F(6, 47) = 3.00, p < .01$. Therefore, EI accounted for only 0.8% additional unique variance in Stress Tolerance competency scores. The results indicate that in the prediction of variance in terms of the leadership competency, Stress Tolerance, EI explained a very small significant additional amount of variance, over and above the personality variables entered into the regression model and hence evidence for incremental validity of EI in this leadership competency is lacking.

It is interesting to note that the OPQ32i dimension, Emotionally Controlled (from the Emotions and Feelings subscales on the OPQ32i) did not correlate significantly ($r = -0.15, n = 54, p > 0.05$) with the Emotional Control subscale of the SUEIT, although overlap could be expected as the dimension names indicate. However, on closer inspection it is clear that these two dimensions measure different aspects of Emotional Control. The SUEIT Emotional Control dimension refers to the ability to control strong emotions whereas the OPQ dimension refers to the extent to which an individual can conceal feelings from others as well express their emotions.

This result underscores the challenge of conducting more research on refining personality and EI conceptualisation and measurement in order to establish clear conceptual boundaries for both constructs within established theories (e.g. whether a feelings and emotions subscale is warranted within a personality measure).

**Summary** As discussed previously, the purpose of the study was to provide evidence for the incremental validity of EI by exploring whether it accounts for variance in AC leadership competency scores over and above variance accounted for by the OPQ32i (in spite of overlap in the measured underlying latent constructs that was found in some cases between some EI and OPQ32i dimensions). Firstly, the relationship between the five dimensions of EI and ratings on the ten leadership competencies were investigated by calculating Pearson Product-Moment Correlation Coefficients. The Customer Focus, Building Working Relationships, Developing Others, Gaining Commitment, Problem Solving and Stress Tolerance leadership competencies were found to significantly correlate with various of the EI dimensions. Overlap was found in some cases (Pearson Correlations between the SUEIT and OPQ32i) in what is being measured by the SUEIT and OPQ32i in terms of the underlying...
latent constructs these measures represent (personality and EI). Hierarchical Regression Analyses were conducted for the selection of the leadership competencies in order to determine whether the SUEIT has incremental validity over the OPQ32i in predicting variance in the leadership competency scores. Limited evidence was obtained for the incremental validity of EI over personality (as measured by the OPQ32i) in predicting variance in the Customer Focus, Building Working Relationships, Developing Others, Problem Solving and Stress Tolerance leadership competencies. The findings of this study are however subject to certain limitations of the research design and sample. This will be discussed next.

**Limitations and Future Research**

A significant limitation of the current study is that the data sources utilised partly consisted of archival data and therefore the omission of cases was necessary in some instances. This unfortunate situation emerged as various respondent’s raw data could not always be traced in the record keeping system of the sponsoring organisation. Due to this the sample sizes differ over different analyses and in some cases was quite small.

The sample in the current study furthermore consisted entirely of individuals from one specific organisation with its own unique culture and generally accepted behaviours that could differ from other organisations, which could have influenced the results. The model of leadership used in the current study is also an organisation-specific competency based model (consisting of the behavioural dimensions or competencies identified as critical to leadership and organisational success in the sponsoring organisation). Henceforth, the dimensions or competencies identified as critical for success in a leadership role in the sponsoring organisation might be different from leadership competency models used in other organisations. Therefore, care needs to be taken when interpreting the results and generalising the findings of this study in terms of assessing or predicting effective leadership behaviour in other settings. Given these limitations it is clear that future research is needed to investigate the utility of the SUEIT in the general population of leaders in different organisations, by determining the extent to which the SUEIT (measuring EI) can be utilised over and above personality measures (i.e., the OPQ32i) to predict leadership in general.

Further limitations of the study relates to the measuring instruments that were used. As the SUEIT was developed in Australia, research is necessary to clarify the cross-cultural differences with regards to the tool and construct, in order to more reliably utilise the measure within the South African context. Secondly, both the SUEIT and the OPQ32i are self-report measures, believed to provide respondents with the opportunity to distort their responses to create a more favourable impression of themselves, due to the transparent nature of the questions (Mayer et al., 2000).

Additionally, it has been argued that self-report measures provide a measure of the respondents’ self-concept, rather than their actual abilities or traits. However proponents of self-report measures (Palmer & Stough, 2001) argue that it provides a more accurate picture of the respondents’ internal experiences related to emotional thinking, which may not necessarily be obtained through performance-based measures.

Lastly, the use of AC methodology to obtain a measure of leadership competencies, indicating potential to function efficiently in a leadership role, places a further limitation on this study. To date no longitudinal studies could be located that exists to clarify the reliability and validity of the leadership AC in general, as a means to effectively measure leadership competencies. By adhering to specific design considerations, the validity and reliability of the assessment centers can, however, be increased and ensured. Such design considerations was incorporated by the sponsoring company to ensure better validity and reliability of measurement results.

**Conclusion**

The results of the current study demonstrate the existence of various relationships between EI and the Customer Focus, Building Working Relationships, Gaining Commitment, Developing Others, Problem Solving and Stress Tolerance leadership competencies. In several instances it was found that there is overlap in the measurement of the underlying latent constructs by the different personality and EI dimensions from which such results were inferred. In order to compare these findings (with regards to the overlap between EI and personality traits) with previous research, conceptual links were drawn with other EI and personality measures used (e.g. the Bar-On EQi and NEO-FFI). However, given the overlap found between the different measures, limited empirical evidence for the incremental validity of the SUEIT (specific different dimensions thereof) still emerged for some of the leadership competencies.

In spite of the overlap identified between the five EI dimensions of the SUEIT and the OPQ32i, this study provided partial evidence that EI, as measured by the SUEIT, could add to our understanding of the characteristics leaders in the sponsoring organisation should possess to enable them (as leaders) and the organisation to be successful. Further research is necessary where different models and measures of leadership and personality traits are utilised in order to generalise the findings with regards to the relationship between EI, as measured by the SUEIT, and leadership...
and personality traits in general. The study contributes to the body of knowledge in support of the utility of the EI construct, and specifically the SUEIT in this regard. Based on the results it might be argued that the SUEIT (specific dimensions of the SUEIT) could help predict success in the examined leadership competencies in the sponsoring organisation, over and above the measure of personality, namely the OPQ32i, already employed for this purpose.

Having knowledge about the nature of the relationship between EI and leadership competencies could enable organisational decision makers in the sponsoring organisation to more effectively select and develop individuals that should be successful in leadership roles. The SUEIT seems to have utility in the sense that it could provide a measure that might assist organisational decision makers who needs to select leaders that competently display the applicable leadership behaviours. The results therefore hope to shed light on the question of whether EI should indeed be viewed as a useful and valuable construct and tool.

Acknowledgments
This study was supported by a grant from the South African National Research Foundation (NRF).

References


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