

# THE EFFECT OF AN EMOTIONAL INTELLIGENCE DEVELOPMENT PROGRAMME ON ACCOUNTANTS

**Author:**Cara S. Jonker<sup>1</sup>**Affiliation:**

<sup>1</sup>WorkWell: Research Unit for Economic and Management Sciences, North-West University, South Africa

**Correspondence to:**

Cara S. Jonker

**e-mail:**

cara.jonker@nwu.ac.za

**Postal address:**

Private Bag X6001, North-West University, Potchefstroom 2531, South Africa

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**ABSTRACT**

The objective of this research was to compile and evaluate a development programme aimed at emotional intelligence (EI) in the accounting profession. A two-group design (pre- and post-test) was used. An accidental sample (experimental and control group) was taken from future employees within a financial management environment. The BarOn-EQ-i was administered and further data were gathered qualitatively by means of diary entries. The results showed an improvement in total EI level. The specific areas of EI that were developed due to the programme included the following subscales: interpersonal, adaptability and general mood. The specific EI factors that showed improvement included self-regard, self-actualisation, interpersonal relations, reality testing, problem solving, flexibility, stress tolerance and optimism.

**INTRODUCTION**

Rothmann and Cilliers (2007) identify emotional intelligence (EI) as one of the constructs in the domain of positive psychology that must be the focus of organisational/industrial psychologists in current and future research. Current research is investigating relationships and the correlation between EI and other constructs such as problem solving, team effectiveness and leadership in the workplace (e.g. Abraham, 1999; Boyatzis, 2006; Carmeli & Colakoglu, 2005; Jordan & Troth, 2004; Sosik & Megerian, 1999). To date, little has appeared in the literature that details the effectiveness of EI development programmes (Clarke, 2006).

The focus of this article will be to determine the effect of the development of EI on accountants. In order to achieve this goal, the need for EI in human resources in organisations will be highlighted, the development possibilities of and training in EI will be explored and a specific need to develop EI in the accounting profession will be presented. A brief overview of the theory of EI will show the two different perspectives on what EI comprises. In the results section, an evaluation of the effectiveness of the development of EI in the accounting profession will take place.

**The need for EI development in human resources in organisations**

According to the Global Competitiveness Report of 2007/2008 (Porter, Schwab, & Sala-I-Martin, 2008), the lack of labour market efficiency in South Africa is a disadvantage to economic growth and global competitiveness (South Africa ranks 88th out of 131). Attention must be paid to the development of individuals in the organisation to rectify this poor placement of human resources (Boateng, 2007; Wolmarans, 1998). Human resources is the corporate function with the greatest potential (in theory), the key driver of business performance and also the one that constantly underdelivers (Hammonds, 2008). The optimal development and utilisation of individual characteristics and skills are crucial to greater organisational effectiveness (Hays, 1999; Lukas & Deery, 2004). In this regard, the measurement and development of EI can play a significant role (Boateng, 2007; Wolmarans, 1998). A specific need exists to develop EI in the accounting profession (Bay & McKeage, 2006; Esmond-Kruger, Tucker & Yost, 2006).

In the past, the relevance of emotions and emotion management to the workplace was denied. Personal, home and work life were separate entities that called for separate and differing acceptable behaviours and modes of thinking, feeling and acting. Today, researchers are acknowledging a more integrated way of working and living whereby one makes use of all aspects of one's individual competitive advantage (Turner, 2004). There is a growing recognition among researchers and practitioners that the workplace is not the cognitive-managed environment it was once assumed to be; emotions play a key role in organisational life (Bay & McKeage, 2006). Nowadays many organisations include EI among the core competencies for high performance (Laff, 2008).

Chrusciel (2006) states that once the importance of EI is recognised, it is essential to remember that one's EI can be improved with appropriate training. As one looks at the cost of providing appropriate training to improve upon these skills, one also needs to consider what the cost to the organisation would be if no action were taken. Therefore, it is important to not only recognise the value of EI but also to encourage and promote the improvement of these skills within the organisation (Chrusciel, 2006).

EI forms part of the contributing factors that can enhance worker performance as it stimulates competitiveness and an environment for change and innovation (Dwyer, 2001; Laff, 2008; Law, Smigla & Pastoria, 2000; Wolmarans, 1998; Wong, & Song, 2004). People in organisations determine the production process. By investing in people through human resource development and by attending to people's EI and social capital issues, organisations should be able to better harness and allocate people's talents (Brooks & Nafukho, 2006). Emotions play an important role in organising, motivating and directing human activity (Salovey & Mayer, 1990). Figure 1 illustrates the critical role that both internal and external environments play in determining people's productivity.

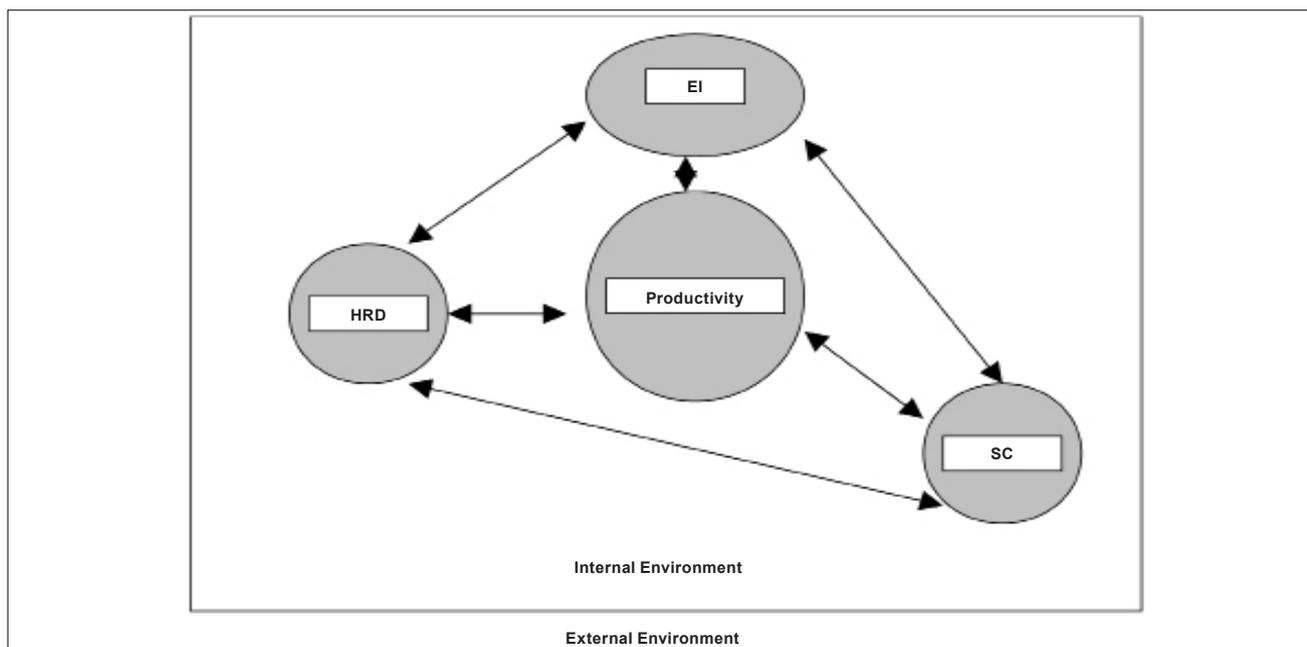


FIGURE 1  
The relationship between human resource development, emotional intelligence, social capital and productivity

If organisations are unaware of EI issues, certain problems will persist (Brooks & Nafukho, 2006). As mentioned earlier, Rothmann and Cilliers (2007) regard EI as a construct of positive psychology that adds value to human resource development in the workplace. According to the literature, EI is also linked to well-being (Gallagher & Vella-Brodick, 2008), better stress management (Mikolajczak & Luminet, 2008), social adaptation (Engelberg & Sjöberg, 2004), effective teamwork (Cooper, 1998; Green, Hill, Friday & Friday, 2005) and job satisfaction (Sy, Tram & O'Hara, 2006). Carmeli (2003) has also established a relationship between EI and work attitudes. These established relationships make the development of EI in the workplace crucial. According to Cooper (1997), the development of EI will result in increased productivity, loyalty, innovation and performance of individuals, groups and organisations.

### The development of EI

EI is learnable and therefore trainable, unlike intelligence quotient (IQ), which measures an individual's inherent ability (Chrusciel, 2006; Turner, 2004). One does not have to accept inadequate levels or be satisfied with current levels of EI. Appropriate training in how to identify and use EI will not only be beneficial to the individual; the organisation will also reap the benefits (Chrusciel, 2006). The learning model required for EI competencies is therefore different (Turner, 2004). The way in which EI is learnt in the brain differs from the way in which cognitive abilities are processed. Cognitive abilities use the neocortex where quick learning takes place whereas EI competencies are learnt more slowly in the subcortex (the lower part of the brain below the neocortex). Rehearsal or role-play situations are required for individuals to build a repertoire of responses that can be used and practised in real and spontaneous situations (Turner, 2004).

Existing EI programmes fail because they make use of cognitive learning over a short period of time (Laabs, 1999). The effectiveness of these programmes is not measured and behaviour change is not seen (Laabs, 1999). Clarke (2006) also warns against the packaging of soft skills based purely on mixed models of EI and argues for the use of ability-based models in EI training programmes.

So far, training specifically coined as EI training has not evolved as a paradigm on its own, although certain types of soft-skills

training, such as interpersonal communication, have been on the training front for years (Laabs, 1999). In a series of four articles, Orme and Cannon (2000; 2001a; 2001b; 2001c) provide guidelines for EI training in four phases: conducting a needs assessment, designing a programme, implementing the programme and evaluating the programme. Cherniss and Goleman (2001) highlight four phases in the design of EI programmes: preparation, training, transfer, maintenance and evaluation.

Training employees on the topic of EI is not the same as training in other areas of interpersonal skills (Laabs, 1999). Teaching someone to be emotionally competent cannot be done in one afternoon session (Laabs, 1999) because behavioural changes have to take place first. Orme and Cannon (2001a) note that expecting to see significant behavioural changes after only a brief programme is not realistic. EI programmes have to take the audience of the EI programme into consideration in the design phase. Sound adult learning principles must be followed and all learning styles must be incorporated (Orme & Cannon, 2001a).

EI training works best in small groups (15–25 participants) (Laabs, 1999). Confidentiality has to be guaranteed and time for the practising of and reflecting on newly obtained skills has to be incorporated into the design of the training programme (Laabs, 1999). There are EI programmes on the market in the form of books; however, the learning outcomes (derived from a needs analysis) must drive the design. The outcomes from the needs analysis may lead to the creation of new material (as done in this study). The trainer must also reveal EI competence during training sessions. It is important to evaluate any training programme and specifically EI programmes in order to determine development areas and to improve programme design. EI training activities and programmes should be studied according to commonly accepted experimental designs, for example designs with control groups and comparisons between pre-tests and post-tests. EI levels should be used to test training effectiveness (Wong, Foo, Wong & Wong, 2007).

The proposition can now be made that by introducing an array of EI interventions in the form of EI training, the organisation will benefit from the results indicated by the above literature study. However, a specific need exists in the accounting profession. In a study by Esmond-Kruger *et al.* (2006), accounting graduates (compared to non-accounting graduates) reported lower levels

of EI than their business school counterparts. This was also found by Bay and McKeage (2006).

**The need for EI in the accounting profession**

Measures must be taken to target the development of EI among accounting students (McPhail, 2003). Programmes may be implemented to provide growth opportunities in recognising, discussing and appropriately managing emotions (Bay & McKeage, 2006). EI (the ability to recognise and manage emotions) has become a skill that may allow accountants to perform better in a variety of areas such as leadership, client relation and decision making (Bay & McKeage, 2006). Foley (2007) adds that in order for accountancy firms to find a source of competitive advantage, EI must be applied.

The most successful partners in many accountancy firms are the ones who display high levels of EI. The first reason for the lack of EI in many accountants is that training for most accounting professions only addresses technical competencies whereas competencies to deal with people in the work environment are in most cases neglected (Smigla & Pastoria, 2000). Secondly, it can be assumed that people in accounting professions have a preference to work with facts and figures, leaving the development of people skills behind. EI, along with good communication skills and technical competency, is necessary for success in the accounting profession. In this regard, the New York State Society of Certified Public Accountants states that 20% of an accountant’s success is related to his or her IQ whilst the other 80% is based on the ability to understand him-/herself and others and to interact with people (EI) (Kirch, Tucker & Kirch, 2001).

**EI theory**

EI may be conceptualised and measured as an ability (Ciarrochi, Chan & Caputi, 2000; Mayer, Caruso & Salovey, 2000) or as a personality trait (mixed approach) (Schutte & Malouff, 1998). According to Spector (2003), EI is a characteristic that falls between a personality trait and a cognitive ability.

According to the ability theory, EI (Salovey & Mayer, 1990) portrays the subset of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions. Salovey and Mayer (1990) coined the term emotional intelligence in an article titled ‘Emotional Intelligence’ that was published in the journal *Imagination, Cognition and Personality* (1990). This article formed the basis of Salovey and Mayer’s future research findings and model development.

Mayer and Salovey (1997) view their model of EI (Figure 2) as operating across both the cognitive and emotional systems. It operates in a mostly unitary fashion but is still subdivisible into four branches. The first of these branches, emotional perception and identification, involves recognising and inputting information from the emotion system. The second and third branches, emotional facilitation of thought and emotional understanding, involve the further processing of emotional information with a view to problem solving. In general, the emotional facilitation of thought branch involves using emotion to improve cognitive processes whereas the emotional understanding branch involves cognitive processing of emotion. The fourth branch, emotion management, concerns

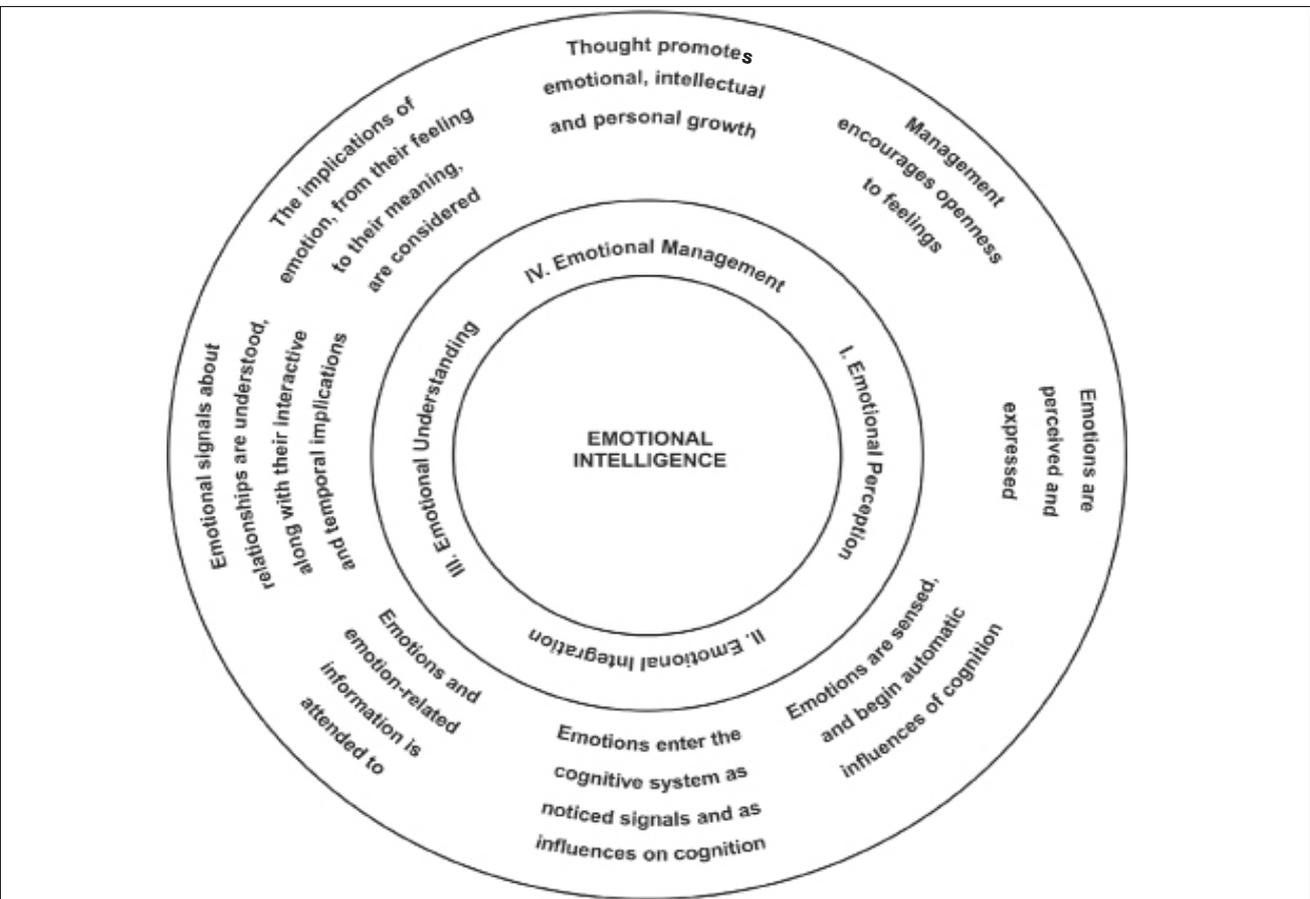


FIGURE 2 Model of emotional intelligence (Salovey & Mayer, 1997)

**TABLE 1**  
Composition of study population

VARIABLES	EXPERIMENTAL GROUP	CONTROL GROUP	TOTAL
Number in sample	20	20	40
Men	10	8	18
Women	10	12	22
Population group			
White	10 (5 men, 5 women)	12 (4 men, 8 women)	22
Black	7 (3 men, 4 women)	5 (2 men, 3 women)	12
Asian	3 (1 man, 2 women)	3 (1 man, 2 women)	6
Average age	20	21	20.5

emotional self-management and the management of emotions in other people. These four branches are shown in Figure 2.

According to the mixed approach, EI encompasses the array of noncognitive capabilities, competencies and skills that influence a person's ability to succeed in coping with environmental demands and pressures (Bar-On, 1997). In defining EI, Bar-On (1997) describes the intelligence component as the aggregate of abilities, competencies and skills representing the collection of knowledge used to cope with life effectively and adds the adjective 'emotional' to distinguish it from cognitive intelligence. Bar-On (1997) further lists 15 factorial components of EI (see Appendix A), namely emotional self-awareness, assertiveness, self-regard, self-actualisation, independence, empathy, interpersonal relationships, social responsibility, problem solving, reality testing, flexibility, stress tolerance, impulse control, happiness and optimism. It is clear from the discussion above that there are different approaches in the study of EI: the ability approach of Mayer and Salovey and the mixed approach of Bar-On (1997).

Bar-On's model illustrates the relationship between the intrapersonal, interpersonal, stress management and adaptability composite factors, which, together with and filtering through the fifth composite factor, general mood, lead to effective performance or success (see Figure 3).

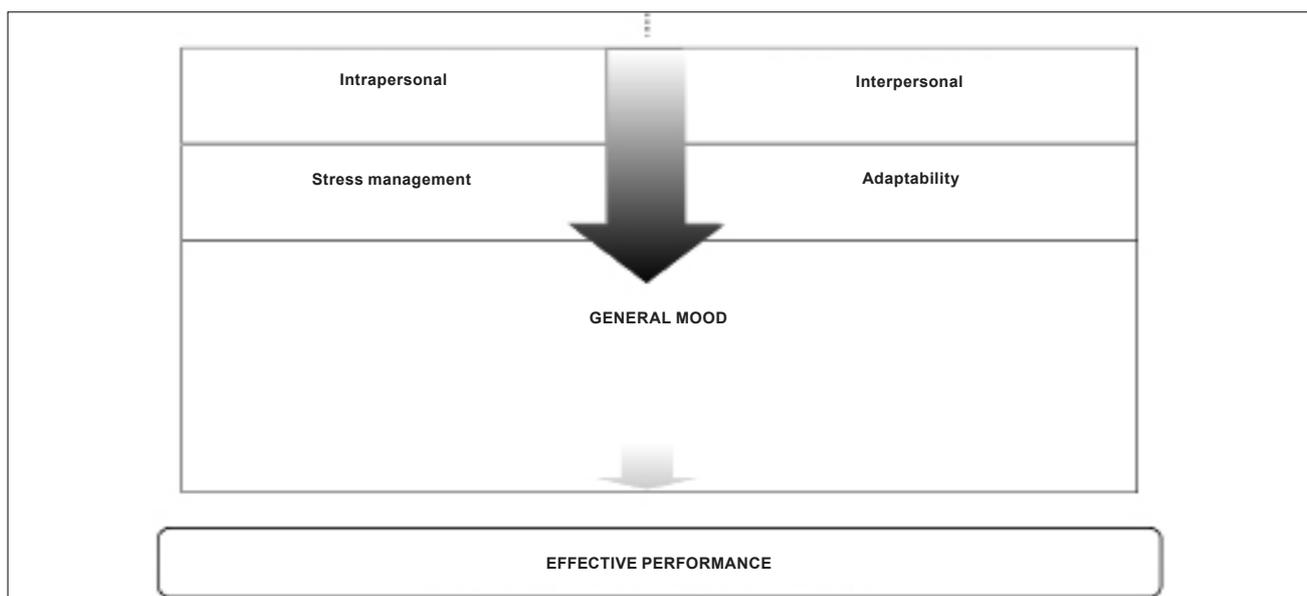
The development programme in this research study was based on a combination of the mixed approach of Bar-On (1997) and

the ability approach of Salovey and Mayer (1990). In the design of the development programme, best practice training principles were taken into consideration according to the literature review of the development and training of EI. The phases and design of the development programme for EI are discussed under the research procedure in the results section later in this article. Against this background, the following research question was formulated: What was the effect of an EI development programme on accountants?

## RESEARCH DESIGN

### Research approach

The research required both a quantitative and a qualitative research approach. A two-group design with a pre- and post-test was used. In this design, the subjects are chosen at random from the population and assigned randomly to the experimental and control group. Each group is given a pre-test and post-test, but only the experimental group is exposed to the instructional treatment. Many of the threats to internal validity are controlled. Variables such as history and pretesting should affect the experimental and the control group equally (Goldstein & Ford, 2001). Although the Solomon four-group design could have been used, the test-retest input forms part of the development programme aimed at EI, meaning that pre- and posttesting will form part of the future use of the programme. The qualitative approach was used to gather information about the subjective experience of the study population. The phenomenological method is an inductive, descriptive method that can be used to study the total experience of an intervention (Omery, 1983).



**FIGURE 3**  
Effective performance model (Sipsma, 2000)

## Research method

### Participants

The sample group consisted of future accountants of a financial institution (N = 40). The names of the future employees were pooled and randomly tabulated into two groups. The composition of the experimental and control groups is found in Table 1.

### Research procedure

The development programme aimed at EI consisted of the following phases:

- **Preparation phase:** (Pre-test and meeting of participants prior to training and Day 1): The purpose of the meeting with participants prior to the training event was to conduct the last phase of a needs analysis (pre-test) and to foster a positive relationship with the target population. A broad learning contract was negotiated by stating what the participants could expect from the training event as well as from the facilitator. A brief introduction to EI according to the model of Bar-On (1997) was provided to familiarise participants with the concept of EI. The use and relevance of EI training related to their future workplace were explained. Day 1 consisted of an introduction to a model and theory of EI and assessment of personal strengths and limitations. Feedback from the self-report measure of EI was also provided. This was done so that participants could experience the need for change. The need for change was also established through different experiential activities.
- **Training phase:** (Day 2 and 3): Day 2 was devoted to the core of EI, namely self-awareness. Participants completed an emotional self-awareness questionnaire (Steiner & Perry, 1997) and the results were discussed in small groups. Participants were also introduced to an array of emotions by means of various experiential activities. The purpose of this session was to show participants that different stimuli lead to different emotions in people and to broaden their vocabulary of emotions. The session was ended with activities and a discussion on the expression of feelings. Day 3 was concerned with the application of the previous day's training in the form of using communication of emotion in the skills of empathy, assertiveness and impulse control.
- **Application of training outside the training environment:** A break (seven days) in the training programme (between days 3 and 4) was provided. The reason for the seven-day break between days 1–3 and 4–5 is that EI development is about a change in behaviour and cannot be done as a 'quick fix'. This also gave participants time to practise their newly acquired skills in the external environment.
- **Transfer of training:** (Day 4). Day 4 was dedicated to the application of learnt skills (Day 3) in competencies such as problem solving, stress tolerance, flexibility and all the other skills obtained during the programme. Application of EI regarding problem solving, stress tolerance and flexibility was provided in the form of three experiential exercises. Before each activity, an introduction to the activity was given and afterwards the feelings and experiences that each activity evoked in participants were shared. The application to the work environment was made after each activity.
- **Evaluation of change:** (Day 5): The post-test was conducted in this phase. The Bar-On EQ-i was used to determine change according to the model of EI of Bar-On. Participants also shared their experiences of the training programme. The results of the questionnaire provided the evaluation of change in total EI, the subscales of EI and the 15 divisions of the subscales.

### Measurement instruments

The Bar-On EQ-i was used to determine the participants' level of EI before and after the training programme in the experimental and control groups. The EQ-i measures abilities and the potential for performance rather than performance itself; it is

process oriented rather than outcome oriented (Bar-On, Brown, Kirkcaldy & Thomé, 2000; O'Connor & Little, 2003). The EQ-i is a self-report inventory comprising 133 declarative statements phrased in the first person singular. Participants are required to indicate the degree to which each statement is true of the way they typically think, feel or act on a five-point scale (1 = Very seldom or not true of me; 5 = Very often true of me or true of me). The items of the EQ-i are summed to yield scores on 15 lower order subscales, five higher order composite scores and an overall EI score. Of the 133 items that comprise the EQ-i, eight items comprise a Positive Impression Scale and seven items comprise a Negative Impression Scale. These two scales are designed to determine whether a participant is responding in an overly positive or overly negative fashion. In addition, there is an Inconsistency Index, calculated by summing the differences in scores between responses on 10 pairs of similar items designed to assess random responding. The final item is a self-report on honesty of responding and is not included in any scale. If a participant's response to this item is either '2' or '1' (Seldom true of me or Very seldom or not true of me), the response is considered invalid. Participants' responses are also considered invalid if a certain percentage of items is not answered (omission rate). If the omission rate is higher than 6%, their EQ-i results are considered invalid. Higher scores indicate a higher level of EI (Palmer, Manocha, Gignac & Stough, 2003). Psychometric analyses of the EQ-i reported in the technical manual (Bar-On, 1997) indicate that it has good internal reliability and test-retest reliability. Across seven population samples, the 15 subscales are reported to have average to high internal consistency coefficients with Cronbach alphas ranging from  $\alpha = 0.69$  for RE to  $\alpha = 0.86$  for SR. With a South African sample (n = 44) the average stability coefficient of the 15 subscales after a one-month period was found to be  $r = 0.85$  and with a smaller subset of this sample (n = 27) was found to be  $r = 0,75$  after a four-month period (Palmer *et al.*, 2003).

A qualitative approach was also used to gather information about the subjective experience of the study population. The phenomenological method is an inductive, descriptive method that can be used to study the total experience of an intervention (Omery, 1983). This is based on the assumption that psychometric measurements cannot capture the total experience of the intervention and can thus render insufficient results. The respondents are therefore provided with an opportunity to express their own unique experiences of the development programme aimed at EI (Kruger, 1984). This was done by means of diary entries the participants made throughout the training programme. The participants gave consent for the use of the diaries for research purposes.

### Statistical analysis

Statistical analysis was done using the SAS computer program (SAS Institute, 1999). For the purposes of this research, descriptive and inferential statistics were used. The research made use of descriptive data to organise the data meaningfully. Standard deviations (s) and arithmetic means (x) were computed to interpret the descriptive statistics. Arithmetic means (x) comprise a point that coincides with the sum of scores divided by the number of scores. Standard deviations (s) show the amount the individual's score differs from the average distribution of the data. To compute standard deviations, the squares of the differences were used and the average served to determine the distribution. Participants' t-tests were used to determine the significance of the difference between the average of the pre- and post-tests of the control and experimental groups. This test was taken to determine whether a significant difference existed between the changes in scores from the pre- to the post-test. The assumption underlying the t-test is that the population is distributed normally even though the sample size is small (experimental group: N < 30). The d-value was computed to determine practical significance. The cutoff point for practical significance was as follows:

- $d \geq 0.2$  slight effect  
 $d \geq 0.5$  moderate effect  
 $d \geq 0.8$  strong effect

Qualitative impressions from the diaries were derived by clustering diary entries (phrases) into different themes. The participants' exact words were used to determine the themes.

## RESULTS

In Table 2, the differences between the experimental and control groups with regard to the Bar-On EQ-i are reported.

Based on the results as presented in Table 2, there was a significant difference between the total EI score with regard to the difference of the pre-tests and post-tests of the experimental and control groups.

Three of the five subscales of EI as measured by the BarOn EQ-i showed a significant difference and improvement due to exposure to the development programme aimed at EI. The subscales interpersonal (moderate effect), adaptability (moderate effect) and general mood (strong effect) showed a significant difference compared to the control group. Based on the results as presented in Table 2, there was a significant difference with regard to some of the components of EI as measured by the BarOn EQ-i:

- Self-regard (strong effect)
- Self-actualisation (moderate effect)
- Interpersonal relations (moderate effect)
- Reality testing (moderate effect)
- Problem solving (strong effect)
- Flexibility (moderate effect)
- Stress tolerance (moderate effect)
- Optimism (strong effect).

The results from the qualitative diary entries will be presented next:

### Theme 1: Self-awareness

The theme of self-awareness was found in all 20 participants. This theme derives from diary entries such as,

*'I became aware about the ways I cope with stress and the ways I can better this...'; 'This course awakened another part of me... different way to measure and improve my abilities...'*

### Theme 2: Emotional self-awareness

The theme of emotional self-awareness was found in 14 participants. This theme derives from diary entries such as,

*'During the break between the two training sessions I became even more aware of my own feelings and being able to identify them and their sources...'; 'I learnt a lot about emotions and how to identify them and what to do about them.'*

### Theme 3: Empathy

The theme of empathy was found in 10 participants. This theme derives from diary entries such as,

*'I do understand other people's feelings...'; 'I became aware of the emotions of others...'*

### Theme 4: Interpersonal relationships

The theme of interpersonal relationships was found in 10 participants. This theme derives from diary entries such as,

*'I had preconceived ideas about certain people in my group but they got to be in my group and I actually got to like them'; 'Not to be prejudiced about people in the group you do not know...'; 'Put effort in to talk to others...'; 'You will come to the conclusion that you summed them up wrongly...'*

### Theme 5: Self-acceptance

The theme of self-acceptance was found in eight participants. This theme derives from diary entries such as,

*'I learnt to appreciate more certain things about myself which I have always seen as weaknesses and can appreciate them now...'; 'I feel free about myself now, I am relaxed with myself...'*

## DISCUSSION

EI development had the following quantitative effects on

**TABLE 2**  
Difference of the pre-test and post-test regarding measurement of the BarOn EQ-i within the experimental and control group

	EG (N = 20)		CG (N = 20)		D
	X	s	X	s	
<b>TOTAL EI</b>	5.60	9.40	1.00	7.30	*0.50
<b>INTRAPERSONAL</b>	3.40	9.60	-0.3	7.80	0.40
Self-regard	2.60	6.70	-2.5	6.40	**0.80
Emotional self-awareness	5.40	13.80	0.30	7.30	0.40
Assertiveness	0.60	12.30	-0.90	10.80	0.10
Independence	0.80	9.50	0.20	9.30	0.06
Self-actualisation	3.05	10.70	-2.10	9.50	*0.50
<b>INTERPERSONAL</b>	4.85	10.40	-0.15	8.78	*0.50
Empathy	5.60	10.70	2.60	9.80	0.30
Social responsibility	1.80	10.02	-2.60	10.06	0.40
Interpersonal relations	4.20	10.50	-1.60	8.20	*0.60
<b>ADAPTABILITY</b>	8.50	7.20	2.40	9.60	*0.60
Reality testing	8.05	6.20	3.00	10.80	*0.50
Problem solving	7.20	8.20	-1.80	8.50	**1.05
Flexibility	4.20	10.50	-1.60	8.20	*0.60
<b>STRESS MANAGEMENT</b>	2.50	11.00	2.50	7.10	0.00
Stress tolerance	4.60	9.30	-1.10	7.30	*0.60
Impulse control	0.05	12.11	3.80	6.80	-0.30
<b>GENERAL MOOD</b>	4.20	9.90	-2.80	8.40	*0.70
Optimism	8.00	11.30	-4.70	9.80	**1.12
Happiness	0.55	11.05	-1.80	6.90	0.20

\*\*  $d \geq 0.8$  (strong effect)

\*  $d \geq 0.5$  (moderate effect)

participants: The development programme aimed at EI increased the total score of EI as measured by the BarOn EQ-i. Specific areas of EI that were developed included the interpersonal, adaptability and general mood subscales. The following EI competencies were developed due to exposure to the development programme aimed at EI: self-regard, self-actualisation, interpersonal relations, reality testing, problem solving, flexibility, stress tolerance and optimism.

Regarding the qualitative impressions, it appears that the development programme aimed at EI led to the development of EI because of the 'emotional self-awareness' theme that was identified. Support for this theme of EI from the literature comes from Goleman (1996), 'express feelings', Salovey and Mayer (1990), 'managing emotions' and 'handling feelings so that they are appropriate', and Steiner (1997), 'express own emotions productively, manage and control own emotions'. Other qualitative themes that were identified that confirm an increase in EI competencies are empathy and interpersonal relationships. Support for empathy as a theme in EI comes from Goleman (1996), 'sense what others are feeling', Gardner (1993), 'ability to understand others, what motivates them and how they work', and Salovey and Mayer (1990), 'recognising emotions in others'. Support for interpersonal relationships as a theme of EI comes from Goleman (1996), 'sense what others are feeling', Gardner (1993), 'ability to understand others, what motivates them and how they work', and Salovey and Mayer (1990), 'recognising emotions in others'.

Two new themes (not measured by the BarOn EQ-i) that can be investigated in further research (maybe as prerequisites for the development of EI) are self-awareness and self-acceptance. Support for self-awareness as a theme of EI from the literature comes from Gardner's definition of EI, 'self-knowledge' and 'ability to relate inner and outer world' as well as 'self-awareness', defined by Salovey and Mayer (1990). Although the quantitative results did not indicate an increase in empathy and emotional self-awareness, the qualitative results showed a definite improvement in these applications of EI.

EI can be applied in the organisation through selection, recruitment, training and development of employees from senior executives to new entrant employees. Selection for different types of jobs (based on different EI competencies) can be done. Within specific domains in the organisation, to which development of EI can be applied, leaders and groups within the organisation can be targeted.

The ability to manage emotions and relations permits the emotionally intelligent leader to understand followers' needs and to react accordingly (Barling, Slater & Kellaway, 2000). By working to establish norms for emotional awareness and regulation at all levels of interaction, teams can build the solid foundation of trust, group identity and group efficacy they need for true co-operation and collaboration as well as high overall performance (Druskat & Wolff, 2001). Within human resource functions, EI can be applied to performance feedback (Abraham, 1999). An emotionally intelligent delivery of criticism provides valuable information to employees to take corrective action before problems escalate out of control (Korsgaard, 1996). Lastly, a literature study indicated that EI is linked to performance, well-being, stress management, effective teamwork and job satisfaction.

### Limitations

The research targeted participants in a specialist area (accounting) and, as such, resulted in a limitation to generalisation within other types of organisations. The effect of the pre-test was not accounted for because only an experimental and control group were included in the research. In future, a three-group design could be added to determine the effect of the pre-test. The use of small groups made the transfer of EI skills a tedious and time-consuming effort.

The empirical research did not make use of individual EI coaching growth sessions. This could have affected the increase of EI in a more positive way. The choice of evaluation measurement was restricted as only the BarOn EQ-i was regarded as valid and reliable for use in South African samples. The repeatability of the study can be a very costly effort because of the high cost involved in obtaining psychometric material.

### Conclusion

EI competencies should be incorporated in the curriculum of business educators as they are the trainers of the business leaders of the future. Students and/or future employees must take annual EI assessments to gauge their progress and as a means for further development efforts. Future quantitative and qualitative research might focus on students' self-regard and need for self-actualisation with regard to the implementation of EI programmes.

There is also a need for further research to understand the interaction between individuals and organisation/environment in terms of their influence on the development of EI. A development programme aimed at EI must be undertaken and must start with a theoretical introduction by choosing one of the EI models (as discussed in this research) and self-assessment. Training should be done in small groups and must have a strong experiential undertone. Time should be allowed between multiple training sessions for the application of newly acquired EI skills. Training design should be centred and adult-learning principles must be followed accordingly. Training of registered psychologists or human resource officials with a strong psychological background in the design and presentation of development programmes aimed at EI should be conducted throughout the organisation. After training has been attended, support networks should be established and coaches should be appointed in order to maintain and further develop efforts.

Lastly, the need for EI/emotional competence interventions in occupations that can benefit from emotion management should be investigated and tested for employees such as nurses, teachers, human resource officers and police officers.

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capacity for accepting one's aggressive impulses, being composed and controlling aggression, hostility and irresponsible behaviour.

- **Happiness:** Happiness is the ability to feel satisfied with one's life, to enjoy oneself as well as others and to have fun.
- **Optimism:** Optimism is the ability to look on the brighter side of life and to maintain a positive attitude, even in the face of adversity.

## APPENDIX

### *Factorial components of Bar-On's concept of EI*

Listed below are the 15 conceptual components of EI that, according to Bar-On (1997), can develop over time, can change throughout life and can be improved through training and remedial programmes as well as therapeutic techniques. Bar-On's model (1997) is multifactorial and relates to potential for performance rather than performance itself; it is process oriented rather than outcome oriented:

- **Self-awareness:** Emotional self-awareness is the ability to recognise one's feelings. It is not only the ability to be aware of one's feelings and emotions but also the ability to differentiate between them, to know what one is feeling and why and to know what caused the feeling. Serious deficiencies in this regard can manifest in an inability to express feelings verbally.
- **Assertiveness:** Assertiveness is the ability to express feelings, beliefs and thoughts and to defend one's rights in a nondestructive manner. Assertiveness is composed of three basic components: a) the ability to express feelings, b) the ability to express beliefs and thoughts openly and c) the ability to stand up for personal rights.
- **Self-regard:** Self-regard is the ability to respect and accept oneself as basically good.
- **Self-actualisation:** Self-actualisation pertains to the ability to realise one's potential capacity. Becoming involved in pursuits that lead to a meaningful, rich and full life manifests this component of EI.
- **Independence:** Independence is the ability to be self-directed and self-controlled in one's thinking and actions and to be free of emotional dependency.
- **Empathy:** Empathy is the ability to be aware of, to understand and to appreciate the feelings of others.
- **Interpersonal relationships:** Interpersonal relationship skill involves the ability to establish and maintain mutually satisfying relationships that are characterised by intimacy and by giving and receiving affection.
- **Social responsibility:** Social responsibility is the ability to demonstrate oneself as a co-operative, contributing and constructive member of one's social group. This ability involves acting in a responsible manner, even though one may not benefit personally.
- **Problem solving:** Problem-solving aptitude is the ability to identify and define problems as well as to generate and implement potentially effective solutions.
- **Reality testing:** Reality testing is the ability to assess the correspondence between what is experienced and what objectively exists.
- **Flexibility:** Flexibility is the ability to adjust one's emotions, thoughts and behaviour to changing situations and conditions.
- **Stress tolerance:** Stress tolerance is the ability to withstand adverse events and stressful situations without falling apart by actively and positively coping with stress.
- **Impulse control:** Impulse control is the ability to resist or delay an impulse, drive or temptation to act. It entails a