

# Dimensions of Emotional Intelligence

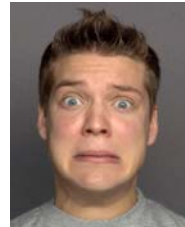
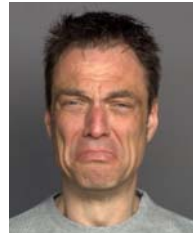


Photographs from FACES  
database

Nicola Schutte

University of New England, Australia

Do you perceive the emotions of others?



A

B

C

D

E

F

Photographs from FACES  
database

Which person may be experiencing

- Sadness? (D?)
- Disgust? (C?)
- Fear? (E?)
- Happiness (A,B,F?)

## Basic Competencies Comprising Emotional Intelligence (EI)

- Perception of emotions



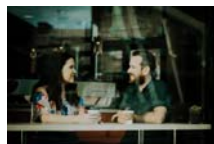
- Understanding development of emotions



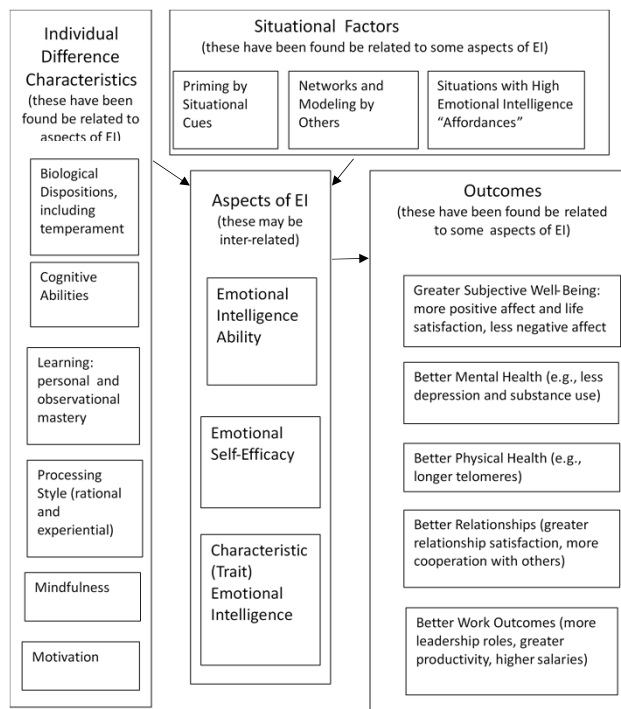
- Harnessing emotions



- Regulating emotions



# A Dimensional Model of Emotional Intelligence (EI)



## **WHAT ARE ABILITY, TRAIT AND SELF-EFFICACY ASPECTS OF EMOTIONAL INTELLIGENCE?**

- The ability conceptualisation holds that emotional intelligence is a potential, similar to most conceptualizations of cognitive intelligence. The ability aspect is generally assessed through performance measures in which individuals' capacity to engage in skills such as understanding and managing emotion are directly assessed (Bucich & MacCann, 2019).
- The trait conceptualisation focuses on emotional intelligence can also as characteristic or typical adaptive emotional functioning. Trait emotional intelligence has generally been assessed by self or other report of typical behaviour (Bucich & MacCann, 2019). The mixed model approach adds competencies, such as stress management and empathy, to the basic emotional competencies.
- Self-Efficacy for emotional intelligence it is the belief or confidence that one can bring about a good outcome in one's emotional functioning. It is generally assessed by self-report (Qualter et al., 2015).

## Some examples of competencies as assessed by ability and trait conceptualisations of emotional intelligence.

**Ability:** Perceiving emotions can consist of the ability to perceive emotions in oneself and others as well as in objects, art, stories, music, and other stimuli.

For example, Resnicow et al. (2004) found that recognition of intended emotion in musical performance was associated with general ability emotional intelligence. What might be intended emotions conveyed by the following music?

Chuck Berry:  
Johnny B.  
Goode



## **Some examples of competencies as assessed by ability and trait conceptualisations of emotional intelligence.**

**Trait:** Perceiving emotions consists of how well one typically perceives emotions in the self and others.

Sample items from the Assessing Emotions Scale (Schutte et al., 1998).

- 'I am aware of my emotions as I experience them.'
- 'By looking at their facial expressions, I recognize the emotions people are experiencing.'

## **ASSOCIATIONS BETWEEN ABILITY, TRAIT AND SELF-EFFICACY ASPECTS OF EMOTIONAL INTELLIGENCE**

Even though the emotional intelligence literature has sometimes presented ability and trait functioning conceptualizations of emotional intelligence as mutually exclusive alternatives, they seem to be inter-related, yet somewhat separate components, of adaptive emotional functioning. Emotional self-efficacy is related to both ability and trait emotional intelligence. For example,

- Schutte et al. (2011) found a significant association of  $r=.33$  between ability and trait emotional intelligence.
- Kirk et al. (2008) found that emotional self-efficacy was significantly associated with ability emotional intelligence at  $r=.34$  and with trait emotional intelligence at  $r=.73$ .



## What Outcomes are related to Emotional Intelligence?

Discussion of Some Selected Characteristics:

### **Subjective Well-Being (Hedonic Well-Being)**

High positive affect, low negative affect, life satisfaction, and subjective happiness ratings are commonly used indicators of subjective well-being. Ability emotional intelligence, trait emotional intelligence, and emotional self-efficacy are all associated with these indicators of subjective well-being. For example, a meta-analysis of numerous studies (Sánchez-Álvarez et al., 2016) found an  $r$  of .38 between trait emotional intelligence and indicators of subjective well being and an  $r$  of .22 between ability emotional intelligence and indicators of subjective well-being. Kirk et al. (2008) found higher emotional self-efficacy was associated with more positive affect,  $r=.40$ , and less negative affect,  $r=-.35$ . These associations have been found for a variety of groups of people. For example, Rey et al. (2019) found an association of  $r=.41$  between trait emotional intelligence and happiness among older Spanish participants (mean age of 65) and Teal et al. (2019) found associations of between  $r=.13$  and  $r=.39$  for trait emotional intelligence competencies among adolescent Australian boys (mean age of 14).

## Some selected items relating to Subjective Well-being

**Positive Affect** (sample items from the PANAS; Watson et al, 1988):

The words below describe different feelings. Please use the scale below to describe how you generally feel.

1 = very slightly or not at all, 2 = a little, 3 = moderately, 4 = quite a bit, 5 = extremely

\_\_\_ 1. interested

\_\_\_ 2. alert

\_\_\_ 3. excited

\_\_\_ 4. inspired

**Life Satisfaction** (sample items from Satisfaction with Life Scale; Diener et al., 1985):

Using the scale below indicate your agreement with each item.

1 = Strongly disagree, 2 = Disagree, 3 = Slightly disagree, 4 = Neither agree nor disagree, 5 = Slightly agree, 6 = Agree, 7 = Strongly agree

\_\_\_ 1. In most ways my life is close to my ideal.

\_\_\_ 2. The conditions of my life are excellent.

\_\_\_ 3. I am satisfied with my life.

## What Outcomes are related to Emotional Intelligence?

### **Psychological Well-Being (Eudaimonic Well-Being)**

Psychological well-being consists of seeing meaning, purpose and growth in life.

**Some selected items relating to Psychological Well-being** (sample items from Psychological Well-Being Scales; Ryff et al., 1995):

Indicate your degree of agreement with each item.

1. I have a sense of direction and purpose in life.
2. I think it is important to have new experiences that challenge how you think about yourself and the world.

DiFabio and Kenny (2016) found higher ability emotional intelligence to be associated with greater psychological well-being as assessed by a scale assessing meaningfulness in one's life,  $r=.32$ . Abayeta et al. (2015) found competencies comprising trait emotional intelligence to be associated with more perception purpose in one's life,  $r=.49$ .

## What Outcomes are related to Emotional Intelligence?

### **Mental Health**

Competencies, such as the ability to perceive, understand and regulate emotions, may facilitate mental health by providing individuals with resilience in the face of adversity so that mental health problems are less likely to develop.

In meta-analyses Schutte et al. (2007) found an association of higher trait emotional intelligence with better mental health of  $r=.31$  and Martins et al. (2010) found an association of ability emotional intelligence with mental health of  $r=.17$  and of trait emotional intelligence with mental health of  $r=.33$ .

For example, in a group of secondary school teachers, those with a profile of high general trait emotional intelligence were less likely to experience symptoms of depression than other teachers (Martínez-Monteaudo et al., 2019). Brackett et al, (2004) found that higher ability emotional intelligence were less likely to use illegal drugs and less likely to consume large amounts of alcohol.

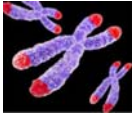
## What Outcomes are related to Emotional Intelligence?

### Physical Health

Do you know what this image shows?



Telomeres on the ends of chromosomes.



## Telomeres

Telomeres protect the ends of chromosomes. Telomeres are a biomarker of aging and longer telomeres are associated with better health and longevity. Schutte et al. (2016) found that higher trait emotional intelligence is associated with longer telomeres.

### Physical health in general

Meta-analyses by Martins et al. (2010) and Schutte et al. (2007) found that across studies higher emotional intelligence was associated with better physical health. For example, Martins et al. (2010) found a weighted  $r$  of .27 between emotional intelligence and various indicators of physical health. It may be that emotional intelligence prompts better health-related behaviours, as found by Omar Dev et al (2018), and that these better health-related behaviours partially account for the relationship between emotional intelligence and health.

## What Outcomes are related to Emotional Intelligence?

### Better Relationships

Both higher ability emotional intelligence and higher trait emotional intelligence tend to be associated with better interpersonal relationships (Lopes, et al., 2004; Lopes 2005). A meta-analysis numerous studies found an overall association of  $r=.23$  between emotional intelligence and romantic relationship satisfaction (Malouff, Schutte & Thorsteinsson, 2014). The association between trait emotional intelligence and relationship satisfaction was stronger than the association between ability emotional intelligence and relationship satisfaction.



### Work Performance

Emotional intelligence is of benefit in the workplace (Ashkanasy & Daus, 2005). A meta-analysis of emotional intelligence and job performance found that both higher ability emotional intelligence and higher trait emotional intelligence were related to superior job performance (Joseph & Newman, 2010). The association between ability emotional intelligence and performance was  $r=.18$  and the association between trait emotional intelligence and performance was  $r=.47$ .



## What are the Origins of Emotional Intelligence?

Discussion of Some Selected Factors:

### Biological

- Genetic Predispositions

For example, in two studies using family and twin designs respectively, Vernon et al. (2008) found heritability estimates of .32 and .42 for trait emotional intelligence.

- Neurological Influences

For example, Krueger et al. (2009) found that head injured veterans' prefrontal cortex functioning was associated with their trait emotional intelligence scores. Using fMRI, Ling et al. (2019) found that connectivity in an area of the superior parietal lobule is associated with ability emotional intelligence.

- Temperament Foundations

Biological predispositions may influence the develop of basic temperament (e.g., Rothbart, 2011). Basic temperament dimensions in turn are related to trait emotional intelligence. For example, Gardner et al. (2011) found that higher levels on the temperament dimensions of effortful control, extraversion, and orienting sensitivity were associated with significantly greater trait emotional intelligence.



## What are the Origins of Emotional Intelligence?

### Cognitive Processes

- Cognitive Ability (e.g., IQ)  
According to the four branch model of emotional intelligence (Mayer et al., 2008), emotional intelligence involves an interplay of cognition and emotion. A meta-analysis of numerous studies (Joseph & Newman, 2010) found associations between greater cognitive intelligence and higher ability emotional intelligence,  $r = .22$ , and a relationship between cognitive intelligence and trait emotional intelligence,  $r = .09$ .
- Processing Style  
Epstein's (1994) dual process model describes an information processing experiential system that is effortless, rapid, and tied to emotion and a rational system that is intentional and logic-based. Both of these systems may contribute to emotional intelligence. For example, Schutte et al. (2010) found that more rational processing was associated with higher emotional intelligence,  $r = .38$ , as was experiential processing,  $r = .50$ .

## What are the Origins of Emotional Intelligence?

### States of Consciousness and Mind

- **Mindfulness**

Mindfulness is a state of consciousness consisting of non-evaluative awareness and focus on the present, with a flexible state of open attention to both one's inner state and the outside world (Van Dam, 2018). A higher level of characteristic mindfulness may make it more likely that individuals show competencies, such as accurate perception of emotion and understanding of emotion, comprising emotional intelligence. For example, in a meta-analysis of numerous studies, Miao et al. (2018) found that greater mindfulness was related to higher levels of aspects of emotional intelligence, with reliability corrected  $r = .48$ .



- **Motivation**

Motivation helps determine which abilities or behavior patterns an individual will choose to show, including competencies comprising emotional intelligence. For example, Christie et al. (2007) found associations between motives relating to need for achievement and need for affiliation with trait emotional intelligence. Van Kleef and Hideg (2011) showed that characteristics such as Machiavellianism can give rise to goals that then influence how emotional intelligence is used.

## **What are the Origins of Emotional Intelligence?** (continued)

### **Situational Factors**

In some situations we are more likely to show emotional intelligence. This can occur through priming, such as by prompts that lead us to recollect times we demonstrated emotional competency (Schutte & Malouff, 2012), being part of social networks in which others show emotional competencies, that may be transmitted through 'contagion' (Schutte, 2014), and affordances of situations (Schutte et al., 2008).

Such situational influences may have permanent as well as temporary effects.

**Serena Williams and Roger Federer after playing against each other in doubles games at the 2019 Hopman Cup in Perth**



**What situational influence might have impacted these tennis players' emotional competencies at the time the photograph was taken?**

- Priming? Memories of the match and previous matches?
- Contagion? One player's recognition of the other's emotion and regulation of his/her own emotion influencing the other player?
- Situational Affordances? The structure and expectations related to a post match meeting?

## What are the Origins of Emotional Intelligence? (continued)

### **Learning**

Both observational learning and personal learning experience can shape emotional intelligence.

- **Observational Learning**

Individuals who have the opportunity to observe higher levels of emotional competency, for example as exemplified by better family relationships and more parental warmth, are higher in emotional intelligence (Brackett, et al., 2004; Ciarrochi, et al, 2001)



## Systematic Learning of Emotional Intelligence through Training

### Emotional intelligence can be learned and increased through training and practice

Numerous programs and studies have investigated whether emotional intelligence can be increased through training.



A recent meta-analysis (Mattingly & Kraiger, 2019) consolidated the results of 56 emotional intelligence training studies, which included over 2,000 participants. Across studies that used treatment (training)-control group designs there was a significant increase in emotional in ability emotional intelligence ( $d=.31$ ) and in trait self-reported emotional intelligence ( $d=.56$ ). Across analyses of pre to post training changes in emotional intelligence in training conditions, there was a significant increase in emotional in ability emotional intelligence ( $d=.52$ ) and in trait self-reported emotional intelligence ( $d=.68$ ).

## **Examples of Emotional Intelligence Training with Different Populations**

Most emotional intelligence training programs have comprised provision of information regarding emotional intelligence competencies, opportunities to practice the competencies in role plays or in the participants' life, and reflection or feedback.

### **Teachers**

Vesely et al. (2014) provided pre-service teachers with five weeks of emotional intelligence training, which consisted of provision of information, discussion, and skills practice. Participants in the training group showed an increase in trait emotional intelligence from before to after the training and also increased in life satisfaction and self-efficacy, and showed decreases in stress. They also experienced more beneficial outcomes on these measures compared to a comparison group of pre-service teachers.

### **Health Care Professionals**

Al Faouri et al (2014) offered registered nurses a seven week emotional intelligence training program comprising information regarding emotional competencies comprising emotional intelligence, discussions, and role plays. The nurses participating in the program showed significant increases in trait emotional intelligence from before to after participation in the program and also experienced significant increases in work satisfaction.

## **Examples of Emotional Intelligence Training with Different Populations**

### **Employees**

Thory (2016) collected information from managers who attended emotional intelligence training courses comprising information relating to emotional intelligence to examine the managers' perception of how the courses influenced them. In general, the managers reported that participation in the courses helped make their day to day work more meaningful.

### **Couples**

Balalami et al. (2019) found that couples who participated in an emotional intelligence training course showed higher trait emotional intelligence as well as greater marital satisfaction after completing the course than comparison couples.



## **Examples of Emotional Intelligence Training with Different Populations**

### **Students**

Dacre Pool and Qualter (2012) provided university students with eleven one hour sessions focusing on developing understanding and skills related to emotional intelligence competencies. Case studies, discussions and role plays provided students with the opportunity to deepen their understanding and skills. Compared to students who did not participate in the emotional intelligence training, those who participated in the training showed significant increases in emotional self-efficacy and significant increases in ability emotional intelligence for the competencies of understanding emotions and managing emotions.

Schutte and Malouff (2002) provided university students with a course consisting of information related to emotional intelligence, role play opportunities, encouragement to use emotional competencies in their life and to journal their experiences using emotional competencies. Students in the training condition increased in emotional intelligence, while those in a comparison condition did not, and a year long follow-up showed students in the training condition were less likely to leave their university studies.

### **A short emotional intelligence training exercise**

- Think of a time you successfully helped another person manage his or her emotions in a beneficial way. Perhaps you helped a person feel less fearful or helped a person feel pride in an achievement.
  - Did you first recognise the person's present emotional state?
  - Did you think about how that emotion might have come about?
  - Did you consider what emotional state the person might desire or find beneficial?
  - What did you do to help the person manage or regulate his or her emotions?
- After reflecting on this past event, can you use this reflection to identify ways you can in the future help others manage their emotions or manage your own emotions?



Thank You!

Wishing you an engaging time at the Congress. I hope to talk with many of you in the next days.