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## Emotional Intelligence

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### Definition

Emotional intelligence has been conceived of in several ways, but this entry will focus on emotional intelligence as a mental ability. The ability model of emotional intelligence defines it as the capacity “to reason validly with emotions and with emotion-related information and to use emotions to enhance thought” (Mayer et al. 2016, p. 295). The approach has several advantages relative to other models, including its conceptual clarity, the validity of its associated measurement procedures, and its predictions of outcomes (Côté 2014; Mayer et al. 2008). There are, however, other meanings of the term. According to the *mixed model* approach, emotional intelligence is a diverse mixture of self-reported personality traits such as assertiveness, self-regard, independence, and empathy (Bar-On and Parker 2000). Alternatives to the ability model will be discussed in a later section of this entry.

## Introduction

Emotional intelligence is a cognitive ability that operates on emotional feelings and information. Consider Emily, a highly emotionally intelligent young wife, who returns home with the expectation of rejoicing in her solitude. Once home, she slumps on the couch to read. Using her emotional intelligence, she realizes that her initial delight at having a moment to herself has actually turned to melancholy over being alone. Although she had *thought* she was missing the plentiful solitude of her earlier life, she now registers surprise that she prefers to be with her husband. From that, she reasons that she treasures her new married life. Now feeling lonely, Emily again uses her emotional intelligence to regulate her emotions by going for a jog – an activity she knows will improve her mood. In this example, emotional intelligence is a mental ability that serves to identify emotions accurately, interpret their meaning, and handle them effectively.

Intelligence in any domain involves the mental abilities of reasoning abstractly and of successfully adapting to the environment. In the contemporary Cattell-Horn-Carroll model of intelligences, mental abilities are arranged hierarchically in three levels (McGrew 2009). General intelligence, known as “g,” is the overarching factor at the top of the hierarchy. The second level consists of a number of broad intelligences including verbal intelligence, perceptual-organizational intelligence, spatial intelligences,

and many others, each of them further divided into specific abilities at the third tier of the model. Emotional intelligence is currently regarded as a broad intelligence, situated at the second level of the hierarchy (MacCann et al. 2014).

Broad intelligences such as emotional intelligence are further classified as “cool” or “hot” (e.g., Mayer et al. 2016). If an intelligence is expressed in a relatively impersonal domain, that intelligence is classified as “cool.” For example, verbal intelligence (a broad intelligence) may be used to understand the objective meaning of a written passage; it is one of the “cool” intelligences. In contrast, “hot” intelligences – of which emotional intelligence is a member – are abilities exercised in areas likely to involve or elicit strong personal feelings. Other “hot” intelligences are personal intelligence and social intelligence.

Emotional intelligence is the narrowest of the hot intelligences, as it concerns problem-solving in the realm of emotions only. By comparison, other hot intelligences are somewhat broader. For example, personal intelligence is the ability to recognize and reason about information relevant to one’s own and others’ personalities (Mayer 2008); social intelligence concerns understanding, reasoning about, and successfully navigating the social world – particularly the world of groups and interpersonal interactions (e.g., Conzelmann et al. 2013; Mayer et al. 2016).

Dealing with the interrelated, personal aspects of human life, hot intelligences are understandably correlated with one another. For example, the strategic area of emotional intelligence and personal intelligence correlated  $r = 0.69$  in one study (Mayer et al. 2012a). Their correlation with social intelligence is yet unknown because measures of social intelligence are less developed.

Emotions are primary and universal modes of human communication (Darwin 1872/1998); conceptualizing emotional intelligence as an ability means that people will vary in the extent that they are able to perceive, communicate, reason about, and manage this crucial information. Those who are better able to detect and navigate their own emotional states are then better able to direct themselves to successful outcomes such as living healthier lives (Zeidner et al. 2012).

## How Did Emotional Intelligence Become a Subject of Study?

In 1920, E. L. Thorndike posited the existence of a social intelligence, defining it as the ability to deal effectively with others and to behave wisely in social relationships. Initial attempts to support this concept empirically were unsuccessful, suffering from both an inconsistent definition of what social intelligence entailed and how it could be measured somewhat separately from verbal intelligence (Cronbach 1960). Two decades later, emotions research burgeoned, and in the late 1970s and 1980s, research examining the ways emotion and thought influenced each other flourished (e.g., Alloy and Abramson 1979; Taylor et al. 1985).

By the late 1980s, researchers in psychology, evolutionary biology, and computer science had identified several abilities involved in understanding emotions and the information they conveyed (e.g., Isen and Means 1983). In a 1990 article, Salovey and Mayer (1990) drew these abilities together and suggested they were part of a unitary construct of emotional intelligence. Over the next decade, research interest in emotional intelligence increased, and findings supported the possibility that it was a unique and newly measured intelligence (e.g., Mayer et al. 1999; Mayer and Geher 1996).

The ability model of emotional intelligence centers on the idea that emotions are feeling states that communicate signals about consequential changes in people’s relationships with others as well as with themselves. The abilities concern an individual’s understanding of the emotional meanings of inner states (such as happiness, sadness, anger, and related responses) and successfully reasoning about them (Mayer and Salovey 1997). When someone is looking through an old photo album, for example, she may become a bit contemplative and melancholy. Emotional intelligence would allow her to determine that she was feeling wistful, and it would help her to identify the source of the feeling. Was it the picture of an old friend who had moved away that caused her emotion, or was it the picture of her own younger self – or perhaps both?

## The Mayer-Salovey-Caruso (MSC) Theory of Emotional Intelligence

In 1997, Mayer and Salovey proposed their four-branch model of emotional intelligence, specifying four areas (or branches, labeled after a visual, branch-like diagram) of problem-solving about emotions: (1) perceiving and expressing emotion, (2) using emotion to benefit thought, (3) understanding and reasoning about emotion, and (4) managing emotion in one's self and in other people (Mayer and Salovey 1997).

The branches of the model are arranged according to the sequence in which they develop across the life span and the cognitive complexity required to perform them. The first branch, considered the most psychologically basic, is the perception, appraisal, and expression of emotion. This area concerns recognizing emotional signals and accurately interpreting them, as well as communicating emotion effectively. If a child appears distressed, her emotionally intelligent father may accurately interpret that she is worried about something.

The second branch, using emotion to facilitate thought, represents an increased level of cognitive complexity. This branch concerns assisting intellectual processing through the use of emotional information. For example, imagining the way he feels when he is worried may help this dad find a way to comfort his daughter.

Understanding emotions is the third branch in the model, and it concerns linking feelings to other feelings and to situations. Realizing that the first day of school is 2 days away, the emotionally intelligent father in our example may reason that his daughter is worried about the first day of school. Moreover, his daughter's silence and upset expression may alert the father that she is hesitant to discuss the issue.

Managing and regulating emotions in oneself and others is the fourth and most cognitively advanced branch of the MSC model. The ability to attend to helpful emotions and to diffuse problematic ones is the focus of this area. For example, when talking with his daughter, the emotionally intelligent father may choose a setting such as hiking in nature that is likely to burn up energy and help her manage her stress.

## Alternative Conceptualization of Emotional Intelligence: Mixed Models

There are several alternatives to ability models of emotional intelligence. Mixed models – also referred to as “trait emotional intelligence” – are so-called because they mix together a variety of different positive personality qualities and dispositions such as self-actualization, optimism, and flexibility (Bar-On and Parker 2000) that are neither entirely emotional nor entirely cognitive in nature. Thus, mixed models conceptualize and measure a construct that varies considerably from one version to another and is not strictly limited to intelligence about emotions. In addition, measurement using a mixed model relies on self-report that includes, in this context, variance unrelated to the construct being measured: A person with high self-esteem, for example, may overestimate herself on many socially desirable qualities. In terms of current standards in testing, self-judgment elicits an inappropriate cognitive process for the assessment of actual ability and adds to construct-irrelevant variance. Both issues argue against the validity of the approach.

## How Is Ability Emotional Intelligence Measured?

Ability-based emotional intelligence is measured by assessing test-takers' accurate problem-solving in relevant areas. For example, a respondent may be asked what emotion is likely to result when feelings of fatigue and sorrow intensify (the answer is “depression”), or what strategy might be best to reduce anger (Mayer et al. 2003). Of course, posing questions to people in order to examine patterns of responding requires that there be a “best” answer to those questions – an answer considered “correct.” These answers can be determined by consulting prevailing research on the subject, by convening a panel of experts to identify a correct response, and/or by using the “majority rule” of test-takers in which the correct answer is the one most respondents choose. For many answers, expert and everyday “majority rule” of test-takers converges (Mayer

et al. 2003), but this may not always be the case. Expert consensus or veridical scoring is generally regarded as superior for more complex problems (MacCann and Roberts 2008; Mayer et al. 2016).

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is the most commonly used test of emotional intelligence (Côté 2014; Fernández-Berrocal, and Extremera 2016). It has tasks designed to measure problem-solving ability in each of the four branches specified by the theory – perceiving emotions, facilitating thought using emotion, understanding emotion, and regulating emotion (Mayer et al. 2016). Although the underlying factor structure of emotional intelligence remains in question, the four problem-solving areas employed by the MSCEIT and the overall test provide reliable scores (Mayer et al. 2012b).

Two other promising tests are the Situational Test of Emotional Understanding (STEU) and the Situational Test of Emotional Management (STEM). These present test-takers with hypothetical situations, asking them to indicate the emotion that the situation might bring about (in the STEU), or the effectiveness of different kinds of emotional management (in the STEM). The STEM and STEU appear to measure problem-solving in the areas of appraising emotion and regulating emotion, respectively. Evidence for their validity is just beginning to be collected (Allen et al. 2015; MacCann and Roberts 2008).

## What Does It Mean to Be Emotionally Intelligent?

Research assessing the relation between emotional intelligence (as measured by the MSCEIT) and various outcomes is robust, and a full review is beyond the scope of this entry. For that reason, we present some of the most common correlates, as indicated by several recent reviews. Major areas of research have examined emotional intelligence as it relates to quality of life and relationships, mental and physical health, and education and employment.

People higher in emotional intelligence tend to be agreeable, open to new experience, and

conscientious (Mayer et al. 2016). They tend to view themselves as interpersonally sensitive and prosocial, and other people view them the same way (Lopes et al. 2005). For children as well as adults, emotional intelligence is associated with better social relationships and decreased use of negative interpersonal strategies such as criticism and avoidance. People feel more comfortable with closeness, and they have relationships they perceive as supportive. They are also less likely to create interpersonal conflict (Brackett et al. 2011).

In addition to satisfying and healthy relationships, people higher in emotional intelligence are more likely to be mentally and physically healthy. They are less likely to suffer from depression, and they are more likely to experience higher life satisfaction (Fernández-Berrocal and Extremera 2016). In addition to better psychological health, emotional intelligence may promote better physical health (Zeidner et al. 2012). There is some evidence of an inverse relationship between emotional intelligence and unhealthy behavior like substance use and abuse (Brackett et al. 2011).

At school, the emotionally intelligent student is more likely to have a positive attitude toward education. He or she is less likely to experience learning problems or issues with bullying, although evidence showing a relation to academic performance has been mixed (Brackett et al. 2011). At work, employees with higher emotional intelligence respect the corporate culture and receive high ratings from supervisors and peers. He or she is likely to have high job satisfaction, to be seen by managers as an effective leader, and to take negative learning incidents in stride (Côté 2014).

## Conclusion

Emotional intelligence is a cognitive ability that operates on emotional information. It involves problem-solving in the areas of perceiving emotion, using emotion to facilitate thought, understanding emotion, and regulating emotion. Emotional intelligence, as determined by the MSCEIT ability measure, predicts important outcomes such as quality of relationships and health-

promoting behavior. Emotional intelligence has also been conceptualized through mixed models that include personality characteristics and motivations in addition to the intellectual qualities connoted by the term “intelligence.”

Viewing emotional intelligence as an individual difference variable that assesses an ability carries certain implications. A person’s emotional intelligence, for instance, should be considered in career selection so that his or her abilities are equal to the tasks required on the job. Interpersonally, conceptualizing emotional intelligence as an ability may change the way we view those with whom we have a relationship. Perhaps that friend really *cannot* understand why we are upset – and we should no longer expect them to. Defining emotional intelligence as an intelligence may also influence societal values. Recognizing that some people are particularly good at reasoning about emotions may make that quality more prized and sought after by those who do not possess the same degree of ability.

The future of research in emotional intelligence will continue to extend its application into education, employment, and health. There is evidence that emotional intelligence can be taught in schools, resulting in greater academic success for students, better teacher-student relationships, and decreased problematic behaviors among students (Durlak et al. 2011). In employment, there is evidence that emotional intelligence enhances leadership (Ashkanasy and Humphrey 2011), and this continues to be a flourishing area of research. In the area of health, substantial evidence links emotional intelligence to well-being (e.g., Zeidner et al. 2012), and there is interest in developing programs using emotional intelligence to alleviate issues such as depression. Attention to and interest in emotional intelligence has risen over the past 25 years; compelling findings and the pervasive nature of emotional information in human life promise that this trend will continue.

## Cross-References

- ▶ [Emotion Regulation](#)
- ▶ [Intelligence](#)
- ▶ [John Mayer](#)
- ▶ [Personal Intelligence](#)

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