

Osofsky J. D. (ed.) *Handbook in Infant Development* (2nd edn). New York: John Wiley and Sons, 494–554. **Malatesta-Magai, C., Izard, C. E. and Camras, L.** 1991: Conceptualizing early infant affect: emotions as fact, fiction or artifact? In Strongman K. T. (ed.) *International Review of Studies on Emotion*. Chichester: John Wiley and Sons, vol. 1, 1–36.

emotional intelligence The construct of emotional intelligence (EI) posits the existence of actual or perceived differences in the extent to which people attend to, process and utilise affect-laden information. The distal roots of EI are in E. L. Thorndike's (1920) construct of 'social intelligence,' which concerns the ability to understand and manage people and to act wisely in human relations. Its proximal roots are in Gardner's (1983) two personal intelligences (*intrapersonal* and *interpersonal*) [see MULTIPLE INTELLIGENCES], which concern the ability to understand the emotions and mental states in one's own SELF (see s. 1) and in other people, respectively. The term 'emotional intelligence' appeared several times in the literature before Salovey and Mayer (1990) proposed the formal definition and model of the construct. The field was essentially launched by Goleman's (1995) best-selling book that influenced most subsequent models of EI.

Early work on EI failed to appreciate the crucial role of MEASUREMENT (see s. 1, MEASUREMENT AND STATISTICS) in the operationalisation of the construct. More specifically, the fundamental distinction between self-report and maximum-performance measurement went unheeded, thus leading to conceptual confusion and contradictory results. The choice of measurement method has a direct and significant influence on the operationalisation process and, thence, on EMPIRICAL (see s. 8) findings. The measurement of EI through maximum performance tests will not yield the same findings as its measurement through self-report inventories, just as the measurement of cognitive ability through IQ tests does not yield the same findings as its measurement through self-report questionnaires.

Petrides and Furnham (2001) proposed a conceptual distinction between two types of EI, based on the measurement method used to operationalise them. Ability EI (or cognitive-emotional ability) concerns the actual ability to perceive, process and utilise affect-laden information. This construct pertains primarily to the realm of cognitive ability and should be measured via maximum-performance tests. Trait EI (or emotional self-efficacy) concerns a constellation of emotion-related self-perceptions and dispositions. This construct pertains primarily to the realm of personality and should be measured via self-report questionnaires. It is important to understand that ability EI and trait EI are two distinct constructs, differentiated by the respective measurement methods used to operationalise them rather than by the content of their SAMPLING (see s. 8) domains. That is to say, even if the two methods were used to assess exactly the same sampling domains, the resultant operationalisations would be fundamentally different.

The measurement of ability EI is problematic because the inherently subjective nature of emotional experience undermines the effort to develop test items along cognitive ability lines, such as those used in standard IQ tests. In other words, it is not obvious how to create comprehen-

sive tests based on truly objective criteria that can cover the entire sampling domain of the construct. For example, much of the intrapersonal component of ability EI (i.e. those facets concerning people's internal emotional states) is not amenable to objective scoring because the information required for such scoring is available only to the test taker.

To circumvent this problem, ability EI tests have employed scoring procedures that attempt to create correct options among the various alternatives. According to the general consensus scoring criterion, an item response is considered correct if it has been endorsed by the majority of participants in a normative SAMPLE (see s. 8), whereas the expert consensus scoring criterion relies on consensus among experts (as opposed to randomly selected individuals) in order to identify correct responses. These scoring procedures have many shortcomings and have not been especially successful in operationalising cognate constructs, like social intelligence. Nevertheless, tests of ability EI, of which the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is the most prominent, continue to be researched and the jury is still out on their VALIDITY (see also s. 8).

The measurement of trait EI is more straightforward because the construct consists of self-perceptions and behavioural dispositions, which are compatible with the subjective nature of emotions. There exist many trait EI measures, although most of them erroneously claim to assess EI as a cognitive ability. Petrides and Furnham (2001) presented the first systematically derived sampling domain of trait EI based on a content analysis of salient models. They identified the following 15 facets, which have provided the basis for the Trait Emotional Intelligence Questionnaire (TEIQue): adaptability, assertiveness, emotion perception, emotion expression, emotion management (others), emotion regulation, impulsiveness (low), relationship skills, SELF-ESTEEM (see s. 5 and s. 7), self-motivation, social competence, STRESS (see s. 7) management, trait empathy, trait happiness and trait optimism.

Factor analytic studies (see FACTOR ANALYSIS and also s. 8) have shown that the constellation of self-perceptions and dispositions that trait EI encompasses forms a distinct composite construct at the lower levels of the Eysenckian and five-factor personality taxonomies [see EYSENCK'S THREE-FACTOR MODEL and FIVE-FACTOR MODEL OF PERSONALITY]. An increasing number of empirical studies have supported the validity of the construct. Thus, it has been demonstrated that trait EI has incremental validity over the major personality dimensions predicting numerous criteria, such as DEPRESSION (see s. 7), life satisfaction, COPING (see s. 7) styles and truancy. It has also been found that individuals with high-trait EI are faster at recognising EMOTIONAL EXPRESSIONS (see s. 5) and are more sensitive to mood-induction procedures compared to their low-trait EI peers. Overall, trait EI has received more empirical support than ability EI; however, neither construct has hitherto shown effects commensurate with expectations in the popular literature. Research in the field of EI is still at a relatively early stage, although significant progress has been achieved since the early models were introduced. Future research must develop within the framework of the distinction between ability EI and trait EI. As expected, a different set of questions is facing the two constructs.

Ability EI research must overcome measurement problems, investigate the nature of the construct's relationship to the *g* [see GENERAL ABILITY] FACTOR, and demonstrate its relevance in real-life settings. Trait EI research must focus on the sociobiological bases of the construct, its implications and development over the lifespan and the design and evaluation of scientifically based intervention programmes.

Goleman, D. 1995: *Emotional Intelligence: Why it Can Matter More than IQ*. London: Bloomsbury. **Matthews, G., Zeidner, M. and Roberts, R. D.** 2002: *Emotional Intelligence: Science and Myth*. Cambridge MA: MIT Press. **Mayer, J. D., Caruso, D. R. and Salovey, P.** 1999: Emotional intelligence meets traditional standards for an intelligence. *Intelligence* 27, 267–98. **Petrides, K. V. and Furnham, A.** 2001: Trait emotional intelligence: psychometric investigation with reference to established trait taxonomies. *European Journal of Personality* 15, 425–48. **Salovey, P. and Mayer, J. D.** 1990: Emotional intelligence. *Imagination, Cognition and Personality* 9, 185–211. **Thorndike, E. L.** 1920: Intelligence and its uses. *Harper's Magazine* 140, 227–35.