

CUNOAȘTEREA ȘTIINȚIFICĂ

ISSN 2821 – 8086, ISSN – L 2821 – 8086, Volumul 2, Numărul 3, Septembrie 2023

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Sfetcu, Nicolae (2023), Models of Emotional Intelligence in Research and Education, *Cunoașterea Științifică*, 2:3, 77-86, DOI: 10.58679/CS72804, <https://www.cunoasterea.ro/models-of-emotional-intelligence-in-research-and-education/>

Publicat online: 17.06.2023

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Models of Emotional Intelligence in Research and Education

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Abstract

The emotional intelligence models have helped to develop different tools for construct assessment. Each theoretical paradigm conceptualizes emotional intelligence from one of two perspectives: ability or mixed model. Ability models consider emotional intelligence as a pure form of mental ability and therefore as pure intelligence. Mixed models of emotional intelligence combine mental capacity with personality traits. The trait models of emotional intelligence refer to the individual perceptions of their own emotional abilities. Cognitive learning involves placing new information into existing frameworks and modes of understanding.

Keywords: models, emotional intelligence, research, education, model of abilities of Mayer and Salovey, Goleman's mixed model, mixed model of Bar-On, Petrides' model of traits

Modele de inteligență emoțională în cercetare și educație

Rezumat

Modelele de inteligență emoțională au ajutat la dezvoltarea diferitelor instrumente de evaluare a constructelor. Fiecare paradigmă teoretică conceptualizează inteligența emoțională dintr-una din două perspective: abilitate sau model mixt. Modelele de abilități consideră inteligența emoțională ca o formă pură de abilitate mentală și, prin urmare, ca inteligență pură. Modelele mixte de inteligență emoțională combină capacitatea mentală cu trăsăturile de personalitate. Modelele de

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trăsături ale inteligenței emoționale se referă la percepțiile individuale asupra propriilor abilități emoționale. Învățarea cognitivă implică plasarea de noi informații în cadrele și modurile de înțelegere existente.

Cuvinte cheie: modele, inteligență emoțională, cercetare, educație, model de abilități ale lui Mayer și Salovey, modelul mixt al lui Goleman, modelul mixt al lui Bar-On, modelul trăsăturilor lui Petrides

CUNOAȘTEREA ȘTIINȚIFICĂ, Volumul 2, Numărul 3, Septembrie 2023, pp. 77-86

ISSN 2821 – 8086, ISSN – L 2821 – 8086 , DOI: [10.58679/CS72804](https://doi.org/10.58679/CS72804)

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Models of emotional intelligence

The emotional intelligence (EI) models have helped to develop different tools for construct assessment. (Mayer, Roberts, and Barsade 2007) Each theoretical paradigm conceptualizes emotional intelligence from one of two perspectives: ability or mixed model. Ability models consider emotional intelligence as a pure form of mental ability and therefore as pure intelligence. Mixed models of emotional intelligence combine mental capacity with personality traits. The trait models of IE refer to the individual perceptions of their own emotional abilities.

Model of abilities of Mayer and Salovey

According to Peter Salovey and John D. Mayer, EI is "the capacity to reason about emotions, and of emotions, to enhance thinking. It includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth." (Mayer, Salovey, and Caruso 2004)

Emotions are sources of information that help social networking. The model includes four types of skills:

1. Perception of emotions
2. Use of emotions
3. Understanding emotions
4. Emotional management

In Mayer and Salovey's model, each ability is measured using specific tasks, (Brackett and Mayer 2003) The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is modeled on ability-based IQ tests. The authors state that emotional intelligence measured by ability framework meets some of the standard criteria for a new intelligence: operationalization as a set of abilities, objectivity of responses, correlation of scores with existing intelligences, unique variation, and scores increase with age. (Mayer et al. 2003) (Stys and Brown 2004) The MSCEIT is a consensual measure that compares individuals' responses with those of a sample of respondents. The answers are considered emotionally "intelligent" only if the majority of the sample gave similar answers.

Other measurements of the ability model include:

- Diagnostic analysis of non-verbal accuracy
- Japanese and Caucasian rapid recognition test
- Scale of levels of emotional awareness

There are studies that contradict the validity of these tests. The ability model has been criticized in research for equivocality and lack of predictions in the workplace but, compared to

the self-reported scales of EI, this model is not based on the opinion of individuals about themselves.

Goleman's mixed model

Daniel Goleman defines emotional intelligence as "the capacity for recognizing our own feelings and those of others, for motivating ourselves, for managing emotions well in ourselves and in our relationships." (Goleman 1998) Daniel Goleman's first model focuses on the abilities required for leadership performance, including five main EI constructs, with twenty-five competencies:

1. Self-awareness
2. Self-regulation
3. Social ability
4. Empathy
5. Motivation

Further analysis of Richard Boyatzis (Goleman, Boyatzis, and McKee 2002) reduced the number of skills to twenty, and the areas to four: (Boyatzis, Goleman, and Rhee 2000)

1. Self-awareness
 - a. Awareness of one's emotions
 - b. Accurate self-assessment
 - c. Self-confidence
2. Self-management
 - a. Emotional self-control
 - b. Transparency
 - c. Adaptability
 - d. Orientation of efforts
 - e. Initiative
 - f. Optimism
3. Social awareness
 - a. Empathy
 - b. Organizational awareness
 - c. Orientation of services
4. Relationship management
 - a. Managing others
 - b. Inspired leadership
 - c. Influence
 - d. Conflict management
 - e. Teamwork and collaboration

Goleman's model can be measured based on:

1. The Emotional Competency Inventory (ECI) created in 1999, revised as the Emotional and Competency Inventory (ESCI) in 2007.
2. Emotional Intelligence Appraisal developed in 2001 as a self-report.
This model has been criticized as simply "popular psychology"

The mixed model of Bar-On

Reuven Bar-On considered that emotional intelligence develops over time and can be improved through training, programming and therapy. (Bar-On 2004) He considers emotional-social intelligence to be "a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how well we understand and express ourselves, understand others and relate with them, and cope with daily demands, challenges and pressures".

Bar-On's model of emotional intelligence refers to performance potential rather than performance itself, being process-oriented rather than results-oriented. (Bar-On 2004) EI focuses on

1. a group of emotional and social skills
2. the ability to cope and adapt

Its mixed model includes five components of emotional intelligence

- Intrapersonal
 - Self-respect
 - Awareness of one's emotions
 - Assertiveness
 - Independence
 - Tenacity
- Interpersonal
 - Empathy
 - Social responsibility
 - Interpersonal relationship
- Adaptability
 - Reality testing
 - Flexibility
 - Problem solving
- Stress management
 - Stress tolerance

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- Impulsivity control
- General mood
 - Optimism
 - Happiness

Bar-On has developed several versions of Emotion Quotient Inventory depending on groups and specific situations. (Bar-On 2004) The Emotion Quotient Inventory correlates only minimally with the Mayer-Salovey-Caruso Emotional Intelligence Test, but more significantly with another self-report measure of emotional intelligence, the Self Report Emotional Intelligence Test. (Schutte et al. 1998)

Petrides' model of traits

Konstantinos V. Petrides developed this model as "a constellation of emotional self-perceptions located at the lower levels of personality." (Petrides and Furnham 2000) The trait model refers to the individual's self-perceptions of his or her emotional abilities, being labeled as trait emotional self-efficacy. It is a construct outside the taxonomy of human cognitive ability.

For self-report measurements of EI, EQ-i can be used, Swinburne University Emotional Intelligence Test (SUEIT), EI Schutte model, etc., being rather limited measurements of emotional intelligence. EQ-i 2.0, initially known as BarOn EQ-i, was the first self-report measurement of emotional intelligence, having the best rules, reliability and validity from self-report measurements. Another measuring instrument, TEIQue, offers an operationalization for Konstantinos V. Petrides' model with reference to some of the Big Five personality traits.

Other models and measurements:

- Levels of the emotional awareness scale (LEAS) (Lane and Schwartz 1987)
- Self-Reporting Emotional Intelligence Test (SREIT) (Petrides and Furnham 2000)

There are theoretical and statistical similarities between the different models of EI. All models aim to help understand and develop emotional intelligence, based on key components of intelligence (such as awareness or perception of emotions and management of emotions as key

elements). Brackett and Mayer (Brackett and Mayer 2003) found significant similarities between the Mayer-Salovey-Caruso and Bar-On models.

Emotional intelligence in research and education

Daniel Goleman (Goleman 2002) states that there are no gender differences in EI. But studies by Mayer and Geher, (Mayer and Geher 1996) Mayer, Caruso and Salovey, (Mayer, Caruso, and Salovey 1999) and more recently Mandell and Pherwani, (Mandell and Pherwani 2003) show that women are more susceptible to achieve a higher level of emotional intelligence than men. The discrepancy may be due to the choice of measurements (Brackett and Mayer 2003) when someone defines EI. in a purely cognitive way rather than a mixed perspective. Overestimation of ability on the part of men is more likely to occur with self-report measures.

Emotional intelligence can have a significant impact on the various elements of everyday life. (Palmer, Donaldson, and Stough 2002) Higher levels of EI are associated with an increased likelihood of health and appearance, positive interactions with friends and family. Mayer, Caruso, and Salovey (Mayer, Salovey, and Caruso 2000) found that lower emotional intelligence was associated with lower self-reports of violent behavior. Lower emotional intelligence (MSCEIT) has been significantly associated with higher drug and alcohol use. Sexual offenders have difficulty identifying their feelings and those of others. (Moriarty et al. 2001)

Goleman argues for the higher predictive significance of EI than IQ, saying that emotional intelligence could be "as powerful, and at times more powerful, than IQ." (Goleman 1995, 34) Current theories tend to be more cautious about the incremental benefits of EQ over IQ. (Lam and Kirby 2002) Goleman, (Goleman 1998) and Mayer, Salovey and Caruso (Sternberg 1982) state that emotional intelligence alone is not likely a strong predictor of work performance but provides a basis for emotional competencies that are strong predictors of job performance.

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Later Goleman (Goleman 2002) describes IQ as playing a sorting function in determining the types of jobs that employees can occupy and a strong predictor of overall success. In a comparison with a specific group of people the predictive power of IQ for performance can be replaced by EQ.

In training in management, in communication and empathy, in conflict resolution and stress management, and in training and self-management, (Cherniss 2000) the traditional training curriculum fails, as it ignores individual complexities, focusing exclusively on cognitive learning. (Dearborn 2002) Cognitive learning involves placing new information into existing frameworks and modes of understanding, (Adler et al. 1998) being ineffective in teaching emotional intelligence abilities. Thus, less traditional techniques of emotional learning are recommended. Goleman has established an optimal process for developing emotional intelligence in organizations, in four phases: preparation for change, training, transfer and maintenance abilities, and evaluation.

Goleman notes that motivational factors could be a problem through the opposite resistance. (Adler et al. 1998)

Possible programs for developing emotional intelligence:

- Mastering Emotional Intelligence Program (MEI): Designed by Goleman and Boyatzis, it helps identify and address emotional intelligence issues in the workplace, while supporting the development of emotional intelligence abilities. (Boyatzis, Goleman, and Rhee 2000) (Sala 2001)
- Emotional Competence Training Program: In order to increase the ability of counselors to cope effectively with emotions. (AMEX Program 2003)
- Customized Leadership Development Program: Allows managers to identify areas where behavioral changes are required. (Goleman, Boyatzis, and McKee 2002)

Best practices for developing emotional intelligence theory: (Côté 2014)

1. Select an EI ability model according to its component definitions and reject the trait/mixed models.
2. Consider the three global models of how EI can relate to the working criteria: generalization of validity, situation-specific model and moderator.

3. Checking the conditions in which the higher EI can be related to adverse results.
4. Specify whether the EI theory and working criteria relate to the broader EI construct, a specific EI branch, or a specific emotional ability.
5. Separate theory development from measurement methods. Decide how to measure the EI only after the theory is fully developed and the hypotheses arising from the theory are stated.

Best practices for measuring emotional intelligence: (Côté 2014)

1. Select performance based EI measurements and reject self-report measures.
2. Describe the process of EI variations according to the selected measurements, justifying how to determine the correct answers to the measurements.
3. Consider the potential cultural variations of the correct responses to EI measurements.
4. Measure the following control variables, which could be correlated with both EI and criteria, to check if they do not cause false associations: cognitive intelligence, Big Five personality traits, and demographic factors. Measure other control variables relevant to the specific context and criterion of interest.
5. If the theory focuses on a specific facet of the EI, include measurements of the other facets to verify the eventual similarity of the associations or the specificity of the theoretical results of the EI. This is not always possible due to the challenges (e.g., time and attention of participants) involved in measuring multiple facets of EI.

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