Emotional Intelligence Assessment and Training in Surgical Education. Brief outline for information

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Why use emotional intelligence assessment in medical education?

The management of emotions in the workplace is a key skill that doctors are required to develop. This skill is known to be related to the ability to demonstrate empathic behaviour to patients, to manage emotional reactions in oneself and others and to be an effective leader. A significant association has been demonstrated between patient satisfaction levels and the emotional intelligence (EI) score of the physician.

What is EI?

Emotional intelligence has been defined both as an ability and as a trait and as a mixture of both. The ability definition describes EI as "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" (Mayer and Salovey 1990 p189). Trait theorists define EI as "a constellation of emotion-related self perceptions and dispositions, assessed through self-report" (Petrides & Furnham 2003 p.40). Mixed model theories define EI as "an array of non-cognitive capabilities, competencies and skills and competencies" (Bar-On 1997 p14).

Measurement of EI.

The **trait models and mixed-models** advocate the use of self-report as their mechanism of measurement inferring that individuals who state that they function at various levels actually do. Examples of these are;

- Emotional Quotient Inventory (EQ-i) (Bar-On 2000);
- Emotional Competence Inventory (ECI) (Boyatzis, Goleman & Rhee 2000);
- Emotional Intelligence Scale (EIS) (Schutte et al 1998);
- Trait Emotional Intelligence Questionnaire (TeiQue) (Petrides and Furnham 2003).

In contrast there is only one well known **ability** measure of EI.

The Mayer-Salovey- Caruso Emotional Intelligence test (MSCEIT) V.2 (Mayer et al 2002) and its forerunner the Multifactor Emotional Intelligence Scale (MEIS) (Mayer et al 1999).

These measures were developed to assess the four branches of Mayer and Salovey's (1993,1997) emotional intelligence ability model . Thus the measure yields a profile of scores which describes an individual's ability to perceive, use, understand and manage emotions. Ability based measures are scored by consensus or by expert opinion and more recently by degrees of confidence (Warwick et al 2010).

Which measure of EI to use?

A recent review concluded on consideration of all of the evidence available to date that trait and mixed-model measures have not demonstrated sufficient discriminant validity to warrant their use when making high-stakes decisions (Zeidner et al 2008).

Other difficulties have been identified including the problem of contamination arising from the fact that these self-report measures include items that refer to e.g. positive mood, optimism and confidence etc; which are often the very same criteria they are being used to predict (Zeidner et al 2008).

Self-report measures have been criticised on the basis of the problem of social desirability bias and the potential for faking (Grubb and McDaniel 2007, Mayer et al 2008) and on evidence that individuals are generally poor at estimating their various intellectual abilities (Visser et al 2008).

Finally, the validity of mixed and trait models of EI have been questioned on the grounds that they do not add anything new to the understanding of human behaviour above and beyond another formulation of personality (Zeidner et al 2008). However the MSCEIT is not without its critics either (Conte 2005 Van Rooy et Viswesvaran 2004). Despite these criticisms, the concept of EI continues to attract investigation in the search for a measure capable of reflecting how an individual will perform in the workplace.

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