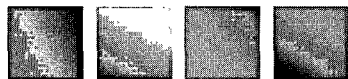


CHAPTER 33



Emotional Intelligence

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Basic research in emotion has proliferated over the past few decades, and although there is still a great deal to be learned, a consistent view of emotion has begun to emerge. Affective phenomena constitute a unique source of information for individuals about their surrounding environment and prospects, and this information informs their thoughts, actions, and subsequent feelings. The essential assumption in our work has been that individuals differ in how skilled they are at perceiving, understanding, regulating, and utilizing this emotional information, and that a person's level of "emotional intelligence" contributes substantially to his or her intellectual and emotional well-being and growth. In this chapter, we review our model of emotional intelligence and the competencies it highlights, including a discussion of measurement issues. We then describe how emotional intelligence influences important psychological phenomena.

Personality psychology most often emphasizes differences in the way people typically think, feel, and act. However, as Mischel (1990) has pointed out, people relate to the

world in a manner that is much more flexible than the terms "dispositions" and "styles" might alone suggest. According to Mischel, cognitive psychology's essential lesson for personality psychologists is that individuals selectively construct their experiences of reality, and that the result of this process depends heavily on individuals' construction competencies (i.e., information-processing abilities that determine the range of potential thoughts, feelings, and behaviors the individual can enlist within and across situations). To understand the person, we must augment our study of dispositions with an appreciation for these competencies. The investigation of such competencies, aside from general intelligence, has focused largely on social problem-solving skills and other practical abilities and has been referred to as "social intelligence," among other labels (Cantor & Kihlstrom, 1985, 1987; Gardner, 1983; Sternberg, 1985, 1988; Sternberg & Smith, 1985; Thorndike, 1920; Thorndike & Stein, 1937; Wagner & Sternberg, 1985).

We believe that emotional competencies are fundamental to social intelligence (Mayer,

Caruso, & Salovey, 2004; Salovey & Mayer, 1990). This is because social problems and situations are laden with affective information. Moreover, emotional competencies apply not only to social experiences, but also to experiences within the individual. Indeed, some investigators have argued that self-knowledge and the individual's inner life are characterized most saliently by emotional experiences (e.g., Showers & Kling, 1996). Thus emotional intelligence is more focused than social intelligence, in that it pertains specifically to emotional phenomena; yet it can be applied directly to a broad range of emotional problems embedded in both interpersonal *and* intrapersonal experience (Epstein, 1998; Mayer & Salovey, 1997; Saarni, 1990, 1997; Salovey & Mayer, 1990). It is this efficient, parsimonious nature of the emotional intelligence framework that we find so compelling. Indeed, we find it puzzling that psychology has taken so long to recognize the importance of emotional competencies.

EMOTION: FROM DISINFORMATION TO INFORMATION

Emotion, historically, has taken a back seat to cognition. Philosophers and scientists (psychologists included) have relied on and glorified analytic intelligence throughout much of Western history. Aristotle (384–322 B.C.E.), for example, argued that the human intellect is “the highest thing in us, and the objects that it apprehends are the highest things that can be known” (1976, p. 328; see also Aristotle, 1947). At the same time, emotion has been regarded as an inferior, often disruptive element of human nature. The passions are fallible guides for action. Anger often leads to unjust acts of violence; fear often leads to debilitating cowardice. This sentiment toward feeling was the impetus for Malebranche's unequivocal prescription: “Impose silence on your senses, your imagination, and your passions, and you will hear the pure voice of inner truth” (quoted in James, 1890/1950, p. 10).

As a result of the historic mistrust of emotion, many psychologists have taken the position that the intellect and passions are at cross-purposes (e.g., Schaffer, Gilmer, & Schoen, 1940; Woodworth, 1940). In this view, the intellect provides accurate information, whereas emotion clouds our minds with disinformation. Young (1936) even went so far as to say that

emotions have no conscious purpose and cause “a complete loss of cerebral control” (pp. 457–458). It is quite understandable, then, that early conceptions of intelligence in the field of psychology were decidedly rational. Terman stated, “An individual is intelligent in proportion as he is able to carry on abstract thinking” (1921, p. 128). Being emotional was not considered smart.

Contemporary psychology has moved away from this view that reason is superior to emotion, and toward an emphasis on the functionality of emotions. This shift originated in the philosophy of David Hume and the ethological observations of Charles Darwin. Hume (1739/1948), an early 18th-century empiricist philosopher, argued that emotional impulses motivate all action. He believed that reason does nothing more than consider facts and generate inferences about the world relevant to achieving and prioritizing the agendas set by the passions. Freud (1923/1962) held a somewhat similar position. He emphasized the primacy of the id—the seat of the self's emotionality and psychic energy—and maintained that the other aspects of the self are derivative. Freud, much like Hume, put reason in the service of emotion.

Although Hume challenged the position that reason is superior to emotion, it was not until Darwin published *The Expression of the Emotions in Man and Animals* (1872/1965) that the functional purpose of emotion was established. Through his intensive ethological observations of animal life, Darwin revealed that emotion serves at least two highly advantageous functions. First, emotion energizes adaptive behaviors such as flight (fear) and procreation (love or lust). Second, emotion gives rise to a signaling and communication system that confers a significant survival advantage on entire species as well as individual organisms (e.g., a single deer's fear response upon seeing a predator quickly informs other deer of the threat). By attributing these functions to emotion, Darwin brought attention to the adaptive, seemingly intelligent nature of emotional expression.

Today great emphasis is placed on the psychological importance of emotion, and it is generally accepted that emotions augment rather than interfere with other cognitive capacities. Emotions certainly have the signaling function identified by Darwin (e.g., Ekman, 1984). Moreover, there is wide agreement that emotions are the primary sources of motiva-

tion: They arouse, sustain, and direct human action (e.g., Izard, 1971; Frijda, 1986; Leeper, 1948; Tomkins, 1962). Finally, many emotion researchers have adopted a broad affect-as-information view, according to which internal emotional experiences provide individuals with important information about their environment and situation. This information shapes the individual's judgments, decisions, priorities, and actions (e.g., Schwarz, 1990; Schwarz & Clore, 1983, 2003).

A FRAMEWORK

When we first began developing the concept of emotional intelligence (e.g., Salovey & Mayer, 1990), our intention was to draw closer attention to the cooperative relationship between emotion and reason (Mayer, Caruso, & Salovey, 1999). Humans are not, in any practical sense, predominantly rational beings, nor are they predominantly emotional beings. They are both. Thus people's abilities to adapt and cope in life depend on the integrated functioning of their emotional and rational capacities. As Tomkins has said, "Out of the marriage of reason with affect there issues clarity with passion. Reason without affect would be impotent, affect without reason would be blind" (1962, p. 112). Success in life depends on one's ability to reason about emotional experiences and other affect-laden information, and to respond in emotionally adaptive ways to the inferences drawn by reason about one's situation, prospects, and past.

Generally, we have described emotional intelligence as the ability to perceive and express emotions, to understand and use them, and to manage emotions so as to foster personal growth (Mayer & Salovey, 1997; Mayer et al., 2001, 2004; Salovey & Grewal, 2005; Salovey & Mayer, 1990). More formally, however, we define emotional intelligence by the specific competencies it encompasses, including the ability to perceive emotion accurately; the ability to access and generate feelings when they facilitate cognition; the ability to understand affect-laden information and make use of emotional knowledge; and the ability to manage or regulate emotions in oneself and others to promote emotional and intellectual growth and well-being. Our model of emotional intelligence is presented in Figure 33.1. The model is composed of four branches, each of which rep-

Perception, Appraisal, and Expression of Emotion

- Ability to identify emotion in one's physical and psychological states.
- Ability to identify emotion in other people and objects.
- Ability to express emotions accurately, and to express needs related to those feelings.
- Ability to discriminate between accurate and inaccurate, or honest and dishonest, expressions of feelings.

Emotional Facilitation of Thinking

- Ability to redirect and prioritize one's thinking based on the feelings associated with objects, events, and other people.
- Ability to generate or emulate vivid emotions to facilitate judgments and memories concerning feelings.
- Ability to capitalize on mood swings to take advantage of multiple points of view; ability to integrate these mood-induced perspectives.
- Ability to use emotional states to facilitate problem solving and creativity.

Understanding and Analyzing Emotional Information

- Ability to understand how different emotions are related.
- Ability to perceive the causes and consequences of feelings.
- Ability to interpret complex feelings, such as emotional blends and contradictory feeling states.
- Ability to understand and predict likely transitions between emotions.

Regulation of Emotion

- Ability to be open to feelings, both those that are pleasant and those that are unpleasant.
 - Ability to monitor and reflect on emotions.
 - Ability to engage, prolong, or detach from an emotional state depending upon its judged informativeness or utility.
 - Ability to manage emotion in oneself and others.
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FIGURE 33.1. The emotional intelligence framework. Adapted from Mayer and Salovey (1997). Copyright 1997 by Peter Salovey and David J. Sluyter. Adapted by permission of Basic Books, a member of Perseus Books, L.L.C.

resents a class of skills. The subskills of each branch are organized according to their complexity, such that the more sophisticated subskills of each branch are more likely to depend on skills from the other branches of the model (Mayer & Salovey, 1997).

Perceiving Emotions

The first branch of emotional intelligence, "perceiving emotions," is the ability to detect and decipher emotions in faces, pictures, voices, and cultural artifacts. It also includes the ability to identify one's own emotions. Perceiving emotions may represent the most basic aspect of emotional intelligence, as it makes all other processing of emotional information possible.

Individuals can be more or less skilled at attending to, appraising, and expressing their own emotional states. These competencies are basic information-processing skills in which the relevant information consists of feelings and mood states. For example, some individuals are unable to express their emotions verbally, presumably because they have difficulty identifying their feelings; this condition is called "alexithymia" (Apfel & Sifneos, 1979; Lumley, Stettner, & Wehmer, 1996). These basic emotional competencies are important, because those who can quickly and accurately appraise and express their emotions are better able to respond to their environment and to others. There is some evidence, for instance, that individuals who can communicate their emotions skillfully are more empathic and less depressed than those who are unable to do so (Mayer, DiPaolo, & Salovey, 1990; Notarius & Levenson, 1979; Prkachin, Craig, Papageorgis, & Reith, 1977).

Individuals also must appraise the emotions of others. Again, there are individual differences in people's ability to perceive accurately, understand, and empathize with others' emotions (reviewed in Buck, 1984; Barrett & Salovey, 2002), and individuals who are best able to do so may be better able to respond to their social environment and build a supportive social network (Salovey, Bedell, Detweiler, & Mayer, 1999).

Using Emotions to Facilitate Thinking

The second branch of emotional intelligence, "using emotions," is the ability to harness emo-

tions to facilitate various cognitive activities, such as thinking and problem solving. Emotional states and their effects can be harnessed by individuals toward a number of ends. For example, positive moods make positive outcomes appear more likely, whereas negative moods make negative outcomes appear more likely (Johnson & Tversky, 1983; Mayer, Gaschke, Braverman, & Evans, 1992). Thus addressing a problem while in different moods may enable individuals to consider a wider range of possible actions and outcomes (Mayer & Hanson, 1995).

Likewise, a number of investigators (e.g., Isen, 1987; Magai & Havliand-Jones, 2002; Palfai & Salovey, 1993; Schwarz, 1990) have argued that emotions create different mental sets that are more or less adaptive for solving certain kinds of problems. That is, different emotions create different information-processing styles. Happy moods facilitate a mental set that is useful for creative tasks in which one must think intuitively or expansively in order to make novel associations (e.g., Isen, Daubman, & Nowicki, 1987). Sad moods generate a mental set in which problems are solved more slowly, with particular attention to detail, and via more focused and deliberate strategies. Palfai and Salovey (1993) argued that these two different information-processing styles (i.e., intuitive and expansive vs. focused and deliberate) should be effective for two different kinds of problem-solving tasks: inductive problems like analogical reasoning, and deductive logical tasks, respectively.

Emotionally intelligent individuals may also be able to harness the motivational qualities of emotion. For example, a student may focus purposefully on the negative consequences of failing to submit a term paper on time, in order to self-induce a state of fear that will spur him to get an early start on the paper. Another student may remind herself of all her successes before sitting down to write the paper. The self-induced positive mood that results bolsters her confidence in writing the paper, and she may be more likely to persevere when faced with a particularly challenging section of it.

Understanding Emotional Information

A third branch of emotional intelligence concerns essential knowledge about the emotional system. "Understanding emotions" is the abil-

ity to comprehend emotion language and to appreciate complicated relationships between emotions. The most fundamental competencies at this level are the abilities to label emotions with words and to recognize the relationships among exemplars of the affective lexicon. The emotionally intelligent individual is able to recognize that the terms used to describe emotions are arranged into families, and that groups of emotion terms form fuzzy sets (see Ortony, Clore, & Collins, 1988). For instance, individuals learn that words such as "rage," "irritation," and "annoyance" can be grouped together as terms associated with anger. Perhaps more importantly, the relations among these terms are deduced—that annoyance and irritation can lead to rage if the provocative stimulus is not eliminated; or that envy is often experienced in contexts that evoke jealousy, but jealousy is less likely to be part of envy-provoking situations (Salovey & Rodin, 1986, 1989).

To understand the emotions, individuals must learn what emotions convey about relationships. Lazarus (1991), for example, describes how core relational themes—the central harm or benefit in adaptational encounters that underlies each emotion—are associated with different kinds of feelings. Anger results from a demeaning offense against the self, guilt from transgressing a moral imperative, and hope from facing the worst but yearning for better (see Table 3.4 in Lazarus, 1991).

Increased complexity in this domain of emotional intelligence is represented by knowledge that emotions can combine in interesting and subtle ways. At a high school reunion, nostalgic conversation can give rise to wistfulness, a blend of both joy and sorrow. Startled surprise at the wonders of the universe combined with fear about one's insignificant place in it may give rise to awe.

Finally, understanding and analyzing emotions include the ability to recognize transitions among emotions. For example, Tangney and her colleagues have written extensively about how shame but not guilt can turn quickly to rage. Individuals can literally be shamed into anger (Tangney, Wagner, Fletcher, & Gramzow, 1992; Tangney & Salovey, 1999).

Managing Emotion

Emotional knowledge also contributes to the fourth component of emotional intelligence,

"emotion regulation." However, individuals must develop further competencies in order to put their knowledge into action. They must first be open to the experience of mood and emotion, and then practice and become adept at engaging in behaviors that bring about desired feelings in themselves and others. These emotion regulation skills enable individuals to engage in mood maintenance and mood repair strategies, such as avoiding unpleasant activities or seeking out activities that they typically find rewarding. Individuals who are unable to manage their emotions are more likely to experience negative affect and remain in poor spirits (Erber, 1996).

Through the self-reflective experience of emotion, individuals acquire knowledge of the correlates and causes of their emotional experiences. Knowledge of emotion thus enables individuals to form theories of how and why emotions are elicited by different situations. This ability to understand and analyze emotional experiences translates into the ability to understand oneself and one's relation to the environment better, which may foster effective emotional regulation and greater well-being. In the psychotherapy literature, this has been termed "emotional literacy" (Steiner & Perry, 1997; see also Maurer & Brackett, 2004, for an application to education).

Although our work has focused primarily on reflective metamood abilities (i.e., thoughts about moods; see Mayer & Gaschke, 1988), it is worth noting that emotional intelligence may manifest itself in a second way. Individuals often react emotionally toward their direct experiences of emotion, and these metaemotional experiences can either facilitate or impede functioning (Gottman, 1997). For example, a person can feel ashamed for having felt or expressed anger toward a loved one. The metaemotion in this case is shame, which takes as its object the individual's direct experience of anger, and it may motivate the individual to inhibit anger or at least suppress angry behavior in the future. This type of learned emotional restraint can be highly advantageous between parents and children, between lovers, and in most other social relationships. To date, there have been very few investigations of metaemotion (although see Gottman, 1997), in part because studying emotional responses to direct emotional experiences is a complex affair. However, metaemotion is a fascinating in-

stance of how humans take themselves and their experiences as objects and respond to these objects in a higher-order manner.

The ability to help others enhance or repair their moods is also an important skill. Individuals often rely on their social networks to provide not just a practical but an emotional buffer against negative life events (for a review, see Stroebe & Stroebe, 1996). Moreover, individuals appear to derive a sense of efficacy and social worth from helping others feel better and from contributing to the joy of their loved ones. The ability to manage others' emotional experiences also plays a significant role in impression management and persuasion. Although this skill is sometimes employed unscrupulously by sociopaths, cult leaders, and some advertisers, impression management and persuasion are often employed prosocially as well. Thus individuals who are effective at regulating the emotions of others are better able to act prosocially and to build and maintain solid social networks.

One might wonder what skills, beyond emotional knowledge, undergird competence at emotion regulation. We cannot answer this question definitively, because very little research has explored the distinction between emotional knowledge and emotion regulation. However, this distinction can be illustrated quite easily. Consider the embarrassment many of us experience while dancing. Those of us who enjoy dancing are able to lose ourselves in the music and motion of dance. Unfortunately, this delightful state is elusive when we are anxious about being evaluated by others. The reality, however, is that few others typically care how we dance. Other dancers are either too engrossed or, ironically, too embarrassed themselves to notice us; spectators pass over those of us whose dancing is at worst a little boring, and are attracted instead to those whose dancing is marked by skill and elegance. Interestingly, those of us who find dancing embarrassing are often aware that no one else is paying attention to our dancing. We even understand that our fear of being evaluated is itself our greatest impediment on the dance floor. This is meta-emotional knowledge. However enlightening this knowledge is, it enables only a few of us to actually overcome our embarrassment. This is because emotional regulation is distinct from the metaemotional knowledge it presupposes. That is, regulatory skills are needed in order to put metaemotional knowledge into action.

Summary

Much remains to be learned about each of the components of emotional intelligence. As a result, our conception of emotional intelligence is still evolving. Nonetheless, our understanding of emotional intelligence has already translated into some research fundings. We next turn to measures of emotional intelligence, after which we discuss some of the findings and implications that have stemmed from the use of these measures and the theory more generally.

MEASURING EMOTIONAL INTELLIGENCE

The introduction of the concept of emotional intelligence (Salovey & Mayer, 1990) had immediate intuitive and popular appeal (e.g., Goleman, 1995a; Segal, 1997), and this idea has been used to organize much past and contemporary research. Attempts to operationalize and directly measure this construct were inevitable. Guided by the original framework of emotional intelligence, Mayer and Salovey initially examined the metaexperience, or reflective experience, of mood (e.g., Mayer & Gaschke, 1988; Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). Two self-report scales to assess metamood cognitions have been employed: a trait scale (Salovey et al., 1995) and a state scale (Mayer & Stevens, 1994). The former, for example, is the Trait Meta-Mood Scale (TMMS), which taps into people's beliefs about their propensity to attend with clarity to their own mood states and to engage in mood repair. The items of this measure are straightforward—for instance, "I pay a lot of attention to how I feel" (Attention), "I can never tell how I feel" (Clarity, reverse-scored), and "I try to think good thoughts no matter how badly I feel" (Repair). The psychometric properties of the TMMS are quite good, and some empirical findings have been generated from its use (Goldman, Kraemer, & Salovey, 1996; Salovey et al., 1995; Salovey, Stroud, Woolery, & Epel, 2002). Nevertheless, this trait scale has its limitations. First, its factor structure consists of only three dimensions (i.e., Attention, Clarity, and Repair), representing only a few of the emotional competencies outlined in our framework. Moreover, the TMMS, like other self-report measures (see, e.g., Bar-On, 1997), essentially asks individuals whether or

not they are emotionally intelligent; it does not require individuals to demonstrate their emotional competencies. We believe that a more valid measure of core emotional intelligence requires a test that relies on tasks and exercises rather than on self-report.

More recent task-based attempts to measure emotional intelligence have focused on comprehensive aptitude-type tests that rely on the assessment of relevant skills. The Multifactor Emotional Intelligence Scale can be administered with pencil and paper or on a computer (Mayer, Caruso, & Salovey, 1998). It is organized into four main branches, reflecting our current framework for understanding emotional intelligence: perceiving emotions, using emotions, understanding emotions, and managing emotions. Within each of these four branches, we designed a series of subtests to assess various competencies.

More recently, we have published a shorter and better-normed ability-based test of emotional intelligence, called the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT; Mayer, Salovey, & Caruso, 2002). The MSCEIT is a 40-minute battery that may be completed either on paper or on a computer. By testing a person's abilities on each of the four branches of emotional intelligence, it generates five scores: one for each of the four branches as well as a total score. Central to the four-branch model is the idea that emotional intelligence requires attunement to social norms. Therefore, the scoring of the MSCEIT is based on consensual norms, with higher scores indicating the amount of overlap between an individual's answers and those provided by a broad sample of thousands of respondents. In addition, the MSCEIT can be expert-scored, so that the amount of overlap is calculated between an individual's answers and those provided by a group of 21 emotion researchers. Importantly, both methods are reliable and yield similar scores, indicating that both laypeople and experts possess shared social knowledge about emotions (Mayer, Salovey, Caruso, & Sitarenios, 2003).

Creating an assessment battery that successfully tests a construct as broad as emotional intelligence is challenging, but it appears that the MSCEIT is an appropriate starting point. Scores on each of the four branches (perceiving, using, understanding, and managing emotions) correlate modestly with one another, and the subscales and overall measure are reliable

(Mayer et al., 2003). Lopes et al. (2003) found small positive correlations between scores on the MSCEIT and the traits of agreeableness and conscientiousness. The MSCEIT appears to test emotional abilities rather than personality traits, however, and does not correlate with social desirability scales.

Although the construct of emotional intelligence and its measurement have generated considerable interest, validity data are only beginning to appear. There is a converging sense among researchers, although not necessarily among those working in more applied settings, of what emotional intelligence is (a set of competencies concerning the appraisal and expression of feelings, the use of emotions to facilitate cognitive activities, knowledge about emotions, and the regulation of emotion) and what emotional intelligence is not (good character, optimism, delay of gratification, or persistence; see Mayer, Salovey, & Caruso, 2000, for a comparison of our model of emotional intelligence to those popularized by others). Yet there is considerably less consensus on how best to measure emotional intelligence. Although we have argued for the advantages of task-based and behavioral assessment (Mayer et al., 1990, 2000), various self-assessments have also appeared that may measure important aspects of individuals' perceptions of their competencies in this and related domains (e.g., Bar-On, 1996, 1997; Petrides & Furnham, 2003; Schutte et al., 1998; Tett, Fox, & Wang, 2005). There is a concern, however, that such self-report tests correlate quite highly with traditional measures of personality and well-being (Brackett & Mayer, 2003; Brackett, Rivers, Shiffman, Lerner, & Salovey, 2006). Other self-report tests that have been repackaged under the emotional intelligence rubric appear to have little to do with this construct (e.g., Simmons & Simmons, 1997).

Findings concerning the correlates of emotional intelligence as operationalized by the MSCEIT are now being reported. Emotional intelligence is negatively associated with deviant behavior in male adolescents (Brackett, Mayer, & Warner, 2004). College-age males who scored lower on the MSCEIT reported engaging in more recreational drug use and greater alcohol consumption. In addition, these participants reported having more unsatisfying relationships with their friends. Even when the effects of participants' personality and analytic intelligence were controlled, the findings in-

volving emotional intelligence remained significant. Similarly, Lopes, Salovey, and Straus (2003) administered the MSCEIT to a sample of college students, along with questionnaires that assessed self-reported satisfaction with social relationships. Participants who scored higher on the MSCEIT were more likely to report having positive relationships with others, including greater perceived support from their parents and fewer negative interactions with their close friends.

A limitation of the two studies described above is that they used the MSCEIT to predict the self-reported quality of social relationships. Lopes et al. (2004), however, examined the relationship between emotional intelligence and peer reports of one's attributes. American college students took the MSCEIT and were asked to have two of their close friends rate their personal qualities. The students who scored higher on the MSCEIT received more positive ratings from their friends. The friends also reported that students high in emotional intelligence were more likely to provide them with emotional support in times of need. In another study, German students were asked to keep diaries of their daily social interactions. Those students who scored higher on the MSCEIT reported greater success in their social interactions with members of the opposite sex. For example, they were more likely to report that they had come across in a competent/attractive manner and that their opposite-sex partners perceived them as having desirable qualities, such as intelligence and friendliness.

Emotional intelligence may also help people in relationships with their partners and spouses. One study examined the emotional intelligence of 180 college-age couples (Brackett, Cox, Gaines, & Salovey, 2005). They completed the MSCEIT and then answered questions about the quality of their relationships: The couples were classified by how well matched the partners were in emotional intelligence. The couples in which both individuals scored low on the MSCEIT reported the greatest unhappiness with their relationship, as compared to the happiness ratings of the other two groups. The couples in which both partners were emotionally intelligent were very happy. Furthermore, couples in which only one partner had high emotional intelligence tended to fall in between the other groups in happiness.

Emotional intelligence also may matter at work. A sample of employees of a Fortune 500

insurance company, who worked in small teams each headed by a supervisor, completed the MSCEIT. All employees were asked to rate each other on the qualities they displayed at work, such as handling stress and conflict well and displaying leadership potential. Supervisors were also asked to rate their employees. Employees with higher scores on the MSCEIT were rated by their colleagues as easier to deal with and more responsible for creating a positive work environment. Their supervisors rated them as more interpersonally sensitive, more tolerant of stress, more sociable, and having greater potential for leadership. Moreover, higher scores on the MSCEIT were related to higher salaries and larger annual raises (Lopes, Grewal, Kadis, Gall, & Salovey, 2006).

Despite what has been learned about the measurement of emotional intelligence over the past few years, research on the validity, in particular, of most emotional intelligence tests is still in its adolescence. Thus Boring's (1923) suggestion that "intelligence is what the tests test" (p. 35) is especially misleading in this area of study. Nonetheless, we are excited that emotional intelligence as measured with the MSCEIT seems to moderate robust (and what have been thought to be relatively universal) psychological phenomena, such as biases in affective forecasting (Dunn, Brackett, Ashton-James, Schneiderman, & Salovey, 2007). As we settle on a clear conceptual understanding of emotional intelligence, we will continue to refine and expand measures of emotional intelligence to reflect this understanding, and especially to look for ways to measure emotional intelligence with information-processing tasks. With this in mind, we now turn our attention toward promising findings pertaining to emotional intelligence and what these findings suggest with respect to particularly relevant domains—coping with stressors and other aspects of self-regulation.

EMOTIONALLY INTELLIGENT COPING AND SELF-REGULATION

We believe, with others (e.g., Izard, 1971; Tomkins, 1962), that emotion is the wellspring of human motivation, the "primary provider of blueprints for cognition, decision and action" (Tomkins, 1962, p. 22). This view implies that emotional intelligence amounts to motivational or self-regulatory intelligence. To the extent

that one has highly developed emotional knowledge and competencies, successful and efficient self-regulation toward desired ends should be facilitated.

Because past events cannot be changed, coping with a previous traumatic experience is a matter of understanding the event and reinterpreting it in a more meaningful way. The importance of emotional competencies is perhaps most evident in these cases, in that individuals are forced to respond to the powerful emotions elicited by memories of past events. Elsewhere, we have argued that successful coping depends on the integrated operation of many emotional competencies, and we have suggested that deficiencies in such basic emotional competencies as emotion perception and expression will interfere with the development and implementation of more complex coping skills, such as emotion regulation (Salovey, Bedell, Detweiler, & Mayer, 1999). The relevance of the emotional intelligence framework to specific methods of coping such as rumination, disclosure, and distraction is reviewed below.

"Rumination" is defined as "passively and repetitively focusing on one's symptoms of distress and the circumstances surrounding those symptoms" (Nolen-Hoeksema, McBride, & Larson, 1997, p. 855). Nolen-Hoeksema (1991; Treynor, Gonzalez, & Nolen-Hoeksema, 2003), who has investigated rumination extensively, regards it as a particular style of responding to stressful events that tends to intensify and lengthen periods of depressed mood. Following the 1989 Loma Prieta earthquake in California, for example, Nolen-Hoeksema and Morrow (1991) found that people who had a more ruminative response style before the earthquake exhibited higher levels of depression 10 days after the event. Similarly, newly bereaved men identified as ruminators prior to their loss experienced longer and more severe periods of depression after their partners' deaths (Nolen-Hoeksema et al., 1997). The deleterious effects of ruminative coping have been corroborated in a number of laboratory studies as well (e.g., Nolen-Hoeksema & Morrow, 1993).

Although ruminating about a negative experience exacerbates one's negative mood, Pennebaker has demonstrated that disclosing emotional traumas in writing, even anonymously, has numerous beneficial effects (see Pennebaker, 1997, for a review). In general, we believe that individuals who can identify how

they are feeling, understand the implications of these feelings, and effectively regulate their emotional experiences will cope more successfully with negative experiences than less emotionally intelligent individuals will. At a basic level, those who are unable to perceive and appraise their own emotional states accurately may fail to recognize the origin of their troubles. If so, the coping process will stall, precluding effective emotional disclosure. In previous work from our own lab, individuals open to emotional experience (even when this was negative) reported lower levels of depression than those who claimed to fight the feeling or asserted that everything is okay (Mayer, Salovey, Gomberg-Kaufman, & Blainey, 1991).

In addition, emotionally intelligent individuals should be able to recognize and pursue the most effective means of coping. For instance, Nolen-Hoeksema and colleagues have argued that one of the most effective approaches for disengaging from a ruminative coping cycle is distraction (Morrow & Nolen-Hoeksema, 1990; Nolen-Hoeksema & Morrow, 1993). When people use pleasant activities to relieve their moods, they show better problem-solving skills and fewer negative thoughts (Lyubomirsky & Nolen-Hoeksema, 1995). One of the most advanced skills within the reflective regulation of emotion is the ability to ameliorate negative emotions and promote pleasant emotions (Mayer & Salovey, 1997). Thus we would argue that individuals who are skilled at regulating emotions should be better able to move to repair their emotional states by using pleasant activities as a distraction from negative affect.

Engaging in distraction is different, however, from avoiding negative affect altogether. Wegner's work on ironic processes (e.g., Wegner, Erber, & Zanakos, 1993) has demonstrated that attempts to avoid negative thoughts and feelings altogether are doomed to fail. The failure of sheer mental willpower occurs because the suppressed thoughts and feelings are maintained as markers of how successfully the person has avoided them. This work is consistent with the model of cognitive changes, suggesting that a negative experience will continue to challenge one's thoughts and feelings until it is resolved and is thus no longer something that needs to be avoided. A further component of reflective regulation is the ability to understand emotions without exaggerating or minimizing their importance (Mayer &

Salovey, 1997). As a result, emotionally intelligent individuals should be able to strike a healthy balance between pleasant distractions and coming to terms with their feelings. Some types of distractions may even facilitate active coping. For instance, we would expect emotionally intelligent individuals to seek out the company of others in an effort to be reminded by them that life is good. Individuals naturally turn to others in order to discuss and make sense of negative life events (Pennebaker & Harber, 1993), and the availability of high-quality social support may prevent individuals from ruminating (Nolen-Hoeksema, 1991).

Emotionally intelligent individuals should disclose their emotional experiences more often, because they are more apt to recognize that sharing is an efficient means of organizing and thus regulating one's emotions. Moreover, the linguistic features characterizing effective emotional disclosure (i.e., insight, causal thinking, and a balance of emotion) reflect one's ability to understand, analyze, and actively regulate emotion. Thus individuals with strong emotional competencies should be able to (1) recognize their emotional responses to a trauma as natural, (2) see the trauma and their emotions in the broader context of their lives, and (3) make positive attributions about the trauma and their emotions.

Emotional intelligence should also lead to more adaptive coping when goals are blocked. Obviously, failing to attain a goal is unpleasant. Even moving more slowly than expected toward a goal can be aversive (Carver & Scheier, 1990; Hsee & Abelson, 1991). However, not everyone reacts similarly when a goal is blocked. Some people are able to disengage gracefully when they realize a goal is out of reach. Others react more negatively, ruminating about their failure and its broader implications.

McIntosh (1996) has proposed a model explaining why certain individuals react strongly to goal nonattainment. The model begins with the observation that goals are structured hierarchically, which restates the notion that proximal day-to-day goals (such as going for a run) are instrumental in achieving more general, distal strivings (such as being healthy or slim). Occasionally a particular lower-order goal must be achieved in order to reach a higher-order goal, but typically there are a number of ways to accomplish goals higher up the goal hierarchy (e.g., eating properly also promotes health

and weight control). Nonetheless, some individuals tend to view particular lower-order goals as necessary even when they are not. McIntosh refers to these individuals as "linkers," because they interpret failure to attain lower-order goals as failure to attain their more distal goals. Linkers believe more strongly than others that their happiness depends on the accomplishment of goals, both big and small, proximal and distal. When a proximal goal is linked to an intermediate goal in the hierarchy, the person may become distressed if the initial goal is blocked. For instance, not running today may be taken as evidence that one will never routinely exercise, which may be disheartening. More dramatically, the proximal goal may be linked to a goal at the very top of the hierarchy. Not running today may be taken as evidence that one will never be healthy, slim, attractive, happy, or a good person. In this way, a minor failure can lead to a depressed or even hopeless state.

In support of the linking model, McIntosh has shown that linkers are more likely than nonlinkers to ruminate about a current unrealized goal (Martin, Tesser, & McIntosh, 1993), and linkers report less happiness and more negative feelings as a result of their propensity to ruminate (McIntosh, 1996). In a short-term prospective study, McIntosh, Harlow, and Martin (1995) asked college students to complete measures of linking, stress, rumination, depression, and physical symptoms at an initial session and then again after a 2-week interval. Students who tend to link the attainment of lower-order goals to the attainment of higher-order goals reported more rumination, depression, and physical symptoms overall than their nonlinking peers did. Moreover, linkers who reported experiencing stressful events at the time of the first session were the most likely to report depression and physical symptoms at the second session. In contrast, high stress at the first session failed to predict later depression and physical symptoms among nonlinkers. This parallels Nolen-Hoeksema's (e.g., Nolen-Hoeksema, 2000; Nolen-Hoeksema & Morrow, 1991, 1993) finding that ruminators report elevated levels of depression after experiencing stress, whereas individuals who do not ruminate are more resilient. Indeed, McIntosh's studies may explain in part why some people ruminate whereas others do not. People who link lower-order goals to higher-order goals appear to ruminate more when they experience

stress or failure, and rumination mediates the influence of goal linking on subsequent dissatisfaction and negative affect.

Emotional intelligence may make it easier to take stock of various goals; it enables the individual to sense the personal importance of each goal and to use this information in reasoning about competing goals as well as alternate means of achieving long-term pursuits. This analysis enables emotionally intelligent individuals to invest themselves wisely in specific activities. If a setback or failure occurs, these individuals experience a loss, but the loss is well defined and assessable with respect to other means of moving forward. This stabilizes self-regulation in much the same way that effective emotional disclosures facilitate coping: by clarifying the individual's situation and averting ruminative thinking and paralysis.

FINAL THOUGHTS ON EMOTIONAL INTELLIGENCE

Most constructs in personality and social psychology mature for decades before they find a popular audience. The fate of emotional intelligence, however, was quite different. Some time after our initial work on the subject was published (e.g., Mayer et al., 1990; Mayer & Salovey, 1993; Salovey & Mayer, 1990), a popular book on emotional intelligence appeared and skyrocketed up the best-seller list (Goleman, 1995a). With this book, emotional competencies went almost overnight from a set of abilities worthy of further study (our view) to a wealth of personal assets capable of determining a person's character, life achievements, and health (Goleman's view). Truly extraordinary claims on behalf of emotional intelligence became commonplace—for instance, “Having great intellectual abilities may make you a superb fiscal analyst or legal scholar, but a highly developed emotional intelligence will make you a candidate for CEO or a brilliant lawyer” (Goleman, 1995b, p. 76). In proposing the framework of emotional intelligence, it would seem that we stumbled upon a panacea for individual and society alike without even knowing it!

Despite the popularization of the construct in the 1990s, serious empirical research on emotional intelligence has begun to emerge in the present decade. The problematic issues in this area of work are not surprising, given the

relative immaturity of this research domain (see, e.g., Matthews, Roberts, & Zeidner, 2004; Matthews, Zeidner, & Roberts, 2003). For one thing, the term “emotional intelligence” is used to represent various aspects of the human condition. We prefer to focus narrowly on specific abilities and competencies concerned with appraising, understanding, and regulating emotions, and using them to facilitate cognitive activities. However, others have defined emotional intelligence in terms of motivation (persistence, zeal), cognitive strategies (delay of gratification), and even character (being a good person). Emotional intelligence may contribute to persistence, delay, and character, but they are not one and the same thing. A con artist may be especially skilled at reading and regulating the emotions of other people, but may have little of what is commonly thought to be good character.

Second, this area of research will not prove to be productive unless the abilities that make up emotional intelligence can be measured reliably, and unless these abilities are related to important, real-world outcomes. We think less attention should be focused on the issue of whether a monolithic “emotional intelligence quotient” has utility, or on gathering together various measures of social competence and calling them “emotional intelligence,” and more on the development of tasks that can be used to assess actual emotion-related skills. We are not confident that self-reported abilities in this domain will prove any more useful than they have in the measurement of traditional, analytic intelligence. Finally, we urge educators and business managers to maintain their present interest in emotional intelligence, but to be skeptical of “quick-fix” programs. Although emotional intelligence research may challenge us to reconsider our notions of what it means to be smart (and what it means to be in touch with feelings), it will not, at the end of the day, be the key to reducing international conflict, fighting the war on drugs, or terminating the global plague of AIDS. Grandiose claims to the contrary serve only as palliatives to the public and as suppressors of scientific inquiry.

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