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# 14

## Emotional Intelligence and Inter-Personal Skills

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### **Summary**

Although emotionally intelligent individuals are assumed to be socially effective, there has been little exploration of the concept in this respect. In the present chapter, we argue that emotion-based abilities, as outlined by Mayer and colleagues (Mayer, Salovey, Caruso, & Sitarenios, 2001), provide a framework for the assessment of inter-personal skills. It is our contention that research on emotional intelligence (EI) may involve attempts to delineate emotional processes underlying skills to promote social interactions and relationships. We present empirical support for the notion that emotional competence characteristic of high EI confers advantages for social adaptation. Our premise is consistent with much current work building on the assumption that there are emotional skills with a high degree of generality, and it supports, in particular, the original idea of measuring EI by means of performance measures.

## 14.1 INTRODUCTION

Emotional Intelligence (EI) has become popular to the extent that it flourishes in the test market and is probably seen as a major individual difference construct of the twentieth century. In spite of this, claims that EI is far more important than traditional intelligence have not yet been empirically supported. Traditional intelligence remains as the main dimension in the prediction of achievement and adjustment (Austin et al., 2002; Schmidt & Hunter, 1998). This does not preclude EI from adding an important piece of information, particularly since the appeal of the concept seems to lie in its social implications. Emotionally intelligent individuals are perceived as ideal employees in jobs that require communication skills and social competence, which almost all jobs do, more or less (see, e.g., Slaski & Cartwright, 2002). The enthusiasm over EI may in fact reflect the lack of an appropriate standard to assess social skills, or social intelligence (Sternberg, 1985). Although social intelligence has been notoriously difficult to measure (Kihlstrom & Cantor, 2000), the current interest in EI may perhaps contribute to the long overdue revival of this field.

Contrary to what might be expected, our aim for the present chapter is not to present possible avenues to reconcile the two concepts of EI and social intelligence. Comparable aspects between the two concepts are already dealt with elsewhere in the present volume (see Chapter 5 by Kang, Day, and Meara as well as Chapter 10 by Weis and Süß). We merely contend that emotion-based abilities as outlined in the work by Mayer and Salovey (Salovey & Mayer, 1990; Mayer, Salovey, Caruso, & Sitarenios, 2001) provide a framework for the assessment of inter-personal skills.

The concept of EI was launched along with the view that emotions are embedded within ongoing social interactions (e.g., Averill, 1980; Lazarus, 1991). Research on EI may therefore be seen as involving attempts to delineate emotional processes underlying skills to promote social interactions and relationships. Although emotionally intelligent individuals are assumed to be socially effective (Caruso, Mayer, & Salovey, 2002), there has been little exploration of the concept in this respect. Other emergent conceptualizations of EI more clearly emphasize social functioning, especially those based on traits discerned in cross-situational consistencies in behavior (e.g., Bar-On, 2000; Goleman, 1995; Petrides & Furnham, 2001; Schutte et al., 1998). Yet, emergent formulations do not specifically deal with social or inter-personal skills as a product of emotion-related abilities.

Our assumption of EI as a basis for inter-personal skills is grounded in different theories of the function of emotions. Functional approaches vary across levels of analysis that may be linked and inter-related (Keltner & Gross, 1999; Keltner & Haidt, 1999). However, all of them emanate from the premise that people are social by nature, as articulated by Brian Parkinson (1996) in a very compelling manner. In the present chapter we base our overall argument on two major points that will be elaborated in detail. First, perceptual and cognitive abilities are prerequisites for social functioning, since they provide us with the ability to perceive and process emotion information. Second, individ-

ual variation in apprehending and responding to emotional cues in others constitutes a meaningful platform for an analysis of emotion as a social-adaptive function.

## 14.2 PERCEPTION AND COGNITION IN THE PROCESSING OF EMOTIONS

Early emotion theorists espoused a functionalism consistent with evolutionary theory in the sense that emotional expressions were selected on the basis of their potential to enhance communication and subsequent coordination of social interactions (Ekman, 1992; Izard, 1971; Öhman, 1986; Plutchik, 1980). Contemporary theorists, who focus on the evolution of the human mind for solving adaptive problems, posit that the majority of our psychological processes have probably evolved to deal with inter-personal contacts (Bereczki, 2000). Inter-personal skills have assumedly evolved from simply processing emotion-laden, perceptual stimuli to elaborating upon the social significance of this type of cues by means of our aptitude to think, reason, and organize knowledge. As a result of evolution, it is believed that emotion information is processed through perceptual and cognitive systems that are hierarchically organized (see, e.g., LeDoux, 1996).

Findings pointing to a hierarchic architecture for emotion processing map neatly onto the model of EI as sub-divisible into different branches (Mayer, Caruso, & Salovey, 2000). The first, apparently most basic branch involves the perception of emotion cues conveyed through non-verbal signals as, for instance, appears through facial expressions and gestures. In this respect, the concept of EI bears resemblance to the notion that our emotions serve as a primordial form of communication (Darwin, 1872/1998). The non-verbal information inherent in expressions of joy, for example, most likely signals social acceptance, and that of disgust, disapproval.

Vocal communication is believed to have taken place through a system of instinctive calls that were expressive of emotional states, such as distress or elation. Language itself is assumed to have arisen late in human evolution (see, e.g., Bradshaw & Rogers, 1993). Therefore, differences in the two forms of communication—non-verbal and verbal—are probably a result of differences in their neural foundation (Buck, 1984). Non-verbal communication evolved on the basis of mainly sub-cortical brain structures of the right hemisphere. Semantic processes underlying verbal communication evolved, more or less superimposed upon existing brain structures, in association with the more recently developed neo-cortex and in the left hemisphere. Research supports the idea that emotion information is processed in different systems of the brain, and that these are hierarchically organized as a result of evolution (see Gainotti, Caltagirone, & Zoccolotti, 1993, for an overview).

This conclusion raises the issue as to what extent modern day humans use non-verbal, emotional cues as social signals to and from other people in the environment. In studies of EI, processing of such cues is studied, for example,

by means of tests of the ability to perceive emotions as expressed through facial expressions. The model of EI proposed by Mayer et al. (2000) also includes a branch involved with the cognitive processing of emotion information. The task is to judge the emotions experienced by each of two actors involved in a scenario depicting social problems. This procedure provides a measure of the ability to discern emotion information from the depicted context, and it requires knowledge about emotions and the situations in which they are likely to arise. More precisely, the ability to judge social episodes reflects verbal and cognitive skills in dealing with emotion information, as well as the degree of insight into cultural conventions pertinent to emotional reactions. Knowledge of this kind should be useful in discerning the nature of expressions performed by the same facial muscles, such as disappointment and regret (see Ekman, 1993). It should be equally useful for interpreting emotions as expressed by a combination of facial expressions, such as awe, which has been suggested to be a blend of expressions for fear and surprise (Plutchik, 1980).

Research within appraisal theory, originating from Magda Arnold (1960), can be seen as a pioneering attempt to study the cognitive nature of emotion knowledge. Basically, findings within this research tradition suggest that the essence of an emotional reaction can be best predicted on the basis of the appraisal of an antecedent situation or event (e.g., Roseman, 1984). A crude form of emotion knowledge thus consists of criteria such as perceived situational control and predictability of the consequences, which determine the emotion elicited as a result of given circumstances. Studies in this tradition have been criticized for reducing emotion to a static phenomenon (Scherer, 1999), whereas emotions are assumed to reflect relational processes that coordinate the dynamics of human interaction. Although emotional experiences may generally be understood according to common ways to appraise situations, many emotions may not be differentiated in a standard fashion. Jealousy or envy, for instance, would require a more comprehensive assessment of the individual context since these emotion terms encompass a range of behavioral tendencies and social circumstances (East & Watts, 1999). That is, in order to anticipate how a person is going to react, we often need to get a sense of his or her expectations and goals with regard to the situation. The former only takes on meaning in the context of the latter, as specific emotions arise out of the personal meanings that people bring to situations that have relevance to their intentions and aspirations (Mesquitas & Frijda, 1992; Lazarus, 1991).

Perceptual and cognitive abilities as outlined within the framework of Mayer and colleagues, in particular Branches 1 and 3 (see Chapter 2 by Neubauer and Freudenthaler), are prerequisites for social functioning as they enable proper understanding of emotional signals. The value of EI-related abilities in this respect is implied in findings that some individuals may differ markedly from the rest of the population in their ability to grasp emotion information. There is a wealth of research suggesting that dysfunctional appraisal styles (Lazarus, 1966) and thought patterns (Beck, Rush, Shaw, & Emery, 1979) are causes of social maladjustment. As people with affective disorders process information differently from others (Beck, Emery, & Greenberg, 1985), it is rea-

sonable to assume that cognitive impairments entail a decrement in the ability to appropriately process emotion information. In addition, affective disorders, particularly depression, are often also associated with a lack of emotional expressiveness (Gotlib & Lee, 1989). Depressed persons typically engage in less eye contact with their interaction partners, and they exhibit facial expressions of happiness, sadness, fear, surprise, and interest less frequently (e.g., Fossi, Faravelli, & Paoli, 1984). The common assumption that depression eventually causes social dysfunction has been challenged by the argument that deficient social skills play a part in the etiology and maintenance of depression. According to Segrin and Abramson (1994), there may be an increased risk for developing symptoms of depression among individuals with poor social skills simply because their behavior elicits negative reactions from other people. The onset of depression may exacerbate a behavior that is already dysfunctional from a social-adaptive point of view.

Adaptation to the social world not only seems to necessitate abilities to construe meaning on what we perceive, but also aptitude to reciprocate in a fairly predictable manner. Social skills hence seem to be contingent upon our emotional functioning that develops and is shaped in interaction with the outside world.

### 14.3 THE SOCIAL-ADAPTIVE FUNCTION OF EMOTION

The contention that EI is related to social skills draws on theory and findings on the role of emotion in coordinating interaction between the individual and his or her environment. Theorists attribute the quality of providing the individual with both a sense of self, and a means to define social relationships, to emotion. According to Zajonc (1980), affective reactions implicate the self and affective responses are hence self-referential by definition. Lazarus (1991) similarly postulates that emotions are self-referential to the extent that they provide information on what is consistent with our goals in relation to others. Emotions are in this sense social since they typically arise in inter-personal contexts. The respective positions on emotion as merely affect, as opposed to elaborate meaning structures, correspond to the notion of emotions as basic or complex phenomena.

Basic emotions, such as surprise, fear, and joy, emerge early in life. They mostly arise by triggering emotion that essentially bypasses cognitive processing. As development progresses, emotional functioning becomes more dependent on social learning. The ability to symbolize or label emotions involves inferential or interpretive processes that depend on cognitive development (Izard, 2001). A more evolved cognitive ability enables the experience of complex emotions, such as shame, guilt, pride, or embarrassment by virtue of awareness of self as independent of others. The importance of self-concept in developing more sophisticated emotional function has been documented through observations which reveal that children who do not recognize their own self in one situation, do not show embarrassment in another context

(Lewis, Sullivan, Stanger, & Weiss, 1989). Complex emotions are therefore referred to as “self-conscious” because they require a consciousness of self as an actor whose behavior has the potential to influence others’ feelings, thoughts, and actions. For instance, the induction of guilt is almost entirely confined to close relationships, and the motive to induce guilt may be understood as a means to signal disturbances in interpersonal attachments (Baumeister, Stillwell, & Heatherton, 1994).

The emergence of a self-concept eventually enables the taking of another person’s perspective. Many theorists have in fact argued that perspective taking (which may be viewed as an ability) is responsible for much of human social capacity (e.g., Piaget, 1932/1997). The importance of both self-concept and perspective taking is implied in findings that we tend to organize perception and represent the social world in reference to the mental category of relationships (Sedikides, Olsen, & Reis, 1993). Information about others is stored in memory within social contexts that have implications for our individual sense of self, presumably because emotions structure relationships as between members of a family (e.g., Dunn & Munn, 1985), and during play, courtship, and romance (Andersen, Eloy, Guerrero, & Spitzberg, 1995; Feeney, 1995; Garner, Robertson, & Smith, 1997). These findings suggest that there are interpersonal features of particularly self-conscious emotions. They are, according to Tangney (1999), “not only intimately connected to the self. They are also intimately connected to our relationships to others” (p. 543). Emotions in this sense have a bearing on the notion of collective self (Markus & Kitayama, 1991; Pratkanis & Greenwald, 1985). That is, in collective or communal contexts, self-identity is embedded in the larger network of relationships with important group members.

The instrumentality of emotions for the differentiation of the self as a way of assimilating to the social environment is particularly discernable in studies on gender differences in emotion and gender roles. Women are believed to feel emotions more frequently than men (Grossman & Wood, 1993) and are typically reported to display happiness, nervousness, fear, shame, and guilt (see Brody & Hall, 1993, for an overview). These are emotions that should be functional when rearing children and caring for social relations. The female tendency to display more of a variety of non-verbal behaviors such as smiling and gesturing (Barr & Kleck, 1995) might also be seen as functional for traditional female tasks. Men have been found to report more pride in the self than do women (Tangney, 1990), along with less embarrassment, shame, and guilt (Stapley & Haviland, 1989). Greater male pride and contempt presumably correspond with the traditional male role of entering in competition with others and managing valuable resources. There seems to be an adaptive advantage of gender differences in emotion when taking on the different roles that males and females are expected to play in Western culture (Brody, 1997). Findings of this kind also imply that EI-related abilities are important when adjusting to roles that will benefit the overall purpose of different social contexts and task-oriented groups.

It has, however, been found that gender differences of this kind are less likely to appear when self-reports concern emotional experience as opposed to emotional expression, and when they are related to impersonal circumstances as opposed to interpersonal context. In other words, gender differences do not appear in self-reports when data are collected concurrently with ongoing experiences (e.g., Shields, 1991). Findings pointing to disparities between global and specific self-reports of emotion have led Robinson, Johnson, and Shields (2001) to propose that there is a *gender heuristic*. It is plausible that we rely on gender stereotypes as a rule of thumb in judging emotions of self and others when we lack easy access to target- and situation-specific information. The notion of a gender heuristic implies that emotion knowledge contains stereotypes about emotion. If this is indeed the case, it would appear that emotion knowledge may occasionally lead us astray in our perception of the social world. Emotion knowledge as such should provide necessary aspects of social skills to adapt to most situations, but there seem nonetheless to be some shortcomings when challenged with more subtle aspects of human behavior.

#### 14.4 EI AS A SOCIAL-ADAPTIVE ABILITY: RESEARCH FINDINGS

Social skills merely involve the ability to interpret emotional expressions and to draw on emotion knowledge that will enable the individual to blend into social contexts of different kinds. Inter-personal skills additionally involve the ability to enter into the bi-directional exchange of emotion information; more precisely, the ability, on the one hand, to apprehend the genuine meaning of social cues in others' behavior, and on the other hand, to calibrate one's own emotional behavior. With this definition, inter-personal skills involve different ways that people affect each other's moods and emotions, as evident through research on emotional contagion, non-verbal cues, and behavior; with clear implications for social functioning.

In short, emotional contagion can be conceived of as a transfer of feelings between persons through a three-stage-process involving mimicry, feedback, and contagion (Hatfield, Cacioppo, & Rapson, 1994). It has been observed that during interaction, people automatically mimic and synchronize their movements with the facial expressions, voices, postures, and movements of other people. It has even been found between people who are unfamiliar to each other that smiles and mannerisms are capable of automatically eliciting the same behavior in the observer (Chartrand & Bargh, 1999). According to theory, subjective emotional experience arises through the activation and feedback from facial, vocal, postural, and movement mimicry. As a result, there is a contagion of feelings from emitter to observer. Other studies suggest, however, that the peripheral activation and feedback as elicited by mimicry are not a necessary condition for contagion to occur (Hess & Blairy, 2001; Neumann & Strack, 2000). The empirical study of the emotional contagion hypothesis suggests that there are individual variations in the susceptibility to emotional



contagion (e.g., Doherty, Orimoto, Singelis, & Hatfield, 1995; LeBlanc, Bakker, Peeters, van Heesch, & Schaufeli, 2001). When explored in a sales context, emotions via facial cues during a conversation were monitored in a study by Verbeke (1997). The data on emotions were analyzed in relation to sales performance that was taken as a measure of social efficacy. Results showed that performance was better among salespersons with, on the one hand, a high ability to transfer emotions, and on the other hand, a great sensitivity to the emotions of the customer. Performance was worse among salespersons with less of an ability to transfer emotions, although they showed high sensitivity to their interacting partners' emotions.

Prior research has revealed that behavioral cues are a source of information that people use to assess the nature of ongoing social interaction (Schefflen, 1964) and, furthermore, that the coordination of inter-personal behavior promotes a sense of social rapport. Work on posture mirroring shows that ratings of involvement, togetherness, and liking, tend to be positively correlated with the display of the same postural configuration on the part of the interaction partner (Chartrand & Bargh, 1999). Emotional state is usually reflected in the behavioral configuration of people in general and it should therefore follow that a match in mood (or feeling states) should be part of the overall influence toward a smoother interaction.

On the basis of this assumption, we formulated a hypothesis that sensitivity to others' mood is related to common EI-performance measures. In other words, we assumed that susceptibility to emotional contagion is part of inter-personal skills grounded in EI-related abilities to perceive and process emotion information.

We were able to test this hypothesis when administering an entrance test to the Stockholm School of Economics. The group of participants consisted of 191 applicants (102 men, 88 women), average age 20.5 years (range 18–34). We used methods (Sjöberg, 2001a, 2001b) that briefly consist of the following two measures:

- performance measures developed according to the model underlying the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), mainly to investigate the ability to identify emotions,
- an instrument to measure the ability to assess others' mood, as developed by the second author.

Emotion identification was measured by two tests. Twelve pictures from the Lightfoot series of facial expressions (Engen, Levy, & Schlosberg, 1957) measured the ability to identify emotions from facial expressions. Participants rated each picture on eight unipolar three-category scales: happiness, anger, sadness, shame, guilt, contempt, surprise, and fear. The "correct" response in this test was the most common response given by the present group of test takers. This scoring method is thus based on the principle of consensus (see Chapter 8 by Legree, Psotka, Tremble, & Bourne), which was also applied in the next test. Emotion identification was measured with the help of written

**Table 14.1 Correlations between Traditional Performance Measures of EI, Accuracy in the Perception of Others' Mood, and Deviance of Own Mood Relative That of Others**

	1	2	3	4
1. Facial Expressions	1.00			
2. Social Episodes	.78**	1.00		
3. Mood Perception	-.32*	-.35*	1.00	
4. Mood Deviance	-.51**	-.58**	.39*	1.00

Notes. \*  $p < .05$ , \*\*  $p < .01$ .

descriptions of brief social problem episodes involving two actors. The task was to rate the extent to which each of the actors felt each of ten different emotions, using unipolar three category scales: happy, angry, sad, ashamed, proud, afraid, relieved, disappointed, surprised, and guilty.

The instrument to measure mood perception is based on a 71-item scale (Sjöberg, Svensson, & Persson, 1979) measuring six factors (i.e., happiness, tension, fatigue, confidence, extraversion, and social orientation). Respondents were instructed to rate their own current feeling state, as well as that of fellow participants. As every individual was assumed to be an expert on their own mood, a "correct" assessment of others' mood corresponds to the mean rating of own mood in the whole group of test takers. An individual score on perception of others' mood was thus obtained by taking the difference between the participant's rating of others' mood and the mean rating of their own mood state *as they actually rated it*. This score, termed *mood perception*, thus provides a measure of how well judges assess the authentic experience of a specific target, as opposed to the principle of consensus scoring (which produces a measure of how well judges perform in relation to each other). The correlations of the performance measures are presented in Table 14.1.

As expected, the measure for mood perception was inversely related to traditional EI performance measures, that is, facial expressions and social episodes. This result indicates that persons who are less accurate in their assessment of others' mood in the concurrent situation tend to deviate from the general consensus on how to perceive and interpret emotion information from facial expressions and narratives describing social problems. However, the objection could be raised concerning the source of information used in generating a more accurate assessment of others' mood. Were accurate judges ignorant of emotional cues and simply assessed the implications of the situation, as such, in relation to more fine-tuned emotion knowledge? This could be the case and would curtail our assumption that emotion knowledge enters into the computation to make sense of emotional cues as observed in others' behavior.

In view of this ambiguity, we performed another calculation on the mood data to strengthen our case that greater susceptibility to mood contagion enables a more accurate assessment of others' mood. Results would be more convincing on this point if they were to show that accurate judges tended to

converge towards the mood of those they observe in their immediate vicinity. Another score was therefore obtained by forming the difference between the ratings of own mood of each participant and the mean rating of own mood as actually rated by all test takers. This measure, termed *mood deviance* presented in Table 14.1, gives the extent to which the respondent differs in own mood from that of other test takers. The negative correlations between mood deviance and EI performance measures suggest that individuals of high EI tended to converge with others in feeling state that was generally prevailing in that particular situation. In addition to the positive correlation between mood deviance and mood perception, there seems to be support for the assumption that susceptibility to mood contagion enhances the perception of others' feelings.

In another study, we found that affect intensity (or heightened reactivity to emotional stimuli) was associated with greater accuracy in the perception of others' mood as assessed in a concurrent situation (Engelberg & Sjöberg, 2004). Additionally, results strongly suggested that accurate emotion perception was linked to indices of social adjustment.

Building on these results, it is plausible to assume that social functioning should be facilitated by a propensity to converge with others in the judgment of emotion information. In sharing very similar emotion knowledge, interaction partners will be more efficient in understanding others' intentions and orientations to different relationships, and also to adjust accordingly. In this sense, emotion knowledge could be viewed as encompassing cognition of cultural display rules (Ekman & Friesen, 1975) that are basically norms of interaction on how to conform to the expectations of a social situation (cf. Grandey, 2000; Totterdell & Holman, 2003).

Additional skills of an inter-personal character seem, however, to consist of an ability to converge in emotional composure. Convergence of this kind seems to consist of susceptibility to emotional signals in order to reciprocate with appropriate behaviors. The exact nature of such behavior may only be guided to an approximate extent by cultural display rules. Whether a matter of susceptibility to emotional contagion or emotional reactivity, it seems to be instrumental for tailoring one's behavior in accordance with the specifics of a situation. Rather than merely sharing similar emotion knowledge, inter-personal skills are about emotional sharing through corresponding behavior and feeling states.

### **Faking Social Skills: Performance Measures Versus Self-Report Scales**

In line with our reasoning so far, it should be possible to fake social skills when drawing on emotion knowledge of more sophisticated kinds. This would especially be true in situations where EI is measured with self-report instruments, since these provide some leeway to the respondent to embellish his or her actual qualities and abilities. Studies suggest that performance measures of EI are more adequate in this respect than self-report instruments (Geher, Warner,

& Brown, 2001; Otto, Döring-Seipel, Grebe, & Lantermann, 2001, a conclusion also drawn by Mayer et al. 2000).

Hence, there are good reasons to believe that effects of social desirability influence self-report measures and this would, of course, warrant more extensive development of performance measures (Morand, 2001). In our studies, we have therefore included measures of social desirability and, in order to estimate the effect of faking, we have carried out a special study in which we compared two different groups.

One of these groups consisted of 41 participants who were recruited among students at the Stockholm School of Economics (SSE). All testing was anonymous, a fact stressed to the participants. The other group consisted of the same 191 participants as mentioned above, and who had taken the same tests about 11 months earlier, as part of a process for assessing applicants to the SSE. As participants in the latter group had been invited to take part in the test on the basis of high school grades or a test of intellectual ability similar to the SAT, they were comparable to the group of 41 participants. Admission to the school is highly competitive and very desirable for many of these applicants. Instructions stressed that they should give honest and frank answers.

Did the respondents who performed in the testing session, which had real consequences, (called *real testing* in the following) differ from those who were tested anonymously? We first investigated three common response bias variables, as well as a combined faking index.

The well-known scale of social desirability by Crowne and Marlowe (1960) was used, as was the Paulhus scales of impression management and self deception (Paulhus, 1991, 1998; Paulhus & Reid, 1991). In addition, we constructed a scale based on data collected under the instruction to give faked answers that would likely contribute to a positive admission decision regarding the test taker. A score under explicit faking instructions (that was close to the score on the same dimension obtained under non-faking instructions) was taken as a measure of the extent of faking under instructions to give honest answers<sup>1</sup>.

The results obtained from this study are encouraging because they show that the response bias variables all worked as expected (see Table 14.2). Note that the last variable, the faking score, should be related in the opposite direction from the other three scores.

The next question concerns to what extent the various EI measures and other variables were affected by tactical answering (see Table 14.3 for performance measures and Table 14.4 for self-report measures). Self-report measures consisted of the scale developed by Schutte et al. (1998) as a direct measure of EI, different scales commonly considered as facets of EI, and a five-factor model of personality. Table 14.4 also contains the results of adjusting the dif-

<sup>1</sup>Tactical responses to the instruction to fake explicitly may have endangered the validity of this measure. Some test-takers may have realized the way their responses were going to be scored, and adjusted them accordingly. However, results supported strongly the approach we used.

**Table 14.2 Response Bias Scores in Two Groups**

Response Bias Variable	Mean, Real Testing	Mean, Anonymous Testing	<i>t</i>	<i>df</i>	<i>p</i>
Crown-Marlowe Social Desirability	0.20	-0.93	7.29	229	< .0005
Paulhus Impression Management	0.15	-0.70	5.23	229	< .0005
Paulhus Self Deception	0.15	-0.68	5.04	229	< .0005
Combined Faking Score on Instructions to Fake	-0.29	1.32	11.83	229	< .0005

*Notes.* All measures are standardized (i.e.,  $M = 0$  and  $SD = 1$ ) in the combined group.

**Table 14.3 Test Scores in Two Groups: Performance Scales**

Test variable	Mean, Real Testing	Mean, Anonymous Testing	<i>t</i>	<i>df</i>	<i>p</i>
Facial Expressions	-0.01	0.04	ns		
Social Episodes	-0.19	0.87	6.69	227	< .0005
Mood/Expert	-0.02	0.11	ns		

*Notes.* ns = not significant at level  $\alpha = .05$ . All measures are standardized (i.e.,  $M = 0$  and  $SD = 1$ ) in the combined group.

ferences between real testing and anonymous testing for impression management and faking.

Note that the test-takers in the high-stakes situation did not differ significantly from the anonymous participants in two of the three performance measures. Test-takers performed significantly *worse* than the anonymous group with regard to social episodes. There is hence no indication in these data that the performance measures could be successfully faked.

Turning to Table 14.4, the picture is very different. The results suggest that the respondents in the high-stakes situation faked a positive image of themselves, because the comparable group that took the test under anonymity gave a much less rosy picture of themselves. All these differences, with the exception of empathy, are quite large. This result agrees well with the fact that the two groups also differed—even more strongly—on measures of impression management, faking, and self-deception.

In all cases, with one exception, statistical control for impression management and faking removed virtually all of the mean difference between the two

**Table 14.4 Test Scores in Two Groups: Self-Report Measures**

Test variable	Mean, Real Testing	Mean, Anon. Testing	<i>t</i>	<i>df</i>	<i>p</i>	adj. diff.	<i>t</i> of adj. diff.
Schutte et al. EQ	0.16	-0.73	5.43	229	< .0005	0.02	ns
Alexithymia	-0.17	0.80	6.09	229	< .0005	0.07	ns
Self actualization	0.18	-0.82	6.32	229	< .0005	-0.05	ns
Machiavellianism	-0.14	0.67	4.96	229	< .0005	0.12	ns
Empathy	0.00	-0.02			ns	0.07	ns
Big 5: Agreeableness	0.13	-0.62	4.55	229	< .0005	-0.17	ns
Big 5: Emotional stability	0.19	-0.86	6.65	229	< .0005	-0.03	ns
Big 5: Extraversion/ Introversion	0.15	-0.71	5.30	229	< .0005	0.13	ns
Big 5: Intellectual Openness	0.21	-0.99	7.90	229	< .0005	-0.18	ns
Big 5: Conscientiousness	0.18	-0.82	6.24	229	< .0005	-0.47	2.78**

*Notes.* Anon. = Anonymous, ns = not significant at level  $\alpha = .05$ , adj. diff. = adjusted difference. Differences between mean residuals when the four impression management and faking variables have been controlled for by linear regressions. All measures are standardized (i.e.,  $M = 0$  and  $SD = 1$ ) in the combined group.

\*\*  $p < .01$

groups. In other words, statistical control was sufficiently powerful to remove the motivational effects of the high-stakes testing situation. The only test variable for which this was not true was the five-factor model measure of conscientiousness. However, even in that case about half of the effect of the high-stakes situation as compared to the anonymous situation was removed. The reason for the relative failure of this particular variable, as distinguished from all others tested for the influence of impression management, may be related to the fact that the measure of faking did not include conscientiousness.

Hence, statistical control for tactical responses that was made possible by our design was successful. Of the two approaches to measuring EI, performance scales showed considerably more promise in two ways. The two most important performance measures showed strong convergence. They were unaffected by tactics of responding in a high-stakes selection context, while self-report measures, as expected, were found to be excessively distorted by such tactics. Extensive coverage of impression management and faking tendencies, and separate measurement of such tendencies, made it possible to exert statistical control over faking and to remove virtually all of its effects. This finding supports the conclusions and the interpretations of results we have given. EI

performance measures and mood knowledge scores converged, strengthening the notion of a dimension of individual differences in EI. The performance measures were not affected by faking. On the other hand, self-report measures were clearly strongly affected, a factor which could be removed in almost all cases by means of statistical control based on social desirability scales.

## 14.5 CONCLUDING REMARKS

The pattern of results that has emerged in our research supports the notion that the emotional competence characteristic of high EI confers advantages for adaptation to the social environment. As pointed out by Roberts, Zeidner, and Matthews (2001), the pervasive use of consensus scoring in studies on EI presumes that a match between responses of an individual and the group as a whole indicates a better adjustment. It is interesting to note that one of the few strong and replicable findings in Rorschach research concerns "good form", that is, conventional answers. Conventional answers tend to be related to a higher degree of social adjustment on the part of the respondent (Dawes, 1999). This type of finding not only provides some additional support for the consensual scoring of EI performance measures, it also provides an input to the conceptual underpinnings of EI as a construct to encompass the ability for adaptation (cf. Izard, 2001), conformity being one aspect of social adaptation (Chan, 2003).

In view of the results concerning statistical control, self-report measures might still be quite useful in situations where the test takers are highly motivated to give many tactical responses. This is, of course, under the assumption that they are not all equally tactical. People always differ. Yet, many practitioners would probably prefer to avoid the psychometric niceties of measuring tactical behavior and use them for statistical control of impression management and instead go for performance measures. We believe that there are good reasons for doing so. Most probably, performance cannot be faked, certainly not without expending considerable effort.

In our theoretical analysis, we argued that skill in understanding and managing emotions constitute an important part of social intelligence, and that emotional skills therefore should be related to social adaptation. This argument presumes that there are emotional skills with a high degree of generality, and that they can be measured. The results of our empirical work support these assumptions. Our work is consistent with much current work in these respects, and it supports, in particular the original idea of measuring EI by means of performance tasks.

Self-report measures have been more popular in practical work, in spite of the problems of faking. Ones and Viswesvaran (1998) acknowledge that faking is prevalent in self-report measures of personality, but they also argue that extensive empirical research shows that the validity of such personality scales is not compromised by faking (Ones & Viswesvaran, 1998; Viswesvaran & Ones, 1999). This is a surprising finding and it may show that faking skills and will-

ingness to fake have, by themselves, a component of validity. Maybe people who fake on personality tests are clever manipulators also in other contexts. Be that as it may, we find it worrisome that tests should be contaminated with unwanted components of this kind and procedures which avoid them altogether (for ethical reasons) are to be preferred.

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