

# Clinical Perspectives in Emotional Intelligence

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## 1. Introduction

Emotional intelligence (EI) is the ability to recognize and express emotions in yourself, and the ability to understand the emotions of others (Salovey & Mayer, 1990). Research devoted to EI has now split off into two distinct perspectives. Both perspectives share the idea that cognitive abilities are not the unique predictor of successful adaptation but that emotional competencies have to be taken into consideration. However, these perspectives markedly differ regarding their conceptualization of such emotional competencies and their assessment. On the one hand, ability models (Mayer & Salovey, 1997) conceive EI as an ability encompassing four dimensions: (a) emotions identification; (b) emotions utilization; (c) emotions understanding; and (d) emotions regulation. In this ability perspective, EI is assessed via intelligence-like tests which comprise correct and wrong responses. On the other hand, trait models (Petrides & Furnham, 2001) consider EI as a multifaceted construct encompassing 13–15 (depending on the model) emotion-related behavioral dispositions thought to affect the ways an individual would cope with demands and pressures (e.g, self-control, well-being, emotional sensibility and sociability). In this trait perspective, EI is evaluated via personality-like questionnaires. While ability tests capture maximal performance like intelligence tests, trait tests aim to capture typical performance (Petrides & Furnham, 2003). Therefore, one can say that ability EI assess what an individual could do, and trait EI what he really do.

Recently the scientific community becomes interested in EI, in order to discern what is true among the huge number of claims on this topic. Indeed, there is still controversy about whether EI represents an entity that differs from what psychologists in the field of intelligence, personality, and applied psychology already know under other names. But now, several lines of evidence suggest the existence of the influence of EI on quality of life, educational attainment, and occupational success. Therefore, since the theoretical foundations of EI are now well recognized, clinical researches are of interest. In this chapter, the main results concerning the relationships between EI and well-being will be reported. After that, some findings on EI and both anxious and depressive states will be developed. Finally, some recent data supporting the possibility to increase EI with specific interventions will be presented.

## 2. Emotional intelligence and well-being

A vast amount of research has documented a positive association between trait EI and well-being related variables (Zeidner et al., 2009), even if as for other outcomes, it is important to

distinguish theoretically and replicated findings from anecdotal ones (Matthews et al., 2002). More particularly, interpersonal abilities are expected to be related to better social and personal relationships, whereas intrapersonal skills are expected to be related to life satisfaction and subjective well-being. Indeed, a better emotional regulation should lead to lower perception of stress and a better quality of life, and subjects with higher EI should report elevated psychological well-being and happiness. Some data demonstrated that subjects that can manage others' emotions seem to respond less intensively to stressful situations, they express more empathy and they have a better social support that protects them from negative feelings. In addition, positive correlations between EI and subjective happiness and life satisfaction were found.

A study reported by Ciarrochi et al. (2001) investigated the relationship between trait EI as assessed by the Schutte's scale (Schutte et al., 1998) and different outcomes theoretically linked to EI among a large sample of adolescents. The results showed first that trait EI, as expected, was positively correlated to self-esteem and negatively with trait anxiety. Second, the authors reported positive associations between EI and the amount of social support, the satisfaction with social support and parental warmth. Interestingly, when self-esteem and trait anxiety were controlled, the relationships remained significant except for parental warmth, meaning that EI explained over these variables some important outcomes. In addition, the amount of social support from friends and extended family was more related to EI than the amount of social support from parents and siblings. The question of the direction of these associations is still open: are individuals with higher EI able to develop and maintain strong social support, or are individuals with relevant social support become better in EI?

The same findings, in addition with health-related measures, were found in a large sample of young adults (Austin et al., 2005). EI was assessed by the revised version of the scale of Schutte (Austin et al., 2004), which proposes three factors: optimism/mood regulation, appraisal of emotion, and utilisation of emotion. The results showed that total EI score was positively correlated with the social network size, the satisfaction with social support, the temporal satisfaction with life, and negatively correlated with the units of alcohol per week, but that EI was not associated with self-rated health compared to others and nor with the number of visits to family doctor the last six months. Moreover, total EI score was negatively correlated with alexithymia. Regression analyses showed that when personality was controlled EI was a significant predictor of social network size, but didn't play a role as a significant predictor for other outcomes. In sum, the finding showed that EI has limited incremental validity, only for social network size, although other studies have reported incremental validity of EI over personality for life satisfaction and loneliness (Palmer et al., 2002; Saklofske et al., 2003). More recently, findings from a study reported by Austin et al. (2010) showed that lower scores of EI were associated with higher level of stress among undergraduate students assessed at the start of the semester and before the pre-exam period, and that EI mediated the effects of personality on stress and subjective well-being.

Another field of investigation of the association between EI and psychological outcomes involves well-being in itself. Last years, substantial literature extends the concept of well-being outside the domain of ill-being state (Cavanagh et al., 2011). Indeed, the majority of previous studies were focused on the therapeutic strategies developed to increase well-being in depressive or anxious patients as well as in diverse somatic disorders, but now

efforts are allocated to ameliorate well-being in normal subjects. This recent interest comes from the development of positive psychology (Peterson, 2006; Wood et al., 2010). There are two main approaches to the study of well-being: the subjective well-being (SWB) approach and the psychological well-being (PWB) one (Ryan & Deci, 2001). First, SWB is defined in relation to life experiences that make the life either enjoyable or unpleasant. In another words, some life experiences are more favorable to induce and maintain well-being. SWB is strongly associated to individual differences related to positive and negative affect, or more particularly to the affective style described by Davidson (2004). A positive affective style means a positive bias towards life experiences and emotional experiences in which individuals allocate more automatic and controlled attention in the direction of positive life experiences and positive emotions (e.g., more recall of positive personal experiences or positive rather than negative words in a free recall test and more positive projection in the future), and this affective style is associated with higher left frontal brain activity as compared to right frontal brain activity. In contrast, individuals with a negative affective style are characterized by a negative bias towards personal life and emotional experiences, and exhibited higher right frontal brain activity as compared to left frontal one.

Second, PWB is considered as a predictor of the strength and the duration of the SWB, and comprises some characteristics that favor the SWB, as self-acceptance, life's goals, environmental mastering, autonomy, supportive relationships, and personal growth (Cloninger, 2004). Recent findings showed that PWB is a strongly predictor of SWB after controlling for personality and demographic measures (Burns & Machin, 2010).

There are four ways to consider a link between EI and well-being (Zeidner & Olnick-Shemesh, 2010). First, since individuals with higher EI are more aware of their emotion and that they are more able to regulate their emotion, they should exhibit lower distress and therefore higher well-being. Second, since these individuals report greater social skills and higher social network quality, this can help them to improve their well-being. Third, understanding our emotions and those of others induce a better environmental and social adaptation, leading to a higher well-being. Finally, individuals with higher EI experience more positive than negative emotions, which play a role to a better well-being.

Mikolajczak et al. (2010) investigated the link between affective style and EI among a sample of young adults. Affective style was assessed by the alpha power band of the electroencephalogram recorded over frontal electrodes. More precisely, an asymmetry index was created from the five frontal electrodes pairs (right/left) by subtracting the natural logarithm of the right site from the natural logarithm of the left homologous site. The results revealed that individuals with higher trait EI as assessed by the Trait Emotional Intelligence Questionnaire (TEIQue, Petrides & Furnham, 2003) had significantly higher left-sided mean frontal asymmetry scores than individuals with lower trait EI. This result was mainly explained by the factor sociability and to a lesser extent by factors self-control and well-being. Therefore, according to the hypothesis, the pattern of resting electroencephalographic activity recorded in the frontal areas was significantly associated with EI.

Zeidner and Olnick-Shemesh (2010) point out that the significant relationships found between EI and well-being measures are limited to trait EI measures and that the results obtained with ability EI measures are not conclusive. As Mikolajczak et al. (2008) argued, ability EI assess what an individual could do, and trait EI what he really do. Consequently,

knowing what is better to do doesn't allow an individual to improve his or her well-being. In their prospective study, Zeidner and Olnick-Shemesh (2010) demonstrated that ability EI is not related to either cognitive or affective facets of SWB.

### **3. Emotional intelligence in depression and anxiety**

Despite the link between EI and well-being, few studies have examined the relationship between EI and both depression and anxiety. However, a better emotional regulation should have direct implications to prevent depressive states since EI is associated with higher psychological well-being and happiness (Austin et al., 2005; Furnham & Petrides, 2003). Therefore, it could be postulated that EI should be reduced in depressive patients. Moreover, some findings among normal (non-depressed) subjects suggest such an association between depression and EI.

When developing the first measure of EI based on a comprehensive model of EI, Schutte et al. (1998) reported on a large group of university students and adults significant positive correlations between EI score and optimism, and negative ones between pessimism and depressive tendencies. Moreover, Dawda and Hart (2000) assessed the convergent validity of the Bar-On Emotional Quotient Inventory (EQ-i) and found, logically based on EI construct, that EI exhibited strong negative correlations with the Beck Depression Inventory (BDI), and more particularly the intrapersonal EQ composite score (i.e., the ability to express and experience emotions). Ciarrochi et al. (2002) showed also that subjects that can manage others' emotions seem to respond less intensively to stressful situations and exhibit less suicidal ideation, less depression, and less hopelessness. Moreover, they express more empathy and they have better social support that protects them from negative feelings. In contrast, subjects higher on emotional perception reported greater depression, hopelessness, and suicidal ideation.

This later finding implying that some facets of EI (i.e., emotion perception) could be considered as a vulnerability factor for depression was replicated in a further study examining the link between EI and depression as regards to cultural variables (Fernandez-Berrocal et al., 2005). These authors assessed the cultural influences on the relationship between EI and depression, and more particularly the influence of individualistic/collectivistic cultures and Masculinity/Femininity dimension. Indeed, individualistic cultures are characterized by greater relevance of own emotions and higher quality of life (i.e., greater positive than negative emotions), while in collectivistic cultures less attention is allocated to the emotional dimension of the individual. Moreover, feministic nations reported more emotional expression than the masculinity ones. The results showed that emotional perception was positively associated with the BDI score, but that emotional regulation was correlated negatively with depression, and that these associations were more intense in feministic countries. In contrast, the individualistic/collectivistic division didn't influence the results. In other words, emotional perception without regulation has rather negative consequences. This finding was extended to job performance (Quoidbach & Hansenne, 2009). Indeed, in this study health care quality of nursing teams was positively correlated with emotion regulation of the team, but emotion appraisal was negatively correlated with the health care quality provided by teams.

In addition to the abovementioned studies, Martinez-Pons (1997) showed that EI correlated positively with life satisfaction, but negatively with depressive symptoms, suggesting that individuals with higher EI report greater life satisfaction and fewer depressive-related symptoms than those with lower EI. Saklofske et al. (2003) also reported negative correlations corresponded to theoretical expectations between EI and social, family, and romantic loneliness as well as between EI and depression-proneness (i.e., the tendency towards developing depressive feelings), and positive correlations between EI and subjective happiness and temporal, past and concurrent life satisfaction among undergraduate students. The persistence of significant associations with these measures when personality is controlled suggests that EI displays incremental validity, implying some degree of explanatory power for these measures over and above those provided by personality trait scores. Schmidt and Andrykowski (2004) demonstrated that EI was associated with lower distress and lower avoidance of the disease among a sample of women with breast cancer, and that higher EI could act as a buffer against the negative impact of a toxic social environment. Moreover, Brown and Schutte (2006), when examining the relationship between EI and subjective fatigue among university students, demonstrated that higher EI was associated with less fatigue, probably because EI allows individuals to develop coping strategies, such as healthier mood, as well as more adaptive ways of interpreting the world and a better social support to ameliorate the effects of physical stresses. Finally, Extremera and Fernandez-Berrocal (2006) using the Trait Meta-Mood Scale (TMMS) reported that low levels of emotional clarity (i.e., understanding owns emotions) and mood repair (i.e., emotional regulation) were related to high levels of depression, but that in contrast, high level of emotional attention (i.e., amount of attention toward owns emotions) was related to depression.

Fisher et al. (2010) investigated the relationship between EI as assessed by the TMMS and both arousal and apprehensive anxieties as well as depression within an emotion-word Stroop task. In addition, Event-Related Brain Potentials (ERPs) were recorded to assess the temporal information processing of the emotional words (see Hansenne, 2006 for a review on ERPs). From a behavioral point of view, the authors reported that both clarity and repair but not attention facets of the TMMS were negatively correlated with both anxious apprehension and arousal as well as with anhedonic depression. Hierarchical regressions showed that only anxious arousal accounted for the variance in clarity and that anhedonic depression was the only predictor for the variance of mood repair. ERPs results showed that P200 amplitude (i.e., an index of automatic attention) was related to attention of emotion and to apprehensive anxiety without an effect of the valence of the word: individuals with higher scores of attention of emotion and with higher apprehensive anxiety exhibited higher P200 amplitude, meaning more attentional allocation to the stimuli. P300 latency (i.e., an index of the time of stimulus conscious processing) was related to emotional clarity and apprehensive anxiety for the negative word, meaning that individuals with higher scores of emotional clarity and with higher apprehensive anxiety processed slower negative words. Taken together, these results demonstrated that attention to emotion and apprehensive anxiety are associated with enhanced automatic processing of information, and that emotional clarity and apprehensive anxiety are associated with increased time to categorize the negative stimuli. In other words, some facets of EI in combination with apprehensive but neither arousal anxiety nor anhedonic depression modify the processing of emotional stimuli.

These studies suggest that emotional regulation dimension's of EI is the core feature of the association between EI and depression, and that emotional perception could be considered as a vulnerability factor for depression. Although these findings are robust they are observed mainly on control subjects and not on depressive ones. Therefore, one step further is to examine the association between EI and depression among major depressive disorder patients. Such study could investigate the impact of EI on depressive severity and to assess whether EI in depression is state or/and trait dependent. Hansenne and Bianchi (2009) investigated EI in a group of depressive inpatients at the beginning of the hospitalization and among a subsample of these patients when they were in a period of remission. Remission was defined by clinical assessment and by a score lower than 7 on the 17-item of the Hamilton Depressive Rating Scale (HDRS), and a score lower than 2 on item 1. EI was assessed by the modified version of Schutte's scale (Schutte et al., 1998) proposed by Austin et al. (2004). The results showed that depressed patients (time 1, beginning of the hospitalization) had lower EI total scores and lower scores for the subscale optimism/mood regulation, as well as for appraisal of emotions as compared to the control group (Table 1). As compared to the depressed state (time 1), patients in remission (time 2) had higher scores on the total EI scale as well as on optimism/mood regulation subscale (Table 2). Comparisons between patients in remission and the group of control participants showed that the two groups didn't differ for either the total EI score or the sub-scores. Stepwise regression conducted among depressed patients at time 1 showed that the HDRS score was not explained by total EI score or the sub-scores.

	Depressive Inpatients	Controls	P
<b>Optimism/Mood regulation</b>	41.1 $\pm$ 7.2	47.9 $\pm$ 5.5	<0.001
<b>Appraisal of emotions</b>	30.2 $\pm$ 7.6	38.2 $\pm$ 5.8	<0.001
<b>Utilisation of emotions</b>	19.0 $\pm$ 3.9	20.2 $\pm$ 2.9	NS
<b>EI total</b>	131.7 $\pm$ 18.1	153.2 $\pm$ 14.6	<0.001

Table 1. Comparisons between depressed patients and controls for EI

The main findings of Hansenne and Bianchi (2009) study's are that depressed patients exhibit lower total EI score and lower subscale scores on optimism/mood regulation and appraisal of emotions. Interestingly, patients in remission have higher scores on the total EI scale as well as on the subscale optimism/mood regulation as compared with their scores during the depressed state. These results suggest a state but not a trait effect because patients in remission do not show differences from controls, but when patients are ill, the total score and the scores of two subscales (i.e., optimism/mood regulation and appraisal of emotions) are lower in the clinical group than in controls. The results also show that the subscale optimism/mood regulation is more particularly dependent of the clinical state since it is modified in the remission phase as compared with the acute phase of the depressive episode. This is the first study that investigated the relationships between EI and depression and the findings could suggest important clinical implications. Since optimism/emotional regulation is the core dimension found in depression, therapeutic strategies based on EI construct could be useful as an important part of the psychological treatment. However, since the score of this dimension is only affected by the clinical state, one cannot conclude that optimism/emotional regulation is an enduring emotional deficit in remitted depression, and in consequence that this dimension couldn't be considered as a

vulnerability factor as some dimensions of personality (e.g., the dimension of harm avoidance, Hansenne & Bianchi, 2009). Nevertheless, the introduction of a therapeutic strategy designed to enhance the ability to maintain a positive mood and to reduce a negative one could be very important during the depressive episode, as suggested by Palmer et al. (2002). Training of this type might help to prevent future depressive relapses, as well as improving the quality of the clinical recovery from the depressive episode.

	Depressive Inpatients	Remitted Depressives	P
<b>Optimism/Mood regulation</b>	41.1 $\pm$ 4.8	45.4 $\pm$ 4.8	0.01
<b>Appraisal of emotions</b>	33.4 $\pm$ 7.7	34.9 $\pm$ 6.3	NS
<b>Utilisation of emotions</b>	18.6 $\pm$ 3.6	19.2 $\pm$ 3.8	NS
<b>EI total</b>	134.8 $\pm$ 18.4	144.5 $\pm$ 16.8	0.02

Table 2. Comparisons of EI between depressed patients and remitted depressive patients

Since EI is related to well-being and consecutively to self-esteem, besides to depressive states, anxiety could be logically related to lower emotion regulation and higher emotional perception. Fernandez-Berrocal et al. (2006) investigated the link between EI and anxiety in a sample of adolescents from 14 to 19 years old. The results showed that the score of the State-Trait Anxiety Inventory is negatively correlated to two facets of EI's TMMS scale; mood repair and emotional clarity. More exactly, regression analysis demonstrated that adolescents which report higher abilities to discriminate and understand their emotion, as well as higher skills to regulate their emotional state, exhibited lower anxiety independently to the level of self-esteem.

Concerning anxious disorders, some data have reported associations between several facets of EI and social phobia as well as generalized anxiety disorder (GAD). GAD is an anxious disorder characterized mainly by exaggerate worries about usual activities, and some theoretical models assume that individuals with GAD avoid emotional processing of various stimulations by the use of worries because they are unable to cope with their overwhelming emotions. In consequence GAD implies an avoidance of intense emotions through worries, which means a deficit of emotional regulation as a core feature of this disorder. Worries let the individual to process emotion in an abstract and conceptual level and avoid intense negative emotions. Indeed, empirical findings show that individuals with GAD exhibit greater emotional experience for negative but not for positive emotions than controls, and have poorer abilities to identify and describe their emotional experience, as well as to modulate their negative emotions (Mennin et al., 2005). In another words, the deficit is mainly localized in term of excessive emotion perception but without emotion awareness. In contrast, Novick-Kline et al. (2005) using a questionnaire based on emotional scenarios that elicited specific emotion with five levels of increasing difficulty found that, conversely to previous researches, individuals with GAD exhibit greater emotional awareness than controls. However, since this questionnaire requests a conceptual processing level rather than an automatic one, the results can be considered as congruent with the findings of Mennin et al. (2005). Finally, Turk et al. (2005) reported that individuals with GAD exhibited greater emotion intensity and higher negative emotion expression than individuals with social anxiety disorder.

Social phobia (SP) is mainly characterized by the fear of social situations in which the individual could be judged, leading to high level of discomfort. These subjects consider their social performance as very negative, and allocate their attention to no-relevant information that justifies their anxious state. So, avoidance strategies to cope with social anxiety are usually utilized. Several lines of evidence suggest that SP is associated to atypical responses to other's emotions, and more particularly individuals with SP exhibit higher neural responses to diverse emotional facial expressions (Amir et al., 2005; Straube et al., 2005). The deficit of emotional processing in SP is directly related to some aspects of EI. Therefore, investigating the relationship between EI and SP could add some relevant information to this disorder. It could be argued that the fear of social situations found in SP could reveal a reduced ability to interpret these situations due to a reduced EI. This hypothesis was recently investigated in a sample of SP patients (Jacobs et al., 2008). In this study, EI was assessed by the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) which considers four branches of EI; perceiving emotion, using emotion, understanding emotion, and managing emotion. In addition to the MSCEIT, the Liebowitz Social Anxiety Scale (LSAS), the Beck Anxiety Inventory (BAI), and the Global Assessment of Functioning (GAF) scale were completed by the patients. The results showed that individuals with SP exhibited MSCEIT scores within the normal range of normal scores. Moreover, as compared to control participants, SP patients reported only a trend toward lower scores of perceiving emotion, but the scores of the three other branches didn't differ from the control group. Therefore, SP seems not characterized by deficit in EI. However, correlations between LSAS and MSCEIT scores revealed interesting findings: significant negative correlations between the severity of social anxiety as assessed by the LSAS and both the perceiving and using emotions branches but not significant correlations with the two other branches (i.e., understanding and managing emotions).

These results are interesting since the significant correlations were observed on the experiential aspect of EI, and not on the strategic one, meaning that social anxiety is strongly related to lower perception of emotional information. Strategic EI involves the ability to reason about emotions and their management, and is related to semantic knowledge about emotions, and reflects more conscious processing of emotion. Therefore, these skills are not related to social anxiety. In contrast, experiential EI (i.e., using and perceiving emotions) is strongly related to social anxiety, and specifically because the severity of anxiety as assessed by the BAI doesn't explain the associations. This finding means that a core feature of social anxiety is really related to a deficit in the perception of own and other emotional states. In other words, individuals with reduced experiential EI could be more influenced by social misinterpretations, leading to an increase of social anxiety symptoms. Summerfeldt et al. (2011) confirm and extend these findings. They showed that SP is mainly characterized by a lower interpersonal EI score (i.e., understanding and identification of others' emotions) as compared to controls, but that panic disorder and obsessive-compulsive disorder didn't differ from controls. In addition they reported that intrapersonal EI (i.e., understanding and identification of owns emotions) was reduced within the three clinical groups as compared to controls, but with a greater level in SP patients.

Finally, a recent study investigated the link between social intelligence conceived as a broad concept including EI and social anxiety (Hampel et al., 2011). The authors considered social intelligence from a theoretical model that comprises five cognitive abilities: social



understanding, social memory, social perception, social flexibility, and social knowledge. A measure of three of these facets called the Magdeburg Test of Social Intelligence has been validated. These performance based measures consist of a rating of emotion perceived by the participants throughout scenario description, video or picture of social interaction. As expected, social perception, social memory, and social understanding predict negatively the level of social anxiety.

#### **4. Increasing emotional intelligence**

Interventions designed to improve EI have recently flourished particularly among children's, managers, and subjects with affective difficulties. Despite the huge expansion of EI development methods and the preliminary evidence for their effectiveness, very few EI programs are based on a solid theoretical model and even fewer have been rigorously tested (Matthews et al., 2007). Although validated programs for kids have emerged with positive outcomes (Zins et al., 2007), programs for adults have been less successful due to several drawbacks. First, these trainings lack a clear theoretical and methodological rationale and use a miscellany of techniques whose psychological bases are sometimes questioning. Second, they usually target only some EI dimensions (e.g., emotion identification but not emotion management) and add a number of skills which are not considered as parts of EI, such as problem solving, alcohol or drugs prevention, and reduction of violence. Third, when evaluations of these programs exist, they are often limited to subjective impression right after the training given by teachers for EI training at school or by the director for EI training at work, without considering the long-term effects. Finally, none of the EI trainings' evaluations to date included a control group.

Thus, in spite of the proliferation of trainings, important questions have remained unanswered: is it possible to meaningfully improve adults' EI? Do the changes last? Do they lead to subsequent alterations in personality? In addition, crucially, which benefits in terms of well-being, health, social relationships, and work success are expected from such EI improvement?

Recent studies (Nélis et al., 2009, 2011) aim to answer those questions while avoiding the shortcomings that have detracted from previous research. To this end, an 18-hour intervention was designed that focused on teaching theoretical knowledge about emotions and on training participants to apply specific emotional skills in their everyday lives. The EI intervention consisted of either three 6-hour sessions (a session on each of 2 consecutive days and the last session 2 weeks later) or six 3-hour sessions (one session per week for 6 weeks). This interval between sessions gave participants time to apply their learning in their daily life. Sessions were centered on the four core emotional competencies: identification, understanding, regulation, and utilisation (Mayer & Salovey, 1997; Saarni, 1999). Each session was designed to enhance a specific emotional competence: understanding emotions, identifying one's own emotions, identifying others' emotions, regulating one's own emotions, regulating others' emotions, and using positive emotions to promote well-being. The content of each session consisted of short lectures, role-playing games, group discussions, and work in dyads. Participants were also provided with a personal diary in which they had to daily report one emotional experience. These emotional experiences had to be analyzed in light of the theory presented in session. Finally, various readings were also proposed. The detailed outline of the sessions is presented in Table 3.

<b>Outline of EI Training Sessions</b>	
<b>Session 1: Understanding Emotions</b>	Welcome-Explanation of the sessions and introduction to the use of the personal diary Introduction to the importance of emotions and explanation of key concepts (emotions, EC) Video clips illustrating the importance of emotions Summary
<b>Session 2: Identifying Emotions</b>	Review of previous session Identifying one's emotions using three doors (i.e., physiological activation, cognitions, and action tendencies): theory and practice Identifying other's emotions through nonverbal communication Identifying other's emotions through facial expression decoding: drill with the METT program Summary and homework
<b>Session 3: Listening to Other's Emotions</b>	Review of previous session and homework Basic communication rules Active listening Empathic listening Role play on active listening Summary
<b>Session 4: Expressing Emotions to Others</b>	Review of previous session How to express emotions: facts – emotions – needs – positive solutions Role play on the expression of emotions How to manage a conflict? Theory and role play Summary and homework
<b>Session 5: Managing Emotions</b>	Review of previous session and homework Coping strategies and their effectiveness: theory and group discussion Positive reappraisal: role play and drill Mind-body connections and relaxation exercises Summary
<b>Session 6: Enhancing Emotions</b>	Review of previous session The importance of positive emotions: theory and group discussion Using the power of positive emotions: promoting positive feelings (e.g., gratefulness) Savoring: theory and exercises Summary-Questions-Evaluation

Table 3. Outline of EI training

After the in-class training, an e-mail-based follow-up was set up to optimize knowledge transfer in daily life. Participants have received two e-mails per week for 6 weeks (12 e-mails total). Each e-mail included a theoretical reminder of the notions discussed in class and a related practical exercise. E-mails were kept as short and simple as possible to increase the chances they were read and put into practice.

In the first study (Nélis et al., 2009), participants of the experimental and control groups completed measures of trait EI, emotion regulation, emotion comprehension, and personality prior to the intervention, at the end of the intervention, and 6 months later. The findings indicated that compared to the control group, the training group showed a significant improvement in emotion understanding, emotion regulation, and overall EI directly after the intervention (Figure 1). Analysis of the change dynamics further revealed that these initial changes remained stable over a 6-month period. That the effect was significant on all these three measures of emotional competences suggests that the training didn't only increase emotion-related knowledge and abilities but also, and more crucially, the use of these knowledge and abilities in daily life. Finally, the intervention led to an immediate increase in extraversion (Figure 2) as well as a progressive increase in agreeableness and a progressive decrease in neuroticism (Figure 3), which all reached significance 6 months after training. Moreover, mediation analysis revealed that these changes were partly mediated by the increase in EI. The more participants learned to understand and manage their emotions, the more sociable and emotionally stable they became. These results suggest that personality traits that have been shown to be relatively stable over time can be modified through intensive training. These findings dovetail with previous studies, demonstrating that clinical interventions can actually change person.

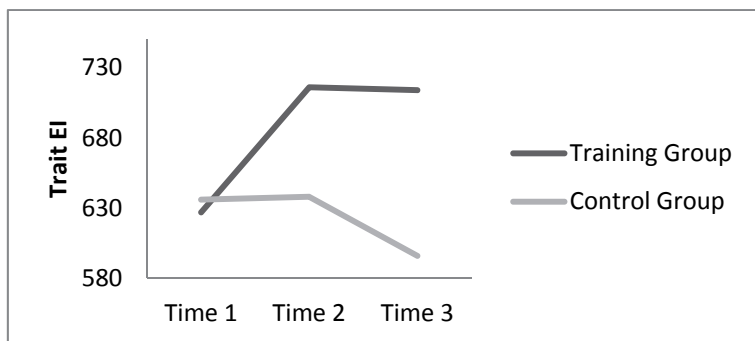


Fig. 1. Comparisons of trait EI between the training and the control group before the training (Time 1), just after the training (Time 2) and six months after the training (Time 3)

In the second study (Nélis et al., 2011), the authors examined whether changes in EI resulted in observable changes in EI correlates, namely psychological well-being, subjective health, quality of social relationships, and work success. To ensure that the benefits of the training were attributable to the changes in EI and not to unrelated factors such as conforming to the experimenter's expectations, developing a social network, becoming involved in a new activity, and so forth, the efficiency of the EI training was assessed with two control groups: one composed of people who didn't participate in the training program, and another one composed of people following an improvisation drama training. Consistent with the previous findings, results showed that EI can increase after a brief training. Moreover, that EI didn't increase in the drama improvisation and control group suggests that these improvements were specific to the training and cannot be explained by experimenter demand, expectation of improvement, or other group processes. More importantly the results showed that developing EI leads to a wide array

of positive consequences. Participants in the EI training group reported a significant improvement of their physical health, mental health, happiness, life satisfaction, and global social functioning. Likewise, employability also increased following the EI intervention, as a diverse panel of human resource professionals was more likely to hire participants after the training.

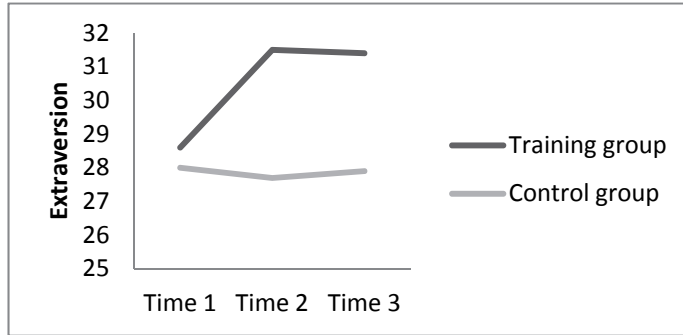


Fig. 2. Comparisons of extraversion between the training and the control group before the training (Time 1), just after the training (Time 2) and six months after the training (Time 3)

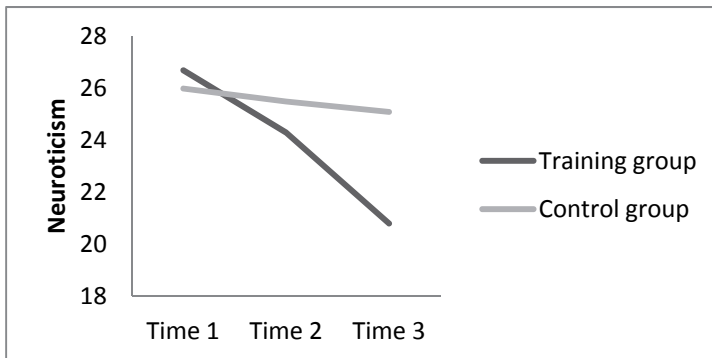


Fig. 3. Comparisons of neuroticism between the training and the control group before the training (Time 1), just after the training (Time 2) and six months after the training (Time 3)

Another recent study (Di Fabio & Kenny, 2011) reports identical positive findings of an EI intervention on different psychological characteristics. This study assessed the efficacy of a training program focused on EI among Italian high school students. The training was elaborated on an ability-based model of EI and the procedure comprised an experimental and a control group like in the Nélis et al.'s studies (Nélis et al., 2009, 2011). The training was divided into four sessions of 2 hour and a half each, weekly. Each session focused on one of the four branches of the MSCEIT (i.e., perceiving emotions, facilitating thought, understanding emotion, and managing emotion). The results showed significant increasing of the scores of the MSCEIT within the experimental group after the intervention, and also increasing scores of the Schutte's et al. (1998) scale. Moreover, the results showed that EI training decreased levels of indecisiveness and career decision difficulties.

Overall, these findings are promising because they demonstrate that, with a proper methodology relying on the latest scientific knowledge of emotion and emotional processing, EI can be enhanced, which in turn, improves people's lives. Not only can people improve their emotional competencies as adults, but learning to identify, understand, express, manage, and use emotions to one's advantage can also be beneficial for them. These findings bring hope to people who have not had the opportunity to develop their EI during their personal development. With motivation, effort, and guidance, such individuals can still improve their EI later in life, and thereby enhance their adjustment in many domains of life. Applications of this intervention in health, educational, and organizational settings offer a promising approach to developing and promoting effective life skills.

## 5. Conclusions

Theoretical models of EI are now well-validated and robust findings give to this concept a real place into the study of individual differences as personality and intelligence. Even if researches are needed to increase the knowledge of EI, there are sufficient empirical data to explore and investigate clinical applications of EI in different settings.

Indeed, EI is clearly associated to well-being related outcomes and can explain negative states like anxiety and depression. The core feature is emotional regulation. Since appropriate trainings of EI have shown promising results to promote well-being and to reduce negative states, the challenge now is to implement those training not only to enhance emotional well-being in normal individuals but also to reduce poorer emotional regulation leading to negative states like anxiety and depression.

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