

Using the Intelligence of the Experiential Mind in Decoding Facial Expressions

Ioana M. Neagoe*ⁱ

*Faculty of Psychology and Educational Sciences, Psychology Department,
University of Bucharest, Bucharest, Romania

Abstract

Introduction: *The ability to accurately perceive facial expressions can predetermine a few highly important adaptive functions, and the information acquired can promote efficient interpersonal behaviour that maximizes social outcomes. We used the concept known as ‘the intelligence of the experiential mind’, introduced by Epstein in the cognitive experiential self-theory – CEST, a theory of the mind that offers a whole new perspective in developing and understanding emotional intelligence.*

Objectives: *Our study aims at investigating and explaining to what extent does one’s experiential intelligence influence his/her capacity of decoding emotions showed through facial expressions. We have captured an already existing relationship between constructive thinking (the operationalization of the intelligence of the experiential mind), and performance in recognizing the value of emotions transmitted through facial expressions.*

Methods: *Constructive thinking, or the intelligence of the experiential mind, was assessed by the Constructive-Thinking Inventory (CTI) (Epstein, 1998). The Reading of the Mind in the Eyes test was used (Baron-Cohen et al., 2001) to measure the participants’ ability to identify emotions.*

Results: *The result of the statistical analysis showed that the adjusted R² was equal to 0.512, which means that the intelligence of one’s experiential mind accounts for 51.2 % of one’s performance in identifying the emotions rendered by facial expressions.*

Conclusions: *The originality and novelty of our study – compared to the existing literature – was the focus on empirically validating the theoretical framework regarding performance predictors in recognizing facial expressions and their meaning – with the help of a modern emotional intelligence theory, focused on automatic, preconscious intelligence, and the information the individual learns, without really being aware of learning. A possible follow-up of our study could explore the differences between the predictive value of constructive thinking and other tests/dimensions that might be performance predictors in decoding emotions rendered by facial expressions.*

Keywords: *Constructive-Thinking Inventory, CEST, emotional intelligence, experiential mind, facial expressions*

ⁱ Corresponding author: Ioana M. Neagoe, Faculty of Psychology and Educational Sciences, University of Bucharest, 90th Panduri 050663, Bucharest, Romania. E-mail: ioanamaria.neagoe@drd.unibuc.ro.

I. Introduction

The ability to accurately perceive facial expressions can predetermine a few highly important adaptive functions, and the information acquired can promote efficient interpersonal behaviour that maximizes social outcomes (McArthur & Baron, 1983).

Given the fact that the human face plays a role similar to one of a white canvas, where we project different kinds of nonverbal emotions (Ekman, 1965), the ability to read facial expressions is vital, and, according to Zuckerman, DePaulo & Rosenthal (1986), facial expressions are more important than any other nonverbal channel – such as voice inflections and body movement.

People tend to prioritize the projection of their own facial expressions before other individuals', and they often don't use enough nonverbal channels in communication (Noller, 1985, apud. Elfenbein et al., 2002). They also underestimate the role of verbal communication in comparison with decoding facial expressions (Friedman, 1987). We have been accustomed to reading facial expressions on a daily basis, therefore, we have a tendency to find cues even on neutral faces, and we also have a higher accuracy in recognizing facial expressions than any other type of expressive information (Boyatzis & Sayaprasad, 1994; Fridlund, Ekman & Oster, 1984, apud. Elfenbein et al., 2002).

More so, the information found on the human face has priority in comparison with other types of communication channels. For example, when a mixed or inconsistent message is sent through a different channel – like a negative message presented with a positive facial expression – the facial information tends to weight more (Fernández-Dols, Walbott & Sanchez, 1991; Mehrabian & Ferris, 1967, apud. Elfenbein et al., 2002).

Emotion perception is viewed as one's ability to distinguish between their own emotions and others', based on "situational and expressive indicators that have a certain degree of consensual cultural meaning in regard to their emotional significance" (Saarni, 1999, apud. Ciarrochi et al., 2003).

Some researchers explain emotion decoding as a process of being aware of another individual – more precisely, the ability to accurately decipher the meaning of an internal state, of one's beliefs, desires, and of the apparent invisible intentions of others (Allison, Puce & McCarthy, 2000). It is thought that the awareness of this mental state has at least two components: a social-perceptual process that facilitates the decoding of the mental state found in nonverbal cues (like the eyes), and a cognitive process that helps create the abstract rationalizations in regard to someone's mental state (like

taking into consideration a false belief that an individual could have) (Sabbagh, 2004; Tager-Flusberg, 2001).

Studies show that the eyes could play an important part in identifying the mental state. The ocular region is rich in information and has been heavily used in social communication (Vinette, Gosselin & Schyns, 2004). More complex changes, like muscle contraction or lowering the eyelids or eyebrows are one way of efficiently decoding emotions, based only on the ocular region of the face (Baron-Cohen, Wheelwright & Jolliffe, 1997).

Epstein (1994) advanced a theory of the mind that offers a new perspective on developing and understanding emotional intelligence. His theory states that we adapt to the environment with the help of two parallel processing systems (minds): the rational system and the experiential system. The experiential mind is a rapid system which works effortless, preconscious, concrete, holistically, through primary images intimately associated with experienced affective states. It is considered accountable for most of the unconscious, automatic learning of emotion decoding. The intelligence of the experiential mind (referred to as constructive thinking) is measured by the *Constructive-Thinking Inventory* (CTI – Epstein, 1990).

The Cognitive Experiential Self Theory (CEST)

The degree to which the automatic thinking of the experiential mind is constructive corresponds to the intelligence of the experiential mind. More precisely, constructive thinking can be defined as the degree to which a person's automatic thinking (the thinking that occurs without deliberate intention) facilitates problem solving in everyday life at a minimum cost in stress (Epstein, 1998).

According to CEST, both the experiential system and the rational system operate independently, and each functions by its own set of principles. The *cognitive experiential self theory* (Epstein, 1998) is compatible with a great variety of psychodynamic theories and learning theories. CEST introduces a new processing system, encapsulated in the experiential system – which is a substitute for or the equivalent of the unconscious system in psychoanalysis.

Thus, CEST includes an implicit theory of reality (a theory of the world, a theory of the self and connective elements). The reality theory consists of a set of schemes, organized hierarchically. At the top of the conceptual structures, there are abstract schemes, like "the self is honorable", "people deserve our trust", or "the world is a place full of goodness and order".

The experiential mind translates experience and directs behavior automatically, effortlessly, and almost instantaneously. It has evolved over millions of years and its primary task is to process information and interpret events with great rapidity in order to initiate quick, decisive action.

The experiential mind learns directly from experience. For the most part, the rational mind learns from words, numbers, and diagrams. This abstract communication is essential for solving engineering problems, for example, but it is not as helpful in coping with emotions or getting along with people. The experiential mind learns from imaginary experience as well as from real experience, it is action-oriented and thinks and acts quickly (Epstein, 1998).

Memories and emotions we try to access have a high impact on the unfolding of the following processes and behavioral tendencies. If they are positive memories and emotions, the individual immediately considers acting accordingly, in order to replicate the emotions. If they are negative, the individual automatically considers avoiding feeling the emotions, and will act accordingly. Therefore, the experiential mind works hand in hand with emotions. Our experiential mind not only interprets events, but also seeks to manage the emotions we feel (Epstein, 1998). Its fundamental purpose is to maximize pleasure and minimize pain, to produce pleasant feelings and avoid unpleasant ones. Individuals are not usually aware of this process, and often try to find a reason for certain events. Usually, they find an acceptable reason – therefore, there are usually satisfactory explanations. Unfortunately, however, the fact that experiential beliefs are inherently convincing does not make them valid. Nor does feeling something more strongly makes it any more true (Epstein, 1998).

Emotional intelligence and the intelligence of the experiential mind

Both the experiential mind and the rational mind offer multiple problem-solving methods, and each of them has its own form of intelligence. The rational mind measures intelligence with the help of an IQ, and its main objective is the ability to solve abstract problems. The intelligence of the experiential mind includes practical intelligence, social intelligence and emotional intelligence.

As explained earlier, they both have their own intelligence, due to being cognitive paths used in problem solving. One can notice that the definition of the experiential mind does not explicitly state that deliberate or conscious cognition is being used in

problem solving, so that the term itself could qualify as intelligence – therefore, intuitive or automatic problem solving is considered a type of intelligence, as well.

Intellectual intelligence is a fusion between categorically related mental abilities (including reasoning, memory, numerical and spacial abilities etc.). The global score and the pattern of individual scores are highly important, as they include strengths and weaknesses. All of the components of intellectual intelligence are actually cognitive abilities, each of them implying multiple cognitive paths. However, intellectual intelligence differs from practical intelligence, even though it is a type of intelligence, because it involves using cognition in problem solving.

It is worth mentioning that tests used in measuring intelligence are set to identify only a certain type of ability – one that is the most important in a specific activity. Other abilities and attributes as important in many situations are practical intelligence (common sense), social skills, emotional attachment, personality factors and creativity. Sternberg (2000) has done various research on practical intelligence and he has demonstrated that predicting professional success can be improved by simply adding other skills to the scales of intellectual intelligence. In one study measuring the performance of businessmen in management positions, Sternberg (2000) concluded that the scales of intellectual and practical intelligence and social skills equally contribute to the ability of the managers' problem-solving skills in regards to their business. Most importantly, taken together, the three intelligence types complete each other, and offer a suitable global prediction.

Studies on emotion have shown that emotions are not necessarily irrational or non-rational, but, actually, the correlation between reason and emotion is rather integrative and mutually supportive. Emotions that function as pattern and response assessment seem to show up over the course of evolution of the species, and, more precisely, over the course of an individual's development. Their main function is to assess the environment – if it's harmful, threatening or beneficial for the species in certain circumstances. Thus, emotions are considered to be a part of the process of reasoning and decision making (Damasio, 1994), with major influence on two levels: (1) Organizing a plan or an intention, choosing the decision and initiating action; (2) The way a plan or an intention is being executed. The emotion has an impact in both cases.

On the one hand, it influences the tendency or availability to take action, since different emotions

correspond to different patterns of action taking (anger – aggression; fear – preparing to escape rapidly from dangerous situations). The tendency to take action refers to a state of preparing to execute an action, and it involves physiological and psychological activation that happen after the emotional assessment. The tendency to take action and the preparation are natural consequences of a certain emotional assessment of the way an individual copes with the event. It is considered that these tendencies and assessments are controlled by evolution and adaptation. The decision-making refers to the process of choosing an option or a course of preferred action from a set of different alternatives. The emotional signal allows the choosing of a few alternatives, and it substantially reduces the burden of conventional computational calculus. Making a decision based on emotions ensures the fact that the emotion has meaning for the subject, by taking into consideration what really matters for the individual.

However, contemporary research on emotional control is still preoccupied with reducing the impact of the negative emotional experience through mental or behavioral control. It has been emphasized that the way an individual intensifies or reduces the experience is rather significant.

The non-adaptive potential of emotional responses is linked to the insufficient development of the human ability to monitor their own emotions and others', or of distinguishing between the two and using the information in order to synchronize their judgment and actions – more precisely, the insufficient development of emotional intelligence. This incapacity is said to have cultural roots, and the idea is supported by the classical conception, which states that emotions endanger the human's capacity to reason, by using subjectivism and reactivity. By addressing affective processes (emotions, feelings, dispositions, affects, passions) as different forms human affectivity can take, in the context of the dynamic between individual-object/environment, and by having the image of this relationship, it is, therefore, important to take into consideration the physiological ground of these processes (especially the role of the sympathetic vegetative nervous system, the hypothalamus and the cerebral cortex in coordinating affective relationships).

In this framework, we have described affective relationships (their organic modifications, affective behavior and emotional expression) and affective traits (viewed as an individual aspect which reflects the subjective impact of complex relationships that are being established between the emotion producing

object, the relationship the subject has with the object and the alterations showed at an organic level) which accompany all emotional processes, no matter what their particularities are (i.e., intensity, orientation, complexity, stability in time).

Distinct assessment scenarios	Universal facial indicators	Specific physiology
Happiness	Happiness	anger
Fear	fear	fear
Disgust	disgust/contempt	disgust
Anger	Anger	sadness
Sadness	Sadness	
	Surprise	

Table 1. List of fundamental emotions, elaborated based on theory and research on assessment scenarios of environmental stimuli, of universal facial indicator and specific physiology of emotions (Power & Dalgleish, 1999).

By synthesizing data offered by the three approaches, we can observe an assent regarding a fundamental emotional nucleus, which consists of four emotions: anger, fear, sadness, and disgust. The authors note that, in terms of their cognitive approach to the paper, these emotions have the assessment of the stimuli and the decoding process in common – which compromise the objectives and the current plans the individual has; also, they mention that the list would not be complete without 'happiness', a distinct, universal human emotional response, that helps accomplish all objectives and plans that are important for the individual at the present time.

The link between basic emotions and the corresponding facial expression is now studied by using coding methods for the action units of the human face (Ekman et al., 2002). FACS (*Facial Action Coding System*) is the main instrument used for this purpose.

Emotion	Action Units
Anger	4, 5 and/or 7, 22, 23, 24
Disgust	9 and/or 10, (25 or 26)
Fear	1, 2, 4, 5, 7, 20, (25 or 26)
Happiness	6, 12
Sadness	1, 4, 15, 17
Surprise	1,2

Table 2. List of fundamental emotions and action units specific for each facial expression (Ekman et al., 2002)

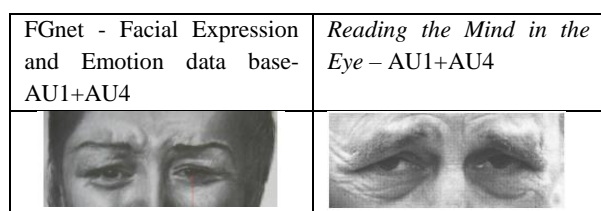


Figure 1. Comparison between facial expressions of sadness according to FACS coding system of FGnet images – *Facial Expression and Emotion* (<http://www.mmk.ei.tum.de/~waf/fgnet/feedtum.html>) and *Reading the Mind in the Eye* (Baron-Cohen et al., 2001), used in our study.

As per Parkinson (1996), this conceptualization of emotions as internal, personal actions, involves two types of consequences in regards to the research outline: (1) It is supposed that emotions could be better studied from a physiological or cognitive perspective, since they are considered to be located in the body or mind of the individual that is experiencing them; (2) It is considered that the act of communicating emotions is a secondary process, dependent on the initial emotional experience of the individual, in the context of which the emotional experience is perceived as a deeply private and intimate experience. By knowing the role emotions play in the interpersonal and social experiences of the individual, a series of theoreticians have brought to light a concept, which states that emotions are expressions of the anticipated, real, imagined or recalled impact of social situations (Kemper, 1978, apud. Parkinson, 1996).

From the perspective of a social phenomenon, emotions express experiences with relational meaning (rather than personal meaning). People never translate situations in an abstract way, nor do they isolate them from their social or relational context. Instead, during the assessment stage (mentioned by cognitive theories), interpersonal factors get involved, and they determine the person's choice – either to approach or to withdraw. Thus, Parkinson (1996) analyzes the following social variables: other people, as significant objects that belong to the existential environment of every individual (what the individual does, says, and the effects his/her actions have on an emotional level, depending on the relationship the individual has); the culturally defined frame of reference – value systems incorporated within the culture and social practices used for interacting with others; for example, people with different education feel different emotions regarding culturally and socially shaped values (fortune, reputation, freedom); expectancies and norms for self-expressing emotions – social conventions, rules and norms that dictate how an

individual can express emotions and if they are manifested in an adequate/inadequate manner.

Emotions are built and expressed within social interactions, in a specific cultural context, defined by shared norms and conventions, regarding adequate or inadequate expression of one's feelings, in different situations. Therefore, there are no two identical emotional experiences expressed in different environmental conditions, and/or at different times, during an individual's lifespan, nor at different individuals.

Gross (1999) argues the distinction between two categories of emotionally adaptive functions:

(a) Intra-individual adjustment level functions:

1. They shape cognitive styles depending on situational requirements;
2. They facilitate the decision-making process;
3. They prepare the individual for rapid motor reactions;
4. They promote learning.

(b) Inter-individual (social) adjustment functions:

1. They provide information for behavioral purposes;
2. They offer indications in regards to the nature of the stimuli;
3. They allow the following of behavioral complex scenarios.

The ability to accurately perceive faces serves important adaptive functions. Information acquired from facial expressions promotes efficient interpersonal behavior that can help maximize social outcomes (McArthur & Baron, 1983). Although the ability to perceive emotion from all channels — and particularly, the face — shows reliable individual differences (Buck, 1976; Rosenthal et al., 1979), the ability to read facial expressions is vital, and thus a crucial component of emotional intelligence.

Attempts to correlate generic emotion recognition and personality traits have been successful most of the time (Rosenthal, et al. 1979); Snyder (apud. Elfenbein et al., 2002) found a small tendency, which depends on the specificity of the faces of participants who monitor themselves. This tendency involves focusing on contextual opportunities and recognizing facial expressions with a better accuracy. Nowicki and his colleagues (apud. Elfenbein et al., 2002) discovered that an internal locus of control predicts a higher accuracy in recognizing facial expressions. Also, Matsumoto and his

research team (apud. Elfenbein et al., 2002) found that personality traits highlighted in Big-Five – Openness, Conscientiousness and Extraversion – are good predictors of higher accuracy levels. Holistically, these findings suggest that individuals who are predisposed to locate contextual and social cues, are better at recognizing facial expressions at other individuals.

Family context affects recognizing facial expressions in other ways, too. Children who grow up being exposed to violence have lower abilities in recognizing positive facial expressions. Researchers suggest that these children have not yet learned to recognize such facial expressions, because they don't see them very often. The utility, in this case, plays a fundamental purpose in learning facial expressions. The experiential mind uses the information available and keeps what is useful. It also uses its communication skills, and it is considered, by CEST, to have a major role in automatic learning of nonverbal cues. Therefore, it makes sense that, as the experiential mind self-perfects, the individual becomes motivated by its beneficial results.

II. Methods

Objectives

The main objective of the study was to explore the link between the intelligence of the experiential mind (*constructive thinking*) and the performance on emotional face expression recognition. We expect that the intelligence of the experiential mind assessed by the global of the *Constructive-Thinking Inventory* would predict higher performance in emotion recognition. We also expect that *naïve optimism*, a dimension that encapsulated both constructive and destructive thinking patterns would predict, albeit to a lesser extent, a higher performance in emotion recognition.

Variables

Constructive thinking, or the intelligence of the experiential mind, as assessed by the *Constructive-Thinking Inventory* (CTI), was used as a predictor. The outcome variable was the performance in facial expression recognition, measured through *Reading the Mind in the Eyes*.

Sample

A number of 110 undergraduate potential participants were contacted at three major universities: the University of Bucharest, Faculty of Psychology and Education Sciences, the Bucharest University of Economic Studies and University Politehnica of Bucharest. There were no exclusion criteria, and

participants would self-select themselves for participation, yielding thus a convenience sample.

In total, 60 students agreed to participate and completed all study materials. Out of the sample, 41 participants were female and 19 were male. Participants' ages ranged between 18 and 24 years with a mean of 22.

Instruments

The *Reading the Mind in the Eyes* test was used to measure participants' ability to identify emotions (Baron-Cohen et al., 2001). The first version of the test, developed by Baron-Cohen and Jolliffe (1997) was originally introduced as an advanced "theory of mind" test for high-functioning adults with autism and Asperger syndrome. Theory of mind reflects an individual's ability to empathize with someone else's mood, state and feelings. People with autism or Asperger syndrome face significant impairment both in theory of mind and emotion recognition (Baron-Cohen & Jolliffe, 1997). A revised version of the RMET for normal adults was introduced in 2001 (Baron-Cohen et al., 2001, Romanian translation by Geangu, 2003). This later version of the test was used in the present study. The test uses items consisting of 36 photographs of the eye regions, of different Caucasian individuals. The eye regions captured in the photos are 5.2 inches. Each photo is presented along with four words, describing mental and emotional states. Participants have to choose the word that best matches the emotion being displayed. For each correct answer, participants score 1 point.

In order to examine *constructive thinking*, Epstein (1998) developed the *Constructive Thinking Inventory* (CTI), which contains the *Global Constructive Thinking* scale, along with six main scales: *Emotional Coping*, *Behavioral Coping*, *Categorical Thinking*, *Personal-Superstitious Thinking*, *Esoteric Thinking* and *Naïve Optimism*. Each scale is divided into several subscales that provide a more detailed picture of how a person obtains a particular score on a main scale. All the main scales, with the exception of *Naïve Optimism*, are significantly correlated with each other, and are combined into a composite main scale. Thus, the CTI provides scores at three levels of generality, a global scale, and six main scales that are further divided into subscales. Through extensive research, the CTI has been demonstrated to be a reliable and valid measure of the constructive and destructive thinking in which people tend to automatically engage. It is important to recognize that, unlike tests of emotional coping, the CTI has been administered to large samples of people and constructed according to recognized psychological principles of test construction.

All scales have high internal consistency and are good predictors for a large number of criteria closely related to success in life. Favorable CTI scores have been associated with high workplace and school performance, leadership aptitudes, the ability to cope with stress, emotional regulation, physical wellbeing, and the absence of alcohol and drug abuse.

The *Constructive Thinking Inventory* was designed to assess the intelligence of the experiential system. The experiential system (as contrasted with the rational system) is preconscious, emotional, fast, and emphasizes imagery. The CTI was theoretically motivated by the *cognitive experiential self theory* (CEST; Epstein, 1998) and its name stems from Epstein's observation that the intelligence of the experiential system is captured by individuals' tendency to be *constructive thinkers*. Constructive thinking involves using the experiential system to solve problems, in adaptive ways, that also minimize stress. The constructive components of the experiential system include: *global constructive thinking, emotional coping, behavioral coping* and their respective subscales as operationalized in the *Constructive-Thinking Inventory* (CTI; Epstein, 2001). The destructive components are: *personal superstitious thinking, categorical thinking, esoteric thinking, and naïve optimism* (Epstein, 2001). The global constructive thinking score is a composite score, obtained by summing the constructive dimensions to a recalculated reversed score on the destructive dimensions. This global score does not include *naïve optimism*, which has both positive and negative features (e.g. unrealistic thinking vs. positive thinking). In the present study, the 30 item CTI short version (Epstein, 1998) was used.

III. Results

Descriptive statistics for the psychological variables assessed in this study is presented in table 3.

Measures	Mean	Median	SD	Range	Min	Max	Skewness	Kurtosis
Constructive thinking	89.38	89.00	9.61	41	67	108	-0.06	-0.49
Naïve optimism	16.30	16.00	2.75	12	10	22	0.08	-0.55
Emotion recognition	26.67	26.50	3.64	15	19	34	-0.04	0.10

Table 3. Descriptive statistics for psychological variables

A simple regression model was fitted in order to explore the predictive power of constructive thinking (the intelligence of the experiential mind) on facial expression recognition. The required conditions for simple linear regression analysis had been met with the residuals being normally distributed, and their variance being constant. No outliers or influential points have been detected. All analyses were conducted using IBM SPSS v.16.

The results were statistically significant ($F(1, 58) = 62.889, p < 0.001$). The regression equation for predicting emotion recognition performance was equal to $2.261 + 0.273 * CTI$ Global Score. The adjusted R^2 was 0.512, meaning that 51.2% of the variance in emotion recognition could be explained by the intelligence of the experiential mind. Thus, the first hypothesis was supported by the data.

Table 4. Regression model

Model	R	R ²	Adjusted R ²	Std. Err. of B Estimate	Std. Err.	Beta
1 (CTI)	.721	.520	.512	2.542	.273	.034

a. Predictors: (Constant), *Constructive thinking*

b. Dependent variable: Emotion recognition performance

Table 5. ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	406.466	1	406.466	62.889	.000
Residual	374.867	58	6.463		
Total	781.333	59			

a. Predictors: (Constant), *Constructive thinking*

b. Dependent variable: Emotion recognition performance

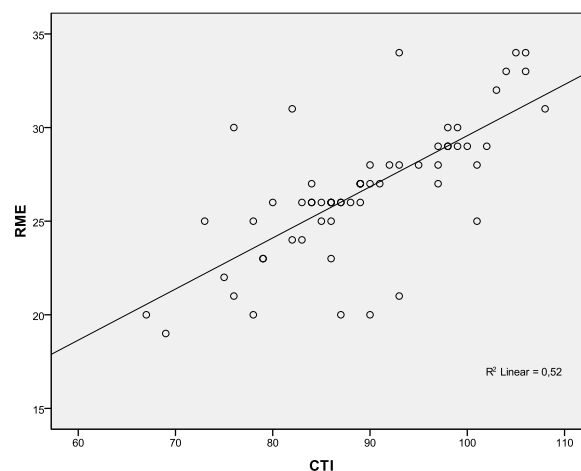


Figure 2. Scatter plot of CTI and RME scores and fitted regression line

Considering that the association demonstrated by the Pearson coefficient is negligible, and the adjusted R^2 coefficient indicates only a small tendency of negative correlation, and is not statistically significant, we conclude that the performance in decoding emotions through facial expressions cannot be explained by *Naïve Optimism*.

The relationship between *naïve optimism* and emotion recognition performance was weak and non-significant (Pearson's $r = .09, p > .05$) and we are required to retain the null hypothesis. Therefore, the second hypothesis of our study wasn't supported by the data.

IV. Conclusions

The ability to accurately perceive faces serves important adaptive functions. Information acquired from facial expressions promotes efficient interpersonal behavior that can help maximize social outcomes (McArthur & Baron, 1983). Although the ability to perceive emotion from all channels — and particularly, the face — shows reliable individual differences (Buck, 1976; Rosenthal et al., 1979), the ability to read facial expressions is vital, and thus a crucial component of emotional intelligence. Unlike other studies that focus on the rationalization of emotional response, the purpose of this study was to capture the relationship between the preconscious wisdom, grounded in the wider construct of emotional intelligence, and the ability to decode emotions rendered by facial expressions. This has been made possible by using the concept of ‘intelligence of the experiential mind’, introduced by Epstein (1994), in his *cognitive experiential self theory* – CEST, a theory of the mind which offers a whole new perspective on understanding and enhancing emotional intelligence.

Thus, the main purpose of our study consisted in identifying psychological predictors, within the wider concept of emotional intelligence, of better performance in recognizing the meaning of emotions transmitted through facial expressions, and, not lastly, in validating the predictive values of the variables that play a role in performance.

We aimed to capture an already existing relationship between *constructive thinking* (the operationalization of the intelligence of the experiential mind) and the performance in recognizing the value of emotions transmitted through facial expressions. The originality and novelty of our study – compared to the existing literature – was focusing on the empirical validation of the theoretical framework, regarding performance predictors in recognizing facial expressions and their meaning – with the help of a modern emotional intelligence theory, focused on automatic, preconscious intelligence, and the information the individual learns, without really being aware that he/she has learned it.

Our main objective has been accomplished, as a result of statistical analysis, with an adjusted R^2 equal to 0.512, which means that the intelligence of one’s experiential mind accounts for 51.2 % of one’s performance in emotional decoding of facial expressions, an equation that can accurately predict the performance in recognizing the significance of emotions transmitted through facial expressions, based on the intelligence of the experiential mind’s coefficient.

As Mayer, DiPaolo & Salovey (1990) suggest, emotional intelligence comprehends a full set of correlated abilities and processes. The authors also took into account the ability to decode emotions from facial expressions. MSCEIT (Salovey et al., 2001) and other recent tests incorporate measurements that use facial expressions corresponding to emotions. Even though the relationship between the two is still being debated, a possible follow-up on our study could explore the differences between the predictive value of constructive thinking and other tests or dimensions which might be performance predictors in decoding emotions through facial expressions.

References

- Allison, T., Puce, A., & McCarthy, G. (2000). Social perception from visual cues: Role of the STS region. *Trends in Cognitive Sciences*, 4, 267–278.
- Baron-Cohen, S., & Jolliffe, T. (1997). Another advanced test of Theory of Mind: Evidence from very high functioning adults with Autism or Asperger Syndrome. *Journal of Child Psychology and Psychiatry*, 38(7), 813–822.
- Baron-Cohen, S., Wheelwright, S., & Jolliffe, T. (1997). Is there a “language of the eyes”? Evidence from normal adults, and adults with autism or Asperger syndrome. *Visual Cognition*, 4, 311–331.
- Baron-Cohen, S., Wheelwright, S., Hill, J., Raste, Y., & Plumb, J. (2001). The “Reading the Mind in the Eyes” test revised version: A study with normal adults, and adults with Asperger Syndrome or high-functioning Autism. *Journal of Child Psychology and Psychiatry*, 42(2), 241–251.
- Boyatzis, C. J., & Satyaprasad, C. (1994). Children’s facial and gestural decoding and encoding—relations between skills and with popularity. *Journal of Nonverbal Behavior*, 18, 37–55.
- Buck, R. (1976). A test of nonverbal receiving ability: Preliminary studies. *Human Communication Research*, 2, 162–171.
- Damasio, R. (1994). *Descartes’ error: emotion, reason, and the human brain*. New York: G. P. Putnam’s Sons.
- Ekman, P. (1965). Differential communication of affect by head and body cues. *Journal of Personality and Social Psychology*, 2, 726–735.
- Ekman, P., Friesen, W., Hager, J. (2002). *FACS: Manual*, CD-ROM Edition.
- Elfenbein, H. A., Marsh, A., & Ambady, N. (2002). Emotional intelligence and the recognition of emotion from facial expressions. In L. F. Barrett & P. Salovey (Eds.), *The Wisdom in Feeling: Psychological Processes in Emotional Intelligence* (pp. 37–59). New York: The Guilford Press.
- Epstein, S. (1994). Integration of the cognitive and the psychodynamic unconscious. *American Psychologist*, 49, 709–724.
- Epstein, S. (1998). *Constructive thinking: The key to emotional intelligence*. Westport, CT: Praeger Publishers.
- Epstein, S. (2001). *Constructive Thinking Inventory: Professional Manual*. Lutz, Florida: Psychological Assessment Resources, Inc.
- Fernández-Dols, J., Wallbott, H., & Sanchez, F. (1991). Emotion category accessibility and the decoding of emotion from facial expression and context. *Journal of Nonverbal Behavior*, 15, 107–124.
- Fridlund, A. J., Ekman, P., & Oster, H. (1984). Facial expressions of emotion. In L. F. Barrett & P. Salovey (Eds.), *The Wisdom*

- in Feeling: Psychological Processes in Emotional Intelligence*. New York: The Guilford Press, 37–59.
- Friedman, H. S. (1978). The relative strength of verbal versus nonverbal cues. *Personality and Social Psychology Bulletin*, 4, 147–150.
- Geangu, E. (2003) *Citirea Minții din Priviri: traducere (Reading the Mind in the Eyes - translation)* – www.autismresearchcentre.com/arc_tests, accessed on 02.12.2012
- Gross, J.J. (1999). Emotion Regulation: Past, Present, Future. *Cognition and Emotion*, 13, 551–573.
- Kemper, T. D. (1978). Toward a sociology of emotions: Some problems and some solutions. *The American Sociologist*, 30–41.
- Mayer, J. D., DiPaolo, M., & Salovey, P. (1990). *Perceiving affective content in ambiguous visual stimuli: A component of emotional intelligence*. *Journal of Personality Assessment*, 54, 772–781.
- McArthur, L. Z., & Baron, R. M. (1983). Toward an ecological theory of social perception. *Psychological Review*, 90, 215–238.
- Mehrabian, A., & Ferris, S. R. (1967). Inference of attitudes from nonverbal communication in two channels. *Journal of Consulting Psychology*, 31, 248–252. In L. F. Barrett & P. Salovey (Eds.), *The Wisdom in Feeling: Psychological Processes in Emotional Intelligence*. New York: The Guilford Press, 37–59.
- Noller, P. (1985). Video primacy—A further look. *Journal of Nonverbal Behavior*, 9(1), 28–47.
- Parkinson, B. (1996). Emotions are social. *British journal of psychology*, 87(4), 663–683.
- Power, M., Dalgleish, T. (1999). *Cognition and Emotion. From Order to Disorder*. Hove: Psychology Press.
- Rosenthal, R., Hall, J. A., DiMatteo, M. R., Rogers, P. L., & Archer, D. (1979). *Sensitivity to Nonverbal Communications: The PONS Test*. Baltimore, MD: The Johns Hopkins University Press.
- Saarni, C. (1999). The development of emotional competence. New York: The Guilford Press. In Ciarrochi, J., Chan, A. Y. C., & Bajgar, J. (2003). *Measuring emotional intelligence in adolescents*. *Personality and Individual Differences*, 31, 1105–1119.
- Sabbagh, M. A. (2004). Understanding orbitofrontal contributions to theory-of-mind reasoning: Implications for autism. *Brain and Cognition*, 55, 209–219.
- Sternberg, R. J. (2000). *Handbook of intelligence* (Ed.). Cambridge, England: Cambridge University Press.
- Tager-Flusberg, H. (2001). A reexamination of the theory of mind hypothesis of autism.
- Vinette, C., Gosselin, F., & Schyns, P. G. (2004). Spatio-temporal dynamics of face recognition in a flash: It's in the eyes. *Cognitive Science*, 28, 289–301.
- Zuckerman, M., DePaulo, B. M., & Rosenthal, R. (1986). Humans as deceivers and lie detectors. In P. D. Blanck, R. Buck, & R. Rosenthal (Eds.), *Nonverbal communication in the clinical context*. University Park, PA: Pennsylvania State University, 13–35.