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Obrazni izrazi kot zrcalo notranjega čustvenega stanja

Facial expressions as reflection of inner emotional state

POVZETEK

Sposobnost prepoznavanja obraznih izrazov že od nekdaj zbuja veliko pozornosti in zanimanja. Obraz razkriva mnogo namigov glede kompleksnega čustvenega izkustva posameznika, kjub temu pa lahko obraz prikrije prav toliko kolikor lahko tudi razkrije. V članku raziskujem široko področje, ki predpostavlja, da so obrazni izrazi zanesljivi indikatorji trenutnega čustvenega izkustva in se posvečam raziskovanju hipoteze o tem, da lahko njihova natančna prepoznava vpliva na izboljšanje socialnih interakcij ter razumevanje opazovanja psihoterapevtskih seans. Na naslednjih straneh preučujem vprašanje univerzalnosti obraznih izrazov ter pomembnost kulturnega vpliva na neverbalno ekspresijo. Razprave o socialnem vplivu na obrazno izraznost še danes ostajajo aktualna tema mnogih znanstvenih diskusij. Vsekakor natančna interpretacija obraznih izrazov vključuje obsežno interdisciplinarno znanje s področij psihologije, nevrobiologije in kulturne antropologije.

KLJUČNE BESEDE

obrazni izraz, univerzalnost obraznih izrazov, prikrivanje, mikro-izrazi, psihoterapija

ABSTRACT

Throughout history, the interest in ability of recognizing diverse facial movements has not disappeared. Face conveys many clues about the complexity of personal emotional state; however, as much as a face can reveal, it can also hide and cover. In this article I explore the argument that facial expressions are reliable indicators of an on-going emotional experience, and that their precise recognition can be used as a tool for improvement of social interactions and observations of psychotherapeutic sessions. In the next pages I will address the controversial question whether some facial expressions are universal and examine the power of cultural influence on facial behaviour. Discussions about social influence on facial expressiveness have remained a subject of disputes in many scientific fields. There is no doubt that an accurate interpretation of facial behaviour requires extensive interdisciplinary knowledge from fields such as psychology, neurobiology and cultural anthropology.

KEY WORDS

facial expression, universality of emotional expressions, deception, micro-expressions, psychotherapy

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Introduction

"Emotion at one level of analysis is neuromuscular activity of the face."
(Izard, 1971, p. 188)

Since we are born, faces play a significant role in our lives. Facial recognition connects an infant with others and more importantly, takes a crucial part in creation of attachment between a mother and an infant. Newborns seem to show preference to their mother's face in just two months after they are born (Maurer & Barrera, 1981); furthermore, some studies (Pascalis& de Schonen, 1994) suggest that this preference is shown much earlier, as soon as just a few days after birth. Another interesting fact is that in compliance with intersubjectivity theory (Trevarthen& Aitken, 2001), children modulate their emotional states in accordance with their mother's affective facial expression. In this way the meaning of facial recognition and facial expressions remains of a great importance throughout our lives.

There are 43 muscles in a human face and their contractions produce facial movements (Murtaza, Sharif, Raza& Shah, 2013), which are primarily used to communicate with others and to express emotions. Recognition of emotional states through facial expressions is a part of general emotional intelligence, which is closely related to person's capability of experiencing feelings of empathy. Interestingly, some mental disorders heavily affect patient's ability to recognize the meaning of facial emotional expressions and simultaneously their ability of empathy. Recognition of subtle emotional messages through facial movements is a key of effective communication and comprehension of others, not only in everyday situations, but also in psychotherapeutic sessions.

Ekman & Friesen (2003) see a face as a multi-message system which provides us with various types of information. This information includes rapid, slow and static facial signals. Ekman & Friesen describe rapid facial signs as very quick facial movements and emblems, which are gestures or agreed nonverbal movements. They describe slow facial signs as changes in the facial appearance over time, which include wrinkles and changes in skin texture. The third type of facial signalling, static facial signs, includes permanent characteristics, such as physiognomy of a face and facial features that remain the same over time (Ekman & Friesen, 2003). Generally, we do not look at every facial sign isolatedly, but we rather make an integrated perception of the person we are speaking to, composed of all accessible information. The main focus of this article is the question whether facial expressions are reliable indicators of genuine emotional experience. In the next pages I will examine conflicting disputes on universality of facial expressions and explore different aspects about concealing facial behaviour caused by emotional triggers.

Darwin's theory on universality of emotional expressions and its opponents

There has been a lot controversy and confusion in the field of science regarding the question whether certain facial expressions are innate and universal rather than only socially learned. The opponents of the hypothesis about universality of facial expressions argue that facial movements are largely influenced by the socio-cultural environment. They are questioning the accuracy of studies made to prove universality of facial expressions and believe that they are conditioned.

On the other side, many scientists claim that universal displays of emotions do exist and are supporting this statement by various researches.

Charles Darwin was one of the first scientists who had carefully observed and recorded non-verbal behaviour. He captured the findings in his book, The Expression of Emotion in Man and Animals (Darwin, 2005; original work published in 1872). According to Barret (2011), Darwin's work is extremely important because he made a significant observation that some facial and bodily movements were developed throughout time as a result of our evolution. Darwin observed facial expressions that are typically associated with emotions and hypothesized that they must have an evolutionary purpose. Emotions which cause facial expressions that are usually recognized as universal are surprise, fear, disgust, sadness, happiness, and anger (Darwin, 1872; Ekman and Friesen, 1976). Elfenbein & Ambady (2003), support Darwin's claim and write that some emotional expressions are without doubt universal. They explain that a good example of this suggestion is watching foreign films. Even if we do not understand a word the actors are saying, we can easily recognize the meaning of emotions, expressed on their faces.

Ekman and Friesen (1967) made an assumption that the universality exists in the connection between movements of the facial muscles and specific emotions. The question whether universal facial expressions really exist has been a hot topic among scientists. Universalists are convinced that certain facial movements are connected with specific emotions in all human beings. Others deny universality of emotional expressions and claim that they are not innate but rather socially learned. Moreover, they believe it is almost impossible for one emotional expression to have the same meaning in two different cultures (Ekman, 1972).

The socio-cultural aspects of emotions were largely ignored until recently when several steps have been made towards conceptualization of emotions that allows the findings of cross-cultural differences (Mesquita& Walker, 2003). According to Ekman (1970), the cultural specific view which states that facial behaviours are associated with emotion through culturally variable learning, was strongly supported by Klineberg's (1938) descriptions of how the facial behaviours described in Chinese literature differed from the facial behaviours associated with emotions in the Western world. Anyhow, Kleinberg has recently admitted that the axiom "what shows on the face is written there by culture" is not entirely true, and that there are certain types of expressive behaviour that can be found in all cultures around the world (Ekman, 1970). One of the most influential writers arguing for the culture specific view on facial expressions of emotion is by all means Birdwhistell (Ekman, 1972). Ekman (1972) noted that Birdwhistell never admitted the possibility of universality of facial expressions but maintained his central claim that facial and body behaviour are like language, with the same types of units and levels of organization as spoken language, and can therefore be appropriately studied by linguistic methods.

Many scientists take an intermediate position (e.g., Ekman, 1972; Fiske, Kitayama, Markus, &Nisbett, 1998; Fridlund, 1994; Mesquita, Frijda, & Scherer, 1997; Rosenthal, Hall, DiMatteo, Rogers, & Archer, 1979) which recognizes both, universal and cultural influence in the expression of emotion. One of the noticeable intermediate approaches is neuro-cultural theory which was created by Paul Ekman (Ekman, 1972), based on Tomkins's earlier work on primary affects (Tomkins & McCarter, 1964). Ekman (1968) and Friesen (Ekman& Friesen, 1967, 1968, 1971) have called it neuro-cultural, because it connects two different sets of determinants of facial expressions; the first is responsible for universal expression of emotion and the second for cultural influence. Ekman (1972) explains that neuro refers to the facial affect program which is the relationship between particular emotions and the firing of a specific pattern of facial muscles.

Cultural, on the other hand, refers to most of the events which trigger emotion, to the rules about controlling the expression of emotion and to the consequences of emotional expression in a specific society.

Parkinson (2005) noted that cultural learning partly determines the range of "elicitors" that will trigger the emotion and may moderate the impact of facial affect program impulses on actual facial movements. It is important to take into account that in social situations people use conscious "management techniques" (Ekman, 1972, p. 225) called display rules, to control and override the operation of the universal facial affect program (Elfenbein & Ambady, 2003). Siegler (2006) describes display rules as social group's informal norms about when, where, and how one should express emotions. These rules have a major influence on the emotional expression of people from any culture depending on what that particular culture recognizes as acceptable or unacceptable expression of emotion (Matsumoto, Kasri, & Kooken, 1999). According to Ekman (1992), display rules can modulate facial behaviour in different ways: intensification or attenuation of a felt emotion, neutralization of a felt emotion, and masking a felt emotion with an expression associated with a different emotion. Moreover, Ekman & Friesen (2003) described the term »personal display rules« as expression codes, learned in the context of a particular family or individual experience.

The controversy in this field still exists and so do various definitions of what exactly is meant by universal facial displays of emotion. Ekman (in Darwin, 1998) explains that this subject is still an actual dispute, which includes different views and interpretations of Charles Darwin's great work on facial expression of emotion. Neuro-cultural theory recognizes both, biological and socio-cultural influence on human emotions and their expressions. It only makes sense that we should consider and connect both aspects, since we know that it is not only our biology nor our environment that shapes our personality, but a fusion of many impacts. Why would it be any different when it comes to facial expressions?

Genuine and voluntary facial behaviour

Throughout time, scientific researches as well as our common sense have convinced us that human face is conveying at least some information about a personal state of being. Interestingly, we can find a God's quote in the Bible saying: "My fury shall come up in my face" (Ezekiel 39:18), where he refers to emotional expression of anger. Facial expressions are the essential component of interpersonal, non-verbal communication. According to Batty & Taylor, facial behaviour is a way of communication that is much faster than language. Facial expressions help us instantly understand different behaviours of others and can therefore be used as a powerful tool for effective communication (Batty & Taylor, 2003).

When we talk about facial expressions, we have to encounter the fact that there are different views on their meaning and function. As stated by Darwin, there are some emotional expressions that are widely recognized in different cultures and are therefore universal. Anyhow, not all facial expressions are universal and innate. According to Freitas-Magalhães (2011), the literature confirms the distinction between two types of expressions, genuine and voluntary facial expression. When we are experiencing a genuine emotion, we usually do not think about the message we are conveying with our face. However, when producing a voluntary facial expression, we become much more aware of our expression, because of the conscious attention we bring into making a voluntary facial expression.

Korb, Grandjean and Scherer (2008) observe that some facial expressions are part of emotional reactions. They add that humans can voluntarily produce a certain emotional expression without having the corresponding underlying feeling and that they can voluntarily modify (e.g. reduce or increase) their spontaneous expression in reaction to an emotional event. In addition, they note that most of us are, at different degrees of mastery, able to voluntarily pose – even without experiencing the corresponding underlying emotion – facial expressions that are very similar to those that are typically triggered by emotions, so called posed emotional facial expressions. They (Korb et al., 2008) state that from a theoretical point of view, facial expressions can be either totally spontaneous, i.e. triggered by an emotional stimulus, and free of any form of (voluntary) control, or the opposite, i.e. produced on a 100% voluntary basis, without being influenced by any emotion at all. However, they believe that such polarisation is unnatural and that naturally occurring facial expressions are more likely to be made out of blends of spontaneous and deliberate behaviours.

Ekman, Hager & Friesen (1981) name three types of facial expressions; spontaneous, simulated and gestural. They describe spontaneous emotional expressions as those that appear quickly, apparently without choice, although they may be changed by choice or habit. Some of them are considered to be inborn because of resemblances across cultures and among some primates. A simulated emotional expression is a deliberate attempt to appear as if an emotion is actually being experienced. Most people who see it believe they are seeing a spontaneous emotional expression and not a simulation. A simulation is used either to camouflage the fact that no emotion is felt or as a mask to cover one feeling with the appearance of another. Ekman et al. (1981) agree that a gestural emotional expression mirrors an actual emotional expression, but it differs sufficiently in appearance so that it is obvious that the person does not feel that emotion at this moment.

Galati, Scherer & Ricci-Bitti (1997) and Naab & Russell (2007) explain that both, voluntary and involuntary facial expressions originate from the contraction of muscles and signals from the brain, and add that it is often difficult to distinguish between them. It is interesting, as stated by Korb et al. (2008), that emotional and voluntary facial expressions seem to arise, at least partly, from different neural circuitries. According to Rinn (1984), voluntary facial expressions travel from primary motor cortex through pyramidal system and are coincidentally cortically related. Moreover, cortically related expressions are considered to be made consciously and are usually associated with social display rules. He adds that emotional expression originates from the extrapyramidal motor that involves subcortical nuclei and for this reason, genuine emotions are not associated with the cortex and are often displayed unconsciously. Rinn explains that this is demonstrated in infants before the age of two, when they display distress, disgust, interest, anger, contempt, surprise and fear. Infants' displays of these emotions indicate that they are not cortically related.

It is clear that there are physiological and psychological differences in formation of genuine and voluntary facial movements. An interesting example of recognizing a sincere expression of joy was made by French neurologist and anatomist, Duchenne de Boulogne. Over a century ago, Duchenne de Boulogne (1990/1862), categorised different types of smiles (Gunnery, Hall & Ruben, 2012). Ducheene describes that when a smile is genuine, we can detect activity in the muscles surrounding the eyes, called orbicularis oculi, and when the smile is simulated, we can only detect activation of the muscle called zygomaticus major, which is positioned in the cheeks (Mehu, Little & Dunbar, 2007). Gunnery et al. (2012, p. 1) nicely described a genuine or a so called Ducheene smile: "The Duchenne smile, typically called an enjoyment or genuine smile, is often said to be a spontaneous reflection of concurrent positive affect." In a non-Duchenne smile

or in a so called fake, false, social smile, the activation of muscles around the eyes is lacking (Ekman, Davidson & Friesen, 1990; Frank, Ekman, & Friesen, 1993; Gunnery et al., 2012).

To conclude, voluntary facial expressions seem to be made consciously while emotional facial expressions are spontaneous and made unconsciously. It is extremely hard to conceal genuine emotional impulses; however, with conscious, voluntary control it is possible to neutralize and modify our genuine facial behaviour. We learn to mask our emotions in early childhood through the process of socialization in which we are confronted with the existing social standards. During my research I started wondering about the authenticity of our emotional expressions. If we grow up learning to conceal socially unwanted emotional expressions, could we therefore all be considered deceivers?

Masked expressions and micro-momentary movements

To become more accurate in recognizing inner emotional states of people, we have to encounter the phenomenon of deception. When we talk about deception, it is important to encounter the difference between deceiving others and deceiving ourselves. Funkhouser (2009) states that when it comes to self-deception, many different views and concepts should be considered. However, he presents a broadly accepted definition: "Self-deception is some kind of motivated irrationality, in which the self-deceiver fails to handle the evidence available to her appropriately" (Funkhouser, 2009, p. 2). Hippel & Trivers (2011) write that classical examples of self--deception are rationalizing and convincing the self that something untrue is true, because people will always prefer to believe what is easier for them to accept. On the other hand, Fallis (2010) notes that the common definition of lying underlines the willing purpose to deceive others. Ekman describes lying as a part of the human experience, when a person consciously misleads another person (Ekman in Lockard & Paulhus, 1988).

Face is a great source of information and it is recognized as a symbol of the self (Ekman in Lockard & Paulhus, 1988). Since childhood we learn to control facial expressions and until adulthood most people have learned how to control them to meet social demands. Although most people manage to control their facial expressions quite well, it is much easier to lie with words than it is with face. Ekman & Friesen write that facial expressions that occur along emotional experience are involuntary and because of that much harder to control than words. According to them, we mask our expression when we want to hide our true emotion, and we camouflage it with a simulated facial expression. People normally mask their expressions because it is easier to show another emotion rather than a neutral facial expression. Neutralizing facial expressions is challenging and although people wish that their faces would look neutral during an emotional experience, they will often look tense (Ekman & Friesen, 2003).

The known expression, a bald-faced lie, implicates that what has been said is obviously a lie and usually both parties believe that the statement is false (Fallis, 2010). However, Ekman describes two major forms of lying, concealment and falsification. Concealing information means that a person only retains some information and does not say anything untrue. Falsification is a step further and includes presenting false information as if it was true. Obviously, concealing information is more innocent and easier because you do not have to make anything up. In other words, concealment is passive and consequently a person who conceals feels less guilty than a person who falsifies information. Ekman explains that emotions are not involved in all lies but

usually in those which cause specific problems for the liar. Since we cannot actively select when to feel certain emotions, in liars, we can often observe the signs of internal battle between true and false emotions (Ekman in Lockard & Paulhus, 1988).

As I mentioned before, there are six emotional expressions that are thought to be universal (Darwin, 1872; Ekman and Friesen, 1976): surprise, fear, disgust, anger, sadness, and happiness. These expressions are macro-expressions, which normally last from three quarters of a second to two seconds and can occur in specific facial area or in all three facial areas, depending on the type of emotional expression (Shreve, Godavarthy, Goldgof, &Sarkar, 2011). Micro-expressions, on the other hand, are very quick, involuntary facial movements, lasting between forty and two hundred milliseconds (Ekman, Rolls, Perrett & Ellis, 1992 in Shreve et al., 2011). Matsumoto and Hwang (2011) claim that any emotional expression that is shorter than 500 milliseconds can be defined as micro-expression. Micro expressions were first mentioned in the study of Haggard and Isaacs (1966) as micro-momentary movements on the face, which appear when emotion is being repressed.

Micro-expressions are believed to appear when a person tries to conceal a genuine emotional experience, and are considered to be very hard to detect (Ekman, 2009). Ekman & Friesen explain that they are likely to involuntarily appear when somebody tries to de-intensify, mask or neutralize their facial expression. They mention that we cannot draw specific conclusions from spotting micro-expressions; however, we should consider them as potential deception clues. Micro-expressions will commonly appear in movement, during some other facial expression, and will be quickly followed by a masked facial expression (Ekman & Friesen, 2003).

In his book Telling Lies (Ekman, 1992), Ekman presents a case, where he studied a filmed interview with a psychiatric patient, named Mary, who was hiding her intent to commit suicide. She was a forty-two year old woman suffering from depression and had had a history of three suicide attempts. During her re-hospitalization she desperately wished to get a free weekend to return home. What she really wanted was to fool the doctors, go home and commit suicide. In the filmed interview she completely convinced the doctors that she really felt a lot better. Later on, Ekman found extremely quick expressions of despair on her face. Now, we know these were micro-expressions which appear when a person tries to conceal and repress an emotion. They also found some micro-gestures, which appeared as a very brief shoulder lifting (Ekman, 1992).

Ekman (1992) highlights two problems regarding micro expressions. Firstly, he explains that not all human beings have equal abilities to conceal the on-going emotions. The second problem about micro-expressions appears when people do not consider the fact that a person who is experiencing a severe stress may be perceived as if they are lying. Ekman calls this mistake Othello's error, which relates to Othello, the protagonist in Shakespeare's play. Othello misinterprets his wife's reaction when he accuses her of being in love with another man. She is falsely accused but afraid for her life and under extreme emotional distress. In the end, he kills his wife Desdemona. An innocent person who wants to conceal their fear or any other emotion may also display very fast facial movements or so called micro-expressions. This means that we have to remain very careful when making judgments based on appearance of micro-expressions.

Detection of micro-expressions is becoming a popular tool in the field of national security, and it is considered to be an extremely effective technique in detecting lies, repressed emotions and menacing behaviour. There is a great perspective in utilization of micro-expressions in the clinical and psychotherapeutic fields, because with their detection, we can achieve greater

understanding of patients' genuine emotions (Ekman, 2009). Careful observation of a patient's face in a psychotherapeutic setting can enrich us with information of patient's inner emotional experience. While some patients are commonly having troubles with verbally expressing their feelings, a face always speaks for itself.

Meaning of facial expressions in psychotherapy

There is no doubt that psychotherapists are experts in decoding patients' questions, statements and triggers when it comes to their on-going emotional experiences. However, patients also display meaningful non-verbal messages, which can sometimes reveal even more information than a patient is prepared to verbally express. Burgoon, Guerrero & Floyd (2009) claim that people largely communicate through nonverbal signs. Around sixty percent of all communication is thought to be obtained through nonverbal messages. Ekman & Friesen (1974) suggest that individual's personality may be reflected on their face while taking into account the meaning of social and personal display rules.

Although there has been an increasing interest in the connection between non-verbal behaviour and psychotherapy sessions, a systematic approach and measurements were missing throughout the past. The question about the importance of non-verbal behaviour over patient's verbal expressions has also been widely discussed among psychotherapists who have been questioning the accuracy of facial expressions in correlation to emotional states. However, they admitted there were many psychotherapeutic situations where patients could not express their emotional states verbally, but therapists were still able to recognize their feelings in a glimpse of an eye (Ekman & Friesen, 1968). Ekman & Friesen (1968, p. 180) claim that "nonverbal behaviour can be considered a relationship language, sensitive to, and the primary means of, signalling changes in the quality of an on-going interpersonal relationship". They elaborate that non-verbal behaviour is primarily used for communicating emotional messages, "either because of the physiology of the organism or because of the priority of nonverbal to verbal behaviour in the formative years of personal development" (Ekman & Friesen, 1968, p. 180). This statement suggests that a therapist's attention should be focused not only on a patient's words and descriptions but also on the matching of patient's verbal components with their nonverbal behaviour. Therefore, facial behaviour can be used as a therapist's clue which uncovers if patients really feel what they say (Ekman & Friesen, 1968). Another interesting assumption is that facial behaviour expresses subtle, unconscious messages about an individual's self-image, which is largely formed in early childhood through a child's interaction with their parents. Ekman & Friesen (1968) suggest that parent's repeated attitude towards a child's body is reflected later on in their adulthood, through an individual's attitude towards their body, in their specific body gestures and movements. All unconscious body behaviours serve as valuable clues for psychotherapists, helping them in the understanding of patient's self-image and personality structure. However, for a long time there was no direct, empirical evidence to confirm all of the listed assumptions about non-verbal behaviour, which means that it was only used as a partial support for psychotherapist's understanding of patient's psychodynamics (Ekman & Friesen, 1968).

In 2002, Ekman, Friesen, and Hager (2002) presented an updated version of Facial Action Coding System (FACS), which was originally developed by anatomist Carl-Herman Hjortsjö (1969). FACS is a computer system which can measure quick facial movements and analyse sudden changes in the facial appearance. With FACS it is possible to differentiate distinct facial

movements that appear on a face through a slow motion video analysis. FACS has largely influenced researchers involved in detection and recognition of facial expressions, especially the ones interested in video analysis of psychotherapeutic sessions. Using Facial Action Coding System, researchers are able to define facial units in which a specific facial movement appears. Although therapists have to learn to detect facial movements that indicate certain emotions through a video analysis, FACS is a useful tool for psychotherapeutic praxis. Once we learn how to spot various facial movements, it is much easier to pay attention to quick expressions of shame, despair, depression or happiness, displayed on a patient's face. With FACS it is possible to spot all six basic emotions precisely, detect quick changes in facial expressions and observe mixtures of different emotions on a face (Ekman, Friesen, and Hager, 2002).

Interestingly, Suslow, Junghanns, & Arolt (2001) mention that it is possible to spot differences in facial appearance and expressiveness when observing depressed patients. An interesting symptom, called a 'flat affect' (Gur, Kohler, Ragland, Siegel, Lesko, Bilker, Gur, 2006; Krause, Steimer, Sanger-Alt, Wagner, 1989), appears in some mental disorders and manifests as a reduced ability to express emotions, which primarily influences facial expressiveness, especially in social interactions with others. According to Sue D. & Sue D. M. (2012), it usually appears in people who suffered brain damage, depression, patients with PTSD and schizophrenia. Ekman & Friesen (1974) believe that the study of non-verbal behaviour can bring us to a better understanding of patients in psychotherapeutic settings and helps us gain knowledge about different mental disorders.

While blushing is commonly recognized as a sign of shame, other emotional facial expressions can easily be dismissed if therapist does not pay attention to them. Furthermore, in an interactive type of therapy, the psychotherapist's facial response and expression can be of a great meaning to a patient. A better knowledge of facial behaviour could become therapists' significant tool in the future of psychotherapy. Recognizing emotions and spotting micro-expressions can lead psychotherapists to evoke new questions, and help them to see a bigger picture in the complexity of the patients' mind.

Conclusion

Face is a significant symbol of the self and a wonderful communication tool. Seeing emotional expressions of others helps us to relate and feel closer as human beings. When it comes to different disputes about Darwin's universality theory, I have come to the conclusion that some emotional facial expressions are widely recognized around the world, and can therefore be considered universal. Anyhow, differences between cultures exist and we should keep in mind that what is appropriate in one culture may not be appropriate in another. We are part of a society which teaches us its own ways of acceptable emotional expressions. In such sense, we should consider both, social and biological influences on emotions and their expressions, and not investigate them separately. With both approaches united, we can build up an integrated view and a deeper understanding of emotional facial behaviour. In the end I can conclude that facial expressions and even their absence are revealing important information about a person's inner emotional state. Although we can get information about personal emotional experience from observing facial behaviour, we should never jump to conclusions too fast and always encounter the possibility that people might be masking, simulating or neutralizing their expressions. While facial expressions are reliable indicators of genuine emotional experience, it is crucial to obser-

ve the timing and location of their appearance. Nevertheless, the context in which they appear is extremely important for the right interpretation and for the understanding of an individual's psychodynamics.

I believe that becoming better readers of emotional facial expressions comes hand in hand with sharpening our own emotional awareness. One of the characteristics of emotional intelligence is the ability of recognizing emotions of other people. Better knowledge of physical signs of emotional experience can lead us to an improved communication and interpersonal dialog. In the field of psychotherapy, facial behaviour can be used to guide a therapist in the right direction, and moreover, to help a therapist to immediately examine patients' reaction to their interventions. I see a strong potential for investigation of facial behaviour in different clinical settings, such as psychiatry and psychotherapy. An interesting subject for further research would be how the observation of facial behaviour can contribute to an early recognition of mental illnesses and even to the prevention of suicide.

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