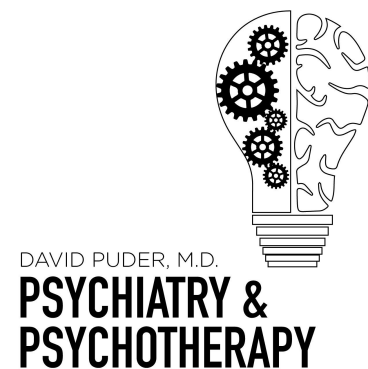


Episode 016: Microexpressions to Make Microconnections Part 2 with Ariana Cunningham

David Puder, M.D., Ariana Cunningham

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There are no conflicts of interest for this episode.

On the last Psychiatry and Psychotherapy podcast and blog, we talked about how [Microexpressions make Microconnections](#), their role in therapy and how learning about them can increase our emotional connection to others.

This week, we will continue uncovering how different microexpressions look on the face and feel in our body, and their corresponding emotions.

Fear ([link to video](#))

Fear is an adaptive emotion—its original goal is to keep us safe and alive. When someone pulls into our lane on the interstate, it's fear and our ability to quickly jerk the steering wheel straight that saves our lives. When we encounter heights, snakes, or frightening people in a dark alley at night, fear is the emotion we feel.

As children, we have fears of abandonment from our mothers, and at around two years old, we begin to experience stranger anxiety. As we grow, we read our parents and see what they are afraid of, so we can form protective fear patterns. Even different genders receive different messaging about fear. Parents teach male children to be more fearless, empowering and enabling, more courageous. They teach females to be more cautious, careful and more fearful.

Fear, demonstrated on the face in a microexpression, looks like:

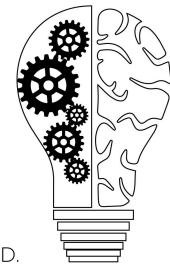
- Eyebrows drawing up and together with tension in the forehead
- Lower eyelids tensing
- Mouth opening horizontally in an interaction

Fear can bond people together but also separate us from having an emotional connection. In any emotional interaction, we are experiencing a state of calmness, fight/flight, or disconnection.

Fear and anger come into play in both fight and flight. When we notice someone exhibiting fear when we are interacting with them, it's important to be curious as to why. Are they fearful because of the interaction with us? Or are they fearful because they are accounting a story about something that scared them?

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When someone experiences fear, it's important to strive for a healthy connection again. That person may experience fear because of vulnerability or shame. Because fear's goal is to stay safe, it can cause disconnection. Establish a psychologically safe place for them to feel connected, rather than fight or flight.

Dealing with fear

Listen to your voice of courage that's inside of you. Anytime there is fear, there is also a courageous part of us that is sending different messages too, we just need to focus on it and therefore turn up the volume of the courage signals. When we get stuck, frozen, in a state of fight or flight, we can choose to engage the object of fear anyway. We can choose courage.

Experiencing fear during sporting events or performances is a great way to think about this. Fear can be decreased over time. When we train often enough, or compete often enough, that fear response slowly decreases. After plenty of performances, after plenty of sport competition events, we start to normalize that fear and courage takes over—training gives us confidence in the face of fear.

We can learn how to handle fear without being totally overwhelmed by facing the cause of our fear in slow, small increments. It can create an adaptation, rather than stress. Even cardiovascular health is tied to your emotional ability to handle fight or flight. By training physically, you are actually training for interpersonal stressors as well by spiking your adrenaline, breathing and heart rate.

Beyond behavioral therapy help, you can do mental exercises to regain control of your body during fear. Even simply saying out loud, "I am experiencing fear" can feel normalizing. Also, through meditation and breathing, you can reset your heart rate and breathing, and calm your body's fear responses.

Surprise ([link to video](#))

On the face, the microexpression of surprise looks similar to fear, but where fear affects the face on a more horizontal axis, surprise affects the face on a more vertical axis. Surprise looks like:

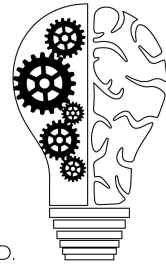
- Rising and rounding eyebrows
- Rising upper eyelid
- Sometimes mouth falling open with lips relaxing
- Note: rising eyebrows can also be a conversational signal emphasizing something.

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Surprise can be awe, curiosity, a revelation. It can be a more transitory emotion—quickly moving on to fear, anger or joy. When someone is exhibiting surprise on their face, be curious about why, ask them if the answer isn't obvious—such as them arriving at their own surprise party—and you may learn something new about them.



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Disgust ([link to video](#))

People rarely use the word “disgust.” They’ll talk about happiness, anger or fear or other emotions. But disgust is something that we don’t understand as easily without dipping back into the primal reasons for the emotion, and how it is helpful in modern day interactions.

Originally, disgust was an important emotion for survival. It standardized hygiene and behavioral norms. If a caveman or woman ate something gross, or fell out of line with the accepted hygiene of the day, they were shunned from the group. If they slept with a relative or animal, ate another human, or did not clean food properly, they aroused disgust in their tribe, and were exiled or even killed.

Without disgust, there would be less social norms, less “rules” for relating to each other and maintaining health codes. It’s a powerful emotion that drives behavior.

Disgust as a microexpression looks like:

- Wrinkling around the nose
- Upper lip rising
- Eyebrows move down without tension (contrast this with anger where the eyebrows are pulled together and the eyelids are raised and tense).

I feel that people need to be more aware of disgust as a microexpression, and learn what it is trying to communicate to them. It’s not just about a survival mechanism, such as smelling rancid milk and being able to avoid getting sick. It’s also about how our spouse treats us, how we feel when we watch interactions between other people.

The negative effects of disgust, when it is taken too far, can be damaging and horrific. Racism and sexism are examples of disgust gone wrong. It can be dehumanizing. Even listening to Hitler’s conversation at his dinners, experts have analyzed disgust-oriented language. Much of his propaganda was even disgust-provoking propaganda.

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People who are an object of someone's disgust experience deep shame. Sometimes, that is warranted—such as when that person has broken a societal rule like pedophilia. But as a therapist, I have to have a lower threshold of disgust when it comes to hearing people's secrets.

After awhile, I think that disgust, like fear, can be adaptable. I have heard all manners of secrets, and I rarely feel disgust anymore. Instead, I feel I need to exhibit psychological safety, so the patient feels open to talking about the things they cannot tell anyone. Through talk therapy, hopefully I can help them feel less shame and understand their unique journey and struggles more fully.

Using microexpressions in interactions

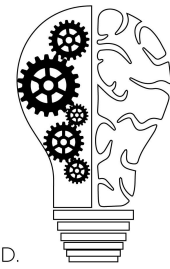
The first key to using microexpressions is to pay attention. Look at the person's face, be interested and curious about what emotional state they are in. Notice the facial movements, and listen to what they are saying. Is what they are expressing maybe outside of their awareness as they talk? Does the emotion they are showing match what they are talking about?

As a therapeutic tool, understanding microexpressions is a way of gathering information about someone else. Use that information to respond in a way that shows the person you are desiring to connect.

Paying attention to microexpressions actually creates empathy. We have mirror neurons—neurons in our brain that are devoted to telling us what someone else is feeling. Those neurons light up when we watch someone else doing something, or feeling something. When we see someone bite into hamburger on a commercial, it might make us hungry, even causing our stomach to rumble or our mouths to make extra saliva. When we see someone cry, it might make us cry. Your brain will light up, to some degree, as if you are experiencing someone else's' emotions. We can train ourselves to pay attention to those neurons to better be able to connect with people.

Some people experience either less or more empathy than what is considered normal. This can be because of a disorder, or because of emotional burnout. Even experiencing emotional overload causes a decrease in empathy.

Being able to determine the difference between yourself and the other person is another important part of empathy. Learning about microexpressions can help you do that—you can see their emotions, and recognize they are the one experiencing it, and you can respond to the emotion, but you do not have to own it as your own.



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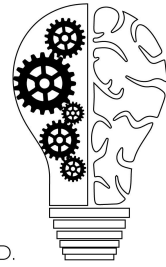
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Tune in next week to hear part three of Microexpressions. If you're interested in learning more, consider looking into our [Microexpression Training Program](#).



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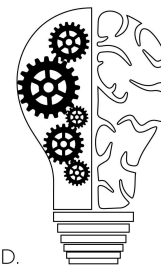
Fear

- Fear in the brain
 - activates different areas of the brain and has different effects, dependent on its duration.
 - Immediate/short-lived fear => action and is analgesic,
 - Impending/chronic => increase vigilance, muscle tension, and magnifies the pain sensation (Eckman, 2007).
- Fear in the body
 - sense of weight on your chest, constriction around your neck, and butterflies in your stomach from serotonin activation.
 - increased blood flow to lower extremities (cold hands) to move away from the emotional trigger
 - feeling immobilized and dissociated in a shutdown state
 - often it is an adaptive body response to trauma. Freezing becomes a way to overcome, as struggling may be seen by the body as more life threatening.
- Fear on the face
 - raising of the upper eyelids, tensing of the lower eyelids, eyebrows drawing up and together, and stretching of the lips horizontally.
- Development of fear
 - from early childhood through fear of abandonment from their mothers and subsequent stranger anxiety.
 - As a child grows read fear cues from their caregivers and experiences, creating automatic responses that may be carried through into adulthood.
 - Daughters are given more fear messages by parents, and sons are pushed to overcome their fears without assistance (Morrongiello et al., 1999).

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- Can be helpful (avoid danger) or crippling (avoid all life)
- Fear in therapy
 - discerning between the past and the present, aka reacting to you now or remembering a past experience
 - Make note of what topics elicit the microexpression of fear
 - E.g. patient was being violated and froze with fear instead of fighting back
 - (Q) Why did they have this reaction?
 - (A) Passive acquiescence to another in the midst of being violated
 - (A) An adaptive body response to trauma, a way to survive, as struggling may be seen by the body as more life threatening.
 - Shame and fear
 - Shame is often present in the midst of this, so **reducing fear is, in part, a process of reducing shame** via empathy and normalization
 - Verbalizing the emotion is itself therapeutic (Lieberman et al., 2007).
 - understanding patient's fear through therapeutic alliance is significantly correlated to a decrease in patient's experience of fear (Verhulst et al., 2013)

Surprise

- Surprise and fear are the hardest to distinguish
 - Shown in Eckman's studies of both Western and non-Western cultures (Eckman, 2007).
- Surprise vs startle (the two are separate, not a continuum on a spectrum)
 - Surprise = brief emotion
 - open eyes, raised eyebrows, and open mouth
 - sensation of a jolt to the body and increased awareness
 - Often quickly followed by another emotion such as fear
 - Startle = reflex, physical reaction
 - closed eyes, lowered brows, and a closed and horizontally stretched mouth

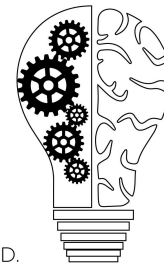
Disgust

- Body of disgust
 - queasiness, gagging in the throat and/or wanting to vomit.
- Face of disgust

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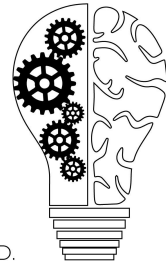
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- face contorts slightly through raising of the upper lid, wrinkling around the nose, and eyebrows (similar to anger) moving down and together.
- Special populations
 - Express a higher frequency of disgust than unaffected counterparts: OCD, phobias, eating disorders (Eckman, 2007), schizophrenics, or severe psychosomatics (Merten, 2003)
 - disgust expressions were highly predictive of marital instability (Gottman et al., 2001).
- Our reaction to disgust
 - Whether consciously or unconsciously experienced, disgust can be upsetting to harbor towards someone you committed to => defense techniques.
 - Therapeutic reaction = notice the expression and empathize with the tension of having negative thoughts towards the people we love
- Theory of disgust
 - It is good when it helps us avoid physical and emotional toxins
 - Interpersonal disgust helps maintain relational and societal rules; we obey rules to avoid triggering a disgust response in others.
 - Extreme disgust most strongly associated with morally objectionable behaviors, and most poignantly with sexually repugnant actions such as pedophilic encounters (Eckman, 2007).
 - Danger is in what we identify as disgusting; capacity to dehumanize entire groups of people or individuals...make things like torture less morally reprehensible.
- Disgust in relationships; the closer we are the more it takes for us to be disgusted
 - threshold of disgust exhibition is inversely proportional to the degree of intimacy
 - E.g. parent-child dynamic, in which parents are able to suspend their sense of disgust in dealing with the bodily fluids of their infant.
 - E.g. sexual intimates, “consensual sex means the mutual transgression of disgust-defended boundaries.” (Miller, 1998).
 - ties into theories regarding compassionate empathy
 - intimacy is what is required to overcome our disgust in regards to the other person's state/appearance/actions, then empathy may be viewed as necessarily a process of fostering intimacy, or coming to identify more of the self within the other

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Review of Microexpression in Psychotherapy

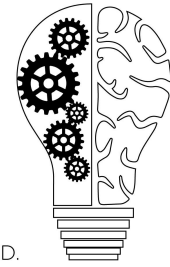
- emotion detection => increase empathic accuracy => appropriate feedback and gauge how the interaction is progressing (Merten et al., 2005).
- affect labeling; ID an emotion in a patient and guide them to verbalize it => decrease the patient's limbic system activity => therapeutic benefit (Lieberman et al., 2007; Creswell et al., 2007).

Using Microexpression to Increase Empathy

- Mirror neuron system
 - 1992, discovery of the mirror neuron system,
 - its activation when observing the facial expressions of others=> mechanism behind empathy (Molenberghs, 2012).
 - ability of perspective taking (inherent component of empathy) is correlated to stronger activation of mirror areas in the brain (Gazzola, 2006).
 - chameleon effect; the nonconscious mimicry of postures, mannerisms, and facial expressions (Chartrand et al., 1999; Lakin et al., 2003).
- Populations deficit in empathy = alexithymics, schizophrenics (Gottman et al., 2002; Carlozzi et al., 2002).
- professional utilization of empathy
 - facilitates client-professional relationship,
 - instrumental in achieving a client-related goal (Gallese, 2003).
 - Goal = “relief, or something making sense, a feeling of inner connection, one of being less alone, or of some easing or enhancing quality.” (Barrett-Lennard, 1993).
 - Increases patient compliance (Nelson, 1975; DiMatteo et al., 1986), satisfaction (Kim et al., 2004; Kenny, 1995), and clinical outcome (Hojat et al., 2011; Raket et al., 2009; Del Canale et al., 2012).
- **Can we learn empathy? There are both innate and intentional components**
 - There is a basis of innate reaction driven by mirror neuron system activation (Gallese et al., 1998; Gallese, 2003; Barrett-Lennard, 1993)

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- Then there are trainable enhancements on this; training interventions on emotion recognition (Galinsky et al., 2000, Gery et al., 2009), experiential practice (Riess et al., 2012), and cognitive exercises

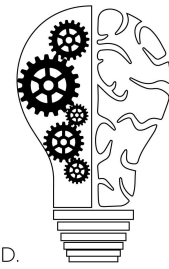
Cognitive, Affective & Compassionate Empathy

- Definition contains 3 elements of **cognitive**, **affective**, and **compassionate**, with the associated concept of **self-other distinction**.
 - postulated most directly by Ickes (2003), but contains and reflects the numerous other subtleties of distinction found in our substantive literary review.
- Cognitive = one's understanding of the other person's experience & is further subdivided into intuitive vs. pursued (Kohut, 1959; Clark, 2010).
 - **Intuitive** = follows the vein of **mimicry** (Chartrand et al., 1999; Baaren et al., 2003) and **resonance** (Barrett-Lennard, 1993; Krause et al., 1998; Preston et al., 2002; Carlozzi et al., 2002).
 - **Pursued** = activity of **information gathering** and perspective taking capacity (Blair, 2009) aka the ability to **construct a working model** of the emotional states of others.
 - most distinctive in the professional context
 - may be improved upon by expanding knowledge base & microexpression training (Gallese, 2001, 2003).
- Self-other distinction helps therapists
 - regulate their emotions and decrease their distress (countertransference) (Elliot et al., 2011; Gallese, 2003; Barrett-Lennard, 1993; Rogers, 1975; Kohut, 1959; Gallese 2001, 2003; Carlozzi et al., 2002)
 - Helps to avoid emotional contagion (Preston et al., 2002).
 - decreases the intensity of counter-transference.
 - Allows empathy without becoming fully immersed in the other person's emotion.
 - If lacking then habitual openness to the client (without regulation) may result in vicarious trauma or burnout (Trippany et al., 2004).

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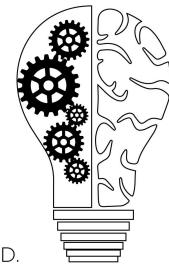
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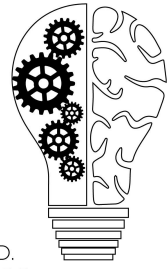
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