Applied psychophysiology appears useful to uncover whether the external persona represents the internal physical and emotional experience. Observing the ongoing physiological changes within an individual can be helpful to guide the clinical interventions and can be used by the therapist to uncover ongoing psychological and emotional processes, describe and help label the subjective experience, offer a physiological rationale for the illness process, and offer interventions to promote healing. The therapist can then use this information to guide the therapeutic process and speak for the client's internal experience. Speaking for the client, utilizing a YES set, and reframing may increase rapport and allow the client to feel understood—a process that may induce symptom relief and relaxation.

**Introduction**

How do you know whether the visible “external persona” represents the internal physical and emotional experience? At times clients appear calm and mask the emotional storm that is brewing inside. They do not appear to signal distress with sighs, gasps, rapid eye blinks, blushing, twitches, or immobility. They have learned to talk about stressful topics that trigger anger or fear while they appear calm and relaxed. Although the body-mind emotional connections appear externally invisible, physiological recording may uncover them. Observing the ongoing physiological changes within an individual can be helpful to guide the clinical interventions and can be used by the therapist to uncover ongoing psychological and emotional processes, describe and help label the subjective experiences, offer a physiological rationale of the illness process, and suggest interventions to promote healing. The physiological signals such as respiration, blood volume pulse, heart rate, and skin conductance visualize the ongoing dynamic mind-body emotional processes just as magnetic resonance imaging (MRI) can visualize the internal physiological structure.

The client’s physiological responses are either congruent or noncongruent with his or her subjective reports and superficial body responses. Physiological monitoring may help the therapist to identify what is occurring within the client. It may indicate to what extent the client is aware of his or her own physiological reactivity and help identify what is occurring within the client that caused the physiological changes. For example, during a stress protocol procedure, one of the authors used to say “Now let’s look at how you react to acupuncture needles...” and then start rummaging through the cabinet to look for the needles. Most people, and especially men, for some reason responded with extreme physiological reactions although some of them had insisted beforehand that they were not frightened at all. A few had even said that they were already conditioned to needles because they had previously experienced acupuncture treatment and claimed not to experience emotional or physical reactions. Just the expectation of the needle without even actually seeing it caused such a massive stress response that the therapist decided for ethical reasons to discontinue this specific stress profile procedure.

**Speaking for the Client**

The therapist can utilize changes that occur in the physiological measures to investigate, speculate, ask questions, and reflect on what is happening in the client to induce the physiological changes. The therapist may then desire to explore, verbalize, and label the client’s covert internal process, especially if the apparent physiology is not congruent with the apparent external appearance or self-report. The following case is an example.

A 51-year-old woman with neck and shoulder pain was asked by her boss to volunteer for a teaching seminar on pain reduction for physical therapists. After physiological sensors were attached, the therapist monitored her reactivity. During the preliminary baseline, she observed the group of 12 physical therapists practicing Qi Gong and her physiology showed a relaxed state. There was minimal
muscle tension and her breathing was observed more in her chest than in her abdomen, and it was rather shallow and rapid. The breathing appeared partially affected by her tight clothing. In particular, she was about 20 kg overweight, and therefore abdominal displacement during breathing was not possible. Her heart rate was high but flexible, and her pulse amplitude (the measure of peripheral blood flow) seemed normal. Yet when the physical therapists stopped their Qi Gong, and even before they actually sat down to observe the biofeedback assessment procedure with this client, the volunteer’s blood vessels constricted, her muscle tension increased, and her skin conductance and heart rate increased and stayed up (see the Figure), although externally she seemed relaxed. Her physiology indicated that she became vigilant—“Oh no, now it is my turn to be the focus of attention”—although everyone was just returning to their chairs to sit down. This example demonstrates Moss’s second principle for the use of psychophysiology in psychotherapy: that observing changes in the body leads to detection of defensive and inhibitory operations (Moss, 2005).

Although she appeared quite relaxed, the therapist observed her physiological response and described her internal experience to her. He said, “When you realized that the physical therapists had finished with their exercises, you must have gotten a bit nervous and thought, ‘Now it’s my turn, I wonder what they will do with me now? Will I be judged or compromised, will it hurt, what is he going to do next?’” She nodded and agreed that this was her experience. The therapist then asked the other physical therapists present how they had experienced the volunteer sitting in the chair. They all agreed that she looked very calm and relaxed and not frightened at all. Without the physiological feedback they would not have known about her internal emotional experience.

The therapist then explained the concept of vigilance, arousal, and pain to the volunteer. Namely, as her muscle tension increased and stayed up, although nothing happened, her pain may also have increased. Similarly, her anticipation of a stressor induced an actual physiological reaction (sympathetic activation), and thereby could have increased the pain (increased activation of the trigger points). The therapist then wondered aloud if this same vigilant and anticipatory pattern also happens during her working day and thereby contributes to her severe neck and shoulder pain.

This example demonstrates the following:

- **What you see on the outside and what you may think the person is actually doing may not be what is actually occurring.** The physiological signals offer additional information about the unique behavioral, cognitive, and physiological response patterns of the person. For example, a volunteer may appear to be relaxed and comfortable, yet the physiology may indicate another state. In this example, the masked physiology may represent the core etiology of her disorder—hyper vigilance and a desire to perform perfectly—which would not have been uncovered without the physiological monitoring.

- **Physiological monitoring and feedback are useful tools in “describing” the client’s emotional experience for the therapist.** Changes in the physiological signals indicate that something has occurred within the client. The therapist can then ask him or herself, “What would I experience if I were the client? What would I need to do to get out of this situation?” Namely, put yourself “into your client’s shoes” and imagine how the client has experienced the world—a type of mental role-playing and active listening (Westra, 1996; see sidebar). The physiological signal guides the therapist to speak for the experience of the client and thereby creates a therapeutic alliance—a kind of bonding. In the above example, the therapist

---

1See the following Web sites for additional instructions for active listening:
http://www.colorado.edu/conflict/peace/treatment/activel.htm
http://crs.uvm.edu/gopher/nerl/personal/comm/e.html
http://edis.ifas.ufl.edu/HE361
verbalized the client’s subjective experience, and this gave the client the experience that the therapist understood her. Thereafter, she was more willing to participate in the therapeutic and treatment process.

Role of Language to Inhibit or Promote Healing

Speaking for the client’s internal experience may evoke a YES set, a relaxation response, and an appreciation by the patient that the therapist understands her or him. The more often the client answers with “yes” to the therapist’s questions, the more likely the client will feel understood. The YES set usually consists of at least three sequential YES responses (Peper & Fuhs, 2004). On the other hand, if the therapist evokes a “no” response or questions the client about her or his experience, it may decrease rapport. Even questions such as, “How are you today?” or, “How do you feel?” covertly tells the client that the therapist does not understand her or him and may lack empathy. Namely, the therapist demonstrates that he or she is unaware of the client’s subjective experience—this may contribute to a feeling of not being understood and of isolation. On the other hand, when the therapist says, “You must have felt...” —and if the description is correct—the client will often feel more understood. Speaking for the client—a type of active listening—is different from saying, “I understand you” or “I feel your pain.” Those phrases demonstrate to the client that you do not understand her or him. They are just words, and even worse, they often inhibit further communication.

Imagine that you would like to explain your sorrows to a therapist and the therapist says, “I understand” before you have even finished. Many people probably feel “shut off” by such attempts at empathy. With each additional word from the therapist, the client then further doubts her or his understanding. The client may feel that the therapist is not “really” interested or is not able to understand the depth and meaning of the client’s emotional experience. On the other hand, when the therapist offers a more precise label for the client’s feelings, the client will experience understanding and emotional clarity for the “unlabeled” and uncomfortable emotional state. Alternatively, the therapist could request more information (e.g., “Tell me more about it”) to facilitate the communication. It is through the sharing and the correct labeling of the emotional experience that understanding is experienced. This process is illustrated in the following two dialogues with a patient who has just been diagnosed with breast cancer.

- **Dialogue 1:** “I am saddened to hear that you have breast cancer. How do you feel? Let’s explore how we can help you mobilize your health.”

---

**Practice: Place Yourself Into Your Client’s Shoes**

Imagine being your client, feel how he or she experiences his or her world physically, emotionally, and mentally. Take on his or her state of being and then fantasize what must have happened to cause the change in the physiological signal. Mentally role-play being the client—feeling the client’s bodily experience and incorporating the client’s psychosocial background (e.g., imitate your clients’ breathing pattern, body tension pattern, posture, or facial expressions). Then ask, “What emotional experience occurred to produce this physiological response? What thoughts, emotions, or body movements occurred to induce the physiological change?” Make an educated guess. Reframe and reflect the information back to the client; for example, “I can imagine that it feels kind of scary to see your body reflected on the computer monitor—sometimes people think it allows us to read your brains and hidden secrets as if it is a lie detector.” Then reflect back the experience to the client in the language and analogies that are unique for the client. For example, you could say, “I could imagine that it must have felt like ____.” Fill in the blank space.

**Note.** if you use absolute statements, it is often more challenging for the client to agree. Instead use questions and assumptions designed not to trigger the resistance of the client; otherwise he or she may feel judged. Use your creativity and intuition. The client will let you know if your formulation is correct. If it is correct, the client will usually respond by saying “yes,” and you may see the client’s physiology relaxing.
• Dialogue 2: “The first moment that you anticipated or heard the diagnosis, you may have just wished that everything was just a dream and that you could just return to your daily routine life. But your body didn’t allow you to do so and you felt weak. For a few moments, the doctor’s words rushed over you without you really hearing them.

However, even in situations like these you eventually will have experienced something positive, like people who offered help or were just there to support or listen. You may have experienced what is really important in your life. From now on, let’s explore ways to cooperate so that you can boost your immune system as much as possible.

Although the intent of the first dialogue was positive, the client may report that the therapist did not understand the gravity of the experience. On the other hand, through the description of the emotional experience in the second dialogue, the therapist spoke for the unlabeled emotions of the client and demonstrated that he or she understood the magnitude of the traumatic experience.

The same process underlies most therapeutic dialogues. If the health professional describes the client’s experience of pain or how the illness affects her or him, the client will then feel understood and more likely to trust the health professional. Obviously, this assumes both a correct medical diagnosis and correct emotional labeling. This moment of empathy then evokes a new form of hope.

Summary

The major components that underlie this approach include the following:

• Speaking for the client through mental and physiological role modeling to label the undefined emotional state. This creates in the client an experience of being understood.
• Evoking the YES set to facilitate relaxation and letting go.
• Normalizing the illness experience as a strategy to reduce anxiety. Most clients think that they may be abnormal. Therefore, it is often a relief to know that what they experience is normal and is not craziness.

References


Correspondence: Erik Peper, PhD, Institute for Holistic Healing Studies, San Francisco State University, 1600 Holloway Avenue, San Francisco, CA 94132, email: epeper@sfsu.edu.