65 The Role of the Breath in Mind-Body Psychotherapy[i]

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Introduction

Breath has long been an essential part of the quest to understand the human condition, to promote health and to alleviate suffering. Over thousands of years, Taoist and Yogic philosophers and adepts have evolved their techniques to enhance people's awareness of

their breathing as an aid to reaching different levels of consciousness. Today, Yoga, Buddhist mediation, Tai Chi, and other martial arts, as well as various relaxation approaches, have contributed to the prevalence of breathing practices in Western cultures. We will be differentiating the term "breathwork" (as consciously modifying amplitude and rate of breath) and breath *awareness*, dealing with breath "as it is."

While Eastern cultures and other traditions spent centuries using breath awareness among other techniques to improve human functioning, Wilhelm Reich's 20th century venture into the therapeutic applications of breathing practices in psychiatry and therapy is comparatively recent. Reich used active breathing patterns, as well as the provocation of muscles through deep pressure, to dissolve what he termed "character armor" (Macnaughton, 2004). He discovered that, paying attention to the patterns or types of breathing, his patients displayed provided useful information. Reich also found that intervening in their breathing patterns helped move them towards self-regulation and a 'felt sense' of safety, wholeness, and wellness (in other words, coherence).

According to Levine (1976, 2010, and ongoing clinical observations) and Porges (2011), coherence is a measureable state (e.g. noted as respiratory modulation of heart rate and blood flow to parts of the body inhabiting conscious breath) that serves as an indication of health. They noted that a relationship exists between behavior and coherent flow states under the control of the myelinated vagus nerve, known as the ventral vagus (Porges, 2011). The development of these understandings has allowed us to move beyond the historically interesting paradigm of Reich's structures toward a more sophisticated way of viewing coherent organismic function.

An understanding of some basic physiology helps to clarify the role of consciously modified breathwork and to elucidate the effect of different breathing patterns on individuals' resources and their ability to self-regulate. In this article, our focus is on the neuro-physiological underpinnings of respiration and the therapeutic implications and effects of various breathwork interventions. We will discuss breath interventions by addressing: 1) Developmental issues within Alexander Lowen's Bioenergetic character structure framework, which was adapted from Reich's armoring theory; 2) Use of breath awareness; and 3) Contra-indications for breathwork.

Reich's Vital Contribution

Studying originally with Sigmund Freud, Wilhelm Reich was perplexed as to why various patients did not respond favorably to Freud's 'talking cure'. He began to notice his patients' non-verbal body language – how they presented themselves, how they held their musculature, and how they modified their breathing patterns. He began experimenting with movements that would allow the muscles and breath to loosen for fuller natural expression.

Reich developed his groundbreaking ("Reichian") therapy while living in Austria in the 1920's (see Wolf Büntig: Cpt. 3). He later worked directly with the body to unveil "repressed" emotions underlying character neurosis. Ultimately, he sought to harmonize and balance the client's 'bio-energy' system. His primary objective was to enhance a patient's physical, emotional, and spiritual sense of well-being.

Encouraged by these results, he developed a therapeutic model of optimal health, restoring the "wisdom of the body" and the capacity for self-regulation. Reich realized that the body operated as an energy system, in harmony with the energy of the natural environment. He called this "orgone" energy. To the degree that this energy system operated efficiently and effectively, throughout the organism, patients reported that they felt better and functioned more spontaneously. According to Reich, ready access to "orgone" was essential for all living organisms because it was the vital energy of life; the "Élan Vital," or "Life Force," as it will be used in this chapter.

To Reich, the human dilemma lay in learning how to surrender to this Life Force by allowing it to flow freely. Put another way, achieving well-being implies learning how to not block the free flow of this 'current' of Life Force, instead opening to it with receptivity. Ultimately, Reich theorized, blocking this energy flow caused dysfunctions in health, both physical and emotional.

As the emerging psyche tries to handle its developmental frustrations, throughout childhood, muscular contractions suppress and deaden the emotions associated with that thwarting. Reich noted that the blockage of energy flow occurred when we "armor" ourselves (physically and psychically) against experiencing our deep feelings of connection to the Life Force. He then developed his theory of "segmental armoring", which correlated somewhat to the chakra systems of eastern philosophies.

(See Rosenberg & Kitaen-Morse, Cpt. 56). Reich employed this schema to address what he called "character armoring". This block against emotional and energetic experiences results in either rigidity, or a collapse, in the body and a constriction of emotional contact. For an excellent review of this, see Michael Heller (2012).

Reich felt that the comfortable, pleasant sensations of feeling the soft pulsations of energy within oneself had become so foreign to his patients that they were frightened and braced against these deeply pleasurable, pulsations. In other words, pleasure and ease had become 'alien' and tension, anger, sadness, depression, and pain had became the 'familiar' experience. This state of 'dis–ease' became the 'normal' feeling tone! All other experiences were experienced as unusual and, therefore, threatening. Next, we look, briefly, at the role of the breath in various types of "armoring."

Character Armoring: Character Structures

According to Reich, character armoring manifested in bodily postures, gestures, voice, and also breathing patterns. These 'character structures' reveal how an individual handles his need to love, his reaching out for intimacy and closeness, and his striving for competence and pleasure.

Seen in this light, the different character structures form a spectrum. At one end of the continuum is the *schizoid* position, embodying an almost total withdrawal from intimacy and closeness, because these are seen as too threatening. At the other end of the spectrum is emotional health. Here, there is little holding against the impulse to reach out openly for closeness and contact. The various character types fit into this spectrum, or hierarchy, essentially according to the degree that they allow for intimacy and contact.

Alexander Lowen, one of Reich's many students, re-interpreted his teacher's work to create the therapeutic system he called 'Bioenergetic Analysis' (See Cpt. 14). It also examines character and personality in terms of the body's energetic processes. Lowen (1994) defined character as a fixed pattern of behavior – the typical way an individual handles his striving for pleasure and connection. These prototypic striving manifestations are structured in the body in the form of chronic and (generally) unconscious muscular tensions, which block or limit our impulses to reach out.

Character, according to Reich and Lowen, is also a psychic attitude, buttressed by a system of denials, rationalizations, and projections. The functional identity of psychic character and body structure (or muscular attitude) is the key to understanding personality; it enables therapists to read the character from the body and to explain a body attitude by its psychic representations, and vice versa.

In the Bioenergetics nomenclature, the different character structures are classified into five basic types. Each has a special pattern of defense, both on the psychological and on the muscular levels. Finally, Reich understood that hidden, beneath the individual's unique character-structure blend is their pure "life-force", an animating birthright of vitality and joy fueling their capacity to live and to flourish.

It is important to note that this is a classification of defensive positions, not of people. It is recognized that no individual is a pure type, and that all people combine some or all of these defensive patterns within their personality and physical structure. No two individuals are alike, in either their inherent vitality, or in their patterns of defense (which have arisen from aversive or conflictual life experiences). Nevertheless, we speak in terms of types for the sake of clarity. The five types are termed *schizoid, oral, psychopathic, masochistic,* and *rigid.* These terms are used because of their historical significance, though they clearly lack much that is known from the contemporary fields of child development and neuroscience.

The "schizoid" character structure:

'Schizoid' describes a person whose sense of self is severely diminished, whose ego is weak, and whose contact with the body and its feelings is greatly reduced (also known as the Unwanted Child). It is probable that the schizoid structure is formed by overwhelming stress during the perinatal period and includes attachment frailty. It is maintained primarily through a large reduction of breath and a conservation of energy; breathing only enough barely to sustain life and breathing very shallowly.

The "oral" character structure:

A personality is described as being 'oral' when it contains many traits typical of infancy—the oral period of life. These regressive traits are weakness in the sense of independence, a tendency to cling to others, a decreased assertiveness, and an inner feeling of needing to be held, supported, and cared for (also known as the Needy Child).

The fear of annihilation is less severe than with the schizoid structure. The breath here is also quite diminished, though less so than for the earlier structure.

The 'psychopathic' character structure:

The essence of the 'psychopathic' attitude is the denial of feeling. There is, in all psychopathic characters, a great investment of energy in one's own image. The other aspect of this personality is the drive for power, and the need to dominate and control others (also known as the Controller/Leader). Their breath pattern is equally controlled.

The 'masochistic' character structure:

The 'masochistic' individual is one who suffers, whines, blames or complains but remains submissive. Submissiveness is the dominant masochistic tendency. While the masochistic character shows a submissive attitude in his outward behavior, he harbors the opposite within (as in the passive/aggressive personality). This deeper emotional level holds strong feelings of spite, negativity, hostility, and superiority (the "Endurer" personality) and correspondingly represses, or suppresses, their breathing.

The "rigid" character structure:

The concept of rigidity derives from the tendency of these individuals to hold themselves stiff, possibly with pride. Thus, the head is held fairly high and the back-bone straight. These would be positive traits were it not for the fact that the hardened pride is defensive, the rigidity unyielding. The rigid character is afraid to give in, equating this with submission and weakness. Rigidity can also become a defense against an underlying masochistic tendency (also known as the Perfectionist / Obsessional) and the rigid person's breathing is designed to maintain this state, with little proper release and relaxation.

Breathwork with Character Structures

The Importance of Understanding the Physiology of Breathwork

Breath has the unusual capacity to bridge voluntary and involuntary realms – it is the autonomic function that we have the most control over. Humans can, at will, breathe rapidly, slowly, deeply, superficially, abdominally or thoracically. As we ready ourselves to run, our breath prepares us for this exertion. In different emotional states, our breathing patterns vary. Shakespeare, the Great Bard, in *As You Like It,* describes

"… lovers sighing like a furnace". In fear, we gasp and hyperventilate to the point that we may even pass-out. In anger, we breathe strong full breaths and prepare our body for an energetic response. All of these breath experiences are on the grey border between voluntary and involuntary.

The deep involuntary control of breath, on the other hand, is orchestrated primarily by two factors: the respiratory "pacemaker" in the medulla of the brainstem (which stimulates the basic respiratory rhythm), and the level of carbon dioxide in the blood. It is *not* the level of oxygen, as is so often presumed, but the CO_2 levels that are crucial in the chemical and physiological regulation of the breath.

The Bohr Effect

An important phenomenon associated with blood gas CO_2 levels (and hence respiration) is known as the 'Bohr Effect'. This effect describes the dynamic in which hemoglobin molecules pick up oxygen from the lungs (in the alveoli) and transport it to all the cells of the body, where it charges the ATP[ii]. This molecule, in turn, fuels the energy production in the mitochondria of the cells. Efficient oxygen transfer, release and utilization, depends on the level of carbon dioxide (within a specific optimal range). Any departure from these CO_2 concentration levels reduces the oxygen available to the brain and body. In other words, when you have *either* too high or too low CO_2 levels, the amount of oxygen being transported and delivered to the cells is reduced. The notion that people need to breathe deeply, or speed up their respiration to get more oxygen, is physiologically incorrect. This reduced CO_2 also diminishes the inner (i.e. involuntary) urge for a spontaneous breath. If we mechanically override the spontaneous interplay of the breath pacemaker and CO_2, we interfere with the normal physiological role of CO_2 to regulate breath. What we really want is regulated breath – a self-regulated breath under pacemaker regulation (within normal levels of CO_2). This dynamism, expertly and spontaneously, helps us to manage our responses to a multitude of encounters and experiences.

Hyperventilation, CO_2, and Emotional Flooding

Reich knew that breath-work evoked deep-rooted psychological and emotional material. He frequently had patients over-breathe in order to build a charge, leading to catharsis and 'de-armoring'. He seemed less aware that *"the reduction or dissolution of the*

patient's armor can disorganize his whole system of adaptation and coping" (Macnaughton, 2004, p. 371). Today, there are many therapeutic uses of voluntary hyperventilation, some constructive, and some destructive.

From a physiological perspective, hyperventilation causes vasoconstriction of the blood vessels in the brain (Lowry, 1967). The brain responds first by shutting down activity in the neo-cortex, second in the limbic brain, and then, finally, in the brainstem where oxygen starvation would be lethal. When less oxygen is delivered to the brain, the neo-cortex goes "off-line" first. One of the important functions of the neo-cortex is to inhibit the lower centers. This control is, therefore, diminished due to hyperventilation. With this inhibition reduced, the limbic system and brainstem became destabilized and a flood of primitive sensations, emotions and images are released. Some of these may be trauma-related and many, including attachment styles, are pre-verbal. This dis-inhibition can be of therapeutic value, as it allows one to get in touch with various emotions and procedural (body) memories normally unconscious. However, it can also lead to flooding, panic attacks and potential (re) traumatization.

This experience of dis-inhibition can be dramatic, a bit like taking a hallucinogenic drug such as LSD. In addition, patients can become almost addicted to hyperventilation, since it evokes such intense experiences. This over-breathing can set up a pattern of seeking this kind of dramatic catharsis with its primitive sensations, emotions and strikingly vivid imagery. Hyperventilation, then, becomes a habitual way of accessing these emotions; however, simply "getting them out" does not necessarily give rise to deeper integration and regulation. The habitual cathartic venting of emotions can produce dead-end results where patients do not sense a deeper connection to their felt inner world. They do not learn from experiencing the subtleties of their sensations and emotions and then expressing them effectively in relationship. They may feel better immediately after these catharses, however, problems of destabilization may arise in the next hours or even days or weeks following such sessions.

What the effective use hyperventilation requires is that the patient has the capacity both to hold a 'charge' and also the (limbic) feeling and the observational (neo-cortex) functions, all together, in full play. None of these brain regions can be sacrificed to the other. While talk-therapy overemphasizes cognition and some body-

based therapies over-emphasize emotion, it is balance of all these levels ("bottom-up" and "top-down" processing) that leads to truly integrative and holistic therapy. An optimal therapeutic approach maintains all three regions in concert. Body sensations (upper brainstem and thalamus), the emotions (limbic system), and the observing/thinking/reasoning capacity (neo-cortex), can work together to manifest deep integration and to develop a coherent narrative that furthers the individual's emerging capacities. (Levine, 1997, 2010)

Character Structure and Breathwork: Hyper- and Hypo-ventilation

Strategies for working with patients depend on their psychological make-up and on their character structure. For instance, in the *schizoid* and *oral* character structures, voluntary over-breathing is not generally a good approach for uncovering unresolved developmental issues. In the other structures, *psychopathic, masochistic* and *rigid*, voluntary over-breathing is more useful; the patient has the resources to integrate its impact, having developed more ego strength and autonomic stability at the earlier developmental stages. These later character structures tend to have issues around surrender, which breathwork can help to address.

There will be, necessarily, somewhat different intervention strategies for each of the character structures. When a charge is built up, a *schizoid* structure type may believe he is going to "fall apart," die, or disintegrate. He may become terrified of explosion (fragmentation) or implosion (collapse inward). He may contact an even greater fear of getting stuck in one of these terror states. Supporting the patient verbally, and with gentle touch as he breathes, can result in shifts in activation without falling apart. This experience can move him toward a more organized and functional way of being in the world.

On the other hand, a patient with a *rigid* structure will try, without success, to push through a charge, yet often fails to achieve discharge and relaxation. This patient requires some degree of "provocation", possibly via (agreed) manipulation of musculature (particularly of the jaw, neck, shoulders and back) as well as a continuation of breathwork.

Patients with a *masochistic* structure are likely to be most aware of the tension,

while those with a *rigid* structure will be more aware of excitement, the ability to handle the energetic sensations, and the subsequent move into surrender. When working with these patients, (especially the *masochistic* structure), therapists need to be both firm and gentle. They may need to assist the patient, perhaps freeing the breath using various touch techniques such as massage to diminish the patient's over-thinking activity, promoting a sense of ease and stillness, and allows him to let go into surrender to their softer sensations and feelings.

Therapeutic interventions are used to help the patients' transition from a sympathetic state of arousal and holding to a parasympathetic (ventral vagal) state of release. In the parasympathetic state, patients begin to notice and experience sensations besides pain, bracing, and tension. They start to realize that there is another world available to them. They are now able to experience a larger range of sensations. Later, they can learn to access these sensations and feelings without their habitual over-breathing. They become aware of more subtle, softer sensations, and those of flow, aliveness, connection, yearning, and healthy aggression.

Some further guidelines with regard to these structures include having patients lying down with their eyes closed, attending to their inner experiences, as they increase their breathing. This typically allows them to pay more refined attention to discovering awareness of emergent life energy, sensations, feelings, images and thoughts. It's also important, at the same time, that patients become aware of the therapist's presence and the overall container of safety that the therapist provides (Porges, 2011). Asking patients to report on what they are discovering, as the process proceeds, while also attuning both felt sense and some visual contact with the therapist, can assist in reinforcing the therapeutic alliance, social engagement, and safety for patients.

As a general rule, interventions should be made in gradual steps with patients trying out different breathing patterns, taking a few breaths, then resting and reporting on their experience, their sensations, images, feelings. They then repeat that cycle, pacing the level of integration. These steps help patients develop a foundation of awareness (both cognitively and somatically) so that they can build on in a timely, relational sense of discovery and safety. With each phase of exploration and pausing, integration is enhanced vertically (brain stem, limbic, and prefrontal cortex), and

horizontally (left and right brain).

It is helpful to include interventions, such as asking patients for their awareness of how and where they experience their breath, i.e. shallow or deep, slow or fast, whether in the chest or belly, or both; as well as encouraging them to report if it is experienced in their back, front, to their sides. What sensations, feelings or images arise? What meanings are associated? These questions assist patients in developing a more coherent narrative of their embodied experience and to increase their appreciation and discovery of their capacity for expansion and for various states of consciousness.

It is often tempting to view the character structure in a layered linear manner through life's developmental stages. In fact, while there is a discreet domain to these stages of development, each with their own challenges and opportunities, the whole system of development is actually non-linear, moving (back and forth) between later and earlier structures. For example, an earlier structure may well depend on the stability of later structures for its capacity to self-regulate, if even in a limited way. In addition, it is important not to "undo" a (later) character structure without considering the effect on destabilizing earlier structures. Further, understanding the functions of more hypo-responsive muscular patterns and the hyper- responsive patterns of compensation for hypo-responsive (weaker) tension patterns in muscle fascia and in organ systems. These require precise assessment and more delicate interventions (Marcher & Fich, 2010).

Hyper-ventilators

People who tend to over-breathe (hyper-ventilate) are generally from the later structures (*psychopathic, masochistic* and *rigid)*. They often do not believe in meaningful experience without a tangible concrete anchor ("It's not rational", or "I'm trying but can't seem to find it") and may express disillusionments, since they have tried to change their reality and nothing has happened. They can use breathing as a tool to discover the more subtle levels of their felt experience. In these cases, a therapist can work directly with breathing to build up a charge. Eventually, patients will start going into deeper discharge experiences, altered states of awareness, and suspended respiratory states ("still points"). They may begin to see "eidetic" images and experience subtle body sensations associated with "Near Death States."

Relaxation happens when patients navigate the excitation, or charge

successfully, and are able to drop into deeper states of consciousness. This kind of deep relaxation can support hypernesia and the ability to make more flexible associations and can loosen up the super ego, our critical censor and critical judge. When patients yield to deep relaxation, they are able to access more core material: memories associated with how they see their self, how they feel, and how they experience the difference between the public and private self, the heart, feelings and desires. They also often begin to develop an interest in spirituality and seek to explore these dimensions through various spiritual practices.

Since *rigid* structure patients need to learn to move through the tension and experience the charge, the therapist must work with their tension and help to ease the hold of the musculature, so as to achieve a free flow of sensation. Once patients begin to accept and feel comfortable with new sensations and gain confidence derived from successful experiences, they will be able to gradually release their patterns of holding their breath and muscular armoring.

Hypo-ventilators

Schizoid and *oral* character structures generally hypo-ventilate (though they may have periods of unstable hyperventilation and panic attacks). They need to be strongly encouraged, supported, and helped to breathe more deeply. The first benefits that the hypo-ventilator will experience from increasing respiration is having more oxygen. This enables them to get more energy, and hold more charge, and to sense some greater vitality, core feeling, and satisfaction. It is crucial for the hypo-ventilator to learn to develop self-support. This can be done with a little gentle awareness work with ankles, feet,and on the chest. If the therapist places his hands gently on the sides of the patient's chest, it encourages the patient to engage in 'side-breathing' (expansion of the rib-cage), which is usually more spontaneous and expansive. The patient may need only two or three breaths before experiencing a noticeable sense of charge in their nervous system.

By staying with that experience, until the charge becomes fully associated as a sensation or feeling, the patient can move towards integration. The patient may become a little dizzy, or slightly uneasy at first, and may need external contact or support. The therapist can also encourage some movement work at this time to help the patient titrate the experience gradually. As the patient opens up feelings contained within their body,

these then becomes more grounded in meaning, and mutual-connection. At this point, the goal of therapy is to develop some further sense of containment, grounding and energy flow, and to reinforce the ability of the patient to handle the increasing charge without fragmentation. This is an important corrective experience, because it reorganizes the patient's basic belief in their self, and their capacity to be in the world.

It is important to give these individuals a strong sense of security, so they will not feel that they are flying apart when they experience increased intensity. They need to learn to feel directly within their body and then work at containing it. Their natural tendency will be to escape from the increased sensations, so it is necessary to build up feeling a little at a time, helping patients to stay with their experiences. This initially invites a positive transference and supports them to develop a good therapeutic alliance. Occasional breathwork (as contrasted with breathing awareness), at this point, can help patients develop the strength to reduce flooding by sensations and any spontaneous emotional material that may emerge. As they learn to control the charge and tolerate it, the experience becomes one of developing increased resilience and healthy boundaries.

It is also important that therapists take care not to push the *schizoid* structure into disassociation or catharsis (actually a different form of disassociation). Therapists need to work at a level where patients are able to contain and tolerate the charge, via 'titration' in the Somatic Experiencing model (Levine, 1997, 2010), and cited as the 'window of tolerance' (Ogden, Minton & Pain, 2006). It is critical to work within the patient's observable ability to self-regulate and co-regulate without dissociation.

Titration: Differentiating Procedural Memory & Self-Management of Activation

Understanding the role of the breath, within the therapeutic environment, is an important framework for differentiating between declarative (explicit) and procedural (implicit) memories. Procedural (implicit) memory is unconscious; it is the language of the body, and oversees self-management of activation. Procedural memories include those of defending one's self, setting boundaries, retracting, fighting, fleeing and freezing. The respiratory and autonomic procedural memories are also deeply rooted procedural memories that need to be carefully titrated, and worked with at the level of body sensations (Levine 2010, and Levine, in progress).

Regardless of the precipitating event, patients are going to have procedural (implicit) memory cues related to past overwhelming experiences. One of these might be cued as, "I can't breathe" (the primal fear of suffocation). Once they move through the procedural memory of not being able to breathe and realize, "Ah yes, my breath does come in on its own." Their anxiety lessons and the breath can flow more freely, allowing a state of coherence to develop. Working with breathing awareness (rather than breathwork) is, generally, the best approach here.

Optimally, therapists want the arousal state to go up and then to come down on its own. The goal is to re-establish dynamic homeostasis and a flexible physiological respiratory pattern, and a physiological balance between the sympathetic and parasympathetic (ventral vagal) nervous systems. Attention to respiration is critical because it is intrinsically tied to anxiety, to different kinds of specific traumas related to suffocation.

Primal (core) anxiety is the experience of suffocation. Therefore, pausing between the exhalation and inhalation is a useful exercise. One might suggest, "Okay let's just see what happens . . . I know it feels like you need to take a breath, but let's just see if you can feel what happens just *before* you take a breath?" or "Okay, when you feel like you need to take that deep breath . . . see if you can delay it for a bit. Just feel the sensation that wants you to take that deep breath . . . just see if you can trust in that difficult moment." Generally, as patients do this, their respiration resets to the more physiologically regulated, rather than by conscious effort. It may also be useful to use "self-talk," phrases like, "I can allow a deep breath. I can relax. I can calm myself."

Breathing Awareness

Generally, with early structures, and where there is unresolved (shock) trauma or physical pain, awareness of breath is the most valuable approach. What follows are some descriptions of simple breath awareness exercises.

Just One Breath

The goal is to watch the breath without consciously trying to change it. Have the patient simply follow the sense of the breath as it moves in and through the body, and again as the breath moves out, just like waves lapping on the beach flow in and out.

Have him notice what changes in his body during that one inhale/exhale cycle. Repeat the cycle, following the pathway of a second breath as it moves through the body as it comes in, and then goes out, again sensing it like the tides of the ocean that ebb and flow. Again, focus on what changes are noticed in the body this time. (Levine & Phillips, 2012, p. 33-34).

Circle Breathing

This exercise is used to open up pathways of movement and flow in the body to begin counteracting the constriction of fight, flight, and freeze. First, have the patient take a few moments to connect with the overall sense of his body. Then practice breathing up the middle (midline) of the body, imagining that the inhale starts at the base of the pelvis and rises up to the nose and face. Then imagine breathing out, down, and through both sides of the body, through the shoulders, arms, and hands, and down through both legs and out through the feet. Repeat this process three to four breaths and then do a check-in.

If problems exist in the cervical, thoracic or lumbar spine, another technique involves imagining breathing up the middle of the front of the body to the top of the head. As the patient breathes out, have him sense the breath moving down the back of his head, neck, mid-back, and through the lower back and out through the tailbone; finally imagine it cascading down both legs. Repeat this several times. Then do a check-in: what are the effects? (Levine & Phillips, 2012, p. 25-26).

An Exercise for Patients to Practice At Home: Pause, Take One Breath, and Choose

After working with the therapist on exploring the sensation to breathe and resist, this exercise can help patients find relief from anxiety through a simple three-step model. When the patient becomes aware of an increase in anxiety, the first and most important step is to pause. Really get a sense of pausing and slowing everything down.

The next step is to take one breath with full awareness and notice what happens in the body as they take only one full breath, pause at the end of the inhalation and then exhale pacing the release of air with the inhalation rate and pausing at the end of the exhale. After that breath, or perhaps several more, they will be in a position to make choices—to

use other techniques to stay with the sensations through the discharge or regulate it as necessary for the current situation. (Levine & Phillips, 2012).

Rather than focusing on resistance, understanding, or emotional release, clients can learn to sense their body in a way that helps to awaken undeveloped resources, resources that have been given up, or never learned. The acquisition of these new resources (which are exactly the ones needed, but missing), greatly facilitates the resolution of developmental / relational issues. At the same time, it empowers patients to new actions in daily life, including developing the ability to reposition themselves within their family-of-origin and their social context.

Contraindications

A body-oriented therapist must know something about the somatic organization making up character structure, health status and psychopathology; enough to recognize when not to use controlled breathwork. For example, it is rarely appropriate in working directly with shock trauma. As previously mentioned, however, it can be useful in some situations to help develop resources and uncover previously unconscious material. This holds true particularly for individuals with the later character structures. Nonetheless, it is important for the therapist not to push these clients through to these discoveries prematurely. Put simply, breathing *awareness* can be used in traumatic and schizoid/oral structures to help patients / clients tune into their respiration and autonomic nervous system rhythms, and to develop a sense of beneficial resources. A therapist may choose to do this before working with the shock itself. It is not appropriate to introduce over-breathing techniques for patients / clients under the effect of extreme unresolved birth and intra-uterine stress. It is important for the breathing to start from the generation of spontaneous biological rhythms, rather than those imposed by the therapist.

The patient may have been respirated at birth. If the therapist introduces an external (voluntary) respiration pattern, the patient may become even more locked into that shock pattern. It is important to realize that these interventions must be put into the appropriate context. A therapist should not, for example, do a 'rebirthing' session if a patient is still exhibiting birth stress or shock. However, if the patient has worked through some of their birth and intra-uterine stress, gentle belly breathing, followed by a

light panting pattern can be used as a resource, to recapture some degree of 'womb bliss'.

It is essential to monitor the patient's breathing patterns closely – what appears to be hyperventilation may be a transitional phase that will actually take the patient back to equilibrium. Or, a patient who is barely breathing may start to hyperventilate to avoid going through the experience of "non-breath." Working with this is similar to the situation of patients / clients with dissociative states. Instead of going fully into the state, we need to support patients / clients as they touch into it and come back out.

Careful monitoring and titration is essential and will prevent a run-away cycles of hyperventilation followed by shutdown. The principle of establishing safe resources with patients / clients, both in terms of the relationship with the therapist and through "enough" stabilization of the nervous system, provides a foundation for forward progress. It is important to slow the process down and take it in little bits, and to calibrate interventions in response.

Breathwork may be contraindicated, or be a cause for concern, in the presence of certain medical conditions, or entrenched personality disorders. For instance, it is difficult to know what meaning a patient will place on the altered state experience, especially if they have a borderline personality or a dissociative identity disorder. This patient may take a few breaths and become flooded with traumatic images, projecting them on to the therapist. Such a patient needs to connect more slowly, in terms of transference, rather than have a rapid projection provoked by hyperventilation.

Hyperventilation can cause the blood sugar to drop precipitously, which can be significant for patients / clients with diabetes and hypoglycemia. The increased stress of prolonged hyperventilation could, possibly, precipitate a heart attack in those with certain heart problems, including particular arrhythmias. It could conceivably also increase the rate of spread of cancer within the body. Auto-immune and endocrine problems are most likely a result from Hypothalamic-Pituitary-Adrenal (HPA) axis central nervous system dysregulation. If too much energy is introduced, through over-breathing, the therapist may not be able to control HPA destabilization. Hence, it is possible to reactivate symptoms of lupus, muscular sclerosis, Grave's disease and other autoimmune disorders. A patient with certain kidney problems who is exposed to hyperventilation could, potentially, experience kidney failure since the hyperventilation

can force the kidneys to secrete additional carbonate ions, putting more stress on them. These are not necessarily absolute contraindications, but they are serious concerns and caveats for therapists to, carefully, consider.

Indeed breathwork, along with breathing awareness, can have a considerable positive impact, informing various body-oriented therapies. A therapist can provide trustworthy support to patients / clients,' help them secure healthy attachment, psychodynamic development, movement out of trauma patterns, promote self-regulation, contact core energy pulsation, and help in restoration of the deep self (Levine, 2010).

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Endnotes:

[i] The term "patient" is used throughout this article, although, other terms are such as "client" are preferred

by many therapists. Also, the personal pronoun “him” is used for flow purposes and, of course, refers equally to both women and men.

[ii] Adenosine Triphosphate (ATP) is a nucleoside triphosphate that transports chemical energy within cells and plays a signaling role in the central and peripheral nervous system.