INTERNATIONAL BODY PSYCHOTHERAPY JOURNAL

Published by the European & United States Associations for Body Psychotherapy & Somatic Psychology

The Art and Science of Somatic Praxis

Volume 19 ■ Number 1 ■ Spring/Summer 2020

INTERNATIONAL
BODY PSYCHOTHERAPY
JOURNAL

The Art and Science of Somatic Praxis

Volume 19 ■ Number 1 ■ Spring/Summer 2020

Published by the European & United States Associations
for Body Psychotherapy & Somatic Psychology

INTERNATIONAL **BODY PSYCHOTHERAPY** JOURNAL

The Art and Science of Somatic Praxis

Published by the European & United States Associations
for Body Psychotherapy & Somatic Psychology

Volume 19 ▪ Number 1 ▪ Spring/Summer 2020

Message from the Editorial Team

Madlen Algafari
Editor-in-Chief

Aline LaPierre
Deputy Editor

Antigone Oreopoulou
Managing Editor

A microscopic virus with a crown (Lat., *corona*) has come around to do the work that we therapists do every day – help people find meaning and truth, help them switch on their antivirus programs against the internal "viruses" that flourish in human lack of awareness and mistaken beliefs.

Thanks to the state of emergency, our clients are reaching deeper realizations, catalyzed by what is happening around them in this time when we must work remotely. Some anxious and depressive clients stabilize, while those in need of control soften into humility. The vulnerable become empowered, and the strong are humbled. It seems like the situation pushes us to an alchemical healthy middle ground. We become sick in order to return to health, and we truly meet after an experience of separation.

As Wilhelm Reich would say: *"The emotional plague has been embodied."* And the crown – the symbol of the power neurosis of our time – has finally made our bodies sick. The body is ever the hospitable host of symptoms when a problem cannot be solved at the level of our behaviors, thoughts, and emotions. And the body, as we all well know, makes symbols literal by transforming them into symptoms: fever, cough, and shortness of breath equate to warming up, throwing out what is unnecessary, and expressing the need for internal freedom.

We must take the time to analyze what has happened.

All of this gives us reason to believe that we are profoundly needed – ever more so as body psychotherapists who acknowledge and work with the unity of body and soul.

■ ■ ■

For those who receive the printed version of this *Journal*, you will notice that we have a new look. We felt in need of fresh air and expansion. We wanted larger pages with broader margins that act as a more spacious container for type that is bigger and easier to read. We wanted to honor our rich and diverse contributors with a home that better embodied these very somatic principles of ease and expansion.

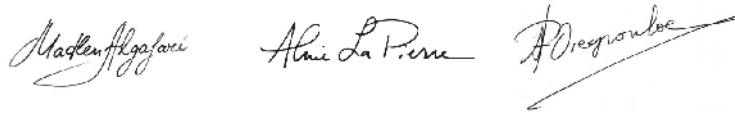
The content of this issue, however, is a continuation of the previous one. It includes articles from the last EABP Congress and USABP Conference, all written before the time of corona. (We hope we will get to use the phrases "before" and "after" the coronavirus as in before and after the time of global awareness. Let us not forget that "apocalypse" (from Greek) means revelation and uncovering.)

In this issue, you will once again find different sections. We acknowledge these pandemic times with a special Covid section that offers different points of view on the unusual situation in which we are forced (or unconsciously chose) to live. An Interview section presents a conversation with Peter Levine, which we complement in the Book Reviews with a comparative analysis of two of his seminal books: *Waking the Tiger: Healing Trauma* and *In an Unspoken Voice: How the Body Releases Trauma and Restores Goodness*. You will discover a new 2020 credo for the body psychotherapist, a moving case study written from the dual perspectives of client and therapist, and a teaching approach to the ethical principles of our profession. You will be introduced to body psychotherapy in Russia, find interesting data on how body psychotherapy in Japan helps schizophrenic patients, and learn how the functional body psychotherapy approach helps depressed clients in Italy. You will explore the benefits of therapeutic contact with nature and silence through the field of eco-psychosomatics, and the healing power of physical activity in Authentic Movement and exercise science – all topics addressing embodied self-regulation, that is, what is natural and true, and what is implicitly familiar and healing for our bodies. And as a special offering, you will learn about the magic of epigenetics and the coronavirus.

Maybe we needed this quarantine to allow an internal dialogue to emerge that would encourage us to sort truth from delusion. We have apparently needed this quarantine to grow our awareness. At times, until recently, when we psychotherapists spoke of growing awareness, people called us utopian. Today, we feel closer to the possibility of transforming a utopian vision into reality. Self-absorbed individuals may even consider taking off their crowns.

Because, as you see on the cover of this issue, all roads in the maze of life lead to the heart – to the love at the center.

Your Editorial Team,



A World Disrupted by a Microscopic Being!

Courtenay Young

As I write this, we are in the middle of an almost worldwide, unique "change process" involving a virtual lockdown in many of our cities and in many countries.

A pandemic (a widespread disease epidemic) can be looked at in various ways: the word itself (in English) connotes "panic," and there is certainly a lot of that around. We may be asked, as therapists, by our clients (now isolated) what they can do to help themselves. So, how can we, as body psychotherapists, work with someone over the phone or by Skype?

Other than using the phrase on the front of the legendary book, *The Hitchhiker's Guide to the Galaxy*, "Don't Panic!", there is actually quite a lot that we can do. They may be very scared, and thus need our reassuring presence. Their present isolation may feel like an earlier abandonment or punishment, which can be worked through. If they live alone, they may be going "stir crazy," and thus need grounding in their body and other forms of contact.

Some of the techniques explored in my writings about "Body Psychotherapy without Touch" (Young, 2007, 2009, 2018) can be utilized. We can, and should be – if not trained in, then certainly aware of – some of the differing factors involved in any sort of online therapy. These are more readily available now, and even people like Pat Ogden are giving webinars about online body-oriented therapy[1].

Many more people will be experiencing trauma, and this can cause panic, and increase its dramatic effects. Much more of our work as body psychotherapists will be dealing with people in trauma, and we may need to extend our understanding and expertise in this area. Luckily, a lot has been written about this from within our field.

There are a couple of broader aspects to consider: a pandemic has been increasingly inevitable as the world population expands exponentially and as world travel has also increased. Indeed, many scientists (epidemiologists) have just been waiting for that to happen. And this may not be the last pandemic; there have been several others, and there may well be several more – almost inevitably.

In such critical instances – and we are seeing many more human crises as global warming increases the incidence of extreme weather events (hurricanes, floods, wildfires, etc.) – everyone should, of course, "hope for the best and plan for the worst." However, these events are often beyond any individual's capacity to cope by themselves, and so we are also seeing many more people coming together and creating heartwarming community responses. This is a very welcome sight, especially in an increasingly narcissistic and material world culture.

As this present pandemic winds down, which it will do eventually, there are many lessons to be learned. and many people will have had their lives changed – often quite dramatically. There have been, and will be, many more people experiencing grief, many businesses will have gone under, there may well be more restrictions still imposed (similar to some "emergency powers" – but gradually

1. *Sensorimotor Psychotherapy from a Distance: Engaging the Body, Creating Presence, and Building Relationship In Online Therapy*. Pat Ogden. Zoom, US.

lessening), the refugee crisis is not over and may have become more intense, and these most vulnerable groups of people will need additional resources. We may see the military increasingly being used to assist – a humane use of military power – and (no doubt), this resource might also become abused by a military coup.

All these factors – once they seemingly pass – may cause people to become overly joyful or even complacent in the short term, but the next crisis or disaster may well be coming soon. Many people may well become almost continually scared – something akin to post-traumatic stress disorder. These are all external factors in this so-called civilized world.

Internally, our emergency response mechanisms – located deep within our autonomic nervous (and vagal) systems – will become increasingly triggered. This present-day overload must be treated first, before any further therapy work can be done. We may therefore need to teach our clients – and ourselves – many new "tricks" to self-soothe, stay centered and grounded, relax properly when we can, self-regulate, de-stress, and try to maintain equilibrium in both body and mind. Some of these techniques should have been taught in elementary school, as our children may now have to learn very different topics; understanding the history of our country takes second place to learning new survival techniques.

There are also broader aspects to be considered. On the TV news recently, one person quoted the maxim about what happens when a single butterfly flaps its wings far away in a forest; they followed this with the question of what happens when someone in a street market cuts up a diseased animal for food, and its pathogens mutate across to our species. Many of these "plagues" or pandemics have a zoonotic origin. Perhaps we need to consider a much wider perspective, like how do we (as humans) relate to other animal species and – indeed – to the planet itself?

Finally, there are some metaphysical concepts. We are not the "supreme" beings or "rulers" of the earth, or so scientifically advanced that nothing can harm us, or so "civilized" and cultural a species as we thought we were. A microscopic being has disrupted our world; it is almost ironic. However, a metaphysical crisis is generally considered a good thing, because it makes us look more closely at our lives. Some people believe that we can create opportunities out of such crises: this may be the way to do so.

We tend to see these plagues and viruses as something "bad" because they impact negatively on our lives and on our worldview; we forget that they may have, or there may be, a valid reason for their existence. Many bacteria live in our gut and undeniably perform very useful functions. Are there then some bacteria that are "good" and others "bad"?

Maybe we need to step back and consider such events from a more metaphysical perspective. I am not – quite – going so far as to say that such pandemics might be Nature's way of reducing the impact of a virulent species (us humans) that is overrunning the health and wellbeing of its (planetary) host – but I did write a poem to that effect some time ago.

More recently, I posted on Facebook: *"I am trying to treat the CV-19 hysteria by staying in a Zen space: I am wise because I know that I know nothing; because I know nothing, there is nothing to get anxious about (i.e., it is all in my imagination); I stay calm because it is pointless to worry."*

Stay safe!

■ ■ ■

Courtenay Young s a UK-based psychotherapist, who originally trained in body psychotherapy. He has been working within the field of humanistic and transpersonal psychotherapy, and he has been employed as a Counsellor in the NHS for the last 15 years, while living in and around Edinburgh, Scotland. Previously, he was the EABP General Secretary (1992-1999) and the EABP President (2000-2004), and is now an Honorary Member and a founding member of the EABP's Science and Research Committee (SRC). He was also a founding member of the USABP. He has been a representative on the Board of the United Kingdom Council of Psychotherapy (UKCP), and of the European Association of Psychotherapy (EAP), as well as many other professional associations. He is a member of the EAP's Science and Research Committee (SARC), and is currently the Editor of the EAP's *International Journal of Psychotherapy*. He has written many published articles and has authored and edited several books, details of which are on his website: www.courtenay-young.com.

Everything Has Meaning

Madlen Algafari

I believe that everything has meaning!

Even my naivety. In the search for the meaning of what is going on in the world at the moment, I find that I never want to lose my naivety. I hope that there are others like me out there, that we are many.

I hope we will learn to limit our abuse of freedom in order for those in charge not to limit our actual freedom.

I hope we will cure our power neurosis – the leading diagnosis of modern-day humans alongside the lack of awareness (Bernasconi, 1999). The corona (Lat., *corona*) is a symbol of power – power that makes us ill since we prefer to be right rather than happy, since we strive to dominate no matter the cost.

I hope that, in a time, rather than heading towards alienation, distancing will remind us that our first human need is to belong.

I hope we will be able to appreciate closeness in real life and not only through screens and keyboards.

I hope isolation and hunger for touch will remind us that touch is essential for our bodies and for our souls. We, body psychotherapists, have been pointing out for years how terrifying it is that we touch each other less and less. While all the while a hug is the fastest antidepressant and the quickest tranquilizer (Bernasconi, 1996).

I hope immobility will remind us of how important it is to walk on foot.

I hope we will need fewer possessions since hyper consumption is killing humanity and the Earth.

I hope we will come out less afraid of silence and of spending time alone as we realize that not only are they not dangerous but they give us an opportunity for self-analysis.

I hope we will feel everyone around the planet closer to us, regardless of sex, race, religion or nationality.

I hope we will understand the terrifying power of the media that constantly seeks sensation. The media not only informs but intoxicates as well.

I hope more people will develop critical thinking.

I hope less people will be shaken with panic.

I hope more people will realize their own strength, and see what they believe in become real.

I hope we will become aware of our personal responsibility in making ourselves ill or making ourselves healthy.

I hope that having felt our lungs threatened, we will protect mother Earth's lungs – the forests – and protect the air that we ourselves need to be clean.

I hope we will rearrange our priorities and understand that communicating through love is the most important, that to be is more important than to have (Bernasconi, 2005).

I hope we will not be in such a hurry all the time.

I hope we will appreciate what personal space means and will no longer abuse our own boundaries.

I hope we will not waste. Anything.

I hope we will safeguard our most humane urge to help.

I hope we will live calmly and, since we don't control everything, have more humility and acceptance for the unknown.

I hope we can be more centered and aware of the "here and now" and not the "there and then".

I hope we will have greater appreciation for our elder friends and family.

I hope we will see what nonsense we have fought over.

I hope we will not fight as much with each other since a microscopic enemy has shown us that we can be united.

I hope we will better appreciate our homes and, even when we can travel anywhere in the world, not forget our roots.

I hope we will eat healthier and have a greater awareness of the signals our body and souls send us.

I hope we will communicate more honestly and be better once we have outlived such evil.

I hope we will be able to act out of goodwill and not necessarily for profit.

I hope we will care for a broken tree branch on the other side of the world having understood that we depend on it.

I hope we will grow up and stop acting like irresponsible children (Algafari, 2010).

I hope more people will realize that the first doctor on the frontline we should be applauding is ourselves as we have the ability to make ourselves ill (alas!) as well as to heal ourselves (Algafari, 2012).

I hope we will manage to understand the meaning of all that has happened so that we never go back.

I hope those who have understood this will use love to help those who still find it difficult to grasp.

How about you?

Madlen Algafari is a psychologist, psychotherapist, writer (12 books), theater director. MA in psychology from University of Sofia "St. Clement Ohridski" in 1991, postgraduate specialisation in Neo-Reichian analytical psychotherapy with Prof. Waldo Bernasconi in 1998 – Lugano, Switzerland, member of the Bulgarian Neo-Reichian Association, member of the Bulgarian Scientist's Union – section "Psychology and Pedagogy," President of the Board of directors of the Bulgarian Institute for Neo-Reichian analytical psychotherapy, member of The Bulgarian Association of Psychotherapy, member of the European Association of Body Psychotherapy. Editor-in-Chief of *International Body Psychotherapy Journal*.

Website: www.madlenalgafari.com

REFERENCES

Algafari, M. (2010). *Fairytales for Grown-up Children* (e-books – Amazon). "Junior Partners", Sofia

Algafari, M. (2012). *How to Fall Ill Best* (e-books – Amazon). "Junior partners", Sofia

Bernasconi, W. (1999). *La Nevrosi di Potere*. Irc-Press, Lugano

Bernasconi, W. (1996). *L'uomo a Cassetti*. Irc-Press, Lugano

Bernasconi, W. (2005). *Ecce Homo Nevroticus Normalis*. Irc-Press, Lugano

Covid-19 Pandemic Stress and Its Impact on Our Epigenome

Milena Georgieva

George Miloshev

The word Covid-19 raises caution as no other word ever has. Not even the words "war" or "death" have been as scary as "Covid-19".

Cases of a new coronavirus first emerged in late 2019, when a mysterious illness was reported in Wuhan, China. The cause of the disease was soon confirmed as a new kind of coronavirus, and the infection quickly spread across countries.

The world went under complete lockdown!

In our modern world of advanced technologies such as AI, self-driving cars, and trips to Mars, we are on lockdown, socially distanced by a banal and, at first glance, prosaic viral respiratory infection. How can this be explained? How, in the world of modern medicine, where we bravely discuss gene editing, human design, and the possibilities of combating human disease, are we completely defeated by a viral infection? These are questions we scientists often discuss during our regular webinars and digital meetings. And yet we cannot find any logical explanation...

Covid-19 has threatened the modern world and commanded a major change in our way of living, our way of communicating, and our whole working process. We went digital!!

With the successful development of a vaccine and treatment protocol, this disease will eventually disappear, or at least fatal cases will be reduced to near zero. But how shall we exit the crisis provoked by the infection within us—the crisis provoked by the fear of losing our work and our monthly income, which can overwhelm our whole being!!

Stress, stress, and stress – this is the world we now live in. We strive to reduce our stress, and meditative and psychotherapeutic techniques teach the importance of inner regulation. The best way to combat stress is to focus on what makes us happy and relaxed, because stress, no matter the source or type, leaves marks on our genes and adds chemical molecules that control our genetic activity for generations to come. Take, for example, the Dutch famine at the end of the Second World War. For months, the German occupation of the Netherlands left the country under complete lockdown. This was accompanied by extensive stress and lack of food. Women pregnant during this period gave birth to children small in size who, later in life, suffered from metabolic syndrome, Type 2 diabetes, and cardiovascular disease. Medical records of these individuals show extensive change in the epigenetic profiles of the genes involved in their metabolism and overall maintenance of their physiological functions. These records were the first proofs linking stress to changes in gene activity, and showed that these changes continued on for many generations. Since then, a lot of additional data has accumulated linking stress with changes in gene activity. The most striking fact about these changes in gene activity is that they are transmitted to future generations.

In this time of Covid-19, we will witness a similar outcome. People under lockdown, stressed by their changed way of life, stricken by the fear of becoming homeless, poor, and without any way to survive the economic crisis will, undoubtedly, experience impacts on their genes. Years will pass before we can detect these changes and track them in future generations. It is certain that the pandemic and the stress it causes in almost everyone will have changed our epigenetics, and will lead to increases in mental disorders and other pathologies. Special attention should be given to these emerging dangers. It will require the joint efforts of scientists, medical doctors, psychotherapists, and policy makers to track down the epigenetic changes induced by the pandemic and its impact on human health.

Particular care should be given to the mental health of all of us living under the pandemic and to our future generations.

■ ■ ■

Associate Professor Milena Georgieva, PhD, Molecular Genetics Lab, Institute of Molecular Biology, BAS. Milena is an Associate Professor of Molecular Biology. Her current work investigates the interplay between DNA and the environment during normal development, aging and age-associated diseases. As a specialist in Molecular Biology, Genetics, and Epigenetics, Milena believes that in modern biomedicine we can now very clearly distinguish between the time "before" and "after" the project "The Human Genome." The time "after" not only marks the beginning of the new millennium but also highlights the beginning of a turning point in modern medicine, where the handwriting of our genes and the specificity of our DNA are studied in the light of epigenetics. As a zealous communicator of science, Milena strives to present trends in modern science in accessible and interesting language.

E-mail: milenageorgy@gmail.com
LinkedIn: https://www.linkedin.com/in/milena-georgieva/
ORCID ID: https://orcid.org/0000-0002-2371-7544
Website: www.chromatinepigenetics.com

Professor George Miloshev, PhD, Head of the Laboratory of Molecular Genetics, Institute of Molecular Biology, Bulgarian Academy of Sciences. Professor Miloshev is a full professor of Molecular Genetics, and head of the laboratory. His main interests are in the field of chromatin, with special emphasis on the interplay between the environment and chromatin structure and dynamics. His scientific interests and research efforts are aimed at gaining deeper understanding of general cellular mechanisms, specifically about epigenetic phenomena. The intention of his work is to acquire information for practical use in medicine, criminology, and ecology. The areas of his research include epigenetic mechanisms, nuclear organization, and chromatin structure and dynamics, especially at higher order levels of organization.

E-mail: H1resteam@gmail.com
LinkedIn: https://www.linkedin.com/in/george-miloshev-b7595148/
ORCID ID: https://orcid.org/0000-0003-2979-8899
Website: www.chromatinepigenetics.com

The Non-Places of Body Psychotherapy in Coronavirus Times

Luisa Barbato

In just over three months, Covid-19 has brought a radical transformation in our world as we knew it. Reality has taken us into a most terrifying science fiction movie. Life will be changing in a radical way after Coronavirus period. The time of emergency has maybe passed away, but we now have a time characterized by another place and another time, a time in which we psychotherapists are even more important in this period of an economic recovery full of confusion and uncertainty.

Many of us have experienced a new form of psychotherapy, we can call it a psychotherapy for the Coronavirus times. We can identify it as an "other" psychotherapy: mediated by a screen or a telephone, characterized by a new setting with two different virtual places, perhaps two non-places where people in their physicality disappear or are reduced to an image or a voice. Sometimes, I have thought about how much technology has helped us in this pandemic time, as technology has allowed us to offer support and continuity to our meaningful human contacts. This is particularly true for the therapeutic function, so important precisely at this time when we all need containment for our fears, our anxieties, our need to face the economic crisis. A phone call, a video call, or an online session can make all the difference.

Containing the anguish, the fear, and the anxiety of the last few months in response to an invisible enemy was not easy. Even more difficult is maintaining hope and planning for a vital future. It was also difficult to welcome and support those parts our interiority more vulnerable, threatened, exposed. The words "caution" and "acceptance" were key words in therapy sessions with my patients.

Now that we can breathe a little more, that the roads in Italy are getting busy again, we can reflect, once again and with even more commitment and sense of responsibility, on the function of psychotherapy, above all body psychotherapy – on its function of accessing the sense of reality, the limits and resources of each individual, and her/his potential to be an agent of change. This is particularly true now that the economic crisis begins to be felt, and everyone is called to restart together, as even the television advertisements tell us.

The function of body psychotherapy is essential in this phase; the ghosts of the pandemic can be overcome, above all, by anchoring ourselves in the body, that is, to our vitality, to the energy that never ceased to flow inside us, to our sensations, which cannot be confused with opinions.

During the last two months, we had to face new conditions and new challenges: online psychological counseling was the elective way to "meet" our patients. But it wasn't always so easy. Due to cramped and necessarily shared spaces lacking privacy, many patients didn't have a safe place in which to take advantage of therapy in their home. Others showed some resistance to adapt to the online mode and decided to wait for "better times" to again meet their therapist, as if they could recognize themselves only in the specific place of psychotherapy.

For some patients, online psychological support could become an experience of distance and unsus-

tainable abandonment. In patients with more compromised functioning, online contact could reinforce an experience of alienation or a lack of adherence to the reality principle. We must now be ready to welcome them back, if they are ready to return – not only to the physical space of our clinic, but above all to that peculiar space of intimacy that is the therapeutic relationship. So, now we can help them to return to "reality." "Reality" starts from body sensations.

Now we wonder if online communication substituting for presence could become a new setting, even in normal time. In my opinion, it's difficult to evaluate, as we know that some particular elements constitute the psychotherapy setting: the place and space of the cure, the relationship in person, the here and now, the contact, in general the communication between two bodies.

The setting is a scene where the patient's past can be present; it's the place of care, a microenvironment rich in internal and external objects, the place where the therapeutic relationship and the holding function are developed.

The therapist's and patient's bodies are present in the setting, most of the time with an unconscious and analog communication. Our body feels and transforms itself through encounter with another body in that particular space-time, and this produces a transformation in the other, and in the relationship. We can say that without an experience of transformation in the body, we can't have a complete psychological transformation.

So, what happens to this transformation and vitality in a "virtual" setting? How can we be free to communicate if we are mediated and, in a certain sense, interrupted by the screen? I wonder how much space can be available for creativity and body sensations in online psychotherapy?

Is a full and vibrant meeting with the patient possible in remote therapy? These questions aren't easy to answer now, but I think the risk is a psychotherapeutic relationship that isn't sufficiently a body-to-body relationship. Maybe, in part. Of course, we can know the patient's thoughts expressed verbally, and look at a part of her/his body, but this may not be enough.

It's also important to consider the contact: a fundamental and indispensable element of the psychotherapeutic communication, even when, as in different therapeutic approaches, it does not include physical contact. All the senses are called to listen and dialogue; also silence, noises, smells, and looks are part of a deep communication, regression, opening. It's an integral part of the work to access memories, emotions, insights. Online therapy can represent a narrowing of experience, rather than an evaluation and amplification of these indispensable and constitutive elements of the relationship.

I believe that the near future requires a wider approach: the virus aggravated loneliness and depression; it isolated and separated us from each other. Now, gradually, it's possible to return to a different sociality. First, we as a professional community must respond by meeting again, person to person, becoming and offering an example to get out of isolation and fear.

We can help our patients transform the negative emotions of this period, such as suspicion, social estrangement, complaint of a more identifiable enemy, and conspiracy, where the "other" is identified as a potential carrier of disease and danger from which we must get away.

These emotions can be replaced by other internal dimensions, above all altruism and compassion, activating the areas of our resilience and the resources available for everyone. We can help our patients to do so with our multidimensional know-how: psychological, intellectual, emotional, and physical.

Luisa Barbato is a certified Reichian body psychotherapist and a Board member and supervisor for the Italian Society of Reichian Analysis (SIAR). She practices as a body psychotherapist in Rome in private and public institutions working with individuals and groups. She is the director of the Scientific Committee of the Italian Association of Body Psychotherapy (AIPC). She is an elected member of the Italian Board of Professional Association of Psychologists and is the chair of the Executive Committee of the Forum of European Accredited Body Psychotherapy Training Institutes. She teaches body psychotherapy in numerous Italian post-graduate schools of psychotherapy.

REFERENCES

Ferri, G., & Cimini, G. (1999). Analytical Setting: Time, Relation and Complexity. ***Annals of New York Academy of Sciences***, 857 (7)

IAP, a cura di Giuseppe Ruiggiero (2020). Diversi orientamenti nel comune disorientamento: riflessioni e confronti. Available on FIAP website

Lowen, A. (1958). *The Language of the Body*. New York, NY: Grune and Stratton

Montecucco, F. N. (2005). *Psicosomatica olistica*. Roma, Italia: Edizioni Mediterranee

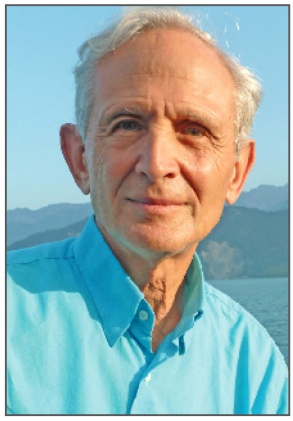
Reich, W. (1945). *Character Analysis*. New York, NY: Farrar, Straus & Giroux

Reich, W. (1948). *Function of the Orgasm*. New York: Farrar, Straus and Giroux

A Shaman's Scientific Journey

Conversation with Peter Levine

Aline LaPierre



Peter Levine recently received the eminent Psychotherapy Network Association's Lifetime Achievement Award. Now in his eighth decade, he reminisces about the personal journey that led him to develop Somatic Experiencing, a body-based revolutionary approach to trauma treatment now used worldwide by some 50,000 practitioners in 42 countries. This conversation gives us insight into the creative process of a man whose visionary curiosity has opened hopeful healing possibilities beyond what he ever imagined. Peter reads excerpts from the autobiography he is currently writing, and marvels at the synchronicity of events that have guided his life.

Aline: *Peter, you have raised global awareness of the profound impact of trauma. I thought I'd start with an obvious question by asking you how your amazing journey began. What were your early roots? How did you come to somatic psychotherapy, because it wasn't an obvious choice in the 1960s when you were at the starting point of your career?*

Peter: Where to begin? In the mid-1960s, I was interested in what at that time was the fledgling field of mind-body. I worked with a group of people who had high blood pressure, and I discovered that by doing exercises and helping them relax their jaw and neck muscles, that sometimes their blood pressure would drop by 10, 20, 30 and even 40 points, so I knew that something important was going on. I think in a way that was my beginning, but I have so many different possible beginnings.

During that time, after the Nancy story, in '69, as relayed in my book *In An Unspoken Voice*, I started to do more work with people who had different symptoms. As you pointed out, the idea of trauma didn't really exist. It certainly didn't exist as PTSD, which arrived as a diagnosis a decade and a half later. As I started working with more people and seeing what kinds of things were underlying their symptoms, it became pretty clear that it had something to do with accumulated stress and trauma.

The other thing I realized around this time was that if animals in the wild, in their natural environments, were traumatized the way people become traumatized, they wouldn't survive, and their species wouldn't survive. I realized that there was something that animals did, that other mammals did, that we humans weren't doing, or were somehow interfering with, so that we became much more susceptible to traumatization. I recognized that an event where we're very frightened, or feel helpless and overwhelmed, can leave a permanent imprint on a person's body-mind. Working with that, in 1973 I think it was, I came across three ethologists – scientists who study wild animals in their natural environments – Nikolaas Tinbergen, Konrad Lorenz, and Karl von Frisch. I was particularly taken by the work of Tinbergen.

I came across a transcript of his Nobel acceptance speech in which he described some treatments that he and his family were undergoing that made a big change in their sleep and in their posture and blood pressure. I thought, *"My God, that's just what I'm observing."* I was able to make contact with Tinbergen. He was then at Oxford, and we corresponded by snail mail. We also had some conversations on the transatlantic cables. Basically, my conversations with him cost me much of my graduate student's stipend. He was very encouraging and strongly supported what I was doing in my practice.

I continued to develop more healing tools, and also began exploring the antecedents of becoming overwhelmed beyond our capacity to rebound, to restore. This was what I was observing with the animals. They could restore after they experienced threat – very often more than once a day. In fact, life threats could happen many times a day. If they were to lose their competitive edge, each time they

barely escaped, they would not survive the next time, certainly not the next, or next. What, I wondered, prevented people from having the same kind of resilience? That's when I got into "the body thing".

A: *You were in a creative process.*

Peter: Yes. That's right!

A: *The way you questioned, and the way you tracked and followed signs, and how you experienced it in yourself; you are describing a deep, alive, creative process.*

Peter: Yes, indeed. When I received a Lifetime Achievement Award from the USABP in 2010, in the address, I mentioned something about creativity and my urge, my drive, my desire to explore anything that was in front of me. I mentioned that my creativity came from my hunger to explore, to ask questions.

I was very surprised that my brother Jon was there, because he was a very famous medical researcher who had discovered the mechanisms of the placebo response. My belief was, that he didn't really consider the work I was doing as legitimate because it wasn't scientific enough, so I was very taken when he showed up for the award. When we had dinner afterwards and I mentioned curiosity as being important, Jon said, *"I don't know if you remember this..."* He told the story of when I was about eight years old; he was about five, and my youngest brother, Bob, was about three and a half. During the summer, we stayed on my grandparents' farm in upstate New York. We would get fruits and vegetables from the farm and take them in our little red wagon up Pine Tree Road to a bungalow colony where people from New York City came to spend the summer in the country.

Here we were, three cute little kids, and people couldn't resist us. We basically sold out every time. This particular time though, we were coming back with one head of cabbage in our red wagon. Tired from the long walk, we stopped for a break. When we started for home again, Jon pulling the wagon forward, I noticed that the cabbage rolled to the back of the wagon. I became enthralled with this, and deeply curious. I sat at the side of the wagon and had him pull the wagon forward over and over again. What I realized was that it wasn't that the cabbage was rolling to the back of the wagon, but rather that the cabbage was staying in place as the wagon lurched forward.

When I got back to the farm, I asked my mother about it. I said, *"Every time we did it, the same thing happened. The cabbage stayed where it was while the wagon went forward."* She said, *"Well Peter, I don't know quite how to tell you this, but you've just discovered Newton's first law."* It wasn't till I was in high school that we formally learned that a body at rest tends to stay at rest unless acted on by outside forces. An object in motion tends to stay in motion. From then on, I was constantly in motion. As I continued corresponding with Tinbergen, he really encouraged my thinking and my creativity.

In the early 70's, I was with a group of about a dozen really bright therapists from Berkeley. We would meet at what they called my tree house. It was out in the country at the end of Wildcat Canyon in Richmond. I would work with people and try to get the right language to explain to them what I was doing, why I was doing it, what outcomes I was expecting, as well as what actually happened. It meant finding a language to explain what I was doing, because, at that time, I didn't have any clear verbal explanation.

As I started working with more and more people, they began to see me as some kind of "a mystical shamanic healer" type. My job was to prove them wrong: To prove that this was something that was scientifically validated such that it was teachable, transmissible, and that people could learn it and then pass the teachings onto others. That was really the basic development of SE. Starting from that small 12-person cabal in Berkeley, it has spread, and by this year of 2020, there are 50 teachers teaching in 42 different countries with, at this point, 50,000 practitioners.

A: *That is truly extraordinary.*

Peter: It is, and I still can't get it. I still don't get it. I still keep thinking, *"Right. I've taught it to 12 people."* The idea of how it's caught on, and how the whole field of body psychotherapy, which used to be considered fringe, is now clearly becoming mainstream! This last week, I received a Lifetime Achievement Award from the Psychotherapy Network Associates.

A: *I saw it. I heard your acceptance talk.*

Peter: You did?

A: *I did. The award was a beautiful acknowledgement and appreciation of your work.*

Peter: At first,I had to think about what I was going to say. I felt awkward, but then it occurred to me that I have always been this rolling stone, traveling around the world like Johnny Appleseed, trying to teach anybody who would listen. It just took off on its own after awhile. Getting this award, not from a body-centered field, but from very traditional talk therapy representatives, made it clear to me that the genie was out of the box; that it was no longer a fringe movement. Embodied psychotherapy is now part of the mainstream. Because again, what I discovered in the late 60's and early 70's was that trauma is something that not only affects the brain; it affects the mind, but I would say that it primarily affects the body.

When we are frightened, our bodies tense into readiness. If we're experiencing overwhelming life-threat, our bodies collapse into helplessness. These are things that go on in the body. As long as they're going on in the body, it's actually sending information from the body to the brain

saying that the threat is still occurring. So, the threat then gets, if you like, embodied. It stays with the person because they're getting that feedback from the body. The key in developing Somatic Experiencing was to find ways to help people find different experiences in their bodies, ones that contradicted those of fear and bracing and overwhelming helplessness. Because when we have new experiences in the body, then those new experiences would be relaying back up to the brain.

That was it. If you could break those feedback loops, I call them positive feedback loops with negative consequences, if I could interrupt those by having people create new experiences in their bodies, then the trauma was gone, as though by magic. I think that's why people saw me as being some kind of "mystical" shamanic healer because I was fiddle-faddling with the experience people were having in their bodies, helping them create new ones. It seemed magical, but of course, it wasn't. It was a very clear, pragmatic approach.

A: *From early on, you had the capacity to observe very closely.*

Peter: That's right.

A: *You were moving bottom-up before neuroscience became popular, before bottom-up became a buzzword. You had somehow entered who we are as human beings from the bottom, from the living body.*

Peter: Yes, that's right. It was also about aliveness in our body, about connecting with the living, sensing body; knowing the experience not just the anatomy.

A: *The 60's were very much about living in our bodies so I think there must have been some influence there, because I grew up in the 60's as well, and it cued all of us into a different way of being embodied*

Peter: When I came out to Berkeley, I didn't know I had a body.

A: *[chuckles] Right.*

Peter: This friend of mine, Jack Kaplan, was very much involved with the Green Gulch, Zen Center there. This couple was giving a workshop; it was basically for the monks who were at Green Gulch. It was given by this woman named Charlotte Selver and her husband, Charles Brooks.

A: *Yes, she developed Sensory Awareness.*

Peter: I went there to that workshop for two days. She had us walk around the room, picking up things, feeling the weight, feeling our feet and our legs as we walked around the room. I remember I saw this one monk and said to him, *"How are you doing with this?"* He said, *"I don't know. I'm getting pain in my head."*

After the workshop, I remember it was about sunset. This was at that big church on the top of Geary Street, I forget what it's called, a beautiful contemporary church. I walked out and I looked down at San Francisco at night, all the lights were on, and you could see the colors from the sunset and all of a sudden, I realized, *"This is the most beautiful thing I've ever seen."*

That really flipped my thoughts. What the heck had happened there? Obviously, something profoundly shifted. At that time, I was teaching the class for sophomores in Berkeley on contemporary natural sciences. It was basically a composite of different natural sciences. I had gotten a small grant from the National Institutes of Health to get some physiological measuring equipment. I had this curiosity about some of Charlotte Selver's exercises at the end, when we were breathing in from your feet or breathing in from your groin. I thought, you don't breathe from there, you breathe from your lungs, but I couldn't contradict the results. The results were amazing.

Anyhow, there was this young red-haired Irish girl in the class. I asked her if she'd be willing to do some experiments. After the class, I connected her up to the physiological monitoring, which was an instrument gauge around the chest and belly. Then I also connected an electromyogram muscle activity recording to her feet. I figured I would just get her to do the things that Charlotte Selver taught us to do, and see what happened, see what relationship there was between the breath and these other physiological components. I tried to get her to do the exercises, to relax this, to relax that, but it wasn't working.

I didn't know what I was doing. I totally didn't know what I was doing. Finally, out of frustration, actually, out of her frustration, all of a sudden, I could see that along with her breath, the blood was moving into her extremities. There was activity in the muscles in the feet. Literally, everywhere on the body, you could see indications of the breath. It was literally an embodied experience, but then I realized this is something that is a truly valid phenomenon, even though you don't literally breathe through different parts of your body. The cohesion or the coherence between breath and all of these other physiologic functions was undeniable.

That's when I started developing my techniques to work with people who had high blood pressure, linking it up to the different, what we now call trauma experiences, that people have had through their lives. We then worked to reconnect these people to their physiological coherence. That's what really shifted them out of the trauma.

These experiences added to my exchange with the Nobel laureate, Tinbergen. His field of study, ethology, was about observing animals in their natural environment as they went about their day-to-day functions. In my client encounters, I was starting to use that same skill looking, or let me see now... what's the word I'm looking for? Observing the people that I was working with. Carefully, observing in the way the ethologists observed the animals.

Day after day, I observed these people I was working with, week after week, month after month, and really year after year. I was using those skills pioneered by ethologists in my study of human behavior and human physiology, as related to their internal psychological and spiritual states.

A: *You're describing the stages you went through in developing SE.*

Peter: That's right. It was by no means a linear process. It was definitely something where I would be going in this direction, and something would steer me in another direction. Then somehow, I was able to gradually put the pieces together. Finally, in my 1972 Berkeley class, I started to teach it to therapists.

A: *Part of your journey was a deep involvement with your own experience, as well as observing.*

Peter: A friend of mine once said, *"Research is me search."* I had a lot of tremendously ominous threats throughout my childhood as well as some very traumatic life experiences; hence a likely background for somebody who's going to be studying trauma.

A: *You could not know this at the time.*

Peter: That's right. One of the first people I worked with in 1969 was Nancy. She was experiencing all kinds of physical problems, which would now be called fibromyalgia, irritable bowel, chronic fatigue, migraines, and so forth. We discovered what was underlying that, plus the panic, anxiety, and agoraphobia that had plagued her since the age of four years old. Doctors and nurses had held her down, and forced an ether mask on her face for a routine tonsillectomy. She was utterly terrified. She went into sheer terrifying shock. She never really recovered, and her body, even 20 years later at the age of 24, was still wanting to escape, but couldn't because she was held down.

In that session in 1969, she was able to muster what her body needed to do. Instead of having the experience of trauma, she had the experience of empowerment, of agency, of flight. I remember at the end of the session, she asked me if I wanted to know what had happened, and I said *"Yes."* She said, *"Well when you told me that there was a tiger chasing me to run and run and escape, when I first tried to run, I couldn't run, my legs were like lead. When you continued to encourage me, I could slowly feel my body starting to move, and I could."* And when I told her, *"And climb those rocks and escape"* she said, *"Yes. I could feel myself. I could actually feel my body climbing. When I got to the top, I looked down and I saw the tiger, but the image of the tiger changed to seeing me when I was four years old being held down."* She had renegotiated the experience. That's a term that I've used, renegotiating the trauma by instilling an active response where previously there was only the experience of overwhelm and helplessness.

A: *That was a moment similar to you looking at the cabbage and going, "What's going on here?"*

Peter: Exactly! It was an aha moment.

A: *An aha that started with a cabbage in a little red wagon.*

Peter: That's right. It started there. I have another friend, Ian, who said, *"Well, the shortest distance between two points is not necessarily a straight line."* My development has definitely not been a straight line. It's been a jigging and a jagging. Carl Jung once said, *"The right way to wholeness is made up of faithful detours and wrong turnings."* Using my curiosity, I basically followed it to wherever it took me to next and put the pieces together, piece by piece by piece, until it was something coherent that could be transmitted to others.

A: *I'm intrigued by the fact that you had to find the languaging because there wasn't any. There's still a lack of languaging to talk about the deep inner body experience and the energy we experience there. It's still a work in progress.*

Peter: Indeed, it is. That's been, in a way, the motivation for a number of... well, for all the books I've written. In a way, it's to try to get this language and describe this phenomenon in different ways so that lay people could understand it, so that therapists could understand it. Researchers could understand it.

Around this time, when I was beginning to develop things in the 70s, I came in contact with Stephen Porges. He was on sabbatical at UCLA, so I flew down to meet him there. This has been a deep friendship that has lasted throughout our whole lives. I explained to him what I was observing clinically, and he was puzzled by it. Then, come 1992 or 1994, I forget which, I think it was 1994, he published the "polyvagal theory," so that we were able to put the science and the phenomenon together and give it more credibility if you like, with a different language to teach it.

A: *Grounding the experience of the body in real science validated it, and was crucial because the body has been so maligned and ignored. Between your work with trauma and his work with the polyvagal system, you were putting body psychotherapy on the map.*

Peter: Yes, I think so. The people who I think have made those contributions really are, of course, Stephen, and back in the '80s, when I was living and working in Boulder, Colorado, a neurologist who had heard about my work, Bob Scaer. He was one of my first clients in Boulder. He is fine with me telling the story. He had, I think, a two-year-old or four-year-old child. He was playing with some friends, rough playing. One of the kids took a hanger and threw it, and the hanger went through his eyes and he lost one eye. In our first session, this came up in implicit and in procedural memory. He had had fibro-

myalgia for most of his life, but after that session, it was 80% gone. I didn't know this, but he headed the physical therapy department at the Boulder hospital. After that he went from being a standard neurologist to becoming a traumatologist and wrote two very important books.

A: *Yes, he did.*

Peter: One is called *The Body Bears the Burden*, which is about how traumas get locked in the body as disease. Another one is called *The Trauma Spectrum*.

Then there is Bessel, who I met back in…it must have been the early or middle '80s; I'm not sure. He also began to understand the centrality of the body. He had more to lose than I did. I was always considered a maverick while he was a mainstream psychiatrist. First came his research, and then his book, *The Body Keeps the Score*. Again, the work went from being nowhere to now being everywhere. That's it.

A: *Like you say, it's mysterious, and there is so much synchronicity. You talk a lot about synchronicity, that there's a level where things get brought together…*

Peter: That's right, and you never know where it's going to come from or how it's going to come in. Let me give you one little example here *[picks up some typed pages]*. Here, I thank Tinbergen as well as Hans Selye, Ernst Gellhorn, and Raymond Dart, who were important supports for me, because when doing my doctoral work in biophysics, the head of my committee said that my work was so outlandish that he would never permit me to get my PhD.

A: *You were ahead of your time.*

Peter: He threatened to discredit my dissertation. Fortunately, there was somebody on the committee who knew me and liked me, and suggested to Richard Strohman (the chairperson) that it be sent out to specialists in different fields, including mathematics, physics, animal behavior, and anthropology. Thankfully, they congratulated him for the work I had been doing. So he got a little mud on his face with that one. Around that time, still in the early 70's, I received support from another person, but this was a person who was no longer alive. I'll just briefly read you this.

A: *I am intrigued!*

Peter: *[Reads from his typed pages]* "During the early 1970s, I received a visit from an unexpected and uninvited guest. I had been working both on my theoretical biophysics doctoral dissertation on accumulated stress, as well as on my body-mind approach to resolving stress and healing trauma. After long workdays, I would frequently have dinner at my favorite restaurant in Berkeley, the Beggar's Banquet on San Pablo Avenue. I was always greeted warmly by name by the friendly waitresses there. My habitual dinner started with their homemade soup and warm crispy French bread.

Early one evening, I was sitting alone at my usual table for two. I was savoring my vegetable soup and I saw a momentary shadow. I looked up from my dinner and there, across from me, sat an elderly man with wild unkempt curly hair and wearing a completely disheveled sports jacket. At first, I was just startled by this apparition, but when I accepted its presence or even welcomed it, I recognized that it was Albert Einstein."

A: *Oh! Really?*

Peter: Yes. Exactly. *[He continues to read]* "So began a year of weekly visits with this entity. Indeed, at the beginning, so real was the apparition, that I actually ordered soup for him and fortunately, the staff didn't ask. Actually they said, *"Wouldn't you rather I brought the soup later so it'll still be warm?" "No,"* I replied, *"that's okay, now."*

His visitations seemed to be completely real. Part of me, of course, knew that they weren't real. Some kind of a creative synchronistic process was going on. On the other hand, it seemed completely real. Even to this day, when I talk about it, I feel both. It came from some unconscious process which I entertained with enthusiasm.

A: *Or some other dimension…*

Peter: Exactly.

A: *Somehow your vibrations were in alignment.*

Peter: That's just the beginning of the story. This went on for over a year, and we had many encounters. One day, I was visiting my parents in New York and happened to notice on the bookshelf a book I had read in my bed when I was about 12 years old. It was Einstein's *Theory of Relativity*. That prompted me to tell my parents about my encounter with Einstein in Berkeley. My mother, who is amazingly intuitive said, *"Peter, I know why that happened."* My jaw dropped.

A: *Goodness!*

Peter: She said: *"When I was eight months pregnant with you, your father and I were in a canoe on a lake, and a strong wind came up that capsized our canoe. We could not right it and get back in, and surely we would have died and you wouldn't be here. Then a small sailboat came by. It had an old man and a young woman on board and they pulled us to safety. They introduced themselves as Albert Einstein and his daughter."*

My mother said that he had saved my life, and believed that at that moment of life threat, I had bonded with Einstein through her placental fetal "blood web." Again, I have to say that this wasn't really about me. I was being led by these synchronous awakenings.

I'll tell you one more non-ordinary reality story. I had a dream many, many years ago. In the dream, I was met by

Stone Age obelisk with two vortices spinning in opposite directions.

a man in a black robe with purple sashes. I think at that time, I recognized that he must've been some kind of a monk, and later realized it was a Tibetan Lama. He handed me a box, clearly a treasure chest, but a small one. He said, *"Here, I give this to you. Take it into the other room."* I opened the door and noticed there was a safety deposit box there. I opened the safe and put the treasure chest in there, and locked it. I returned to the first room and the Lama nodded to me. That was the end of the dream. Many, many years later, I met a Tibetan Lama and I told him about Somatic Experiencing, and asked him if that was consistent with any of the Tibetan healing traditions. He said, *"Yes, definitely. There's a lot of things that are in common with the Kum Nye tradition,"* which is an embodiment-centered approach. I didn't know it at the time.

He said, *"But this knowledge comes from many, many different places in the world. The original place where this knowledge was born is in the ancient Celtic Stone Age religions."* Of course, I started doing research, and found some pictures. I found a photograph of a Stone Age temple and in front of the temple was an obelisk with two vortices spinning in opposite directions. In order to pass into the Holy of Holies, one had to go through these double vortices. This image became a big part in the SE model, as a metaphor that I used to help teach about trauma.

Again, when I thought back about the dream, I wondered, *"What in the world was that? That is just really weird."* Sometimes, you have a profound dream you think doesn't make any sense at all. Well, the next day, or in the next years, I realized that this was indeed the task that I had been assigned: to protect this ancient knowledge from the Celtic Stone Age temples, and the Tibetan tradition, and to bring it to the scientific Western way of looking at things, of viewing things.

Again, I can only conclude that these were not personal gifts, that I was guided in this direction, and hopefully continue to be guided – and supported in guiding others.

A: ***Yes. Isn't that amazing! Your mission, slowly being revealed.***

Peter: Yes, and I don't think that I realized it at the time.

A: ***Your life was in alignment for that revelation to present itself.***

Peter: Yes, the right place at the right time. Again, when I think about it, going back to Einstein, when we had our discussions at the Beggar's Banquet, I would talk to him about something that I was seeing, either from my doctoral work or about the body-mind work I was developing. How he would reply was by not answering, but instead would give me yet another question. It was a Socratic way of dialogue.

A: *With metaphors, perhaps?*

Peter: Exactly. I would think about it, and then I would meet him the next week and tell him what had come about, and he would nod his head, and I would ask him another question... and then he would ask me another question the following week.

A: *That's the best way to teach, isn't it?*

Peter: It is. I try to embody that when I am teaching.

A: *He was guiding your curiosity.*

Peter: Exactly, and that's what we shared in common, this curiosity. In his life, he actually was somewhat of a real jerk. I can relate to that myself. I'm also in some ways a weird jerk. We share a lot in common.

A: *[chuckles] Yet, on this other level, is a beautiful, spiritual, soulful capacity to bring in new knowledge. You are updating the ancient knowledge to fit a modern mind.*

Peter: Exactly. I was, for whatever reason, chosen to fill that role.

A: *Right, and you did it.*

Peter: I have no idea why, except for the one thing that I can grab onto being my curiosity. I was the annoying curious kid. *"Why, why, how, why, why is the sky blue? Why does it deflect light in this way?"* I was always asking those questions, and I was preparing and preparing...

A: *From this perspective that you have helped, we could say, reintroduce old knowledge into today's world for the modern mind, what do you see the next steps being? Especially speaking now to a new generation of somatic therapists eager to build on your work.*

Peter: Right. Well, at the risk of sounding self-serving, there are other trainings, different trainings in body psychotherapy for sure, but I think the Somatic Experiencing training is one of the most comprehensive ones around trauma, the most embodied one around healing trauma. Of course, I recommend my books, Stephen Porges', Bob Scaer's and Bessel's books. That's really an interesting question you're asking. What would I say to them? I would say, *"You're on the right track!"*

A: *I have to tell you that I am immensely grateful to you because the larger proportion of students who come to my touch trainings have an SE background, and those are the students who really understand what it is to tend to the body.*

Peter: Right, I think so. I think, in a way, Somatic Experiencing is a backbone for body psychotherapy, not just an approach for healing trauma. Again, to the younger people coming in, I would say, *"Hey, you're on the right track. Keep following it. Follow your curiosity, follow your passion."* In Campbell's terms, follow your bliss, but it's really your passion. I think most people are attracted to this kind of therapy because of a passion. In CBT, they may not be attracted so much because of passion, but because it's an evidence-based treatment program. By the way, I'm a fan of things like CBT or mindfulness. I think these are really valuable tools, but they're all about top-down processing.

A: *Yes, but they prepare the mind to be receptive to the body.*

Peter: Exactly. That's right.

A: *That's really important.*

Peter: I think so, and in my view, that's really their value. It really is saying, "Okay, here's a tool, but if you're just going hierarchically from the top down, from the thoughts, the emotions, and so forth... consider adding in the bottom up experience, and explore what's going on in the sensations and bodily feelings when you bring them together, then you really have a comprehensive way of dealing not just with trauma, but with all kinds of symptomatologies.

A: *Preparing the body as well as preparing the mind to be in a different kind of relationship with each other. Sometimes I think that mind and body are like a couple in a bad marriage.*

Peter: Right. There's this great Peanuts cartoon where Lucy is throwing the football to him and it hits him in the head and he's stunned, and she says, *"You know, Charlie, your problem is your mind and your body aren't communicating with each other."*

[laughter]

A: *So where is your passion taking you now?*

Peter: Well, synchronistically, we're mostly in the house, so I'm trying to catch up with things that I've been putting off for a long time. With my partner's encouragement, I'm working on an autobiography. If nobody else reads it except me and her and some friends, that's okay, but it might be my next book. For me, writing is a meditation. It really is a meditation.

A: *As you've described it today, the journey, the synchronicity, the encounter with the numinous, we could say that every level of your being was coming together for you to do what you did.*

Peter: That's right. Again, synchronicity, the right place at the right time, the fact that I had the traumas I've had, the fact that I was doing my doctoral dissertation on stress and persevered, even though I was blocked at every turn. Yes, perseverance, that's another of my characteristics... perseverance. I usually don't give up, not readily, not easily. I keep at it. I'm dogged that way.

A: *In this journey, you encountered roadblocks that could have been discouraging.*

Peter: Well, they were. At one time when I was giving lec-

tures, psychologists and psychiatrists would come up or talk to their colleagues and say, *"This person needs to be stopped. What he's teaching is dangerous. This goes against psychiatry and psychology."* Even as I talk about it, I get this gnawing feeling in my gut. It was scary. It's scary, because I know people can hurt you.

A: *People can hurt you, yes, and they can spread harmful destructive rumors.*

Peter: Exactly.

A: *The mission that you came in with was sacred, and somewhere in you, you knew that.*

Peter: I think so. I think I knew that I was being guided, and I knew that this was difficult, and I knew it was going to be more and more painful for me. But I think I also had the sense, at least a little bit, that after some years, I would look back and I would be able to see this with a modicum of humor. Was it Bernard Shaw who said, *"The best revenge is success."*

I have been successful, and that's wonderful. I've been able to support myself by following my passion. Not many people have had that gift given to them, and it's a gift... a great gift.

A: *It is a gift. You have brought forth a gift of profound healing for our deeply suffering human nature.*

Peter: Speaking of that, so much fear and uncertainty are being spread around now. There's no better time than right now for the tools that body psychotherapy has to offer, and the role that body psychotherapists can play to help people learn skills to calm themselves, to help calm their families, to help calm their communities. That's what we need right now.

This was one of the reasons why I wrote the book *Trauma-Proofing Your Kids*, to give parents tools so that when kids have their mishaps, fall off bicycles, or go through a plate glass window, wind up in the emergency room, what can they do with the kids to help them not become traumatized. What I discovered is not only did it help them not become traumatized, but also these are the kids who became much more resilient as toddlers, as adolescents, and as adults.

A: *Would you say that you are teaching them emotional intelligence?*

Peter: I'm tapping into their emotional intelligence, yes, but it's even more than emotional intelligence. It's *sensorial intelligence*, and I think that's what's been missing. Daniel Goleman did a real service in talking about emotional intelligence.

A: *But sensorial intelligence!*

Peter: Emotional intelligence is only part of the story. The big other part is about the body's sensibility, what we can learn from our bodies, what kind of messages it holds. The body holds a tremendous amount of wisdom, not just for healing from trauma, but tremendous wisdom, because when we connect to our visceral self, to our primary instinctual centers, we connect with source.

A: *The intelligence of the life force.*

Peter: Exactly. The intelligence of the life force. That's exactly the terms I would use, because it's about reconnecting to our life force. It's not just about erasing traumatic memories or changing our thoughts. It's about reconnecting to our life energy, our life force. The French call it *élan vital*, the vital force, the vital energy. Prana, the breath of life. It's all about this life force!

A: *The language for talking about life force is still quite primitive.*

Peter: It is, yes. That's one that's still on the fringe. What is life force? How can energy have wisdom? But it's changing. People, not just therapists, but people are getting an understanding that they do have a life force. That when they are connecting with it, this is the greatest gift they can give to themselves.

A: *Well, Peter, this is a great place to end. Thank you, this was wonderful.*

Peter: We hadn't seen each other for many years, and now we're seeing each other all over the place.

A: *I know. It's delightful.*

Peter: Synchronicity.

A: *Synchronicity. Thank you so much, Peter.*

A 2020s Credo for Body Psychotherapists

Courtenay Young

ABSTRACT

A credo is a set of beliefs that influence the way we live, a statement that guides our actions, a set of principles or opinions that strongly influence the way we live and work, and a position from which we see the world. With the start of this new decade, the 2020s, I believe now is the time that we body psychotherapists could, should, and need to develop a new credo – one that includes proper research into what we actually do professionally.

Keywords: body psychotherapy, research, evidence

Submitted: 04.02.2020
Revised: 29.03.2020
Accepted: 08.04.2020

International Body Psychotherapy Journal
The Art and Science of Somatic Praxis
Volume 19, Number 1,
Spring/Summer 2020, pp. 23-29

ISSN 2169-4745 Printing, ISSN 2168-1279 Online

Many of us body psychotherapists can all too easily bemoan the fact that our particular form of psychotherapy has not been researched enough, or we can get annoyed by claims (for instance) that CBT is the only "evidence-based" therapeutic treatment, or that when we were training in our particular version of body psychotherapy (whatever it was, a long time ago), very little time was spent on trying to understand the "science," or being informed about the research behind our various techniques, as most of the actual training was about how to "practice" and how to apply the particular techniques of that method. It was skill-based, but not necessarily evidence-based.

These trainings were all about practice: nothing wrong with that, except perhaps the "all." We were applying theory-based techniques with virtually no research to support them. They seemed to work, most of the time, and so we kept on using them and not really questioning them. Indeed, it was possibly even "dangerous" to question these techniques, as they had been developed by the very person who had set up the school in which we were studying. These pioneers were very charismatic, and (possibly) also somewhat narcissistic. And people like that often don't like to be questioned. Such questioning could even get you thrown out of their training.

> ***... many different modalities are now beginning to incorporate bodily-oriented techniques and perspectives into their own approaches.***

In those trainings, there were (perhaps) one or two psychologists who had been trained in some sort of research, but usually with rats in cages. There were probably some teachers, social workers, etc., some clients of previously trained therapists (who now wanted to do what had been done to them), and some body-based therapists who wanted to better understand the "psyche" of their clients. There were (possibly) one or two doctors who didn't want to just continue pill-pushing for Big Pharma; there were also a very few people in these trainings with a different professional training – particularly a science-based one.

There definitely was, and still is, an acknowledged "serious gap,"

"rift," "chasm" or "gulf" between the science and the practice of body psychotherapy.

Of course, greatly appreciated (which is very nice to follow up on) was and is all the excellent work done by neuroscientists, neuropsychologists, neuropsychophysiologists, and others who are deeply involved in the study of the function of the human brain and body. They are giving us – almost as a Christmas gift – a wonderful amount of well-researched background information that can, in due course, be used to help us to shape and reformulate some of our theories and practice about how the mind and body work, and how they might even work together, or in opposition with each other. And so, we discovered that all this scientific information and knowledge, based on research, can now help us, in due course, improve some aspects of our body psychotherapy techniques and practice. An excellent example is Stephen Porges' (1995, 2007) polyvagal theory, and Deb Dana's (2018) application of Porges' work to therapy.

But – please – let this be very clearly understood: none of these findings from neuroscience (or whatever) have anything to do with any proper science of, and/or research into, body psychotherapy. Fundamentally, we are "borrowing" other people's research, and then trying to use it to "prove" the basis of our particular method of psychotherapy.

We must also be aware that many of these very brilliant neuroscientists – people like Allan Schore, Antonio Damasio, Steven Porges, Louis Cozolino, Eric Kandel, Daniel Siegel, Oliver Sacks, V.S. Ramachandran, Bessel van der Kolk, etc., mostly got to where they are now by very different routes than our professional routes. Now, I may be traducing them, but I would guess that very few have actually put their hands on a client's body in a body psychotherapy session. They are the "scientists" and we are mostly the "clinical practitioners," the "body-oriented psychotherapists," the "somatic psychologists."

Thankfully, these "scientists" are often very positive about our particular type of clinical psychotherapy work and practice, and they often align their work to ours, very favorably. They are often invited – and usually come – to our body psychotherapy conferences, and they also contribute to webinars, collaborate in seminars, write papers commending us, and so forth.

However, they may also want **us** to be using our practice to "prove" **their** research. They also tell us – emphatically – that we should be doing **our** research. So, this "advice" from them is almost a contradictory reversal of what should be happening: we should be asking them to research what we are doing. This reversal can even contribute to a conspiracy of silence about the lack of proper research into our particular methods. But, it is also fairly obvious that science and research can (and should) be able to inform our practice, and from within our practice, we can, or should, also be able to inform their science (Young & Heller, 2000).

> *"They are learning how the motor works and how it can be adjusted to work most efficiently. However, the motor is not the driver."* (Schere, 2017)

The study of (say) mechanical engineering, with a knowledge of the details and tolerances of the transmission system, access to all the wiring diagrams, and other technical manuals and diagrammatic overlays can all inform us – in detail – how something like a motorcycle works. But how can all or any of this "scientific" material possibly relate to the direct experience of actually riding a motorcycle? Or indeed, how can this tell us anything at all about (say) the driver of the motorcycle (Pirsig, 1974)?

Knowledge alone has quite severe limitations. Here, in our field, skill and experience are also essential. This combination of knowledge, skill, and experience is vital and necessary for any form of good professional practice. It is now the "gold standard" for any therapeutic modality or method. This is also essentially why the European Association for Psychotherapy (EAP) not only "required" every method of psychotherapy to demonstrate its "scientific validity," but also why the EAP developed its Professional Core Competencies of a European Psychotherapist (Young et al., 2013).

This is also why the EABP's Science and Research Committee (SRC) has been promoting different initiatives over the last 10 years to develop the "science" of, and "research" into, body psychotherapy. These initiatives include the succession of Scientific Symposiums at the EABP Biannual Congresses (Cambridge, 2012; Lisbon, 2014; Athens, 2016; Berlin, 2018, and [soon] Bologna 2020), as well as the 2016 questionnaire survey of body psychotherapists, the 2018 publication of Body Psychotherapy Case Histories (Young, 2018), the "Research" section of the EABP website (www.eabp.org), the EABP *Bibliography of Body Psychotherapy*, and various other initiatives that can all help contribute to a coherent body of knowledge and experience (Young & Grassmann, 2019).

As well as all this, the publication of various recent handbooks and anthologies relating to body psychotherapy (to mention just a few: Levine, 1997; McNaughton, 2004; Hartley, 2009; Barratt, 2010; Marcher & Fich, 2010; Stauffer, 2010; Heller, 2012; van der Kolk, 2014; Marlock et al., 2015; Westland, 2015) support a more professional and scientific approach to body psychotherapy. All these publications offer marvelous insights into the deep well of knowledge and the vast experience of clinical practice involved in this particular mainstream. There are, of course, many other articles and chapters in books, all of which are almost too numerous to mention here, that help support the background and basis for potential "research" – properly conducted – in the fields of body psychotherapy and somatic psychology. But the great majority of these books and articles do not really contain anything like "proper" research; they may be supported by bits and pieces of research, and they may support (or be supported by) other

"evidence-based" clinical practices. Yet we are still a long way from proper and essential research data about (a) why what we do works; (b) how we work – and why we do this or that; and (c) how well we work.

This is the quintessential deficit that I want to address in this article. This is why we may need a new "credo" for body psychotherapists – now! There have been a few challenges to psychotherapy in general; perhaps the best known is James Hillman's *We've Had a Hundred Years of Psychotherapy and the World's Getting Worse* (Hillman & Ventura, 1993).

Maybe it is really the politicians and world leaders who need psychotherapy, not us ordinary people, although it is probably useful for us to have therapy in order to cope better with what "they" are doing to us. These "powerful" people – and our feeling of lack of power – are usually sufficiently narcissistic to think that they are "right" and that there is nothing wrong with "them." By implication, there is therefore something "wrong" with us: the "plebs," the ordinary people, the "little men."

Some of these attitudes, platitudes, and prosaicisms, and how we fall for them, are dealt with summarily in Reich's (1946) *Listen, Little Man!* – in which he beseeches us to look honestly at ourselves, and assume responsibility for our lives, for all our actions, and for the great untapped potential that lies within the depths of human nature. It is this untapped potential – within our body psychotherapy community, within ourselves, and thus within our clients – that I am trying to address in this article.

Now it has been clearly established that, as our brains are still quite "plastic," we really can help ourselves and our clients find different ways to change our behavior patterns, our perceptions of ourselves, and our worldly abilities and attitudes. So, we really need to find properly "proven" ways to indicate more precisely how our clients' bodies can actually change, and how these bodily changes can actually change the mind – or how we can really help them change their "body-minds."

> *"The brain enables us to do what we choose to do within the limitations of our inherited neurology. Indeed, at times, when we push beyond our limitations, the brain may work to change itself to allow our goal to be achieved. It is indeed an incredible mechanism."* (Schere, 2017)

If we think – intellectually – about the actual process of therapeutic change that we are hoping to facilitate, and how and what our clients will be going through, it is somewhat like trying to rewire a car (the brain) and tune the motor (the body) using all these manuals, while still driving the car down the road. However, the really important thing that needs to change is not the actual brain, but the body, the mind, and the attitudes. This is a totally different perspective, and (within itself) has many varied and very different aspects. Whoever said that psychotherapy is not political (Schmidt, 2012)?

It is actually almost impossible to "isolate" and account for all the variables that exist in any research program into client-based, face-to-face psychotherapy in order to be able to make a proper and careful inquiry or sampling about which aspects are relevant.

I have also tried to address those aspects of psychotherapy and counseling that do work, and therefore (by implication) which aspects of psychotherapy do not, in a long, two-part, and as yet unpublished article (Young, 2015).

Fairly recently, the American Psychological Association made a very definitive statement about the effectiveness of psychotherapy (APA, 2012). So, we know that psychotherapy does work, and we can, hopefully, build on this statement. We have also been told – over and over again – that the most effective factor in psychotherapy is the quality of the relationship between therapist and client (Norcross, 2011). But this quality is also almost impossible to quantify accurately.

The second most relevant factor is, apparently, the client's commitment to change. There is also a very large scale of values possible here, as well, though some therapists offer techniques or approaches that try to address this aspect (Johnson, 2014; APA, 2015, Lombardi et al., 2014). As a potential research topic, this probably wouldn't be a very good place to start.

So, coming back to the "driver" on the road – the body psychotherapist himself or herself, and his or her actual experience as a therapist, how can we – as therapists – help our clients cope with and make use of the plethora of knowledge and information coming from all these different practices, as well as from neuroscience itself? There is almost *"too much information"* for us ordinary body psychotherapists focused on practicing a particular technique, and also – of course – pragmatically, on earning a living.

Furthermore, some of this new information may actually conflict with – and/or support – what we have already been taught, and what we are currently practicing. Some people are also actively involved – rightly or wrongly – in "debunking" a particular theory, therapy, or psychotherapy (Whitkowski & Zatonski, 2015; Vitz, 1994).

But none of this has to do with anyone's brain; neither has it anything to do with the therapist's body, nor really the client's body or brain. Instead, perhaps, we need to consider how we can help change the client's mind and body. Traditionally, scientists have tried to define the mind as the product of brain activity because, according to them, the brain is the physical substance, and so, the physiology is therefore relevant. Yet, the mind is the conscious product of all those firing neurons. But there is also growing evidence that shows that the concept of the "mind" goes far and way beyond the physical (or physiological) workings of the brain.

> *"The mind is a powerful lens through which we can understand our inner lives with more clarity, integrate the*

brain, and enhance our relationships with others. 'Mindsight' is a kind of focused attention that allows us to see the internal workings of our own minds. It helps us get ourselves off of the autopilot of ingrained behaviors and habitual responses. It lets us 'name and tame' the emotions we are experiencing, rather than being overwhelmed by them." (Siegel, 2014)

The aim of a particular seminar of notable neuroscientists in the early 1990s was to try to come to an understanding of what definition of the mind would appeal most to the common "wheal," and that would satisfy those wrestling with the question across many of these fields.

After much discussion, these scientists concluded that a key component of the mind is "*... [an] emergent self-organizing process, both embodied and relational, that regulates energy and information flow within and among us,"* which is – on the one hand – a form of gobbledygook, but which can also be seen to be quite interesting, and may even have some meaningful implications. If this is truly the case, then we are entering into the field of "metaphysics."

As a result, it would seem that the "mind" extends far beyond our physical selves; the "mind" is not synonymous with the brain; and the "mind" is also not simply that which "records" all of our perception of our experiences, but, essentially, it is that which "experiences."

Siegel argues that it's impossible to disentangle our subjective view of the world from our actual interactions. Indeed, the process by which the mind has evolved has been considered by many psychologists: *"The early attachment bond between infant and caregiver provides a sense of security, but it also serves to foster the development of the mind of the infant that necessarily reflects of that relationship."* (ibid.)

This view of the mind as being much more than the simple product of brain activity has many implications for those engaged in psychotherapy, as we are not working with just a person's brain, but also with their bodies, and thus with their "body-mind" – but also with our bodies, and also with our "mind-body." This is because we are also (hopefully) reasonably embodied psychotherapists (Shaw, 2003; Rachels; 2015; Cozolino, 2016; Totton, 2018).

1. Firstly, this view suggests that the essential role of psychotherapists is to assist clients to explore and confront the issues that are disturbing them. It is also an essential position in order for any good therapy to happen. If the therapist is not fully embodied, then there can be no authentic contact between the client's body-mind and the therapist's mind-body, within the therapeutic relationship. Therefore, any lesser contact between therapist and client (or exchange that does not include the client's and therapist's body-mind) will be relatively ineffective in helping the client to confront their deeper issues.

   "Using a listening touch can often accelerate the process of change." (Rubenfeld, 2002)

2. Second, in light of the mind's dependence on healthy interactions, it can be implied (or assumed) that the therapeutic relationship must be considered of the utmost importance. This is not just an intellectual relationship, but it also needs to be an embodied relationship. In the words of Irvin Yalom, "Therapy should not be theory driven, but relationship driven," (Yalom, 2003) Indeed, as it is also argued by Norcross and others, the establishment of a strong and healthy alliance is the most effective item in a successful therapy. A "strong and healthy alliance" – in this context – **must** include the client's and therapist's deeper feelings, and the more subtle (but powerful) somatic relationships between their bodies.

3. Thirdly, although this "relational" view (especially in other modalities) sees the mind as much more than just the simple product of brain activity, it does not deny the presence of, nor an alliance of, a significant mind-body connection. The mind and body are closely, if not intimately, if not intrinsically, linked, and their almost indivisible relationship can exert either a positive or negative influence on one's health and quality of life.

   "Attitudes, beliefs and emotional states ranging from love and compassion to fear and anger can trigger chain reactions that affect blood chemistry, heart rate and the activity of every cell and organ in the body." (Rubenfeld, 2002)

   These impacts are not just mental, but also physical or physiological, as well as metaphysical.

4. Fourth, included within this perspective, the importance of the mind-body relationship suggests that in order to accomplish effective therapy, with so many different drivers from so many diverse cultures, we need to integrate effective principles from all of the existing evidence-based psychotherapies. So, we must also now consider how to integrate the scientific basis of body-oriented psychotherapy and somatic psychology. (Marlock et al., 2015)

Instead of emphasizing the efficacy of full and "proper" manualized treatments in one psychotherapeutic method or another, we might be better off focusing on what "evidence-based" principles can be utilized by considering instead differing therapists, attempting to assist differing clients, who are struggling with differing problems (Hubble, Duncan & Miller, 1999; Fonagy & Roth, 2006; Miller, 2011; Schere, 2015). This takes us more into considering the evidence of case histories as being another legitimate aspect of "science," which, of course, they are. (Young, 2018)

5. Finally, in light of the very many dimensions involved in the different processes of the mind (emotion, perception, thought), we also need to consider what may be a considerable over-emphasis on purely verbal communication. Allan Schore (2009) has demonstrated the influence of nonverbal interaction on therapeutic process. Many others have done so as well for body

psychotherapists. (Barratt, 2010; Marlock et al., 2015)

Many therapists from many different modalities have discovered that what is communicated verbally is not always congruent with the client's "body story." (Kepner, 1987) So, we can see that many different modalities are now beginning to incorporate bodily-oriented techniques and perspectives into their own approaches.

Does any clinician – especially one trained in body psychotherapy or somatic psychology, or anyone trained in any of the multitude of the many other body-oriented modalities or techniques – doubt that the most effective way to communicate, especially when responding to a tragic (or a positively exhilarating) experience is to offer, or to receive, something like a "handshake" or hug? The effectiveness of such nonverbal communication is very well-evidenced, and much can be obtained from examining the client's lived personal experience and the therapist's professional training and clinical practice – but not necessarily from scientific findings.

As we struggle to survive in this current era, we tend to rely more on technology, i.e. neuropsychology, computers, brain research, and even social media. Various therapies are being offered by email, phone, and Skype. However, it is important that psychotherapists differentiate between their clients and available techniques, and maintain their emphasis on assisting the client, using whatever method works – as long as the techniques have been reasonably researched to ensure "no harm." How many body psychotherapists use such "distance" methods, and have they been trained in such? What we actually should do, or must do, is conduct an effective "risk assessment;" i.e., estimate what might go wrong, and what one needs to do, to minimize the risk; and possibly also an effectiveness assessment – how effective can my therapy be, using this form of distant contact? (Young, 2005, 2009)

Furthermore, we really now need to be able to demonstrate that body psychotherapy really works, and we can do this only by some fairly extensive "outcome research." If we can demonstrate that our clients get "better" – from when they started therapy, during their therapy, and at the end of the therapy, according to their own criteria, and also by some external more standard or objective criteria, and that they stay "better" – using some form of post-therapy outcome research, then, and only then, can we really be confident that body psychotherapy can be properly assessed as being effective (that it works) and also efficacious (that people get better and stay better).

I believe that this goal – of a body (sic) of body psychotherapy research – should become our "credo" for the 2020s – not just in this forthcoming year, but also for the whole of the next decade. We have the resources and we have the people: well over a thousand members of EABP and USABP, as well as other similar professional body psychotherapy associations. All of these practitioners have been trained to a similar level, within a similar discipline – although actual methods may vary considerably, and so may the issues of the multitude of clients.

We could therefore use a fairly standard outcome measure (like CORE-IMS) that has been translated into most of the major languages, which could possibly be used with a similar body-oriented measure, so that we could see how our clients are progressing and how much better they feel after (say) 3, 6, 9, or 12 sessions, and whether the beneficial feelings are sustained for (say) 3, 6, or 12 months after the therapy has stopped. Within a few years, we could have (if we had agreed to do this) compiled a collection of outcome measures from hundreds of therapists, in many different countries, working with thousands of clients.

This could be, would be, irrefutable "evidence" that body psychotherapy works, and that it works for this and that client, with this or that issue, in this or that country, and with people from this or that socioeconomic background. The data could easily be fed directly into a central database from which it could be analyzed. Maintaining this database and analysis – hopefully by independent researchers – would incur some relatively minor costs, but there are international and national grants for such work as well.

This year, 2020, the EABP Science and Research Committee is proposing a new training module for all the FORUM Body Psychotherapy training institutes that will hopefully ensure that future body psychotherapists have at least some "grounding" in science and research.

I "believe" – my personal credo – that this sort of research goal is relatively straightforward to implement, does not have to involve huge amounts of money or resources, and could involve body psychotherapy clinicians in everyday actual client-based outcome research. In this way, the huge gap between research and practice could also – quite suddenly – start to close. And so, this is my dream of a new "credo" for body psychotherapists for the 2020s.

Courtenay Young is a UK-based psychotherapist, who originally trained in body psychotherapy. He has been working within the field of humanistic and transpersonal psychotherapy, and he has been employed as a Counsellor in the NHS for the last 15 years, while living in and around Edinburgh, Scotland. Previously, he was the EABP General Secretary (1992-1999) and the EABP President (2000-2004), and is now an Honorary Member and a founding member of the EABP's Science and Research Committee (SRC). He was also a founding member of the USABP. He has been a representative on the Board of the United Kingdom Council of Psychotherapy (UKCP), and of the European Association of Psychotherapy (EAP), as well as many other professional associations. He is a member of the EAP's Science and Research Committee (SARC), and is currently the Editor of the EAP's *International Journal of Psychotherapy*. He has written many published articles and has authored and edited several books, details of which are on his website: www.courtenay-young.com.

REFERENCES

American Psychological Association (2012). Recognition of Psychotherapy Effectiveness. Accessible at: https://www.apa.org/about/policy/resolution-psychotherapy

American Psychological Association (2015). Eight Strategies to Keep Patients on Track. Accessible at: https://www.apa.org/monitor/2015/04/strategies

Barratt, B. B. (2010). *The Emergence of Somatic Psychology and Bodymind Therapy*. London: Palgrave Macmillan

Cozolino, L. (2018). *Why Therapy Works: Using our Minds to Change our Brains*. New York: W.W. Norton & Co.

Dana, D. (2018). *The Polyvagal Theory in Therapy: Engaging the Rhythm of Regulation*. New York: W.W. Norton & Co.

Duncan, B. L., Miller, S. D., Wampold, B. E., & Hubble, M. A. (Eds.) (2009). *The Heart and Soul of Change: Delivering what Works in Therapy* (2nd Ed.) Washington, DC: American Psychological Association

Fonagy, P., & Roth, A. (2006). *What Works For Whom?: A Critical Review of Psychotherapy*. New York: Guilford Press

Goldhill, O. (2016). *Scientists Say your Mind is not Confined to your Brain, or even your Body*. Quartz Weekend Writer

Hartley, L. (Ed.) (2009). *Contemporary Body Psychotherapy: The Chiron Approach*. Abingdon, UK: Routledge

Heller, M. C. (2012). *Body Psychotherapy: History, Concepts, and Methods*. New York: W.W. Norton & Co.

Hillman, J., & Ventura, M. (1993). *We've Had a Hundred Years of Psychotherapy and the World is Getting Worse*. San Francisco, CA: HarperSanFrancisco

Hubble, M. A., Duncan, B. L., & Miller, S. D. (2008). *The Heart & Soul of Change: What Works in Therapy* (2nd Ed.) Washington, DC: American Psychological Association

Johnson, D. (2014). Whose Therapy is it Anyway? When Your Client is Uncommitted to Change. *Psychotherapy Networker*. Accessible at: https://www.psychotherapynetworker.org/magazine/article/124/case-study

Kepner, J. (1988). *Body Process: A Gestalt Approach to Working with the Body in Psychotherapy*. Cleveland, OH: Psychology Press Ltd.

Levine, P. (1997). *Waking the Tiger: Healing Trauma – The Intimate Capacity to Transform Overwhelming Experiences*. Berkeley, CA: North Atlantic Books

Lombardi, D. R., Button, M. & Westra, H. A. (2014). Measuring Motivation: Change Talk and Counter-Change Talk in Cognitive Behavioural Therapy for Generalised Anxiety. *Cognitive Behavioural Therapy*, 43 (1), pp. 12-21. Accessible at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3863762/

Macnaughton, I. (2004). *Body, Breath, Consciousness: A Somatics Anthology*. Berkeley, CA: North Atlantic Books

Marcher, L., & Fich, S. (2010). *Body Encyclopedia: A Guide to the Physiological Functions of the Muscular System*. Berkeley, CA: North Atlantic Books

Marlock, G., Weiss, H., Young, C., & Soth, M. (2015). *The Handbook of Body Psychotherapy & Somatic Psychology*. Berkeley, CA: North Atlantic Books

Miller, S. D. (2011). What Works in Therapy: Translating 40 Years of Outcome Research. Accessible at: https://www.goodtherapy.org/what-works-in-therapy-web-conference.html

Norcross, J. C. (2001). Purposes, Processes and Products of the Task Force on Empirically Supported Therapy Relationships. *Psychotherapy: Theory, Research, Practice, Training*, 38, 345-356

Norcross, J. C. (2011). *Psychotherapy Relationships That Work: Evidence-based Responsiveness* (2nd ed.) New York: Oxford University Press

Porges, S. (1995). Orienting in a Defensive World: Mammalian Modifications of our Evolutionary Heritage: A Polyvagal Theory. *Psychophysiology*, 32, pp. 301-308

Porges, S. (2007). The Polyvagal Perspective. *Biological Psychology*, 74(2), pp. 116-143

Pirsig, R. M. (1974). *Zen and the Art of Motorcycle Maintenance: An Inquiry into Values*. Morrow & Co. (HarperCollins)

Rachels, K. (2015). *Body, Brain, Love: A Therapist's Workbook for Affect Regulation and Somatic Attachment*. USA: Karen Rachels

Reich, W. (1946). *Listen, Little Man!* New York: Farrar, Straus & Giroux

Rubenfeld, I. (2002). *The Rubenstein Synergy Method*. New York: Piatcus

Schere, R. A. (2015). *Reconsidering Evidence Based Psychotherapy*. San Diego Psychologist

Schere, R. A. (2017). A Driver's Credo for Psychologists. Academia: Accessed at: https://www.academia.edu/38253067/A_Drivers_Credo_for_Psychologists

Schmidt, P. F. (2012). Psychotherapy is Political or it is not Psychotherapy: The Person-Centered Approach as an Essentially Political Venture. *Person-Centered & Experiential Psychotherapies*, Vol. 12, No. 2, pp. 95-108

Schore, A. N. (2009). The Paradigm Shift: The Right Brain and the Relational Unconscious. Invited plenary address to the American Psychological Association 2009 Convention, Toronto, Canada

Shaw, R. (2003). *The Embodied Psychotherapist: The Therapist's Body Story*. Hove, UK: Routledge

Siegel, D. J. (2017). *Mind: A Journey to the Heart of Being Human*. New York: W.W. Norton & Co.

Skinner, B. F. (1953). *Science and Human Behavior*, (pp. 92-3). Oxford, England: Macmillan

Stauffer, K. (2010). *Anatomy & Physiology for Psychotherapists: Connecting Body & Soul*. New York: W.W. Norton & Co.

Totton, N. (2018). *Embodied Relating: The Ground of Psychotherapy*. New York & Abingdon, Oxon: Routledge

van der Kolk, B. A. (2014). *The Body Keeps the Score: Mind, Brain and Body in the Transformation of Trauma*. New York: Viking

Vitz, P. C. (1977, 1994). *Psychology as Religion: The Cult of Self-Worship* (2nd ed.) Grand Rapids, MN: William B. Eerdmans Pub. Co.

Westland, G. (2015). *Verbal & Non-Verbal Communication in Psychotherapy*. New York: W.W. Norton & Co.

Witkowski, T., & Zatonski, M. (2015). *Psychology Gone Wrong: The Dark Side of Science and Therapy*. Boca Raton, FL: BrownWalker Press

Yalom, I. D. (2003). *The Gift of Therapy: An Open Letter to a New Generation of Therapists and their Patients: Reflections on Being a Therapist*. London: Piatkus

Young, C. (2015). What Works in Psychotherapy & Counselling. Internet article accessible at: http://www.courtenay-young.co.uk/courtenay/articles/What_Works_in_Psychotherapy_and_Counselling.pdf

Young, C. (Ed.) (2018). *Body Psychotherapy Case Studies*. Galashiels, Scotland, UK: Body Psychotherapy Publications.

Young, C., & Heller, M. (2000). The Scientific 'What' of Psychotherapy: Psychotherapy is a Craft, not a Science! *International Journal of Psychotherapy*, Vol. 5, No. 2, pp. 113-131

Young, C., Szyszkowitz, T., Oudijk, R., Schulthess P., & Stabingis, A. (2013). The EAP Project to Establish the Professional Competencies of a European Psychotherapist. *International Journal of Psychotherapy*, Vol. 17, No. 2, pp. 39-57

Young, C., & Grassmann, H. (2019). Towards a Greater Understanding of Science and Research within Body Psychotherapy. *International Body Psychotherapy Journal*, Vol, 18, No. 1, pp. 26-60

Hands-Free at Last

A Therapist and Client Describe their Therapeutic Journey

Lucien Ulrich & **Saar Bach**

ABSTRACT

This article is written by a therapist and patient. It describes the therapeutic process of Saar Bach, who came to therapy entirely out of touch with her feelings, with negative judgments about her "disgusting" body, extreme obesity, and dependent and borderline personality disorder. Covering thirteen years of intense weekly work – moments of joy, fights, and depression for both patient and therapist – it presents the patient's unique journey of learning to accept her body, seeing herself in the mirror, and losing weight.

Keywords: incest, powerlessness/empowerment, violence, isolation/group member, shame, overwhelming emotions/grounded emotions

Submitted: 25.12.2018
Revised: 05.02.2020
Accepted: 12.02.2020

International Body Psychotherapy Journal
The Art and Science of Somatic Praxis

Volume 19, Number 1,
Spring/Summer 2020, pp. 30-38

ISSN 2169-4745 Printing, ISSN 2168-1279 Online

Sexual abuse is no longer a taboo subject. Recently, a well-known Belgian author, Griet op de Beeck, appeared in a prime-time Dutch television show, where she made painfully clear how the experience damaged the very core of her being.

Authors like Judith Herman and Babette Rothschild (who is very much indebted to Alexander Lowen) have described how chronic post-traumatic stress syndrome can devastate people's lives, and how a healing therapeutic relationship that offers safety is needed to help patients work through all their painful and shameful memories before they can develop a more positive, realistic view of themselves, and new self-confidence, and trust in others.

Inspired by these books, this article describes, from the perspectives of both therapist and patient, how the therapist managed to support the patient in systematically reducing her colossal misery over the course of fourteen years of therapy. This required a great deal of courage and patience, but also a lot of compassion, perseverance, and inventiveness to not be discouraged by the client's persistent fear and resistance to change. The risk of failure seemed infinitely greater than the chance of success.

> ***Listen,***
> ***are you breathing just a little,***
> ***and calling it a life?***
>
> Mary Oliver

In hindsight, everything appears as if it was quite structured. But while such a long-term process is going on, the therapist often has to feel her way and try her luck, without any guarantee that she is on the right track.

Despite the discrete way in which the client refers to the profound neglect and shameless, selfish sexual abuse she experienced by her father, the reader cannot escape the disheartening impression of how such childhood experiences can disfigure an entire personality. Trust and self-esteem have become suspect. Feelings of self-worth do not exist. Shame and guilt are obvious, and always present. Per-

sonal feelings are not allowed, and evoke fear when they become conscious.

To protect herself, she had to hide behind a dissociative spectator's role and an unappealing thick blanket of body fat. But this did not really help, for the deeply despised and hated self remained present within her. The result of this long battle against the evil that seriously misshaped the client is not a complete makeover in which all shortcomings have been eliminated. Instead, thanks to the therapy, a woman has emerged who no longer hates who she is, but who dares to be herself and show herself – including the damage she suffered and the fears that, despite everything, remain a part of her. And she can now enjoy her own company, and that of others.

Prior History

From her psychiatrist's transfer report:

> *"Saar has an extensive psychiatric history, with treatment in a therapeutic community and several admissions in psychiatric hospitals, Chronic depression and disassociation related to sexual abuse by her father during her childhood. There are also severe personality problems, with borderline and dependent characteristics as the main issues. She is disgusted by her own body, which she sees as a suffocating shell. She cannot tolerate being touched and has issues with intimacy. She is looking for treatment that will help her accept her body."*

First Phase of Treatment: August 2004

My first meeting with Saar Bach (who was born in 1951) didn't leave me with much hope. I saw a woman who was completely numb, dull, and seriously overweight. She had many physical issues, and just as many complaints about her husband, daughter, son, and grandchildren.[1]

What was I getting myself into? In the transfer report, I might as well have read: things will never work out! I decided to look for something that interested me, instead of her boredom and her continuous emphasizing of how miserable her life was. To my surprise, I was fascinated by her clothes. They were made by a fashionable designer based in Amsterdam. I concluded there must still be an ember of self-worth if she was able to give herself such clothes.

I agreed to schedule five sessions, during which we would explore her response to physical exercises. We would then decide if we would continue working together. Very carefully, and in small steps, we started to let her experience what breathing and support could mean for her. Very quickly, we encountered her grim judgment that her body was a filthy, suffocating shell.

She realized that she wanted to pursue this approach, even with a male therapist.

After five sessions, there was enough trust to continue working together. I could see that, underneath this completely humiliated, flat woman, there was also vitality. The most important question was whether she would be able to accept the life in her body.[2]

The work began very intensely. If there was any kind of physical sensation at the outset, she would leave her body, and try to hold on to images from her traumatic past. I had to do everything I could to restrain her, to bring her back into the room, and re-establish contact between us. Sometimes the approach was gentle, but many times I had to raise my voice to reach her. She mostly wanted to scream and cry. This road was leading nowhere. It would only increase her inner feelings of emptiness.

We used the metaphor of tuning her engine to the right number of rpms. Not too high, but also not too low. So, instead of acting out her emotions, our work together was intended to enable her to tolerate her emotions.[3]

In the beginning, I discovered that relaxation created anxiety, and led to the sense, as she said: *"I am going completely crazy inside my own mind."* A more successful approach was to give her a cup of tea at the end of the session, and have her sit up straight in her chair, and let her listen to classical music. We began with Haydn.

In the fall of 2004, her close friend ended her life. She considered this woman her soulmate. Saar felt guilty; she thought she hadn't done enough for her. A major crisis was looming.

We spent a lot of effort to place the friendship in its proper perspective. As it turned out, the friend had wanted Saar to show solidarity with the misery in her life, and thought that Saar should also kick the bucket. This insight was a painfully brutal confrontation.

Creating safety and continuity were important goals.[4] Saar indicated quite early on that she felt safe. To some degree, I could see this in her motivation to work, but it was also an almost blind surrender to the therapeutic situation. She was clinging on to something. This was the start of more intense confrontations. Boundaries I set were regularly tested, like ending the session on time, and not allowing her to shout at me. Saar kept an email diary.[5]

She kept this diary to ensure that incidents that had taken place would not take up all our time in session. In the diary,

1. Rothschild, pp. 56-65
2. Lowen, Depression and the Body, pp. 193-202
3. Rothschild, pp. 135-138
4. Herman, pp. 155-162
5. Horner, pp. 116-117

she would show no mercy for herself, spewing demeaning judgments and reproaches, preferably in bold capital letters. We tried to find a solution for this. After a while, she was able to use blank spaces instead of judgments in her text, which also had a slightly comical effect. In the beginning, there were a lot of white spaces, but this became less, and the diary e-mails became much shorter as well.

Wednesday morning was our regular appointment time. In all those years, she never skipped a session. During the first phase, I gave her the possibility to talk to me on the phone in the afternoon for 15 minutes about how the morning session had landed with her.

Gradually, she started to become angry if I told her to stick to our agreements. She threatened to walk out, and felt she deserved attention because of her miserable past. This crisis gave us the opportunity to create a ritual. After the session, she would walk to a church in the main shopping street, where she would light a candle, and sometimes write in the visitor's book.

Humour was essential in working with her. She enjoyed it if something funny would happen, Or that she could laugh, if in her misery she inflated things out of proportion. I remember her great sense of guilt towards her children, feeling she had failed as a mother. Through her tears, she would say: *"If my life ended, this would give my children more room in their lives."* I reacted quite spontaneously by telling her, *"You are not Jesus Christ."* She would look at me in exasperation, but laughter would break through.

Middle Phase

Her parents passed away quite quickly within a short time of each other's death. It was an intense period of processing, and her reflections were filled with shame about the abuse, sadness, humiliation, and longing for any kind of contact. She recalled how her father looked at her, images of the attic, and his inappropriate behavior on the ferry. Lots of tears and shame.

> *"He shouldn't have been with me. But when he would leave, I would feel even more awful. I wanted to be loved, and if I would enjoy the sex, he would love me. That's when he would say: See, you do like it...."*

She also wanted to be a good daughter to her mother, who was often beaten by her husband. Her need for her mother's love was in opposition to her anger that her mother had been an accomplice in the abuse. Her parents and brothers saw her as a traitor, because she had exposed the violence and abuse at the end of the eighties, when she was 29 years old.

She was seen as a completely insane woman who needed to be locked up. This made it very tempting for her to actually end up there. The image that she would paint of herself was that of an overweight woman, drugged up, in a mobility scooter, who would say goodbye to her mother with tears in her eyes, because...*"she's still my mother..."*[6]

We also spoke about the function of therapy, which was not intended to save her life, but to give it meaning and perspective. We made agreements and developed protocols with her psychiatrist about access to crisis services.

Creating Perspective, Giving Meaning to her Life

Singing became an important anchor for her. With a piano in my therapy space and a voice teacher I invited to join us, we began a singing experiment to open her throat, feel the power of her voice, and stay firmly balanced on her feet. We started singing improvised duets with nonsensical sentences. Initially, her falsetto voice was shaky, and she was close to losing herself. Then, she practiced the chest voice, eyes open, feet firmly on the ground. This way, she made consistent steps. She would feel the pain in her pelvis, so we would take a short break and then continue. After a while she started to take singing lessons with the teacher, in addition to our work in therapy. The approach succeeded: strong support through therapy and then something to continue doing outside the therapy setting.[7]

Her sensitivity to drama and opera gave us the idea for her to join an oratorio choir in a village 50 km outside Amsterdam, which performed Saint Matthew's Passion each year. She has now been a loyal member for years. I have seen their recitals, and witnessed how Saar became part of something larger than herself. Those were healing moments. Bach must have written *"Erbarme dich"* for her.[8]

In the aforementioned church, she met the parish priest. After speaking with him, the idea of being baptized occurred to her. He cared about her and told her, *"Welcome to the flock."*

Another positive development was that she lost a lot of weight over the course of two years. She did this completely on her own, without my prompting. She literally became more visible, and that caused a lot of tension and fear. In the end, that experience became well-integrated.

Money was also an important theme. She paid for the sessions herself. Her daughter had chronic money issues and would turn to her mother, who, because of her sense of guilt about not having been a good mother, could not refuse her, even though she didn't actually have extra funds. In desperation, Saar would throw the contents of her wallet onto the floor of my therapy space: *"Just take it, I don't need it..."*

6. Charles, pp. 65-68
7. Charles, pp. 110-111
8. Herman, pp. 214-218

We spent a lot of time talking about the value of money, and to see what she could do with it. We discussed how she could save money, and tolerate it in her wallet. After a while she started budgeting herself; she began using old-fashioned envelopes for that purpose. From that moment onward, she did not give in to her daughter's unreasonable demands.

During phases of change, we always felt as if we were walking on eggshells. After each positive development, such as singing in the choir, the baptism, a short holiday alone at a seaside Naturefriends hotel, stopping her medication, losing weight, and acknowledging the value of money, were often followed by severe setbacks.[9]

If things went too well, this inherently posed a threat that our therapy would end. A most familiar feeling was activated: deep distrust.

After "celebrating" her achievements, we needed to pay just as much time and attention to her deep-rooted fear of being ultimately abandoned. Moreover, her conviction that my family was perfect elicited strong feelings of jealousy towards me. Being able to work through and accept these strong ambivalent feelings was a tough job.[10]

Entering into conflict outside the therapy setting, with people who were emotionally important to her, was a new challenge. An important statement became: *"Saar: speak your mind!"* After her first strong experience of turbulence, and her subsequent refusal to have anything to do with that person, she took time to calm down and slowly let ripen what she wanted to express. She would write down the sentences, and use the notes for support during these hard conversations. Over the years, she had many of these types of talks, and emerged from them in a positive manner, with preserving the relationship as a major plus.

However, the disagreements between her and her husband became so intense and hopeless that she decided to get a divorce in 2014. The arguments were mostly about money, the value of her therapy, and the – according to her husband – pointless steps she was taking, like visiting museums, attending concerts, and having lunch with friends.

That she was able to develop such strength of will in the midst of this stressful period was quite a miracle. She arranged her divorce, including the entire bureaucratic paperwork, social security, and housing. When she had finally settled into her furnished apartment at the end of 2014, she realized: "This is not what I want." The distance that she put between them, literally, had helped her rise above their squabbles. She realized they had had a tough life together, and that neither of them was to blame for the situation.

To her surprise, her husband reacted the same way, and in 2015, they remarried.

Final Phase

Returning home to Amsterdam from Heiloo late every Tuesday night became too much of a sacrifice. After looking around for a while, she found a church choir right around the corner from her house.

Around 2012, she began singing songs with her voice teacher. After two years of preparation, she gave a short concert with a small group of invited guests. The repertoire was classical, as well as popular. She invested a lot of time and care in making the programs herself, which she really enjoyed. Every other year, she gave another short concert. The small concert became an indicator that would show how self-assured she had become, how much her expression and courage had increased, and how much the quality of her singing had improved.

Over the years, she has taken several trips. She went to Rome and London with her grandchildren. She re-established contact with two former sisters-in-law who had gotten divorced from her brothers. She keeps the contact limited, as it also evokes the painful family history. These improvements showed me that the frequency of our therapy could be reduced.

We developed the mantra: *"It's time go out there with your hands free".* Naturally, she showed a lot of resistance towards reducing the frequency of our sessions. Many times, "proof" was shoved in my face that this road would lead nowhere, and that she would not be able to survive without me. *"I really cannot do without your support. The changes are only illusions anyway…."*

She completely designed the scenario for reducing the number of our sessions. This meant a gradual decline in frequency, up to the point we've now reached: four times a year.

We started with clear agreements about e-mail contact and length of sessions; however, the need for appointments is still there. The therapy might end, but our connection will remain.

Out of sight, out of mind? Being abandoned? No, but standing on her own two feet and gaining a sense of pride and self-esteem from that. The woman who didn't dare look at herself in the mirror, who scrubbed herself vigorously, is able to admit, shyly, that there is a well-dressed lady inside.

Lucien Ulrich
Body psychotherapist

9. Bateman, pp. 93-102
10. Horner, pp. 73-80

"Without a shadow of a doubt, I would go down this road again!"

Saar Bach

The Beginning

In May 2004, my psychiatrist went to a conference in America. When she returned, she told me: *"Saar, I've met someone. It's just, well, he's a man! I talked to him about you, and told him what you need. It would be good if you paid him a visit."* I called Lucien, and our first appointment was on August 18th, 2004.

On the first Wednesday morning, only I talked, and afterwards I was surprised that I told a man I had never met so much. We agreed to five visits, and then to see if it would be good for me to begin this therapy, which targeted the body. After the second appointment, it was clear that this place, this form of therapy, was good, and that I could allow a male therapist into my life. I never really had a good connection with the men in my life. I started the therapy without being able to feel anything, without being able to cry, just being able to talk. I was a zombie without feelings, who survived on autopilot. I've always considered all men as being exactly the same. I thought all men were the same as the man who damaged me so much. Much later, during my therapy, I was able to meet men who were actually honest and genuine.

Every week, I would have a session on Wednesday. I never stayed away, even though there were many moments I wanted to walk away – but not because I didn't want to do the therapy and the body-related work. I wanted to run away from the many mirrors that were held up in front of me. Not knowing how to deal with this, I just felt deep fear. It took a lot of effort to take responsibility for my life. I only knew a life full of guilt and shame! I wanted to walk away, and yet I continued to feel supported and not rejected. I was invited to put my fear into words, and after such an attempt to flee, lots of tears followed.

To Work

The therapy space is very well-lit. There is a piano, and a very large mirror. I can only look into it very briefly. There is a poem called *"Healing,"* with the sentence *"Only Time Can Help."* There is a sofa with pillows, and a duvet. There is a stool underneath the duvet: a breathing stool. When I was finally ready to do more body-related work and started using the stool, I called it the "birthing stool." It's incredible what happened to me on that stool. I could allow myself to be touched. My body started to move; sound started coming out of me. I was so afraid of this. But very carefully, step by step, I started learning how to deal with it. I was surprised, but also sad because of how extremely tense my body was.

There is a tall pillow, which I have hit many times. With bare hands, or with a tennis racket. Those were the moments I realized how much anger I felt inside of me. I was hardly breathing because of all the tension inside. I was not aware of this at all. Time and time again, I was told to pay attention to my breathing. Many times when I stood in front of the pillow, I couldn't help but laugh. My laughter hid my deep fear of having to feel what was happening inside my body. I was a zombie anyway, locked in my own suffocating shell. After the physical work, I would be shaking and crying. This was very unfamiliar; my body was responding!

In the therapy room, also called the laboratory, the atmosphere was supportive and safe for me. In this place, I could practice things before I using them in the outside world.

Money was always a burning issue. To me, money was something dirty, and out of guilt I always thought I had to give it away to my family members. I wanted to fix something, but I couldn't fix anything. I now know that what was done to me is not my fault.

I always paid for therapy myself, and no one can take away how much this means to me.

First Experiences

During the first few months of therapy, I was unable to comprehend what was happening to me. The therapy space made me feel calm. It was so overwhelming that I could feel welcome/safe somewhere, but I was so afraid. And meanwhile, there was a storm raging inside. I had always just swallowed everything, but it felt different this time.

Something was simmering inside, but I didn't know what it was. I can still see how I was banging the door. I wasn't even sent away! That's how the first months went: I continued to talk and move, and something changed. I didn't realize it immediately. Very carefully, when I was saying something, a mirror was held in front of me. Little by little, I got different insights, which was very shocking. I started to cry; the tears started coming. I started to feel! After this, I would say "sorry", but that wasn't allowed, of course (I continued to say sorry and that has sort of become a forbidden word, but I still stay sorry). "Feeling" made me very fearful, and I panicked many times. This meant that I wanted to run away, so I wouldn't be confronted by what was coming out. At those times I would say ugly words to Lucien. I didn't realize it at the time, but I now know that it was my way to make him say: *"Madam, you should leave."*

I was so scared to be confronted by what I really felt. However, I wasn't told to leave, but was actually invited to put into words what was touched upon inside me, that had actually made me leave myself. Oh, my shame and guilt were very big, after I'd been acting so ugly. I wasn't even

punished for that. Lucien had a nice expression for this: *"The feeling has come to fruition inside of you, and is trying to find its way out."* And also, that the ugliness was actually a sign that I trusted him and felt safe. Safety, support, and human kindness were things I didn't know at all. This brought me back to feeling panicked, and full of confusion.

Singing

A few months after starting therapy, Lucien asked me if I wanted to start singing, in addition to the sessions. I didn't dare make a sound, and was suffocating on all the things I hadn't said. I would say a few things, but everything was superficial. Talking about the horrible things that happened in my life was strictly banned – seriously, it could have led to the death penalty. As a child, I was told: *"I could commit murder with you, because you wouldn't say anything anyway."*

This is how a voice teacher entered my life. Once a month, in addition to my therapy, I would get together with Lucien and the teacher for a singing session. With their support, I was able to utter the first sounds in a manner that suited me. The sounds "o" and "a" became words. Words became sentences, and these sentences became music that was sung.

Very carefully, more sound started coming out of me. This also benefited the therapy, because I was able to feel more, and my tears came spontaneously. Carefully, step by step, it became more and more clear how I had survived and what had been done to me. I could feel my fear and sadness, but also my ANGER. I realized that I had to take responsibility for myself, and I had to take my life into my own hands. It was my fear that was limiting me. I preferred to hide in the crap and denial, because that was safe and familiar. Change for the better? I didn't think so!

During the first years of therapy, I would always call Lucien in the afternoon after our morning session. I felt that this was enormously helpful in allowing me to process everything that had happened during the session. Sometimes I would leave a voicemail. It helped me to hear his voice. I would send an email diary. I needed this to express the things that had been very intense for me. The emails also helped me move forward. The frequency of emails was high at the start. There were a lot less as the years passed. Now, in 2018, I email one page every three weeks. And on the day before I have a session, I send the email diary. I also email on the day of the session, to reflect on it.

Fear of Anger

Anger; oh, so many times I thought Lucien was angry with me, and I still think that sometimes. The idea that he was angry with me made me very upset. I was unable to deal with my own crap. It made me feel powerless, and it gave me the tendency to throw the negativity in his face.

I'm still stunned that he has NEVER been angry with me. He has always been honest and respectful towards me. He held a mirror in front of me until it became clear what was truly going on inside of me. I felt myself break at those moments, and that's when the tears came. Many times I was told: *"Don't forget to breathe."*

I was unable to take responsibility for my own life. Life was living me and I just survived, and now I had to take responsibility for myself. *"Gosh, how do I do this?"* This was a mess that was impossible to unravel! But, step by step, I was able to do it. What I needed was to be careful and do things slowly, although I was convinced that nothing good would come of it. I was convinced that my results would be 0%, no matter what. A tiny improvement of 0.25% was already a lot, and this would make me feel very afraid.

Structure

Clarity and structure were and are very important for me. If they don't exist, I drown. I now know that this is a part of me and always will be; uncertainty suffocates me.

I didn't allow myself to be angry. I would feel complete panic when I felt my own strength, because I thought strength was only negative, which was what I had experienced my entire life.

Loyalty

I've always been loyal. I always had the thought, somewhere in my head, that I wasn't entitled to anything. I always let others cross my boundaries. I drowned in my own loyalty, and was abused because of this. I thought I always had to do what somebody else demanded, because I was filthy/dirty and didn't deserve to exist. As a little girl, I was told: *"Sit down, shut up, don't move, don't breathe, you're only useful as a f.....!"* So this is how I started to act.

In therapy and also outside of it, I began experiencing very gradually that people treated me with respect and as an equal.

Step by step, Lucien's honesty and respect made me dare to look into the mirrors he was holding in front of me. I wanted to do this, no matter how afraid I was. I told him that this confrontation helped me. What wouldn't have helped would have been to pamper me. I would say: *"If you treat the wounds gently, they will fester!"* I think that, partially because this, I was able to follow this path.

Anchor Points

At a certain point, Lucien made me a note with anchor points. This was intended as guidance during moments of great confusion. I would yell, on so many occasions, if anything went wrong: *"SEE!"* Of course things will go wrong again, whatever I try. I could never believe that

good things could happen in my life. If I wake up, good things will turn out to be just a dream!

When I began the anchor points book, I didn't quite understand it.

The anchor points note consists of 5 points:
1: Panic!
2: See, this always happens to me (victim).
3: I feel empty.
4: Well, these things can happen.
5 : Something that is nurtured will not lose its value.

This note with anchor points was created when a singing lesson was cancelled, which I was really looking forward to! Of course it didn't go through! See!

The book, the collection of notes, has become so thick that it can barely be closed now. When things get hard, I take the book and read it. I made photos of the therapy space, and I put those in this book. Many things have been written and photos have been put in. Also, the yellow post-it notes, as a form of support, help me: a simple message, or information. I can get so confused that I can't remember anything, and those are the moments a yellow note helps.

This led to the tradition that Lucien will write something in a small book at the end of the session. I sometimes read the little books that have been written, and see the big changes. These touch me deeply, and I still find these hard to believe.

Summer Holidays

Every summer holiday was a tough period. I didn't want to say anything about it, but Lucien invited me to say what I truly felt. I felt a lot of anger; I felt abandoned, afraid that he would never come back. There was a huge discharge, and to my surprise, I felt air entering my body and we were able speak calmly.

He gave me a "holiday-word" to support me. Some of these were:
Summer 2011: Acceptance
Summer 2014: Taking control
Summer 2016: Loved
Summer 2017: Persistent disbelief
Summer 2018: Believing in my own strength.

Music

Music became increasingly more important in my life. At a certain moment I dared to start singing with the voice teacher, outside the therapy space. Singing lessons followed. I took steps forward, and I even dared to take a one-day workshop in a group of about 12 people. That's when I felt the desire to sing in a choir. After this, I sang for almost 10 years in an Oratorio Choir. Such spiritual wealth, and I really love to sing! I, who didn't dare to make a sound, look at me go. I have done this faithfully. My favorite piece of music is the Saint Matthew's Passion, and I have had the opportunity to sing this for many years. At the point when traveling to the choir every Tuesday became too much for me, I found a choir closer to home. I sang there for a year and a half, with my last Saint Matthew's Passion as a beautiful closure.

Faith

The Saint Matthew's Passion awoke a deep desire that I had hidden for a long time. There was no faith in our house; it was mocked. The only faith in my family was abuse and violence. When I came home, I did research on the internet on how I could be baptized, despite not having been raised in any kind of faith. I met the parish priest and told him what I wanted, and why. I spoke with him many times. At some point he said to me: *"Saar, welcome to our flock"*.

On March 23rd, 2007, in the company of a small group of people, I was baptized in his church.

Concerts

In 2013 I found my current singing/piano teacher. I started studying songs with him, from classical to popular. I started going once a month, and this eventually became three times a month.

He taught me so much about singing. We work hard, but we also have fun. From alto, I began singing soprano.

After discussions with him and Lucien, we decided to have a small concert in the therapy space. The first performance was in June 2014, the next one in 2016, and the third in June 2018. The last concert made me very happy, but also very confused! I could feel how I was singing within my own strength, showing myself, in the presence of others, even.

Setbacks and Getting back up Again

I still don't know how to deal with certain moments. I freeze and feel myself becoming very small. But that's when I hear Lucien's voice in my head: *"What do you need? How can you send yourself in the right direction?"* This helps me a lot. I now dare to speak about things on my own initiative. There is still fear, but I know that it's still better to do something than to remain passive.

That's when I think about his email of April 9th, 2009: *"Your trauma is painful, but most important, in the end, is to live your own life. This is actually a bigger trauma than your incest story."* I can admit how recognizable this is for me.

The abuse and the violence of the family that I come from has led to the feeling that I don't come from anywhere and don't know anything about life. Let alone that I know how to live my own life; this is strictly forbidden, and I don't have the courage to stray away from that. Many times I

have said that I am brain-dead. There is nothing in my head, I have not been able to develop myself. I had to, I now think, subconsciously do everything I could to survive. That was quite a job in itself.

By now, I've come to realize that creativity and music are very important to me, and I'm very happy with the input and stimulation of books, museums, and movies.

Divorce and Remarriage

I always had the hope and illusion that my family would change along with me through everything that I learned throughout the years, and that they would be able to see it as well. I can't say that I am not disappointed about that.

In 2014 this even led to divorce, after 44 years of marriage. I couldn't take it anymore. My husband and I are so different and also have very different interests. We had more and more fights and the situation became unbearable for me.

I had to choose for myself and what was once horrible, I really needed: living on autopilot without any feelings. I still don't know how I did it. I arranged a house, the financing, and all the paperwork myself. I now realize that I needed the divorce to get closer to myself and cut the awful ties with my past. Or, to stand on my own two feet. My general practitioner said: *"Congratulations with the enormous step you dared to take to put your past further behind you…."*

I married again. Half a year after the divorce, and yes, with the same man, but this time I very consciously made my own choices. We are still very different and many times I have difficulties and feel misunderstood, but I still want to be with my husband.

Losing Weight

At a certain moment I felt like I wanted to lose my weight. I wanted to eat away my misery. I was hiding. I started to understand that eating away my misery didn't help. I was so tired of my weight, and I lost 43 kg/95 lbs. Until now, I've stayed reasonably balanced. I'm still in disbelief that I was able to do this, very consciously and caring towards myself. I, who had never taken care of myself. This was the very first step in taking care of my health.

Disbelief about Change

My disbelief is still quite huge. I simply cannot believe what my life has become. I have worked very hard over the past few years, with great positive changes for me. I feel really emotional about this!

It's still hard to accept that my loneliness, heaviness, somberness, sadness, and disbelief are a part of me. But I am now able, much to my surprise, to accept and speak about these feelings and judgments.

I still find it very hard to accept change. I need time to get used to it, even if the changes are positive.

I still think that people can see what happened to me, just by looking at me. I would love to go somewhere and drink tea by myself, but I haven't dared to do this yet.

Loyalty and Trust

I am now able to say that I am a loyal person. I always try to keep appointments, and won't just stay away. In all these years, I've never missed a therapy session. There have been occasions when an agreement about emailing didn't work out, and I'm still very unhappy and ashamed about this. I know that I have done this extra emailing in a panic or crisis situation, and then I talk about it with Lucien.

Sometimes I'm surprised by situations that make me feel very small. That's when I change into an ice cube, and completely shut down. I lose all my oversight, and panic rules supreme. When we talk about this in therapy, it becomes clearer to me. This literally gives me more air, and I can move forward. Also, this is one of the many things that are a part of me. I know that I am a complicated woman with deep scars. I still have a hard time accepting this.

When I see emotion in others, it moves me, and makes me quiet and happy – that there are people who dare to show themselves and show their respect for me.

I still fall into the trap of deep mistrust. It's hard work to climb out of it and restore my faith in others. I do recognize this process much quicker, and try to find the right path for myself. There have been moments that I needed to stay in a rehabilitation center or I needed to be committed. This is a thing of the past. What I need is time, space, rest.

When we talked about time-outs, we came up with the plan to go to Bergen aan Zee. I really like going there. It's a nice place to be, and walk by the sea. Once I wrote my name in the sand. I felt touched when the flood washed away my name; it felt like a part of me was washed clean!

Winding Down

In 2013, Lucien proposed that I start coming every other week instead of every week. This seemed an impossible step. I was convinced that I would need therapy every week for the rest of my life. I had to wind down the process in a very supportive and safe manner, which gave me full control. For the time being, I would have a session every two weeks. And I would decide when I was ready for the next step.

So it went, step by step. I would also send fewer emails. But I knew that if the need was at its height, I could turn to him. This helped me take these steps.

In 2014, I took the leap to once every three weeks, and once again I had great doubts and uncertainty about my

ability to take this step.

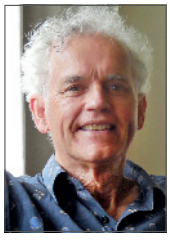
After the summer of 2015 came the hardest part: to come up with a frequency that I could agree with. I was in control, and told Lucien how much I struggled with this, but that I would be kidding myself if I didn't try these steps. So, we went to once every four weeks. I am also ready to take more control of things myself. But I would say regularly: *"Remove the decreased frequency from your calendar; it will not work out."*

I did it one step at a time. After every change, I took the time to get used to it, after which I would be able to take the next step. This kept adding one extra week at a time, forcing nothing, but my fear was great. I was so afraid to lose him and others. Saar, you are on your own. But that was not the case at all. That's how I worked towards October 11th, 2017, convinced that I could handle this. On that day, the frequency was lowered to once every three months, and that's how it will remain. It gives me peace of mind and security.

During the last period I went to an exposition of Ans Wortel, a local anarchistic artist in Bergen. I had never heard of her before. I didn't know her work and was touched by it. So purely herself, without caring about what others think. An inspiration for me. She was an autodidact. I learned another word. This means a person who has gained knowledge through self-study! I have no education, learned nothing, but now I think: *"Wow, I've learned so much over the past years! I want to figure out my own path with my painting and music!"*

Last year I said to Lucien: *"Thank you; you have given me back my life."* I mean that sincerely: I never lived; I survived. I know that I worked hard, looked in many mirrors, went through the lowest of lows. But with his support and safety, I've been able to reach the point that I am at now, at the end of 2018.

Saar Bach
The client



Lucien Ulrich is a body psychotherapist trained by Bill Solomon and Bob Zimmerman. He has been practicing in Amsterdam since 1990, treating patients in individual and group therapy as well as holding men's groups and singing workshops.

E-mail: info@lucienulrich.nl

Saar Bach is married with two children. She is a grandmother and great grandmother. Around 1988, she made her incest history public and went to court. This was the start of many years of turbulence which included psychiatric treatment, medication, hospitalization, and a deep crises in her marriage. She was completely rejected by her family because of her betrayal. In 2004, her psychiatrist referred her to body psychotherapy.

REFERENCES

Bateman, A. (2006). *Mentalization-Based Treatment for Borderline Personality Disorder: A Practical Guide*. Oxford, UK: Oxford University Press

Charles, M. (2013). *Learning from Experience: Guidebook for Clinicians*. London, UK: Routledge

Herman, J. L. (2015). *Trauma and Recovery: The Aftermath of Violence –from Domestic Abuse to Political Terror*. New York, NY: Basic Books

Horner, A. J. (2005). *Dealing with Resistance in Psychotherapy*. Lanham, MD: Jason Aronson

Johnson, S. (1994). *Character Styles*. New York, NY: W. W. Norton & Company

Lowen, A. (1978). *The Language of the Body*. New York, NY: Collier Books

Lowen, A. (1972). *Depression and the Body: The Biological Basis of Faith and Reality*. New York, NY: Coward, McCann & Geoghegan

Rothschild, B. (2000). *The Body Remembers: The Psychophysiology of Trauma and Trauma Treatment*. New York, NY: W. W. Norton & Company

McWilliams, N. (2011). *Psychoanalytic Diagnosis: Understanding Personality Structure in the Clinical Process*. New York, NY: Guilford Press

Three States of Embodied Self-Awareness

The Therapeutic Vitality of Restorative Embodied Self-Awareness

Alan Fogel

ABSTRACT

This article is based on a keynote lecture from the European Association of Body Psychotherapy, Berlin, 2018. I review research and clinical evidence for three distinct states of embodied self-awareness (restorative, modulated, and dysregulated), each with distinct qualities of felt experience, thought process, autonomic nervous system activation, and social engagement. I suggest that while most clinical practices aim to move clients from dysregulated to modulated (more regulated) states, considerable therapeutic benefit is derived by promoting restorative embodied self-awareness in both therapists and clients.

Keywords: embodied self-awareness, interoception, restoration, regulation, modulation, dysregulation.

Submitted: 02.07.2019
Revised: 30.01.2020
Accepted: 30.01.2020

International Body Psychotherapy Journal
The Art and Science of Somatic Praxis

Volume 19, Number 1,
Spring/Summer 2020, pp. 39-49

ISSN 2169-4745 Printing, ISSN 2168-1279 Online

In a previous book, *Body Sense: The Science and Practice of Embodied Self-Awareness* (Fogel, 2009/2013, and the German translation, Fogel, 2013), I introduced the concept of embodied self-awareness (ESA), the present-moment experiencing of sensations that arise from within our bodies, including our emotions. To be embodied means that experiences are felt directly as arising from within the body without intervening thought. The literature on body awareness typically focuses on interoception, which refers to the feelings coming from ergoreceptors in the body tissues, such as those for sensing temperature, pressure, itch, nausea, and pain (Craig, 2014; Laird, 2007; Mahler, 2015; Schwartz & Maiberger, 2018; Tsakiris & de Preester, 2019). The neural signals from the ergoreceptors travel along slow, unmyelinated C-conduction fibers in the posterior spinal cord, and into regions of the brain that interpret these signals (the thalamus, insula, anterior cingulate cortex, and ventromedial prefrontal cortex).

> ***Do you make time for your own restorative moments? Do you make space for your clients to fully feel their emotions in ways that bring relief, rather than insight?***

The ergoreceptors that support interoception can be contrasted with the exteroceptors for sensing the world outside the body, such as for vision, hearing, and smell. Exteroceptors (e.g., the retina of the eye), are linked to specific brain areas (the visual cortex) via specific neural pathways (the optic nerve). Interoception and exteroception, in other words, are brought into conscious awareness by completely different neural networks. Touch is often considered one of the exteroceptive senses, which is the case for "neutral" or non-affective touch, as in exploring a physical object. These touch stimuli travel along fast-myelinated Aß fibers in the spinal cord to the exteroceptive regions for touch in the sensory motor cortex. Affective, gentle, slow touch (as in caring touch by another person), in contrast, travels along the slow C-fibers and projects to the interoceptive networks of the brain (Björnsdotter et al., 2009).

ESA, in my formulation, includes interoception as well as other body

senses. The following types of sensations and feelings could potentially be part of one's ESA:

1. **Interoceptive feelings:** Achy, dizzy, strong, weak, nauseous, suffocating, burning, tense, ease, flushed, bouncy, chilled, warm, tingly, shaky, itchy, heavy, light, expansive, constricted, etc. This is the felt sense of the body's internal condition.
2. **Proprioceptive feelings:** The feeling of equilibrium or disequilibrium, rigidity or fluidity of movement, coordination or disconnectedness of body parts, interpersonal distance and closeness, boundaries or lack thereof. This is the felt sense of the body in relation to the environment and other people.
3. **Autonomic, hormonal, and immune system feelings:** Heartbeat and blood pulsation, changes of air flow in breathing, sweatiness, digestive feelings and movements, arousal, metabolic energy or fatigue, excitement, attraction, sexuality, interpersonal warmth and connection or disconnection, healthy or ill, strong or weak. These are the feelings of being alive in an organismic human body.
4. **Emotional feelings:** Happy, sad, angry, fearful, irritable, ashamed, proud, playful, mischievous, disgusted, etc. These emotions can be about how situations and people affect us, or about all of the above sensory feelings. We can love or hate being in close proximity to a particular other person (felt interpersonal distance). Feeling sweaty or feeling our heart beating can be emotionally exhilarating if we are exercising, or emotionally fearful if we are under threat from outside or inside the body.

In *Body Sense*, I showed how the neural networks for these four different types of felt experience are linked to the autonomic, cardiovascular, respiratory, digestive, hormonal, and immune systems. These systems can all function in a more healthy manner if aided by direct awareness of body sensations and emotions. From an evolutionary perspective, the ESA neural networks conferred a survival advantage to become aware of what may feel good or bad, healthy or unhealthy, and the opportunity to take appropriate action for self-care (Craig, 2014; Fogel, 2009/2013; Gueter, 2016; Savitz & Harrison, 2018).

Stress and trauma, however, can impair ESA in the nervous system. In these situations, neural signals about the internal condition of the body are interpreted as threats, leading to fear and avoidance of those feelings (Quadt, Critchley & Garfinkel, 2018; Schulz & Vögele, 2015). Stress and trauma, by altering the felt sense of the body, block those crucial pathways for survival and self-regulation. As we shall see below, depression, anxiety, addition, hostility, and many other dysregulated behaviors can be linked to impaired forms of ESA.

To understand how this happens, we'll need a brief review of the functions of the autonomic nervous system (ANS), which has both sympathetic and parasympathetic branches. The ANS is the body's first response to perceptions of safety or threat. Activation of the sympathetic branch can manifest as arousal, preparation, defending and engaging, and is usually accompanied by the release of the hormone cortisol, a blood sugar that provides the metabolic energy for activation. Activation of the parasympathetic branch allows us to "rest and digest," and with the accompanying release of the hormone oxytocin, provides feelings of ease, warmth, safety, love, and connection. Typically, the ANS functions automatically, without conscious control, via what has been called "neuroception" (Carter, 2019; Porges, 2001; Esch & Stefano, 2011).

If we are always sympathetically ON, cortisol can permanently alter the parts of the brain that process threat and stress (the amygdala, hypothalamus, and hippocampus), creating chronic states of vigilance and skeletal muscle tension, post-traumatic stress, and release of inflammatory immune cells even after the external threat may no longer be present. Chronic sympathetic activation alters patterns of thought and body sensation, but also impairs digestive, respiratory, hormonal, immune, and cardiovascular function (Ogden et al., 2006; Porges, 2001; Siegel, 2003; van der Kolk, 2014).

Although many approaches to psychotherapy now take account of the effects of stress and trauma on the ANS and health, *there is less recognition that states of stress and trauma are also connected to disturbances in ESA* (Fogel, 2009/2013; Quadt, Critchley & Garfinkel, 2018; Savitz & Harrison, 2018). When ESA is impaired, we lose our internal compass; we fail to notice when we are happy, sad, or angry, and our normal sensations, such as those of hunger and satiety, are blunted. This physiological fact about the relationship between reliable vs. impaired ESA and organismic body function is at the foundation of body psychotherapy and all forms of ESA treatment (Aposhyan, 2004; Fogel, 2009/2013, Heller, 2012; Lowen, 1975; Ogden et al., 2006; Rosen and Brenner, 2003).

In this article, I wish to suggest that *adding a component of ESA to therapy has a direct impact on the autonomic nervous system, health, and recovery*. When we fully experience our ESA *without any intervening interpretation or thought*, there is an activation of the ventral vagal parasympathetic and the dorsal vagal "immobilization without fear" nervous system. This creates a sense of non-doing, presence, ease, softening, calm, relaxation, acceptance, and a natural breath. I call this *restorative embodied self-awareness* (Fogel, 2009/2013; see also, Anderson, Monroy, & Keltner, 2018; Carter, 2019; Cloninger, 2006; Hasuo, Kanbara, Sakuma, & Fukunaga, 2018).

In the original formulation in my book, *Body Sense*, I contrasted this restorative form of ESA with conceptual self-awareness, the experience of primarily thinking

about our body experiences without necessarily being able to feel them. In subsequent interactions with somatically-oriented colleagues (especially Mark Ludwig [Berkeley, CA, USA], Ilse Schmidt Zimmermann [Frankfurt, Germany], Barbara Goodrich Dunn [Washington, DC, USA], and Amanda Blake [Lake Tahoe, CA, USA]), with my Rosen Method Bodywork clients and students, in research on Rosen Method bodywork (Fogel, 2020a, 2020b), and in my own personal experience, it became clear to me that when people are thinking about something in conceptual self-awareness, *they are also having some form of felt experience*. This form of felt experience that accompanies thinking, however, does not involve parasympathetic relaxation.

To understand these types of experience, I am proposing that there are at least two other states of ESA: (1) when people are thinking about something productive (which I am now calling *modulated embodied self-awareness*) or when they are entrapped in ruminative and self-defeating thought patterns (which I am now calling *dysregulated embodied self-awareness*). As explained below, each of these three states of ESA can be described by a synergy of specific types of felt experience, cognition/thought, patterns of autonomic nervous system (ANS) activation, and social relatedness.

Three States of Embodied Self-Awareness

In this section, I present a summary, based on a clinical research study of post-session notes made by Rosen Method bodywork practitioners. In that study, each of the practitioner's statements about the client could be uniquely classified into one of these three states of ESA (Fogel, 2020a). This presentation of the three states will be followed by a discussion of their significance in therapy and in everyday life, with a particular focus on restorative ESA.

Restorative Embodied Self-Awareness

1. ***Felt experience that is sustained and entirely in the present moment,*** arising spontaneously and without planning or effort, as if being suddenly overtaken by feeling. One has to slow down, let go, and surrender to being fully in the moment without "doing" or deliberate control. This felt experience leads to a lasting sense of relief, often from realizing what we "really" feel about something, or from the experience of surrender into the "not knowing" of whatever feelings may come. If you have any sense of control, planning or effort, you are most likely in modulated ESA.
2. ***Non-conceptual thought in the form of evocative words and images that support sustained ESA,*** including free association, daydreaming, memories that feel more alive than our stories about them, sudden clarity that comes without effortful thinking, words, sounds, and images that feel resonant with felt experience. *If you have any logical thoughts, judgments, plans, strategies or interpretations, you are likely in Modulated ESA.*
3. ***Activation of the ventral vagal parasympathetic nervous system and the dorsal vagal "immobilization without fear" system*** (Carter, 2019) including a natural and easy breath, sigh, feeling slowed down, relaxation of muscular tension/armoring, relief, spreading warmth/energy, feeling soothed, safe, seen, settled, vulnerable, open, content, peaceful, fully present, and fully alive. Entering into restorative ESA also activates restorative states in the immune, hormonal, respiratory, digestive, and cardiovascular systems. *If you don't feel this relaxation and spreading sense of ease and warmth, peace and contentment, you are in either modulated or dysregulated ESA.*
4. ***Warm and tender social-relational engagement*** that includes acceptance, surrender, safety, restorative ESA of self and other being together, lack of self-consciousness with the other person, ease of moving and being together, psychobiological interpersonal somatic resonance and deep states of connection, love, appreciation, warmth, and receptivity to caring touch. *If you are thinking about what to do or say, trying to make the right moves with other people, or worried about how you look or sound, then you are in either modulated or dysregulated ESA.*

The following are examples of practitioner statements that were classified as restorative embodied self-awareness (Fogel, 2020a).

> *"She told me about the one thing that had inspired her last week. From there, everything in her body shifted. More breath, softening of the muscles in her neck. She said she makes everything negative, but here, in her body was the breath and the inspiration that had been missing".*
>
> *"Her body is very responsive and her thought(s)/mind is slowly, very slowly, beginning to listen. She was able then to stay longer in the heart-felt sensations. At the end of the session she said the new awareness was like a baby that needed nurturing."*
>
> *"The hopelessness, the failure are so deep and authentic. I can feel the upwelling pretty far inside her. I wait while she feels and then say back, "Everything you did, nothing worked, you felt hopeless." She and I connected; her chest drops slightly. Being witnessed comes through for her and for me. Here at the end is the real jewel: hopeless, impotent about someone she really, really loves and who really loved her."*

Modulated Embodied Self-Awareness

1. ***Felt experience that is transient.*** While keeping busy, being engaged or creative — in a state of "doing" and

thinking – felt experience may arise momentarily to the surface of awareness, such as moments of grounding, reconnecting, and coming back to oneself, but not as a sustained awareness. The person remains on the "edge" of potentially deeper experiences of restorative ESA. These brief moments of felt experience may be spontaneous (the sudden realization that one is tired or hungry, or happy to have reached a solution to a problem) or deliberate (making the choice to stop momentarily, take a breath, or being offered the opportunity to feel for a moment by another person/therapist). In this state, our awareness is almost entirely focused on what we are doing or thinking. Most of the time, most of us are in this state, and it usually feels alive, productive, helpful, and creative. However, it can also feel intense, and too much, and can often transform into dysregulated ESA.

2. ***Purposeful or intentional thought*** that is conceptual, deliberate, categorical, modulated, and adaptive to the situation. Generated via the task-positive neural network (Boyatzis, Rochford & Jack, 2014; Di & Biswal, 2014), this type of thought can include creative thinking and problem solving, decision-making, explaining, understanding, planning, or thoughts about self and other that are not obsessive, but move toward a specific conclusion or solution. Conceptual thought in modulated ESA can also include *thinking about a feeling*, rather than directly accessing the felt experience or seeking explanations about one's momentary felt experience. The brief moments of felt experience might "stand out" against the background of thinking, and ***make us think*** we are more present with our feelings than we actually are.

3. ***Modulated ESA is primarily sympathetic arousal and engagement***, including being focused; busy, creative, pleasurable, and engaging work; taking part in athletics, dance, musical, artistic, or social activities. Modulated ESA can also feel edgy, vigilant, tense, or include overdoing, distraction, fatigue, or withdrawal. The interoception of autonomic activation is primarily aroused, excited, "up," intensity.

4. ***Modulated social-relational engagement*** in which there is a goal or intention to be with others (to work together, be creative together, spend time together, solve a common problem) with possible brief feelings such as being seen and appreciated, or shared tears and laughter, excitement, playfulness, or wanting to connect. On the other hand, this can come with a tendency to push beyond limits, keep up, be clever, want to look good, sound good, feeling uncertain, vigilant and self-conscious, all perhaps cycling with brief moments of ease and letting down one's guard.

The following are examples of practitioner statements that were classified as modulated embodied self-awareness (Fogel, 2020a).

> *"For a brief moment, her body moves with the emotion. Then the words come again, the feeling goes underground, and the stillness is back."*
>
> *"She is very quick to move from the feeling to words and thoughts. A good thing might happen that she will relate, but quickly she is back in what doesn't work. Her body seems to be in a state of confusion: one moment she gets in touch with herself, and the next, the words are there to take her out of the feeling."*
>
> *"She has a very slight amount of wetness coming out of her eyes; certainly not tears, but she's upset. "I wish I could have someone I could rely on, someone to tell me what is happening and what to do, someone with guiding wisdom." Here she is younger, real, softer. She quickly pulls herself up and together, closes up that moment of tenderness, and goes on."*

Distinguishing Restorative from Modulated Embodied Self-Awareness

My experience in teaching and clinical work is that people have difficulty discerning the differences between restorative and modulated ESA. There are at least three reasons for this. One is that experiences of genuinely restorative ESA are relatively rare. The second reason is that modulated ESA is adaptive to most of our everyday tasks: it captivates us and keeps us thinking, moving, and doing. We are never really settled. Even our "down" time is some form of active engagement like reading, being on a device, being entertained, or being with family or friends. The third reason is that modulated ESA is perverse, in the sense that we can easily convince ourselves that we are settled and relaxed, even though we remain in a state of sympathetic arousal.

Restorative ESA **is NOT what you think.** If you have any thoughts – any mental tracking of what you are doing, planning, organizing your approach to being embodied, doing deliberate exercises to become embodied – then you are NOT there. You are most likely in modulated ESA.

Dysregulated Embodied Self-Awareness

Dysregulated ESA is what you might expect from lots of clinical theory and practice on emotion dysregulation and trauma (Jungmann et al., 2016; Schore, 2003; Seligowski et al., 2015; Thayer & Lane, 2000). What I am adding here is that Dysregulated ESA can be understood as part of a continuum of states of ESA. Dysregulation, in other words, *distorts not only mental and physical body function, but also our awareness of the felt sense of our bodies* (Fogel, 2009/2013; Heller, 2012; Quadt, Critchley & Garfinkel, 2018; Savitz & Harrison, 2018).

1. ***Felt experience*** is experienced as an ongoing and uncontrollable self-focus on feelings of acute and chron-

ic states of physical and emotional discomfort, pain, fatigue, disorientation, dissociation, hopelessness, despair, depression, and/or uncomfortable self-consciousness. including shame. Or, on the other hand, there may be feelings of invulnerability, risk, addictive urges, hypervigilance, tense muscles, hostility, racing, extreme highs and lows, anxiety.

2. ***Ruminative (repetitive) conceptual thinking***, including worrying, defending, denying, depressive and self-negative thoughts, suicidal thoughts, hostile, blaming (self and other) and judgmental thought patterns, mental confusion and disorientation, self-convincing, self-arguing and indecision, all repeating in seemingly endless thought loops.

3. There is a ***hyperactivation of the sympathetic and/or dorsal vagal parasympathetic nervous systems*** resulting from current or prior unresolved stress and trauma. There is no ventral vagal activation, as might be found in modulated ESA, such as when we feel that we are pushing ourselves beyond our limits, but we still have the ability to slow down briefly into a parasympathetic moment to reground ourselves. In dysreglated ESA, we do not have that ability.

    a. ***Mobilization and sympathetic hyperactivation:*** In states of stress this may include feelings such as slow-burn anger, watchfulness, muscle tension, high arousal, somatization in the form of chronic pain, discomfort and fatigue (fight), or withdrawing, making oneself small or unnoticed, and feelings of worthlessness, doubt, shame (flight). In more extreme trauma states: chronic or "stuck" overt verbal or physical hostility without settling or closure, tense and intense, risk-taking (fight), or can't settle, anxious, hiding, suicidal thoughts, self-harm (flight).

    b. ***Immobilization/paralysis and dorsal vagal activation with fear:*** Includes "ordinary" dissociation such as confusion, numbness, losing train of thought, fatigue, depression, loss of initiative; and traumatic dissociation, such as not there, vacant gaze, hypotonic, dissociative identities.

4. ***Dysregulated social-relational engagement*** may include using and abusing others, hostility, power assertion, harassment, feeling "not enough," or "less than," shame, withdrawal, passivity, unwanted submission.

The following are examples of practitioner statements that were classified as dysregulated embodied self-awareness (Fogel, 2020a).

> *"As she talks about the history of her condition. some words pop out for me... "taut," "stretched to my limit." There is no response in her breathing, no change in her voice, facial expression, or color as she says these things."*

> *"I ask her what she is noticing in her neck and shoulders now. She does not respond to that query about her felt sensation. but continues with her words. This happens two other times where I ask her what she is feeling in her body. and she responds with her narrative."*

> *"It was a very intense experience for her, and she had the desire to smoke. She finally got the cigarette, knowing that the doctor had told her there are two things that exacerbate her illness: smoking and stress. The voice she hears is one of self-hatred. She, for the first time, realizes that happy thoughts or new-age thinking are not going to get rid of this self-hatred. She is at a loss as to what to do."*

Research on dysregulation shows that the nervous system shifts the body into a defensive mode to protect against perceived threats from outside or inside our bodies. If we are being attacked, threatened, or are in a stressful situation, interoception would take energy and resources away from self-protection. Illness is more likely to develop when our bodies continue in this defensive trauma mode, even after the threat has passed.

This is why body awareness therapies are needed: to restore our ability to feel ourselves in the present moment as an aid to facilitate recovery (Fogel, 2009/2013; Quadt et al., 2018; Schulz & Vögele, 2015). Unlike some forms of psychotherapy that require cognitive interpretation and reframing dysregulated thought and habit patterns, I am proposing that treatment may also be focused on guiding clients into embodied awareness of how it feels when they are dysregulated.

This is because the very nature of dysregulated ESA is the habitual avoidance of felt experience. People need to first feel sufficiently safe to stay with feelings that are "too much" to bear. I have written in more detail about the important process of guiding clients from dysregulated, to modulated, to restorative ESA (Fogel, 2020a; 2020b). Here, however, I am focusing attention on restorative ESA, primarily because it has not been sufficiently emphasized in therapeutic work.

Restorative Embodied Self-Awareness In Clinical Practice

The Client's Embodied Self-Awareness

Practices that enhance client ESA include some forms of body psychotherapy, psychodynamic and emotion-focused psychotherapy, body-centered forms of meditation, certain contemplative yoga and yoga therapy practices, Feldenkrais, Rosen Method bodywork, dance movement therapy, and a growing number of experimental programs meant to enhance interoception. The primary purpose of these disciplines is gaining the ability to self-modulate. Modulated ESA allows clients to feel and find themselves, to live more fully, to set appropriate interpersonal

boundaries, and acquire a measure of self-compassion and understanding (Aposhyan, 2004; Gueter, 2016; Hoffrén-Larsson, Gustafsson & Falkenberg, 2009; Moltu & Binder, 2014; Music, 2015; Rolef Ben-Shahar, 2014; Price & Hooven, 2018; Schwartz & Maiberger, 2018; Sullivan et al., 2018; Vago, 2013).

Restorative ESA, however, is a state of being and self-awareness that many of the above-mentioned practices may not explicitly include. Restorative ESA, unlike verbal dialogue in psychotherapy, occurs in the absence of rational or logical thought, in the absence of insight and reasoning, in the absence of mental or cognitive modulation.

It is reasonable to ask if restorative ESA has a place in body psychotherapy beyond the goal of cultivating self-modulation. Rosen Method bodywork – my own clinical practice and expertise – is a body-based therapeutic practice that explicitly includes the dimension of restorative ESA in the treatment process. This work, founded by Marion Rosen, follows principles developed by body psychotherapy pioneers Charlotte Selver and Elsa Gindler (Huebner, 2010; Rosen & Brenner, 2004; Weaver, 2005).

Below are some quotes from clients, based on interview studies on the effects of Rosen Method bodywork, about their experience of restorative states. Perhaps some of this material may resonate with readers who practice or receive body psychotherapy.

> *"I realized that I could think about what I felt in talk therapy, but it was an intellectual process. Now, with Rosen Method bodywork, I have learned to discern what I think I feel and what I really can feel. Now I can feel myself, feel love for myself, know that I am present, that I do exist, in a visceral way. And all the sensations are . . . in color now, so to speak, as if they had been black and white before"* (Bernard, 2016, p. 43).

> *". . . no matter what's been going on, how anxious I've been feeling, how upset I am about something, I can just kind of let go within… As soon as I lie down I can feel myself starting to relax and let go, and I just feel so supported and so safe. It's hard to even describe adequately… I find myself wanting to just stay like that like forever. (Laughs) …in that place where I don't have to do anything else. Just relax and just breathe. And feel…"* (Smart, 2018, p. 130).

> *"Rosen has helped me really feel things viscerally and integrate things so they're not just this concept like, "Oh, of course, I know that". No. To actually feel, to experience it in my body. Then, the whole world is different. … And it doesn't ever go back. You're changed forever"!* (Smart, 2018, p. 133)

These comments speak to the transformative power of restorative ESA. Clients in these interview studies speak to links between restorative ESA and spirituality, awe, grace, something bigger than self and other. Elsa Gindler's work, like that of Marion Rosen, assumed that accessing this state of restorative ESA was both necessary and sufficient for healing.

> *"The uniqueness Gindler looked for in her students is . . . to help them uncover their connection and faith in their own innate beings. Without a sense of this in their own organisms, physical and sensorial as well as mental and emotional, the wholeness of the human being we are working with will not feel complete"* (Weaver, 2005, p. 25-26).

In some cases, psychotherapists have discovered a similar foundational truth. Music (2015), referring to Winnicott's (1954) theory of the mother-infant relationship and his notion of the true self, says,

> *"Too many of our patients almost never experience a relaxed state of being in which one can muse and just be uninterrupted by impingements, external or internal. When [a person] experiences impingements and does not feel safe, they resort to alternative ways of holding themselves together. These include . . . sympathetic nervous system reactions such as faster heart rates and tightening in the body. One often sees either an active mind or body, or both, alongside an attempt to be overly self-sufficient"* (Music, 2015, p. 5-6).

The Therapist's Embodied Self-Awareness

Following the discussion in the previous section, not all disciplines and not all therapists who work with the body and body awareness focus on restorative ESA. The intention to access states of awareness that are similar to restorative ESA is more likely, however, to be found in "relational" approaches to therapy, including therapeutic bodywork modalities, embodied coaching, dance movement therapy, and relational body and somatically-informed psychotherapy. In these approaches, therapists' access to their own embodied experience is a central part of the treatment and recovery process for the client. Why are relational approaches more likely to promote restorative ESA? This is because the therapists' ESA, and not only the client's, is a central part of the treatment process.

Concepts that have been used to capture the relational ESA of client and practitioner include *relational somatic presence, attunement, "feeling felt," inter-bodily resonance, somatic resonance, limbic resonance, reflexive embodied empathy, dyadic expansion of consciousness, and psychophysiological coherence* (Aposhyan, 2004; Bernard, 2018; Blake, 2018; Findlay, 2005; Fogel, 2009/2013; Green, 2014; Moltu & Binder, 2014; Siegel, 2003; Stern, 2004; Tronick, 2007; Vinston Ritz, 2018). When practitioners are trained to become aware of their own ESA – as opposed to trying to remain "distant" or "objective" toward the client – there is more possibility for the client to develop similar attitudes of self-awareness and embodiment.

Because of this mutual embodied resonance, the practitioner's states of ESA during sessions may mirror those of the client, and therefore provide information to the practitioner about the client's state of ESA. Most importantly, therapists who are capable of accessing their own restorative ESA – staying for sustained periods in the present moment with whatever feelings arise as they engage with clients – are more likely to be able to tolerate and "hold" any of the three states of ESA in which the client may be found. Treatment approaches for such clients are discussed more fully elsewhere (Fogel, 2020b).

When I work with clients in dysregulated ESA states, I just wait until the possibility of an action or some words arise in me that do not come from a thought process.

> *"While I can articulate various conceptual guidelines for my [therapeutic] decisions, the quality with which I do things and the timing that I use often defy conceptualization: They just feel right"* (Aposhyan, 2004, p. 54).

If some possible action arises from a thought, I just let the thought be there in my mind, and I don't react to it. Whatever I say from a place of presence with the client is more likely to resonate with the client's experience, and allow the client to more fully enter into his or her own felt experience. In support of this approach to being with clients, the following is a quote from an interview study of therapists working from a relational empathic perspective, rather than from a mode of applying techniques or cognitive strategies.

> *"I couldn't really get contact [with the client] if I was all about doing . . . Spaciousness . . . just being able to tolerate what happens inside of you . . . So it was about using the person I am in a certain way, or consciously with the client . . . where the relationship is my entry into being a therapist rather than doing therapy (cognitive)"* (Moltu & Binder, 2014, p. 132).

In this mode of "being a therapist," I observe the client to notice if – in response to what I had said or done – there is a softening of the muscles, or if tears come, or it the breath gets any easier, or if there is more color or aliveness, all of which are physiological indices of an emergent parasympathetic state. I notice if this is sustained or transitory. I notice if a change I observe in the client evokes a corresponding feeling in me, which is how I know for sure that the client is engaged with a feeling. There is, in this process, no judgment or interpretation – or, if there is, I let it pass as something else that I simply notice.

If I do begin to have more continuous thoughts – like more modulated or dysregulated forms of ESA – then I feel certain the client is also thinking, and that their feelings are either transitory or negative. I don't follow the logic of my own thoughts, nor even the logic of what the client may be saying to me. Rather, I note my *felt experience of having thoughts:* that they are there, that they take me out of my body sense into worry or problem-solving. This allows me to notice the pattern and timing of the client slipping into habitual thought patterns, away from felt experience – something I can point out to encourage clients' awareness of when and how they shift from one to another state of ESA.

And, as this is all happening, suddenly and mysteriously, I might feel a transient felt experience and a brief parasympathetic response in the client's body. I can point this response out ("Did you feel what just happened?" If not, I describe what I noticed: "You took a bigger breath there." "You slowed down for a minute. What did you notice?"). I'm not thinking. I feel totally empowered, and I don't judge or question whatever comes out of me.

For me and other relationally-oriented therapists (Aposhyan, 2004; Bernard, 2018; Green, 2014; LaPierre, 2015; Moltu & Binder, 2014; Rolef Ben-Shahar, 2014), the therapeutic perspective is not only about the therapist's ability to self-modulate when engaged with the client's feelings. It is not only about being skilled at finding interpretations, exercises, movements, and meditations to connect clients with their embodied experience.

The therapeutic perspective is fundamentally about therapists' vulnerability to their own embodied experience and awareness. This openness to the embodied felt experience of practitioners provides clients with the safe container needed to develop their own abilities to stay present with themselves (Green, 2014).

> *"The transpersonal fulfillment of our ... intercorporeality is not a confusion of identities, but rather a deeply felt compassion – an openness and readiness to be moved by compassion – and an uncompromising respect for the other as other, the other as different, but for whose difference one is capable, nonetheless, of feeling some bodily grounded sympathy"* (Levin, 1988, p. 301).

When therapists are restoratively open and vulnerable, it feels to clients like an invitation to enter into a similar place inside themselves. This shared vulnerability is the foundation of trust in relational and potentially restorative ESA therapy practices.

> *"... body psychotherapists develop their capacity to consciously track shifts in gut feelings, breath, heart rate, and bracing patterns both in their clients and in themselves. In conjunction with supporting their clients' ongoing emotional and cognitive reflective processes, relational body psychotherapists allow themselves to be guided by their own interoceptive body-based responses"* (LaPierre, 2015, p. 87).

> *"... the main way to feel into the intersubjective space ... is through body sensations ... when we are attentive to our own bodies, we can feel the other alive and moving through us"* (Rolef Ben-Shahar, 2014, p. 153).

Conclusion

Practices for Cultivating Restorative Embodied Self-Awareness

You cannot master the art and practice of any restorative somatic therapeutic modality unless you take care of yourself by regularly engaging in restorative practices. Honesty about this is essential. Do you make time for your own restorative moments? Do you make space for your clients to fully feel their emotions in ways that bring relief, rather than insight? Or, are you propelled by thinking and doing, problem-solving and treating, interpreting and analyzing, wondering and worrying? Are you mostly in modulated ESA, thinking that you are in restorative ESA?

An article on Rosen Method bodywork concluded that practitioners may find restoration in mindfulness practices that

> *". . . can help the practitioner to use her body as a very sensitive diagnostic tool. It can signal to the practitioner what is happening in her body as well as in the client's body. . . I experience again and again that the level of acceptance of my own difficulties determines the degree to which I can hold the space for others. As I let go of self-judgment, I am free to receive with compassion. The more I realize my own human nature and frailty and bring loving-kindness to myself, the more I am able to be the container of my clients' processes"* (Kushnir, 2008, pp. 13-14).

Mindfulness practices, however, do not work for everyone (Lutkajtis, 2018; Treleaven, 2018). How can we find sustainable restorative resources to suit our unique individuality? To become better at discerning our own states of ESA and to find meaningful restorative practices, I include here a set of personal study questions that I give to students in workshops that I teach on ESA.

- Name some of the places/activities (being in nature, meditation, yoga, dance and authentic movement, sports and exercise, prayer and spiritual practice, music, art, gardening, cooking, eating healthy foods, shopping, being with family and friends, intimate partnerships, etc.) that feel most restorative for you, in which you are more able to fully experience your own restorative ESA. Note that these may be different at different times in life.
- How can you discern whether an activity is actually guiding you to a state of restorative ESA, rather than to a state of modulated or dysregulated ESA? During and after engaging in the activity, do you feel more alive, healthier, relaxed, or more fully yourself? Or do you feel tired, drained, stressed, overwhelmed, tense, or sympathetically "up" or "ON"? Both modes of engagement are important, but only those practices that activate a sustained parasympathetic response are genuinely restorative for mind, body, and spirit.
- Name some of the places/activities that feel more stressful or overwhelming to you. What happens to you in these different places? Can you self-modulate, or do you become dysregulated? How can you discern if you are self-regulating, or only thinking that you can handle the situation, i.e., that you are in fact dysregulated? Can you sense why these things affect you in these specific ways? What can you do to minimize these stressors?
- Make a list of possible changes you might make in your life to maximize time for restorative ESA when you feel stressed or overwhelmed. How can you be with other people in ways that help you find restoration (asking for help, asking someone to just listen, saying "no," setting boundaries, asking for the kind of touch you need, etc.)? What does it mean for you to make life-affirming choices? What keeps you from making such choices?

As you consider these questions, what is essential is that you are committed to *making choices to regularly indulge yourself in your own in-depth healing and restoration.* Again, honesty about the states of ESA in which you most typically live is a crucial component of eventually finding genuine restoration. If you are thinking that you have finally reached a state of restorative ESA, then you are convincing yourself, and maybe even wanting to believe, that you are there. These thoughts come with effort and sympathetic arousal, no matter how well-modulated they may be. Restoration, when regularly accessed and practiced, helps us to notice our own modulated or dysregulated ESA. This simple noticing – without judgment and with presence, patience, acceptance, and self-forgiveness – is enough to allow us to come home to a sense of peace, belonging, and gratitude.

Alan Fogel, PhD, LMT is a Rosen Method Bodywork Practitioner and Certified Senior Teacher, the founding editor of the *Rosen Method International Journal*, and a Professor of Psychology Emeritus, University of Utah. His research career on early nonverbal communicative and emotional development spanned over 40 years, with multiple scientific articles and books. He has a Rosen Method Bodywork private practice in Salt Lake City, US, and a one-on-one video consulting practice for anyone who wishes to better access and sustain their restorative ESA or who wants to promote restorative ESA in their work with clients. Fogel teaches intensives and workshops internationally and by video conference in Rosen Method Bodywork, ESA, and Trauma and Resilience. He is the author of *Body Sense: The Science and Practice of Embodied Self-Awareness* (W. W. Norton & Company, 2013), and has written a blog on body sense for *Psychology Today* magazine.

E-mail: fogel.alan@gmail.com
Websites: http://www.alanfogelrosenmethod.abmp.com/
https://www.researchgate.net/profile/Alan_Fogel
http://utah.aa/AlanFogel

REFERENCES

Anderson, C. L., Monroy, M., & Keltner, D. (2018). Awe in Nature Heals: Evidence from Military Veterans, At-Risk Youth, and College Students. ***Emotion***, 18, 1195-1202

Aposhyan, S. (2004). B*ody-Mind Psychotherapy: Principles, Techniques, and Practical Applications.* NY: W. W. Norton

Bernard, S. (2016). Relational Somatic Presence: Meeting Trauma with Rosen Method Bodywork. ***Rosen Method International Journal***, 9, 25-53. (https://1xhdko41sric25njz22ditir-wpengine.netdna-ssl.com/wp-content/uploads/2016/09/BernardFinalArticleSpring2016.pdf)

Björnsdotter, M., Löken, L., Olausson, H., Vallbo, A., & Wessberg, J. (2009). Somatotopic Oganization of Gentle Touch Processing in the Posterior Insular Cortex. ***The Journal of Neuroscience***, 29, 9314-9320

Blake, A. (2018). *Your Body is Your Brain.* Embright/Tokay Press

Boyatzis, R. E., Rochford, K., & Jack, A. I. (2014). Antagonistic Neural Networks Underlying Differentiated Leadership Roles. *Frontiers in Human Neuroscience*, 8, 1-15

Carter, C. S. (2019). Love as Embodied Medicine. ***International Body Psychotherapy Journal***, 18, 19-25

Cloninger, C. R. (2006). The Science of Well-Being: an Integrated Approach to Mental Health and its Disorders. ***World Psychiatry***, 5, 71-76

Craig, A. D. (2014). *How Do You Feel?: An Interoceptive Moment with Your Neurobiological Self.* Princeton, NJ: Princeton University Press

Di, X. & Biswal, B. B. (2014). Modulatory Interactions between the Default Mode Network and Task Positive Networks in Resting-State. *PeerJ*, 2, 1-19

Esch, T., & Stefano, G. B. (2011). The Neurobiological Link between Compassion and Love. ***Medical Science Monitor***, 17, 65-75

Findlay, L. (2005). "Reflexive Embodied Empathy": A Phenomenology of Participant-Researcher Intersubjectivity. ***The Humanistic Psychologist***, 33(4), 271-292

Fogel, A. (2009/2013). *Body Sense: The Science and Practice of Embodied Self-Awareness.* N.Y.: W. W. Norton

Fogel, A. (2013). *Selbstwahrnehmung und Embodiment in der Körperpsychotherapie* (trans. H. Boese). Stuttgart, Germany: Schattauer

Fogel, A (2020a). Three States of Embodied Self-Awareness in Rosen Method Bodywork: Part 1: Practitioner Observations of their Clients. ***Rosen Method International Journal***, 13, 4-36. (https://roseninstitute.net/journal/journal-volumes/)

Fogel, A (2020b). Three States of Embodied Self-Awareness in Rosen Method Bodywork: Part 2: Practitioner Observations of their Own Experience. ***Rosen Method International Journal***, 13, 37-57. (https://roseninstitute.net/journal/journal-volumes/)

Green, I. (2014). The Safe Container of Interpersonal Relationships. ***Rosen Method International Journal***, 7, 6-29. (https://1xhdko41sric25njz22ditir-wpengine.netdna-ssl.com/wp-content/uploads/2015/04/vol7iss1-2.pdf)

Gueter, U. (2016). Body Psychotherapy: Experiencing the Body, Experiencing the Self. ***International Body Psychotherapy Journal***, 15, 6-19

Hasuo, H., Kanbara, K., Sakuma, H. & Fukunaga, M. (2018). Awareness of Comfort Immediately after a Relaxation Therapy Session Affects Future Quality of Life and Autonomic Function: a Prospective Cohort Study on the Expectations of Therapy. ***Bio-Psycho-Social Medicine***, 12, 16-26

Heller, M. C. (2012). ***Body Psychotherapy: History, Concepts, Methods.*** NY: W. W. Norton

Hoffrén-Larsson, R., Gustafsson, B., & Falkenberg, T. (2009). Rosen Method Bodywork: an Exploratory Study of an Uncharted Complementary Therapy. ***Journal of Alternative and Complementary Medicine***, 15, 1-6

Hoffrén-Larsson, R., Löwstedt, J., Mattiasson, A-C., & Falkenberg, T. (2013). Caring as an Essential Component in Rosen Method Bodywork - Clients' Experiences of Interpersonal Interaction from a Nursing Theoretical Perspective. ***European Journal of Integrative Medicine***, 5, 561-570

Huebner, M. (2010). The Life and Teachings of Elsa Gindler. ***Rosen Method International Journal***, 3, 17-21. (https://roseninstitute.net/journal/journal-volumes/)

Jungmann, S. M., Vollmer, N., Selby, E. A., Witthöft, M. (2016). Understanding Dysregulated Behaviors and Compulsions: an Extension of the Emotional Cascade Model and the Mediating Role of Intrusive Thoughts. ***Frontiers in Psychology***, 7, 1-13

Kushnir, D. (2008). Mindfulness Meditation and Rosen Method Bodywork. ***Rosen Method International Journal***, 1, 11-14. (https://1x-hdko41sric25njz22ditir-wpengine.netdna-ssl.com/wp-content/uploads/2015/08/Vol1.1-3.pdf)

Laird, J. D. (2007). ***Feelings: The Perception of Self***. Oxford University Press

LaPierre, A. (2015). Relational Body Psychotherapy. ***International Body Psychotherapy Journal***, 14, 80-100

Levin, D. M. (1988). Transpersonal Phenomenology: The Corporeal Schema. ***The Humanistic Psychologist***, 16, 282-313

Lowen, A. (1975). ***Bioenergetics.*** NY: Coward, McCann and Geoghegan

Lutkajtis, A. (2018). The Dark Side of Dharma: Why have Adverse Effects of Meditation been Ignored in Contemporary Western Secular Contexts? ***Journal of Academic Study for Religion***, 31, 192-217

Mahler, K. (2015). ***Interoception: The Eighth Sensory System.*** AAPC Publishing

Moltu, C., & Binder, P. (2014). Skilled Therapists' Experiences of how they Contributed to Constructive Change in Difficult Therapies: A Qualitative Study. ***Counselling and Psychotherapy Research***, 14, 128-137

Music, G. (2015). Bringing up the Bodies: Psyche-Soma, Body Awareness and Feeling at Ease. ***British Journal of Psychotherapy***, 31, 4-19

Ogden, P., Minton, K., & Pain, C. (2006). ***Trauma and the Body: A Sensorimotor Approach to Psychotherapy.*** New York, NY: W. W. Norton

Porges, S. W. (2001). The Polyvagal Theory: Phylogenetic Substrates of a Social Nervous System. ***International Journal of Psychophysiology***, 42, 123-146

Price, C. J. & Hooven, C. (2018). Interoceptive Awareness Skills for Emotion Regulation: Theory and Approach of Mindful Awareness in Body-Oriented Therapy (MABT). ***Frontiers in Psychology***, 9, 1-12

Quadt, L., Critchley, S. N., & Garfinkel, H. D. (2018). The Neurobiology of Interoception in Health and Disease. ***Annals of the New York Academy of Sciences***, 1428, 112-128

Rolef Ben-Shahar, A. (2014). ***Touching the Relational Edge.*** London: Karnac

Rosen, M., & Brenner, S. (2003). ***Rosen Method Bodywork: Accessing the Unconscious through Touch.*** Berkeley CA: North Atlantic Books

Savitz, J., & Harrison, N.A. (2018). Interoception and Inflammation in Psychiatric Disorders. ***Biological Psychiatry: Cognitive Neuroscience and Neuroimaging***, 3, 514-524

Schore, A. N. (2003). ***Affect Dysregulation and Disorders of the Self.*** NY: W. E. Norton

Schwartz, A., & Maiberger, B. (2018). ***EMDR Therapy and Somatic Psychology: Interventions to Enhance Embodiment in Trauma Treatment.*** NY: W. W. Norton

Schulz, A., & Vögele, C. (2015). Interoception and Stress. ***Frontiers in Psychology***,6, 1-23

Seligowski, A. V., Lee, D. J., Bardeen, J. R., & Orcutt, H. K. (2015). Emotion Regulation and Posttraumatic Stress Symptoms: A Meta-Analysis. ***Cognitive Behavior Therapy***, 44, 87-102

Siegel, D. J. (2003). An Interpersonal Neurobiology of Psychotherapy: The Developing Mind and the Resolution of Trauma. In: M. F. Solomon & D. J. Siegel (Eds.), ***Healing Trauma: Attachment, Mind, Body, and Brain*** (pp. 1-56). NY: W. W. Norton

Smart, S. (2018). ***Grounded Theory of Rosen Method Bodywork.*** Doctoral Dissertation: Kent State University. (https://etd.ohiolink.edu/pg_10?0::NO:10:P10_ACCESSION_NUM:kent1524757138389208)

Stern, D. N. (2004). *The Present Moment in Psychotherapy and Everyday Life.* NY: W. W. Norton

Sullivan, M. B., Erb, M., Schmalz, L., Moonaz, S., Noggle Taylor, J., & Porges, S. W. (2018). Yoga Therapy and Polyvagal Theory: The Convergence of Traditional Wisdom and Contemporary Neuroscience for Self-Regulation and Resilience. *Frontiers in Human Neuroscience*, 12, 1-15

Thayer, J. F., & Lane, R. D. (2000). A Model of Neurovisceral Integration in Emotion Regulation and Dysregulation. *Journal of Affective Disorders*, 61, 201-216

Treleaven, D. A. (2018). *Trauma-Sensitive Mindfulness: Practices for Safe and Transformative Healing.* NY: W.W. Norton & Company

Tronick, E. (2007). *The Neurobehavioral and Social-Emotional Development of Infants and Children.* New York: W. W. Norton

Tsakiris, M., & de Preester, H. (Eds.) (2019). *The Interoceptive Mind.* Oxford University Press

van der Kolk, B. (2014). *The Body Keeps the Score: Brain, Mind and Body in the Healing of Trauma.* New York: Penguin Books

Vinston Ritz, A. (2018). "Fixations in Time": A Term from Phenomenology as Applied to Rosen Method Bodywork. *Rosen Method International Journal*, 11, 20-37. (https://1xhdko41sric25njz22ditir-wpengine.netdna-ssl.com/wp-content/uploads/2019/01/Dec-FinalVinstonRitz2018version2.pdf)

Vago, D. (2013). Mapping Modalities of Self-Awareness in Mindfulness Practice: a Potential Mechanism for Clarifying Habits of Mind. *Annals of the New York Academy of Sciences*, 1307, 1-15

Weaver, J. (2005). The Influence of Elsa Gindler on Somatic Psychotherapy and on Charlotte Selver. *USA Body Psychotherapy Journal*, 4, 22-26

Winnicott, D.W. (1954) Mind and its Relation to the Psyche-Soma. *British Journal of Medical Psychology*, 27, 201-9

Embodied Wisdom: The Dance of Three

Tina Stromsted

ABSTRACT

Authentic Movement, also known as "active imagination in movement," is a simple yet powerful meditative and therapeutic approach that bridges body, psyche, spirit, and relationship through expressive movement and reflective witnessing. Through the practice, participants can deepen their ability to be present with themselves and with another in a more vital, increasingly conscious relationship. The practice invites a level of perception of self and other that can evoke deep respect and empathy. Allowing natural movement to emerge within a safe, relational space, the experience may bring further visibility and form to emotions, developmental elements, and qualities that may have been previously repressed or unformed in the person's life. This can provide a pathway toward wholeness – living a more soulful life. This workshop focused on *The Dance of Three*, a further application of Authentic Movement developed by Jungian analyst Marion Woodman, dancer Mary Hamilton, and voice teacher Ann Skinner in their BodySoul Rhythms® approach. A longtime practitioner and teacher of Authentic Movement and of Marion Woodman's BodySoul Rhythms® work, the author reflects on how these practices help develop the embodied consciousness that is fundamental for healing our relations with self, other, and with the natural world.

Keywords: Dance of Three, Authentic Movement, Active Imagination, Marion Woodman, witnessing, embodied consciousnes

Submitted: 01.09.2019
Revised: no revision
Accepted: 07.04.2020

International Body Psychotherapy Journal
The Art and Science of Somatic Praxis
Volume 19, Number 1,
Spring/Summer 2020, pp. 50-54

ISSN 2169-4745 Printing, ISSN 2168-1279 Online

> ***The body is the visibility of the soul, the psyche: and the soul is the psychological experience of the body. So it is really one and the same thing.***
>
> C. G. Jung

Our bodies and dreams may be our closest links to the unconscious, expressing the soul's longing through image, breath, gesture, the rhythm of our step, and the music of our speech. Movement that emerges from a genuine source within us, when made conscious and integrated into lived experience, is by its very nature transformative.

Authentic Movement

Before diving into the inner workings of *The Dance of Three*, some information about Authentic Movement provides a necessary foundation for this approach.

Active imagination, a self-guided method for contacting the unconscious developed by C. G. Jung, is the psychological underpinning of Authentic Movement. Authentic Movement was originated by Mary Starks Whitehouse when she integrated her dance experience and training with German modern dancer Mary Wigman and myth-inspired dancer and choreographer Martha Graham with her studies at the Zurich Jung Institute. A modern dancer and pioneer in the field of dance/movement therapy, Whitehouse returned to California to explore a particular form of active imagination through movement. She worked with dancers and people interested in personal growth from the 1950s until her death in 1979 (Stromsted, 2009a).

Also called "movement in depth" and "active imagination in movement," this approach invites a descent into the inner world of the

psyche through natural movement, and can be practiced in individual and group settings. The mover/client closes their eyes, waits, and then, witnessed by their therapist/witness, moves in response to bodily-felt sensations, emotions, memories, movement impulses, or images. The witness provides a safe, contained, and receptive presence, maintaining an awareness of their mover's bodily expression as well as their own embodied experience. Through its incorporation of expressive movement and other creative media, Authentic Movement evokes and facilitates the integration of unconscious material as it arises in the body (Stromsted, 2009b).

After the movement session, creative self-expression, such as writing or drawing, anchors the mover's experience, which they can then share with their witness. The witness responds to the mover's expression of the physical, emotional, and imaginal elements of their journey without judgment or interpretation. Describing specific movements they observed, the witness may share sensations, images, and feelings that arose in them as they brought their attention to the mover's experience. The witness's empathic mirroring helps the mover remember and reflect on movements arising from their unconscious. "Shadow" (Jung, 1916, para 193) aspects and dreams may emerge – repressed emotions, primordial instincts, or forgotten images.

The process serves to widen the field of consciousness through confrontation with previously denied or unconscious contents, which can then be further explored and integrated (Stromsted, 2009b, p. 202). Early developmental trauma and/or subsequent wounding can also be sensitively explored, renegotiated, and moved toward repair in the context of a safe relationship.

Transpersonal experiences may also emerge – a spirited, archetypal energy that springs from the deeper layers of the Self (Jung, 1944, para. 44). These moments are often characterized by a sense of resonance within and between the mover and the witness. When this occurs, each can experience transformative shifts, as the boundaries of time and space, "self" and "other" begin to soften. This allows for the possibility of experiencing a sense of union, and profound participation in the larger web of life.

Movers may continue to integrate their therapeutic process following their Authentic Movement sessions. A wide range of creative explorations, such as painting, choreographing dances, creative writing, sculpting, or composing music, may be utilized. This integrative process brings further form to what was once unconscious (Chodorow, 1997, p. 9). This helps movers develop their sense of wholeness, and can enhance what they are able to contribute to the broader culture. Authentic Movement has many applications, and is practiced as psychotherapy, meditation, sacred dance, and/or as a source for creative work. It can also be used to amplify dreams, bringing further clarity, depth, and meaning to them as formative images become consciously embodied (Stromsted, 1998, 2004).

Three Female Figures Dancing and Playing
Sir Edward Coley Burne-Jones, 1833-1898

Our planet needs our awareness and compassion. As our attitude toward our body mirrors our relationship with the Earth's Body, working in embodied ways enhances our sensitivity and awareness of the natural world in which we play a vital role. Numbing, lack of respect, and manipulation of the flesh go hand in hand with the mismanagement and overuse of our natural resources. Authentic Movement is a holistic approach to reversing this trend, bringing us greater body/mind/spirit healing and integration in the current disembodied zeitgeist (Stromsted, 2009b, p. 210).

Embodied Active Imagination: The Dance of Three

> *"When there has been a radical split, a somatic container must be prepared to receive the psychic labor. There must be a greeting of the spirit, a chalice to receive the wine."* (Woodman 1982: 69).

From our earliest beginnings, empathic relating from our caretakers is an essential component in the formation of the self. Advances in interpersonal neurobiology point to the right brain's receptivity to nonverbal elements. These include facial expression, voice tone, movement, music, imagery, and the play of symbols in dreams and poetry. Authentic Movement provides a form in which developmental experiences stored in the body and the right brain may be accessed, explored, and further integrated.

The Dance of Three draws on essential elements from Authentic Movement, and was developed by Jungian analyst and author Marion Woodman and her team: dancer Mary Hamilton, who trained with the Royal Canadian Ballet, and voice coach and mask maker Ann Skinner, former Head of Voice at the Ontario Stratford Shakespeare company

(Hamilton, 2009, pp. 93-94). Together, these three women developed a profoundly integrative approach to body/psyche/soul healing, which they call BodySoul Rhythms®.

Marion's discovery of Authentic Movement came about by following the active imagination process in her body to heal a kidney disorder that had resulted from her struggles with anorexia. Then, in 1982, at Jungian analyst and Dance/movement therapist Joan Chodorow's invitation, Marion participated in an Authentic Movement retreat with other well-known dance therapists at Jacob's Pillow in Becket, Massachusetts. Marion's experience there affirmed her sense of the potency of having a personal "witness" while moving in response to an inner prompting – elements fundamental to Authentic Movement practice.

Returning to her teaching, through careful attending, Marion noticed that when her attention wavered during rehearsals:

> *[S]omething went wrong on the floor. The energy became lax, muffled, attenuated, an edge of fear crept in, the courageous spontaneity was lost. I suddenly understood that perceiver and perceived were one: my perception of a block in a body influenced the energy in the perceived block without one word spoken. Similarly, my lack of perception (while I thought about softening the spotlight) resulted in unconscious whorls on the stage* (Woodman in Stromsted, 2005, p. 12-13).

Marion's insights about the effects of the witness on the group mirrored a crucial part of my own experience in leading body-oriented psychotherapy sessions and facilitating Authentic Movement groups. *The Dance of Three* brings in further nuance by including a "second witness" (the container/supervisor) who could reflect not only on the mover's experience, but on the dynamics of the mover-witness relationship as well.

The Dance of Three explores the nonverbal underpinnings of psychotherapy through direct experience of bodily-felt sensations, imagination, emotions, and empathic witnessing practice in a safe, embodied, and relational way. A form of embodied active imagination, this approach involves a mover/client, a mirror/therapist, and a container/supervisor who explore the dynamics of their relationships. Working in groups of three, each participant has an opportunity to move, witness, contain, and reflect on their embodied experience. The triad supports the regenerative effects of natural movement and empathic response. Participants can deepen their ability to be present with oneself and with another in a more vital, increasingly conscious relationship. The practice invites a level of perception of self and other that can evoke deep respect and empathy (Stromsted, 2009a).

Teaching *The Dance of Three* gave me valuable insights into the importance of introducing elements from Authentic Movement practice – for example, employing the use of "percept language," which I'd learned from my colleague and early Authentic Movement teacher Janet Adler. I had heard witnesses in the BodySoul Rhythms® work unconsciously use (though with the best of intentions) evaluative language like: "You looked a little stiff," or "I wish you'd kept going with that," or even "You were absolutely beautiful!" These reflections may initially seem affirming, although the mover may have been feeling anything but beautiful at the time. Instead, they may have been trying to connect with something more challenging or profound. However, this can give the mover the impression that they need to be beautiful for their witnesses.

Additionally, psychotherapists trained in psychodynamic verbal psychotherapy are often encouraged to interpret what they see in the client, assuming it to be helpful. However, this approach may inadvertently contribute to the mover feeling hurt, judged, or unseen at a time when they have freshly emerged from the depths of their unconscious and may feel deeply vulnerable.

Instead, the witness is encouraged to use "I" statements and non-judgmental, non-interpretive language to describe what they have seen. This way they "own" their experience, and do not project it onto the mover. This provides additional safety, depth, and clarity for movers as well as their witnesses.

Another element I introduced was what I termed "re-call." Here, a witness simply reflects words they heard their mover say, together with how the mover's words/experiences resonated within the witness themselves (with respect to the witness' sensations, feelings, and images). For example:

> *[I]f a mover says (speaking in the present tense about her movement experience), "After standing for some time, I surrender to the floor and my hair falls over my face like a waterfall", the witness's "re-call" might be something like this: "Standing, surrender, floor, waterfall: As I hear you speak, I feel a deepening in my breath, a release in my spine, and a softening sensation in my face"* (Stromsted, 2015, p. 348-349).

Additionally, I worked with witnesses to help them develop more nuanced observational skills: tracking and describing what they observed in the mover's and their own body's gestures, postures, shapes, breathing patterns, quality of presence, and the use of space. I highlighted the importance of "holding the container" instead of talking to other witnesses, watching other movers, or losing awareness of inner experience through judgments, projections, or the stirring of one's own emotions. I also invited an awareness of what Jung (1927, par. 342) called "collective" elements that often find expression in the group field. While practicing Authentic Movement in a group, witnesses sit or stand in a circle to create a visible "container" for the movers. Adler (1994) introduced what she called the "collective body," the practice of exploring the possible underlying stories and motifs in the group's unconscious as they emerged. In BodySoul Rhythms®, we call this kind of

witnessing "reading the floor." In both Authentic Movement and BodySoul Rhythms®, the presence of a containing, compassionate witness contributes to healing, as the mover/client opens to his or her senses, to natural movement, and to the unfinished business and unlived potentials within. The witness, in turn, is often touched by the places their mover ventures to go. Thus, both people can open to their deeper natures, and to the divine, the "third space" that they share (Stromsted, 2009).

Unlike Authentic Movement, which occurs in silence as movers listen for an inner prompting, *The Dance of Three* is accompanied by music. While teaching in Africa, Asia, Latin America, different parts of Europe, Canada, and the United States, I learned to vary the music Marion had always chosen for The Dance of Three – Chopin's beautiful, emotionally nuanced classical piano Nocturnes. The use of music was particularly crucial while teaching people from diverse backgrounds. Intermingling selections of music from a variety of cultures invited elements from the "cultural unconscious" (Henderson, 1984), and broadened the scope of our work. Through The Dance of Three, participants were able to explore individual and cultural differences while affirming shared human experiences. This approach provides a protocol for reflection and communication that is critical to any therapeutic situation.

The Dance of Three & The Brain

As we move from an inner source, and in relationship to one another, what's going on in the brain – our embodied organ of perception?

Interestingly, like the participants in *The Dance of Three*, the brain includes three interconnected structures: the "body-brain," the limbic system, and the cerebral cortex (Homann, 2010). These three dimensions reside within each participant, and also come into play within the dynamics of the triad. The brain structures are activated in the relational movement field, providing a foundation for our ability to move, sense the body, and feel and communicate empathy. Working together, they enhance affect regulation and deepen self- and other-awareness (Homann & Stromsted, 2011).

Importantly, the limbic system coordinates sensation, motivation, emotion, and memory. We share this part of our brain with all other mammals who rely on attachment connections for growth and survival. *The Dance of Three* provides a sense of holding, safety, and connection between the mover and their witnesses. This promotes healing as they free up blocked energy, express deeper feelings, and revisit and repair early attachment dynamics anchored in the limbic system.

Practicing deep inner listening allows us to contact the cellular resonance so vital to our body/brain wisdom. With practice in a safe and open space, these learnings can be explored and integrated into our daily lives – in our relationships, work, and through engaging what brings most meaning and value to our lives.

Conclusion

In *The Dance of Three* workshop, participants explored a dance in which they took turns in the roles of mover/client, engaged witness/therapist, and container/supervisor. With roots in Jung's depth psychology, the practice allowed participants to access the play of imagination in the body, and provided a direct experience of how natural movement can enhance self-awareness and creative expression. It also helped them build trust in a deeper source within themselves, and with each other. This laid a foundation for empathic response, attuned communication, and a celebration of spirit in the body – soul's body – the integration of body, mind, spirit, and relationship.

Embodied consciousness enhances all forms of psychotherapy. Here, therapist and client alike can become attuned to the somatic underpinnings of transference and countertransference dynamics within their relationship (Stromsted, 2009b). These are the bones of the healing process, which, with time, helps the heart shine through.

The workshop ended with participants sharing their experiences and a discussion on the somatic elements necessary for establishing a sense of safety, well-being, and belonging in the world. Responses reflected respect for individual and cultural differences, as well as universal aspects of human functioning and experience.

Participants spoke of how the practice supported them in staying true to what was most authentic. They were able to open to direct, embodied experiences of themselves, their partners, and a growing sense of community. As people connected to their depths and to one another, a sense of the sacred emerged. This natural process is not predicated on adopting outmoded religious dogmas and unforgiving gods. Instead, by listening to our body's deeper callings, we can give shape to the feelings and images that surface from underground wellsprings, toward consciousness. The practice also has socio-political significance as we learn to discern and reclaim our own unconscious "shadow" projections – inner fears and demons that we otherwise tend to attribute to outer "others," making enemies of them and generating "cause" for warfare (Stromsted, 2007, p. 206).

As C.G. Jung (1954/1985, CW16, par. 454) says, "The unrelated human being lacks wholeness, for he can achieve wholeness only through the soul, and the soul cannot exist without its other side, which is always found in "You." Wholeness is a combination of I and You, and these show themselves to be parts of a transcendent unity whose nature can only be grasped symbolically."

Won't you join the dance?

Tina Stromsted, Ph.D., MFT, LPCC, RSMT/E, BC-DMT is a Jungian analyst, Board Certified Dance/Movement therapist, Somatics Educator, and author. Former co-founder of the Authentic Movement Institute, she teaches internationally and at the C. G. Jung Institute of San Francisco, the Depth Psychology/Somatics Doctoral program at Pacifica Graduate Institute, and is a core faculty member for the Marion Woodman Foundation. Founder of Soul's Body Center®, her work and publications explore the integration of body, brain, psyche, soul, and community in healing, with a special interest in the creative process, nature, and embodied spirituality. Her private practice is in San Francisco.

www.AuthenticMovement-BodySoul.com; Tina@AuthenticMovement-BodySoul.com

REFERENCES

Adler, J. (1994). The Collective Body. In: P. Pallaro (Ed.), ***Authentic Movement: Essays by Mary Starks Whitehouse, Janet Adler, and Joan Chodorow*** (pp. 190-204). Philadelphia: Jessica Kingsley Publishers, 1999

Chodorow, J. (Ed.) (1997). ***Jung on Active Imagination***. Princeton, NJ: Princeton University Press

Henderson, J. L. (1984). ***Cultural Attitudes in Psychological Perspective***. Toronto: Inner City Books

Hamilton, M. (2009). ***The Dragonfly Principle: An Exploration of the Body's Experience in Unfolding Spirituality***. London Ontario: Colenso Island Press. pp. 93-94

Homann, K. B. (2010). Embodied Concepts of Neurobiology in Dance/Movement Therapy Practice. ***American Journal of Dance Therapy***, 32(2), pp. 80-99

Homann, K., & Stromsted, T. (2011). Dancing Body, Brain, & Soul: The Dance of Three. In: ***Collaborations: Different Identities, Mutual Paths, Proceedings of the 47th American Dance Therapy Association Annual Conference***. Minneapolis, Minnesota, October 2011, CD

Jung, C. G. (1916). The Transcendent Function. In: ***The Collected Works***, vol. 8. (trans R.F.C. Hull), Princeton: Princeton University Press. 1969

Jung, C. G. (1927). The Structure of the Psyche. In: ***The Collected Works***, vol. 8 (trans R.F.C. Hull). Princeton: Princeton University Press. 1969

Jung, C. G. (1944). Introduction. In: ***The Collected Works***, 12 (Trans. R. F. C. Hull). Princeton: Princeton University Press. 1953

Jung, C. G. (1954/1985). The Practice of Psychotherapy: Essays on the Psychology of the Transference and Other Subjects. In: ***The Collected Works***, 16 (Trans. R. F. C. Hull). Princeton: Princeton University Press

Stromsted, T. (1998). The Dance and the Body in Psychotherapy: Reflections and Clinical Examples. In: D. H. Johnson & I. J. Grand (Eds.), ***The Body in Psychotherapy***. Berkeley & San Francisco: North Atlantic Press & California Institute of Integral Studies, pp. 147-169

Stromsted, T. (2004). DreamDancing: Re-inhabiting your Body through Authentic Movement. In: ***Proceedings of the XVIth International IAAP Congress for Analytical Psychology. Edges of Experience: Memory and Emergence***. Barcelona, Spain, 2004, CD

Stromsted, T. (2005), Cellular Resonance and the Sacred Feminine: Marion Woodman's story. In: N. Cater (ed.), ***Spring: A Journal of Archetype & Culture, Body & Soul: Honoring Marion Woodman***, 72, pp. 1-30

Stromsted, T. (2007). The Dancing Body in Psychotherapy: Reflections on Somatic Psychotherapy and Authentic Movement. In: P. Pallaro (Ed.), ***Authentic Movement: Moving the Body, Moving the Self, Being Moved: A Collection of Essays***. Volume II. Philadelphia: Jessica Kingsley Publishers, pp. 202-220

Stromsted, T. (2009a). Healing Soul's Body: An Introduction to Authentic Movement. In: P. Bennett (Ed.), ***Proceedings of the 17th International IAAP Congress for Analytical Psychology: Journeys & Encounters: Clinical, Communal, Cultural***. Capetown, South Africa. Einsiedeln, Switzerland: Daimon Verlag

Stromsted, T. (Summer, 2009b). Authentic Movement: A Dance with the Divine. ***Body Movement and Dance in Psychotherapy Journal***. 4(3), pp. 201-213

Stromsted, T. (2015). Authentic Movement & The Evolution of Soul's Body® Work. ***Journal of Dance and Somatic Practices: Authentic Movement: Defining the Field, Intellect***, 2015, vol. 7.2

Woodman, M. (1982). ***Addiction to Perfection: The Still Unravished Bride***. Toronto: Inner City Books

Authentic Movement as a Movement Meditation Practice

Support for Immune Mediated Inflammatory Disease

Elyn Selu

ABSTRACT

This article details a study conducted with a group of women diagnosed with multiple sclerosis (MS) in rural Western North Carolina (WNC) who participated in a six-week Authentic Movement (AM) class. The study was conducted as part of the author's doctoral dissertation in somatic depth psychology at Pacifica Graduate Institute. MS is a physical illness, meaning that the psychological impact of living with the many neurologic symptoms is rarely addressed. The purpose of this study was to explore the lived experiences of women with MS by providing a way to be in relationship with symptoms. The intention was to explore how a self-directed movement meditation practice could cultivate interoception and active imagination, both self-reflective tools that support psychological wellness. The central finding of this study is that movement meditation practices must accommodate diverse cultural communities who may not have interoceptive knowing. The practice of group support became the medium through which participants acquired the language of embodiment. By developing interoceptive literacy, those with the immune-mediated disease of MS often discover a stronger sense of self and an internal locus of control that may have been lost in the disease course..

Keywords: multiple sclerosis, authentic movement, interoception.

Submitted: 24.08.2019
Revised: 24.02.2020
Accepted: 26.02.2020

International Body Psychotherapy Journal
The Art and Science of Somatic Praxis

Volume 19, Number 1,
Spring/Summer 2020, pp. 55-63

ISSN 2169-4745 Printing, ISSN 2168-1279 Online

This study addressed the lived experience of those diagnosed with multiple sclerosis (MS), an immune mediated inflammatory disease (IMID) that affects the central nervous system (CNS) and inhibits voluntary motor movement, cognition, and mood. As it is often psychologically experienced as betrayal by one's own body, the objective was to explore a means of cultivating a renewed relationship with one's body. The original intent of the study was to discover whether participants with MS could access their symptoms, and, in doing so, shift their relationship to their symptoms and diagnoses. Because the participants lacked interoceptive awareness, they found it difficult to access symptoms during the practice sessions and report on them. However, the participants had vivid meditations during the practice that led to changes in self-care and return to an internal locus of control. In a review published in *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging* by Khasla et al. (2018), the authors presented current findings detailing how a lack of interoception adversely affects mood disorders, addictions, and post-traumatic stress disorder (PTSD), among many other mental health issues.

> ***For many with this diagnosis, such a distortion is considered a disease of betrayal and revolt: the contract between the body and its desire for movement has been broken.***

In this study, MS was explored through the practice of Authentic Movement (AM), a somatic movement modality grounded in witnessed presence to self through movement. The findings reveal that long-term psychoeducative training in interoceptive awareness – the capacity to observe and learn from phenomena occurring internally in the body – is paramount to the ways that those with MS experience the transformative benefits of AM. The most central

finding is that movement meditation practices like AM must possess the flexibility to accommodate diverse cultural communities who may not have access to movement modalities that entrain interoceptive knowing.

The study participants included three women diagnosed with MS who engaged in a six-week practice of AM. Authentic Movement provides an avenue to being psychologically available to and accepting of the actual state of one's body – whether or not a flare-up or relapse is present. The study also argues that a concrete relationship to interoceptive experience is understood to be paramount to psychological wellness, and enhance one's physical and emotional wellness.

Interoception, the ability to sense internal bodily changes and how those physical sensations interact with cognition and emotion, and further defined by Porges (2004) as "how neural circuits distinguish whether situations or people are safe, dangerous, or life threatening," is often dampened in a person who has an autoimmune illness (e.g., spasticity is a common symptom of MS, making interpretation of bodily functioning difficult). Dissociation often becomes a coping strategy for those who suffer daily with difficult and painful symptoms. The study engaged research participants who had no previous movement meditation experience or somatic training in developing interoceptive awareness. Their exploration of their bodies and symptoms yielded a glimpse into how to approach and work with underserved and chronically ill populations when exploring somatic interventions.

Multiple Sclerosis – An Overview

Multiple sclerosis is a disease that inhibits movement, rest, cognition, and mood. It is a challenge to the entire system. The body stiffens, aches, and ignores the simplest motor commands as in the case of muscle spasticity. When it does move, it twitches, trembles, becomes exhausted, and shakes, as if in rebellion to stillness, as tremors, painful spasticity, or neuropathy refuse the body rest.

For many with this diagnosis, such a distortion is considered a disease of betrayal and revolt: the contract between the body and its desire for movement has been broken. Yesterday, one might have walked without conscious thought, but today, the right foot does not respond because the efferent message from the brain, "take a step forward," does not reach the foot. One's body moves forward, unconsciously dancing with gravity and forward momentum, but instead of taking a simple step forward, one trips and falls, seemingly leaving behind a formerly compliant foot. The person with MS, who until that point has lived as an able-bodied person, now enters a dreamscape of incoordination where the known laws of physicality no longer apply. Physical movement – too little, or too much – is often beyond control. This creates a radical identify shift regarding one's relationship with oneself and the world.

Many with this illness use allopathic pharmaceuticals in the hopes of managing symptoms. The known medications quiet the immune response, smooth tight muscles, calm an overactive bladder, alleviate pain, soothe anxiety and depression, steady vertigo, stimulate fatigue from its stupor, and calm tremors. Many of the immune suppressor drugs have been a great benefit for those with MS, as well as promising new therapies[1] that have become available in the past few years. These drugs keep the immune system from going into overdrive and causing relapses and, subsequently, more brain damage.

While such support is indispensable, what is rarely addressed or scribbled across prescription pads is how to meet the psychological consequences of experiencing a body that betrays one's intentions. Though medication and treatment protocols have immeasurably improved the lives of those with MS, the symptoms themselves are not considered as something worthy of inquiry. In being with the symptom – through active imagination, movement, or other forms of inquiry – those who suffer may find much-needed insight and psychological ease.

There are several studies showing the benefits of mindfulness-based interventions (MBI) for those with MS. Simpson et al. (2014) looked at three different studies conducted in three countries on MS and MBI: they showed positive results in MS patients. There were "Statistically significant beneficial effects relating to Quality of Life (QOL), mental health, and some physical measures" (p. 2). Mindfulness-based interventions empower those with chronic illness to feel they have a sense of control with a disease that often takes away the most basic sense of control.

Authentic Movement as a Mindfulness-Based Intervention

Authentic Movement (AM) is a meditative movement practice that opens a mover to their somatic wisdom. The practice was first explored as movement-in-depth by dance therapy pioneer Mary Starks Whitehouse (Levy, 1992), and later enhanced by Jungian analyst and dance therapist, Joan Chodorow, Ph.D., and dance movement therapist Janet Adler, Ph.D. Adler (1999) writes of the practice:

> *This could be one way of describing the development of the self. It is interesting to notice in our movement work*

1 Immunosuppressive medications include Avonex, Betaserone, Copaxone, and Rebif, which are subcutaneous injectibles. Monthly infusion drugs have been developed more recently and include Lemtrada, Novantrone, and Tysabri. Some patients have had success with disease-modifying medications in oral form, including Gilenya, Tecfidera, and Mavenclad.

> *so far that being seen inevitably precedes seeing oneself: 'I can't see myself here. First you see me as I am in this unknown place, then I begin to witness myself anew.'* (p. 154)

The practice begins when the mover steps onto the floor and chooses where and how to begin their meditation – standing, lying, or sitting. With their eyes closed, only peeking when making large movements or traveling, the mover awaits an impulse to move and direct them. There is no predetermined or choreographed way to move. The practice allows for the body to move as it wishes, and through these movements, psychic material is accessed, which might come as visions, sounds, words, and emotion.

The witness watches the mover, holding the space in a way that allows the mover to feel physically and emotionally safe. The witnessing part of AM brings the practice its healing aspects. Much like the dyadic relationship that is created between client and therapist, the witness contains and reflects the mover's process back to them. As described by Stromsted (2015):

> *The attuned, containing presence of the witness/therapist in Authentic Movement allows the mover/client safe access to early, primary process-oriented parts of the self. Engaging this material establishes new neuropathways in the brain, and supports further integration and embodiment.* (p. 344)

The witness is vital to the mover's ability to renegotiate and integrate new discoveries. Authentic Movement asks that one be with the body in whatever way that it wants to move, or not move; both are equally meaningful. This moving meditation provides the body the space and time to be with spasticity, pain, and fatigue in a safe, contained way.

Safety is vital in AM so that movers feel comfortable enough to stay present to any emotional material that may arise. Safety becomes more relevant when taking into account that those with IMIDs often have high adverse childhood experience (ACE) scores (Dube & Fairweather, 2009), meaning that those who are diagnosed with IMIDs often have had traumatic events occur during childhood where the ongoing dysregulation of their vulnerable nervous systems created systemic health issues that manifested in adulthood.

It has been found that many of those with MS (Counsell et al., 2013) experience PTSD simply from living with the complications of the illness itself. Providing integration and a locus of control for those with the complex issues of an IMID diagnosis and PTSD is of vital importance to the wellbeing of those with chronic illness. Authentic Movement creates a space that lends itself to being trauma-informed for those with these complex diagnoses. (Shimmin et al., 2017)

Participants and Procedures

From May through July of 2018, three women with different MS diagnoses – relapsing-remitting, secondary-progressive, and primary-progressive – participated in an eight-week study held in Western North Carolina (WNC).

The study was held in a dance studio where the participants, witnesses, and the researcher met for two hours, once a week. It was difficult to find dance teachers with AM experience in the small city in WNC where the study was conducted. Two dance teachers who acted as witnesses were employed because scheduling difficulties required that one teacher participate for the first half of the study, and a second teacher acted as witness for the second half of the study. Ideally, the study would have benefited from having the same witness throughout the study. The space was ADA-compliant. The study ran for eight weeks and included an introductory class, six weeks of AM classes, and one week set aside for interviews. A follow-up interview was conducted six months after the study began. In the six-month follow-up interview, participants were asked about how their AM practice continued to show up in their lives. All participants reported that AM encouraged them to make positive changes in their self-care routines. Each participant reported a deeper connection with their bodies and symptoms.

The National Multiple Sclerosis Society (NMSS) defines the different disease courses. In relapsing-remitting, the patient has relapses: periods when the immune system actively attacks the myelin sheath protecting the nerves in the CNS. These attacks leave scars, or sclerosis. The scars create the many varied symptoms of MS. Once the attack is over, the patient experiences partial to full recovery. For those with secondary-progressive, relapsing-remitting MS has moved into a progressive stage where there is no longer recovery after a relapse, and the patient continually worsens. In primary-progressive, the patient with MS has a disease course where the symptoms never remit but continually worsen.

The participants were addressed throughout by pseudonyms that they chose. Moonflower is a 50-year old white woman with the diagnoses of progressive MS and bipolar disorder, and is also a recovering alcoholic. Lillie Blanche is a 65-year old white woman with secondary-progressive MS. Eli is a 48-year old white woman with remitting-relapsing MS. In the preliminary interviews, each woman expressed a desire to shift her relationship with her MS diagnosis, which was the basis of their inclusion in the study. I asked if they had participated in any other movement or exercise classes. Due to the limited availability of classes designed for those with disabilities in WNC, only one of the participants had had limited experience with yoga. I asked that the participants keep a journal of their experience with AM during their six weeks of practice. Also, during breaks between movement ses-

sions, art paper and oil pastels were provided to help the movers concretize their experiences.

Gathering Data and Procedures

During weeks four and eight, I conducted semi-structured interviews with open-ended questions to allow participants to provide in-depth responses. Some of the questions asked included:

- "Have you noticed any part of your body needing extra attention during your movement practice?"
- "How has noticing your body and symptoms shifted since beginning AM?"
- "Have there been any changes in your self-care routine since beginning the study?"

I adjusted the interviews from one-on-one to group after I realized that as a group, the participants had an easier time providing answers. I kept notes during classes, while the teacher/witness took over the AM portion of the class.

Analyzing Data

This study was designed using interpretive phenomenological analysis (IPA) methodology. The question posed to the participants, "How does your relationship to symptom and diagnosis change by practicing Authentic Movement?" could not be answered by the participants. It was discovered that the research participants had trouble accessing their interoception. Those with chronic illness and trauma are often unable to access their bodies. Instead of being able to answer direct questions about their bodily sensations and experiences, the participants instead shared their access to active imagination while in meditation. This led to shifting away from IPA methodology toward a multiple case phenomenological study. The participants' experiences defined emergent phenomena. In examining meaning, I looked for themes that arose among the movers in the data they provided about their lived experience as movers. I also addressed their difficulty in understanding what we were doing, and also noted how they experienced shifts in their self-perception of body and symptom. When assessing the journal entries and the interviews, I attempted to parlay the participants' lived experiences of AM into the greater body of research on MBIs for those with IMIDs, as well as offer a new perspective to the practice of AM.

The classes had a rhythm and structure contributing to the sense of safety and allowing psychic material to arise. At the start of each session, the movers, the witness, and I walked around the dance studio three times before settling in. The witness asked each of us to share a few words about how we felt in our bodies that day.

After this share, I moved to the side of the room to observe and take notes. The witness made eye contact with each of the movers. Then, she rang a bell. The movers would close their eyes and allow for movement or stillness, as their bodies chose, for 20 minutes.

At the 18-minute mark, the witness asked the movers to bring their awareness back to the room. When 20 minutes had passed, the witness rang the bell. The movers took 20-minute breaks to go to the bathroom, write in their journals, or draw with oil pastels on art paper. Then, the movers gathered into a circle with the witness. Each mover shared her experience and then received reflection from the witness. The movers returned to their places on the floor for a second 20-minute session.

Ethical Considerations

The participants' journals and the research notes were kept in a lockbox. The electronic data, including voice recordings of the interviews and the transcriptions, were kept on a secure server. The study presented minimal risk, as the participants did not encounter any discomfort beyond that of an MS yoga class. Danger of injury was further minimized as their movements were self-directed. The potentiality of psychoactive material being activated was addressed in the consent forms, with assurances that the participant would be referred to a mental health professional if needed.

Using the participant-centered perspective, I provided anonymity for the participants, asked them to sign an informed consent form, and requested that they be under the care of a neurologist for the duration of the study. I provided contact information of licensed therapists for participants if they chose to explore therapy during or after the study. Participants were given the ability to opt out of the study at any time, for any reason. I shared the class plan with participants, and asked for their input for their needs and desires within the class structure. I invited guest witnesses so that I could be present as researcher, and allow the process of the movers to have reflection with a witness who had no bias or expectation of their process.

Peer Review

As this was a study conducted for a doctoral dissertation, the study was approved by the university Internal Review Board (IRB). There were also three subject matter experts advising and supervising the study.

Participants' Experience of Authentic Movement

Moonflower

Moonflower joined the study because she wanted to feel emotion again. During our short time together, Moonflower quickly went from walking with a walker to having to be pushed in a wheelchair. She had a urinary tract in-

fection (UTI) for the first three weeks of the study, which worsened her MS symptoms. This flare-up presented as cognitive difficulties that included dysarthria (slurred speech), losing the thread of a thought mid-sentence, and having trouble following directions for moving, sharing, and receiving reflection from the witness. She had profound muscle weakness, which prevented her from walking or standing. Moonflower did much better in group shares and interviews than in one-on-one interviews. I attributed this to her years of participating in Alcoholics Anonymous. I shifted the interviews to group interviews for the eight-week interview and the six-month follow-up interview. Having her fellow movers present helped Moonflower report about her experience more easily. The other two participants reported that they preferred group interviews as well.

Working with Moonflower deepened my understanding that a person who has little ability for movement can still benefit greatly from an AM practice. Rarely moving during sessions, she often seemed to be sleeping, curled into the left side of her wheelchair, her chin lowered toward her chest as if in deep rest. The witness perceived emotion and movement in Moonflower's face that was startling for Moonflower to have reflected back to her. Despite her minimal movement, Moonflower experienced intense imagery during the practices.

The images that Moonflower reported became the themes of her journey with AM and MS: quicksand, neglect, and relaxation. Moonflower's vivid imagery created a powerful metaphor – being stuck in quicksand and disgusting smells – for her fatigue and inability to walk. Authentic Movement provided the space for her psyche and body to help her sort through her fear and anger in a way that she had not been able to access in talk therapy or EMDR sessions. She shared that being in community and being witnessed helped her access images and feelings she hadn't felt in a long time. From this practice. she developed better self-care habits and returned to journaling as a regular practice. By listening to her symptoms, she decided to switch her medications, which she discovered had been causing many of her cognitive issues.

Lillie Blanche

Lillie Blanche was surprised to hear from witnesses that she often tapped her forefinger on her thigh during movements. She did not realize that she had many unconscious movements when she believed she was sitting still. Throughout the AM study, Lillie Blanche felt too self-conscious to move beyond gentle stretching. She shared that her partner often teased her about her muscle spasticity, and dissuaded her from expressing her extroverted personality.

Discovering that her body moved involuntarily helped her explore her muscle spasticity with more awareness, and also began an exploration of how others perceived her. Being compassionately witnessed with spasticity helped her address the internalized critic in her psyche.

Lillie Blanche shared profound shifts that arose from her AM practice that she felt were leading her back to her authentic self. Her most powerful moment of transformation came when she rescued a dog. She exclaimed in our interview: "And, I mean the trucks were zooming by, big huge trucks, and she had no place to go! Guard rail, little strip of green grass, busy, busy road. And she had no place to go! And this old woman can still run! This old woman who has MS! I don't know if I was running. I could have been crawling. I don't know. But when I got to her, she knew I was coming for her (starts to cry). She starts running towards me, and when I got to her, she jumped in my arms and she covered my face in kisses! That was me! That was truly, truly me that day who did that. (Cries hard.) I authentically moved that day!"

The phenomena of being witnessed had great significance for Lillie Blanche. During the study, she found a dead Luna moth that had what resembled an eye on each wing. She studied the wings, and later drew them during our practice breaks. She shared that there had always been a critic watching her every move and internally chastising her. From her experience of being witnessed in AM, the critical eyes upon her transformed into eyes that held a "loving gaze."

Eli

At first, Eli was reluctant to join the study because the summer heat often prevented her from leaving the one room in her home that had an air conditioning unit. She expressed how much anxiety she feels now that she has MS, and that agreeing to come to the study was an effort for her. Often, knowing she had an obligation to meet others created too much anxiety for her to follow through with plans. The themes that arose for Eli included discomfort about being watched using a walker, paying attention to her body and symptoms in a different way, isolation, and interacting with those who are insensitive to invisible disabilities.

Eli explored movement more so than Lillie Blanch or Moonflower. Eli chose to explore where exactly in her body the burning sensations (Grierson-Gopalan Syndrome) started and ended, and where the MS hug gripped her shoulders and back. This attention to symptoms led her to realize that while she lives daily with these symptoms, she rarely took time to be with them. Eli shared that painful emotions arose during her one of her movements. She was determined to continue exploring them.

The time spent with her symptoms led her to a deeper sense of how to provide self-care. As a medical practitioner who always cared for others, Eli often stepped into

help her fellow research participants. Eli was expert at taking care of others. Through AM, she was learning how to care for herself.

Six-Month Follow-Up Interview

In the time between the final AM class and the six-month interview, the participants had integrated some of the discoveries they made in their movement meditations. Each woman expressed that they were paying closer attention to their bodies and had shifted their daily self-care practices. Many of the questions asked were repetitions from previous interviews. Lillie Blanche said that because of her AM practice and the reflection from the witness that she was better able to pay attention to her gut reactions, and speak her truth in a way that was thoughtful and compassionate, rather than reactionary.

Eli took the self-care practice that she began in AM, and expanded upon it. She reported that she was feeling much better than she had in months. She also had continued journaling, and had returned to physical therapy. The daily practice of physical therapy had improved her mobility and mood. She credited AM with helping her decide to go back to daily physical therapy. She said, "Now, I make a daily appointment to check in with my body. I'd never done that before. I just pushed through and ignored my symptoms."

Moonflower expressed surprise that the witness mirrored her experience so accurately. The containment of the space and the integrity of the witness held Moonflower in such a way that it allowed her to explore her symptoms and the attendant images and feelings. In the time since participating in the study, Moonflower had changed her medications, and many of her symptoms improved. All three women made positive changes in their diets and exercise routines. Two participants entered therapy.

When participants were asked how they felt about being disabled, all three women said that they disliked the term "disabled." Eli and Moonflower shared that they felt "broken." Lillie Blanche decided that a better term was "alter-abled." All three participants agreed that rather than be considered disabled, they would instead consider themselves alter-abled.

Emergent Themes

The themes that arose came from my notes, electronically recorded interviews, journal entries, art, and the conversations that took place among participants in the spaces before and after AM sessions, and during breaks. Authentic Movement provided a connection between the women that went deeper than their experience of MS support groups. Moving together and having witness reflections deepened the movers' connections and intimacy with one another.

- **Community.** In defining an internal locus of control and stronger sense of self, it is integral that someone with chronic illness have community to validate their lived experience of a difficult diagnosis. From the mirroring and kinesthetic empathy that grew within each participant, a spontaneous support group developed that allowed them to go deeper into self-discovery. Moonflower shared, *"We can sit in silence and I can actually let myself see all these visuals. This provides the space and the understanding that we have MS."* Lillie Blanche shared that she felt safer among her fellow movers and the witness than she ever had in a traditional MS support group because "It is more intimate."

This concept of community and its impact on our somatic experience, or interoception, is reflected by Rae Johnson (2018): *"In short, our nonverbal communication patterns, beliefs about body norms, and feelings of connection and identification with our bodies are all deeply affected by our assigned membership in different social groups and the privileges associated with that membership"* (p. 1). The feeling of belonging creates ease in the body and psyche when one is in the company of others who struggle with similar issues. For the first time in their lives, someone was asking the participants how it felt to be in their bodies in a way they had never explored on their own. Dibbell-Hope (2007) writes of the findings in her study of AM with breast cancer survivors:

> *For these women, the Authentic Movement group can provide an experience of communality and social support, an increase in positive feelings of physical well-being, and unique opportunities for restoring an internal sense of strength, control and trust in the ability to return to the body as the site of the wound to find the source of the healing.* (pp. 358-359)

Authentic Movement provides a place for the chronically ill to deepen their healing through movement, meditation, and community support. Adler (2002) writes, *"The individual body and the collective body overlap, becoming interdependent as we learn to know ourselves as part of a whole"* (p. 95). In the mirroring and kinesthetic empathy that developed within each participant, the witnesses and the researcher, participants created a support group that allowed them to go deeper into self-discovery.

- **Trauma.** Trauma is a complex topic and, while not the main focus of this study, could not be ignored within the container of the movement practices or in the interviews. With Moonflower's inability to feel her emotions, Lillie's feelings of defeat under her partner's criticisms, and in Eli's shattered confidence and feelings of being broken, I witnessed women whose bodies and psyches struggled with unresolved trauma. Each of the participants reported experiencing childhood trauma that ranged from physical and sexual abuse to shaming and neglect. They each expressed

that as children they had to pretend to the rest of the world that things at home were okay.

- **Abandonment.** Each woman told stories of being abandoned by parents, being left by life partners when they were diagnosed with MS, or being threatened to be left when the symptoms became too difficult for the partner to tolerate. Moonflower said of her husband, *"If I get much worse, he told me he was going to put me in a home, and that scared the hell out of me."*

Women disproportionately suffer abandonment from their partners when diagnosed with serious illness versus men. Glantz et al. (2009) found that in those who received cancer diagnoses, *"Female gender was found to be a strong predictor of partner abandonment in patients with serious medical illness. When divorce or separation occurred, quality of care and quality of life were adversely affected"* (n.p.) These added stresses that women endure after an MS diagnosis reinforced my desire to keep the study open to the unique experience of women.

- **Symptoms.** The participants had trouble moving from impulse. Two participants rarely moved at all, and the third was able to explore her body with curiosity, but did not wait for impulse to direct her movements. Those who lack interoceptive awareness are unable to know when there is an impulse from the body to move. Despite this, each woman accessed her active imagination, learning deeper truths about herself and her journey with MS. By being with their bodies in a focused way, and in the presence of a compassionate witness, the participants were able to "search for intelligence in a symptom" (Hillman, 1999), and develop a new relationship with their bodies. Each participant had greater interoceptive literacy by the end of the study by making connections between their symptoms and their psyches.

Limitations

I was diagnosed with relapsing-remitting MS in 2000. In acknowledging the transference and countertransference between the participants and me, it could be possible that the study would have been better conducted by someone who didn't have MS. The transference and countertransference would have still occurred, but perhaps to a different degree and with different results. As Romanyshyn (2013) writes of the wounded researcher, *"The wounded researcher is a complex witness who, by attending to not only the conscious but also the unconscious subjective factors in his or her research, seeks to transform a wound into a work"* (p. 111). As researchers, many of us are driven by our impulse toward healing – ourselves and other.

Non-performers, and those who don't exercise regularly, often feel self-conscious about doing movement with their eyes closed while being watched. Once the movers acclimated to being watched, however, they expressed a desire for more AM classes beyond the study.

Conducting the study in a small town in WNC where there were few somatic resources made it difficult to find ADA-compliant studios and engage experienced witnesses who could be available for the duration of the study. Having the same witness every week would have made Eli more comfortable and perhaps she would have gone deeper into her meditations. The witness is integral to the practice, and it cannot be emphasized enough how important it is to have a witness who herself has had years of experience with AM. In the case of witnessing for underserved and disabled populations, the witness must also have knowledge and understanding of the particular challenges of the movers.

At the conclusion of future studies, it would be beneficial to have a continuing AM practice for the participants. Conducting a study over many months instead of weeks would provide rich data and help participants more fully access interoceptive knowing through AM.

Conclusion

Subject Matter Experts

It was soon discovered that the participants often did not have enough experience with movement meditation practices to fully engage with AM in the way that those with experience in dance and other movement meditation practices have.

The participants were not always able to access their interoceptive experiences and communicate about them in interviews and journal entries. The study uncovered ways to approach the reality that interoceptive literacy is a form of acceptance. If there isn't yet acceptance, which can be challenging when new symptoms develop, accessing repressed emotions can be quite overwhelming, which impacts becoming somatically literate of one's body.

Somatic studies, and trauma studies in particular, are burgeoning in psychology, medicine, and education. As a culture, we are experiencing a much-needed paradigm shift to include trauma awareness in our approach to healing. I offer a suggestion that beyond looking to those with chronic illness as a population to serve, those of us immersed in these fields look to those with IMIDs as subject matter experts.

It is vital that the psyche and soma of the chronically ill be one of the first places researchers and practitioners study interoceptive awareness and the benefits of MBIs for underserved populations. Those who live with an endless list of symptoms provide rich data because they are already dancing with psyche and soma in ways the abled rarely experience.

It is a worthy endeavor to explore the benefits of AM for those with IMIDs. Unlike other movement meditation modalities, AM gives the mover agency in that they are moving in a self-directed way and within the limitations of their disability. Through AM, the mover psychologically renegotiates her experience of disease as a coping strategy, deepens and begins to trust her interoceptive knowing, and strengthens her sense of self and community. These data provide insights for practitioners and researchers in how to work with those who have IMIDs and are part of underserved communities.

Future Applications

There are numerous ways in which AM could be researched as it applies to health concerns. Based on the findings of this study, I recommend more studies using AM as a way to bring ease to those with IMIDs. It would be beneficial to conduct a much larger study including more movers and more experienced witnesses over a greater span of time. Working with an underserved population in Appalachia provided a snapshot of how AM can benefit a more diverse population. Questions that arise from this study include:

- Would participants in larger metropoles who have had access to other movement practices access interoception differently?
- How do ethnic, sexual, and socioeconomic differences affect participants' interoception?
- Given more time in an AM practice, would participants develop stronger interoception?
- How would a control group, perhaps one that practiced only yoga, or attended only a support group, add another dimension to the outcomes?

Further, a mixed-methods study exploring measurable benefits such as biofeedback (Tantia, 2012) would provide quantitative data that could be instrumental for health care providers. Instruments that measure resiliency, coping, and psychological wellbeing would provide data on the psychological benefits of AM. Working intentionally with a small group of women and focusing on their lived experience provided rich data; however, a mixed-methods study with a more diverse population would enhance the benefits of self-directed movement. and the healing benefits of the dyadic relationship between witness and mover.

Authentic Movement is a relatively inexpensive way to provide healing to others and to one's self. I hope that as AM becomes more widespread, it will be as accessible as yoga classes are today. I would caution, however, that those who become witnesses have some training, and have themselves moved in a class for the recommended year before witnessing. It is paramount that a witness fully understands the power in the process of seeing and being seen in a way that is compassionate, boundaried, and healing.

I also propose that those who currently practice AM explore ways to be more inclusive of those who would not be traditionally drawn to the practice, especially those who are "alter-abled." It would be beneficial to design classes that accommodate those with disabilities, particularly ADA-access, temperature controls, and time before and after the practice for community building. It is vital that those who would wish to work with this population have a basic understanding of their students' unique issues and sensitivities.

This study design did not allow time for the movers to act as silent witnesses, as is often done in longer-running AM classes. All of the participants shared that being able to witness would have helped them better understand AM. For future research and classes, I believe AM providers should introduce silent witnessing early in the process to aid the movers in developing kinesthetic empathy (Pallaro, 2007) so as to deepen the resonance in a mover's body as they witness and attend to their own reactions to witnessing another mover.

Elyn Selu, PhD, is an SEP in training. This article is based upon the study she conducted for her PhD dissertation at Pacifica Graduate Institute. Selu began her studies in Chinese medicine, and switched to Somatic Depth Psychology to further explore the connection between psyche and symptom. Diagnosed with multiple sclerosis in 2000, Selu is committed to helping those with autoimmune diagnoses renegotiate connection to their bodies so they may find ease in their symptoms and disease course.

E-mail: elynmselu@gmail.com

REFERENCES

Adler, J. (1992). Body and Soul. In: P. Pallaro (Ed.) (1999). Authentic Movement: Essays by Mary Starks Whitehouse, Janet Adler. and Joan Chodorow (pp. 160-189). London, UK: Jessica Kingsley

Adler, J. (2002). Offering from the Conscious Body: The Discipline of Authentic Movement. Rochester, VT: Inner traditions.

Counsell, A., Hadjistavropoulos, H. D., Kehler, M. D., & Asmundson, G. J. (2013). Posttraumatic Stress Disorder Symptoms in Individuals with Multiple Sclerosis. *Psychological Trauma: Theory, Research, Practice, and Policy*, 5(5), 448-452. doi:10.1037/a0029338

Dibbell-Hope, S. (2007). Moving toward Health – Authentic Movement and Breast Cancer. In: P. Pallaro (Ed.). Authentic Movement: Moving the Body, Moving the Self, Being Moved. A Collection of Essays. (Vol. 2, pp. 337-360). London, UK: Jessica Kingsley

Dube, S. R., & Fairweather, D. (2009). Cumulative Childhood Stress and Autoimmune Disease in Adults. *American Psychosomatic Society*, 71(2), 243-250. doi:10.1097/PSY.0b013e3181907888

Glantz, M. J., Chamberlain, M. C., Liu, Q., Hsieh, C., Edwards, K. R., Horn, A. V., & Recht, L. (2009). Gender Disparity in the Rate of Partner Abandonment in Patients with Serious Medical Illness. *Cancer*, 115(22), 5237-5242. doi:10.1002/cncr.24577

Johansson, C. (2019, Spring). Introduction to Qualitative Research and Grounded Theory. *International Body Psychotherapy Journal*, 18(1), 94-99

Johnson, R. (2018). Embodied Social Justice. New York, NY: Routledge

Levy, F. J. (1992). Dance/Movement Therapy: a Healing Art. Reston, VA: National Dance Association, an association of the American Alliance for Health, Physical Education, Recreation, and Dance

Hillman, J. (1999). The Force of Character and the Lasting Life. New York, NY: Random House

Khalso, S. S., Adolphs, R., Cameron, O., Critchely, H., Davenport, P., Feinstein, J., Feusner, J., Garfinkel, S., Lane, R., Mehling, W., Meuret, A., Nemeroff, C., Oppenheimer, S., Petzschner, F. H., Pollatos, O., Rhudy, J. L., Schramm, L. P., Simmons, K., Zucker, N. (2018). Interoception and Mental Health: A Roadmap. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, 3(6), 501–513. doi: https://doi.org/10.1016/j.bpsc.2017.12.004

Pallaro, P. (2007). Somatic Countertransference: The Therapist in Relationship. In: P. Pallaro (Ed.). Authentic Movement: Moving the Body, Moving the Self, Being Moved. A Collection of Essays. (Vol. 2, pp. 176-193). London, UK: Jessica Kingsley

Porges, S. W. (2004). Neuroception: a Subconscious System for Detecting Threats and Safety. *Zero to Three*, 24, 19-24

Romanyshyn, R. D. (2013). The Wounded Researcher: Research with Soul in Mind. New Orleans, LA: Spring Journal Books

Simpson, R., Booth, J., Lawrence, M., Byrne, S., Mair, F., & Mercer, S. (2014). Mindfulness-based Interventions in Multiple Sclerosis – a Systematic Review. *BMC Neurology*, 14(1). doi:10.1186/1471-2377-14-15

Shimmin, C., Wittmeier, K. D., Lavoie, J. G., Wicklund, E. D., & Sibley, K. M. (2017). Moving towards a more Inclusive Patient and Public Involvement in Health Research Paradigm: The Incorporation of a Trauma-informed Intersectional Analysis. *BMC Health Services Research*, 17(1). doi:10.1186/s12913-017-2463-1

Stromsted, T. (2015). Authentic Movement and the Evolution of Soul's Body Work. *Journal of Dance & Somatic Practices*, 7(2), 339-357

Tantia, J. F. (2012). Authentic Movement and the Autonomic Nervous System: A Preliminary Investigation. *American Journal of Dance Therapy*, 34(1), 53-73

Natural Expression

Embodied Learning within Engaged Eco-Psychosomatics

Alycia Scott Zollinger

ABSTRACT

Engaged Eco-Psychosomatics joins breath awareness, somatic intelligence, and mindful attention with a creative agency further heightened through convening with nature. Within this convening is an interactive symbiosis intensified through heightened perception. The intimate cognizance, breath, and liberation available within the act of communing with nature can serve as an eco-psychosomatic therapeutic resource. This form of engaged therapy enhances holistic embodiment and regeneration. When we invite our creative instincts to flow through our bodies, our somatic intelligence animates in a way that can span our historical narrative and encourage transformation aligned with our core desires and inner wisdom. When we join our heart perception with breath and sensory awareness in nature, the confines of the linear brain dissolve. We begin to attune the bodymind to the depths of slow fascination, compassionate discernment, and synergistic consciousness. When there is an element of nature to assist in addressing the inner self, there is an external and textural feedback loop that grounds each stage of the healing cycle in a tangible reality. Engaged Eco-Psychosomatics joins consciousness and energy in a manner that can lead to a direct insight into our character structure, inner needs, and vital nature, as well as assist in the completion of the healing cycle toward homeostasis.

Keywords: somatic intelligence, engaged eco-psychosomatics, mindfulness, movement, expression, embodiment, the healing cycle, creative agency embodied consciousness

Submitted: 16.08.2019
Revised: 31.12.2019
Accepted: 08.01.2020

International Body Psychotherapy Journal
The Art and Science of Somatic Praxis
Volume 19, Number 1,
Spring/Summer 2020, pp. 64-74

ISSN 2169-4745 Printing, ISSN 2168-1279 Online

> ***Every experience I've had in my life is a resource in my body.***
>
> Anna Halprin

When I was a young girl, my first energy mentor would bring me to the local Seminole Indian drum circles. She was Jamaican Chinese, but somehow, perhaps through her energetic resonance, she had bonded with the tribe who held their ceremonies in the forests close to our homes in Miami, Florida. I would dance with the women and children around the drummers, who sounded like they were playing the heartbeat of the Earth. I don't remember ever speaking in words with anyone at the ceremonies. Still, our collective movements spoke through my cells as one foot after another planted itself into the soft forest soil underneath me. Our focus was on the Earth, spirit, and energetic presence. It was as if roots grew through the soles of our feet, up through the core of our bodies to the sky and back. Our arms wove through the air like winged branches reaching out into the world and then back into our spines. This early foundation of communing with nature and community has threaded through my work as an artist and healer. In time, as I pursued further engagement with nature and body psychotherapy, ritual, and mindfulness practices, I came to realize the psychosomatic resources nature provides in the healing cycle.

A Cycle of Healing

"Like a bird in a cage, the heart speaks of life beyond its confines. A second pulse pumps cerebral spinal fluids, a deep, secret stream of life through the spine and brain. And more fully expressive as a rhythm is breathing, which feeds the cells with new life."

J. P. Conger

Gerda Boyesen illustrated a healing cycle in what she termed the Vasomotoric Cycle of Healing. Through her study of energy and the nervous system, she identified phases we naturally endure or interrupt, from stimulus and charge to expression and equilibrium. When we interrupt or block energy from moving through its full expression, we prevent discharge. This prevention can lead to discomfort and destructive patterns. A completed healing cycle can lead to self-regulation, restoring balance with a new baseline and integrated learning. The cycle is a psychosomatic process of learning that weaves through physical, emotional, and spiritual reactions, along with responsive insights into our lives. A cycle can span experiences from the initial charge and response to a situation, to the winding down, recuperation, and integration of new learning. Within the winding down and relaxation, new competence can be absorbed.

The process can take moments, hours, days, or years. When the full cycle is accomplished, the accumulated diseased energy is discharged. Then, the experience can be digested physiologically. Past tensions can be expressed through the body, mind, and spirit in an experiential way. If someone stops the process at the charge, however, there is a possibility of getting stuck within the anxiety or other energetic conditions the charged experience embodied. Trapped energy can lead to a lack of feeling the soothing sensations at the end of the cycle. It is through the completion of the cycle that a new baseline of homeostasis forms, and gateways to pleasure open. The cycle doesn't erase the experience or inferred images; however, it does release the charge, allowing the nervous system to let go of the disruption and re-integrate in a place of harmony. The involvement of conscious, semi-conscious, and unconscious proprioception influences the autonomic nervous system. It affects both sympathetic and parasympathetic activity, interlacing to usher a person through the journey to equilibrium. When there is an element of nature to assist in addressing the inner self, there is an external and textural feedback loop that grounds each stage of the healing cycle in a tangible reality.

Somatic Intelligence

"I am not what happened to me. I am what I choose to become."

Carl Jung

Tangible reality is just one aspect of our lived experience. We all have bodies with intricate systems that embody inner wisdom, multifaceted feelings, and sophisticated healing capacities. Somatic intelligence encompasses our innate potential to integrate awareness with renewal, intuitive action, and dynamic vitality. In her book *Awakening Somatic Intelligence: The Art and Practice of Embodied Mindfulness*, Dr. Risa Kaparo defines somatic intelligence: *"Somatic Intelligence is your own inner guidance system. A compass to navigate the conditioned aspects of experience from a state of limitless awareness."* (2012) Further, breathing slowly, deeply, and mindfully in connection to the natural world, we attune to the untethered wildness in our hearts, the lush nature of our bodies, and the interconnected nexus that sustains life. When we invite our creative instincts to flow through our bodies and empower our somatic intelligence with breath and attention, we encourage neuroplasticity that has the potential to span historical narrative, and encourage transformation aligned with our core desires and inner wisdom.

Engaged Eco-Psychosomatics (EEP)

"There is that in us which has moved from the very beginning: it is that which can liberate us."

Mary Whitehouse

For the last two decades, I have led students, clients, and myself through creative somatic processes of self-encounter and expression. The processes reach into cellular memory and engage a sensual embrace of the natural world. By tapping into the revealing essence of breath, movement, and nature, there is a grace that wholeheartedly supports and invites an embodiment of the complexities of life. I have found that convening and interacting with nature through intention and focus can both extend and support personal expression. A term that best encapsulates this process is Engaged Eco-Psychosomatics (EEP). By engaging with the tangible qualities of nature and visceral intelligence, we have both a container and a medium to express our deepest pains and most sensuous tenderness. Within this process, I have found an atmosphere where breath can slowly integrate our brain, heart, and gut through the potency of our senses and our innate ability to embody new learning. As Bonnie Bainbridge Cohen noted, *"This dialogue between present cellular and past nervous system experience is what I call 'learning'."* (2012, p. 161) This form of cellular and embodied learning can encourage reflexive creativity that is physical, cognitive, and behavioral. In an article published by the U.S. National Library of Medicine National Institutes of Health entitled *Neuroscience of Exercise: Neuroplasticity and Its Behavioral Consequences*, the adaptability of the brain is presented, as well as the body-mind connection in learning through changing dynamics. The article states:

> *Convergent evidence from both human and animal studies suggests that enhanced physical exercise facilitates neuroplasticity of certain brain structures and as a result cognitive functions as well as affective and behavioral responses. There is evidence linking increased physical exercise with an enhancement of neurogenesis, synaptogenesis, angiogenesis, and the release of neurotrophins as well as neuroendocrinological changes, which are associated with benefits in cognitive and affective as well as behavioral functioning (such as fine motor functioning).* (Budde et al., 2016)

The exercises within an Engaged Eco-Psychosomatic process joins these scientific understandings with the awareness that being in nature is good for us on many different levels. As Dr. Qing Li writes, *"Being in nature can restore our mood, give us back our energy and vitality, refresh and rejuvenate us. We know this deep in our bones. It is like an intuition, or an instinct, a feeling that is sometimes hard to describe."* (2018) EEP develops a bodily felt sense that is focused, intricate, and innovative. There is an invitation to be fully attentive to energy, stillness, movement, and expression. There is a call to cultivate presence through sensory exchanges with nature. In their paper *The Bodily 'Felt Sense' as a Ground for Body Psychotherapies*, Eugene T. Gendlin and Marion N. Hendricks-Gendlin refer to bodily felt sense as an implicit intricacy that is always functioning. They highlight its movement between "verbal-conceptual and bodily implicit understanding," while tapping into intricate bodily knowledge waiting to emerge. The Gendlins explain:

> *You have a bodily orienting sense. You know who you are, and how you come to be in this room. The knowing is physically sensed in your body and can be easily found. You can learn how to let a deeper bodily felt sense come in relation to any specific situation. Your body "knows" the whole of each of your situations, vastly more aspects of them than you can possibly just think. Here, you find an intricate bodily knowledge, and new steps that want to come, and will come if you can wait here and allow them to emerge.* (2015)

Ecopsychology and Engaged Eco-Psychosomatics (EEP)

In the natural world, you can wait and empower emergence. The patterns of beauty, destruction, and growth can be observed in both intimacy and vastness. Along these lines, nature is a reflective tool for encountering personal, cultural, and social realities. Within Ecopsychology, the relationship between human beings and the natural world is viewed through ecological and psychological principles.

There is recognition of the inherent links between human health and the state of the planet. Just like Ecopsychology, the transpersonal elements of identity and appreciation of transcendent experiences in nature are very much a part of an EEP practice. In this way, it could be considered a branch of Ecopsychology. However, EEP interacts with nature in a slightly different way. Within Engaged Eco-Psychosomatics is the catalyst of acutely breathing and feeling into the interaction with nature. There is also a deepening of mindful awareness that focuses on the fine details within nature as well as on our inner dialogue, yearnings, and sensations. This interplay between feelings, textures, and multifaceted details beckons an emergence of intimate hyperawareness.

The EEP experience is interactional and interpersonal in the most primal and intimate sense. Like a kitten purring as she paws the soft belly of her mother, the interconnectedness of self and nature ripples through an EEP experience cellularly. In this way, the mind, body, and spirit are

Photo: Alycia Scott Zollinger

infused experientially. It taps into the depths of personal history while stoking primitive synergy with the natural world simultaneously. Somatic intelligence becomes sensitized. Options and patterned responses are highlighted as we navigate dimensions of nature and feeling into the moment.

Within this EEP praxis, there is a heightened perception of consciousness via the direct experience of our embodied presence and a felt sense of our nervous system. In an EEP process, the mind-body-spirit connection is supported, enlivened, and grounded in the awareness of self. The multifaceted textures of nature assist in attuning attention. Connecting with nature in this physical and intentional way also enhances a greater sense of aliveness. In this practice, the bodymind is the perceptive interpreter and interlocutor. Nature is the web for holistic expression, and breath is the thread. In an article entitled *Why Ecopsychology Needs Natural History*, Laura Sewall and Thomas L. Fleischner write about the influence of convening with nature on our sensibilities and consciousness:

> *Natural history, as a practice of intentionally focused attention to specifics of the nonhuman world, offers a method for learning to see a richly animated world – and the patterns that connect us all. In the practice of doing natural history, signals originating from ecological realities alter sensory habits and perceptual expectations – and shape new ways of seeing. We become more perceptive, more ecologically informed, and more wholesome as our shifting sensibilities influence consciousness and actions.* (2019)

The experience of seeing, feeling, and breathing with a natural element can invite both reclamation and expression of deeply embedded needs, emotions, and pleasure. It provides a tangible orientation, container, and conduit for shifting sensibilities and enlivening consciousness with new perspectives. This psychosomatic practice of interoception, breath awareness, and mindfulness can also facilitate nervous system regulation, self-encounter, and expression within an interconnected container of nature. It is a form of self-engagement that instantly shifts states of conscious awareness while simultaneously heightening receptive discernment. It invites messiness, grace, and play while engaging attention, imagination, and the connective interplay between bodymind and nature. This presencing enlivens one's interactive bodily felt sense. Breath can then further deepen, and new expressions can emerge.

Breath: The Direct Link and Self-Encounter

> ***"There is a way of breathing that's a shame and a suffocation and there's another way of expiring, a love breath, that lets you open infinitely."***
>
> Rumi

Breath's direct link to the nervous system facilitates a more rapid transition into multiple levels of human experience and memory. It is life in an energetic form. Breath is impacted by the effects of emotions and can affect our physiological state. It can carry and move through emotional charges embedded within us. *"While normal unconscious breathing is controlled by the autonomic nervous system, the breath is readily accessible to conscious control and can, therefore, provide a link between our conscious mind and our anatomy, physiology, deeper emotional states, and our deepest spiritual potential."* (Kraftsow, 1999) A practice of Engaged Eco-Psychosomatics combines awareness of conscious breathing and focused attention for insight into our existence and the intricate systems that sustain, heal, and vitalize our human experience.

Breathing illuminates our energy, brings new life to cells, and carries the vitality of our life force. Breath can weave through our nervous system in ways that elucidate the way we structure our character, armor our being, and ei-

ther contract or expand from our daily experiences. Utilizing intentional breath while engaging with an element or aspect of nature further assists in highlighting our natural rhythms of expression, holding, and physical armoring. EEP focuses attention on our inner needs and sensory nature. As Laura Sewall wrote:

> *Within psychology, the most common definition of attention is 'the enhancement of selected sensory information.' Focused attention, we know, translates into a richness of color, a depth of sensory experience, and the difference between seeing and not seeing... Initiated by our intention, attention offers a kind of coming together with the world. Over time, our gratitude rises up like a wave surfacing from still water, meeting the world in a purely present moment. There is grace in the offering of our attention.* (Sewall, 1999)

The union of breath and ecological awareness orients self-expression with our bodily felt sense, allowing us to find a balance between our assertive and receptive movements creatively. This self-awareness can facilitate self-regulation and integration of the past into present intention. It is a form of self-encounter that mindfully tunes us into breathing while enduring a more rapid penetration of our defenses and withheld energy. Dr. John Pierrakos once wrote, *"And the very act of self-encounter is the first step toward reintegration not only of the person within but of this, our being, with outer reality."* (Pierrakos, 2005) When we give ourselves permission to intentionally connect with our breathing, time dissolves, and gravity holds space for us to delve into a deeper level of contact with the most vulnerable aspects of our being. We experience the solid and fluid nature of how we hold ourselves, our energy, love, rage, and thoughts. This mindfulness of our internal imprints and patterns taps into the intricate networks and undercurrents of our nervous system.

Breath is both voluntary and involuntary. It is a meeting place for our inner and outer worlds. It can be a stream of consciousness where we can intimately encounter our unconscious self. When we fully attune to our breath and attention, we more deeply immerse in our living essence, where we can enable transformation. In the image seen, my client is using her breath in connection with sand as an outlet to deepen her self-awareness. The sand is providing a container to press into, throw, roll, and move within, while her breath enhances her connection to her internal processes. These processes could be intellectual, physical, or spiritual. There could be a continual deep focus on the sensual nature of her body in relation to the sand. Alternatively, the thought of how messy it could be to roll in the sand would take her out of the sensuous capacity of the experience. Through either thought, she can intentionally choose to bring her attention back to her breath and the sand to reconnect to a more innate psychosomatic encounter. When she spread her body over a fallen tree trunk and opened her heart to the sky, surrender and empowerment met. In her feedback from this session, she spoke about how she felt so held by the container of natural interrelatedness. New experiential-based messages began to thread through her thinking and behavioral patterns, inviting more openness to expression, pleasure, and being fully in time and space. Passersby or past earlier experiences that may have otherwise distracted her dissolved in the force field of her dedicated intention to be fully present.

Engaging Eco-Psychosomatics: A Guided Experience

> ***"The brain is a far more open system than we ever imagined, and nature has gone very far to help us perceive and take in the world around us. It has given us a brain that survives in a changing world by changing itself."***
>
> Norman Doidge

Nestle yourself comfortably in a place where there is a natural element. Take a moment to turn your awareness to your breath. How are you breathing? Where is your breath going in your body? Is it stopping or gathering in certain places? Is it flowing like currents through your whole body? What happens when you become more intentional about your breath and begin to breathe slowly? As you inhale, fill your belly with air, and lightly lift your heart. As you exhale, bring your navel gently towards your spine as you lightly bring your chin toward your throat and notice the sides of your neck and body lengthen. Continue to breathe as you also take note of the parts of you in connection to the surface below. Connect to the natural rhythm of your breath. Be fully present in the ebb and flow of your breath for a few minutes. If you

feel a yawn or sigh arise, let it move through you with full expression.

Next, turn your attention to a natural element, plant, tree, or flower. Continue to breathe as you take in the intricate details of your focus. If your mind wanders, bring your attention back to your chosen focus. Shift your sensing out of the brain and into your heart. You can do this by feeling your heart's elevation as you breathe in as well as its sensory buoyancy within each exhale. Tune into an awareness of the heart as a perceptual organ with a 360-degree sensing capacity and its own nervous system that interconnects with the autonomic nervous system. The brain can rest in its coherence with your heart's intelligence if you permit it to trust in your innate intuition. Breathe.

Feel grounding through your feet and sitting bones (if you are seated). You can do this by lifting the flesh out from under your sitting bones, if seated. If standing, imagine roots, big and small, growing from the full sole of each foot down toward the core of the Earth.

As you continue to breathe into the intricate details of your point of focus in nature, see what happens when you invite a response within you, whether it be a small gesture, sensation, or movement. Can you tune into your felt sense in connection with the natural point of focus you have selected?

From here, you can take this moment in many directions. You can remain seated, standing, or begin to allow movement to undulate through your body in response to the inner and outer nature you are connecting with in real time. It can be a five-minute meditation or hours long, as you deepen your openness and awareness in connection with a plant or element. The foundational intention is open-heartedness and breath in association with mindful attention. You can remain in connection with the fine details of your focus, or also attune to the consciousness of feelings, thoughts, and sense of being. It can be extended through a deep dive into the depths of sensation, and following the threads to find the deep needs, memories, and withheld expressions awaiting tending and continuance through the bodymind. In this process, inner patterns of thought and action can be seen and then updated in present-day awareness, intention, and integration – akin to the session I mentioned above.

Most importantly, this is a precious time to be with yourself, your breath, and the interdimensional capacity of connecting deeply with inner and outer nature. Breathe and Be.

Somatic Learning and Visceral Compassion

> *From the perspective of somatic learning, as you begin to utilize feeling and sensation as feedback, you become an open, learning-oriented system. You become more self-sensing and self-organizing, transforming your structure and functioning in a way that eases the pressure and allows the organism to follow its own natural course toward healing and self-renewal...* (Kaparo, p. 18, 2012)

The practice of breathing into personal interactions with nature expands the reaches of our senses from the inside out, from cells and neural tissue to sensory nerves and hollow organs. In *Mindsight: The New Science of Personal Transformation*, Dr. Daniel Siegel explains how the brain in the body develops through the dispersion and clustering of cells to the extensive networks of nerves from the heart and other organs that convey information to the brain.

> *The neural networks throughout the interior of the body, including those surrounding the hollow organs, such as the intestines and the heart, send complex sensory input to the skull-based brain. This data forms the foundation of visceral maps that helps us have a "gut feeling" or a "heartfelt sense." Such input from the body forms a vital*

> *source of nutrition and powerfully influences our reasoning and the way we create meaning in our lives.* (Siegel, p. 43, 2009)

The practices within an EEP process provide space for our bodymind to interact with sensory input and create new meaning. In its broadening of our senses and expressions, the experience can be regenerative, cleansing, grounding, and informative. It encourages play, as well as safety in intimacy and connection. Engaging the ecology of our sensations and impulses connects us to our innate wisdom. It empowers a sense of tenderness and curiosity in discovering and growing the edge of our limitations. These experiences can mobilize our holistic intelligence through relational perspectives that engage within the resiliency of nature and the awareness of breath through the whole of our being. As scholar and deep ecologist Paul Shepard wrote, *"The epidermis of the skin is ecologically like a pond surface or a forest soil, not a shell so much as a delicate interpenetration. It reveals the self-ennobled and extended… because the beauty and complexity of nature are continuous with ourselves."* (Shepard, 2006) In the continuity of our sensuous intelligence, breath and ecology can bring the brain into coherence with the ingenuity of the heart. Nature becomes both a tangible anchor and holistic guide into proprioception and then integration. After traversing different levels of intensity, the breath can slow down with a continuous focus and connection to nature, sealing the nervous system back in to present time and space with the cumulative somatic knowledge and sensory perception gleaned.

> *Sensory perception is the natural and right blending of inner and outer. The linear mind is what creates the boundary line between us and the world. Location of consciousness in the brain closes the door to Nature. But the door is unlocked. Perceiving through the senses opens the door. The more sensitivity we cultivate to sensory flows, the more directly we perceive with our senses, and the wider the door opens.* (Buhner, p. 140, 2004)

Heart Perception and Threads of Compassion

Marcel Proust once wrote, *"We do not receive wisdom, we must discover it for ourselves after a journey through the wilderness, which no one else can spare us, for our wisdom is the point of view from which we come at last to regard the world."* When we shift out of the brain and into our heart, perception, breath, and sensory perception in nature, we enter the wilderness of our senses unbound. The confines of the linear brain dissolve, and the bodymind becomes attuned to new and greater depths. This shift also fosters compassionate discernment and alignment with inner wisdom. Our brain can then sync to the new sensory discoveries intuited through intentional attention and movement in heart coherence. *"When the heart moves into coherence, it acts as an amplifier, sending coherent information through its afferent nervous pathways straight to the thalamus, which synchronizes the neocortex and the brain's survival centers."* (Dispenza, 2019) Experiences of deep connections with nature become resources for both the present moment and the future. New foundations, rooted in experiential learning, cultivate healing and compassion that can serve as rejuvenators, regulators, and innovators in times of stress and in response to physiological urgencies. In an essay entitled *Our Deepest Affinity*, conservation biologist Thomas Lowe Fleischner writes about our connection with nature concerning our capacity to honor beauty and express compassion openheartedly. Fleischner refers to this connection as "Natural History." He wrote, *"Compassion – literally, feeling with – occurs when we encounter others with open hearts… When we connect with individual, specific lives – this flower blooming in this parched mudflat, these muskrat eyes looking back at me from the desert pool – we can transcend nebulous notions like 'Nature' and replace them with texture, depth, and a realm of specificities. Natural history, then, is a path of compassion"* (Fleischner, 2017) Once compassion is embodied, somatic learning and renewal can be absorbed through our cells and an extensive network of nerves. Embodied compassion also often generates a conscious awareness of self that sparks creativity and engenders meaningful agency.

Creative Agency and Knowing Our Senses

In my work, I continue to experiment with addressing situations in my life through a creative agency. I find this to be an effective approach to uproot cognitive and behavioral patterns that need transformation. As neuroscientist David Eagleman stated:

> *Our brains naturally default to the neural pathways that represent what we've done before. Creativity emerges when we get off of the path of least resistance. All of the good ideas are in there, but you have to dig deeper into your neural networks. The first way to get more creative is to dig deeper, to get off the path of least resistance and try something new. Creativity belongs to all of us. It is the most potent, transformative tool we have at our disposal. It can change people's lives. It can transform the world.* (The Creative Brain, Video, Beamish & Trackman, Directors, 2019)

Last summer, I addressed certain fears concerning a situation in my life by stepping into the sands of the Utah desert to intentionally get to the seed of what was causing the disruption. I saw a reflection of past experiences in aspects of the current-day problem. I figured there was a pattern in my system stemming from an earlier developmental period of my life. I had no idea what the seed was when

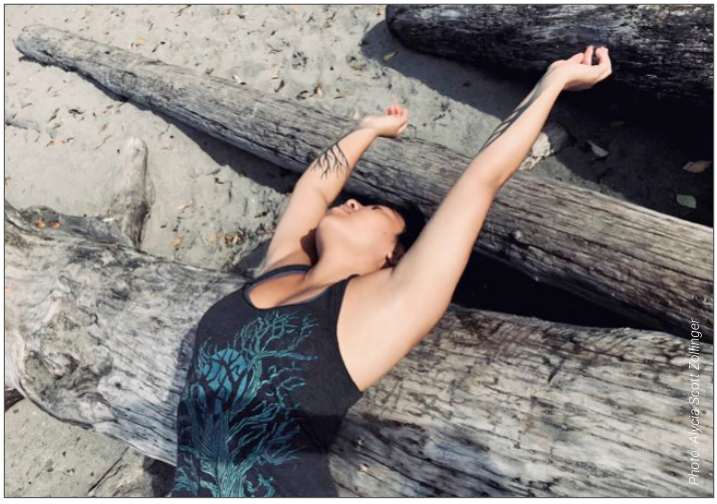

Photo: Holli Zollinger

I began. Still, I knew I needed to lean into the disease and tap into my physiology to understand the psychosomatic complexity as simply as possible. A branch awaited me as I stepped into the sand and ventured into the unknown of my experience. Sounds emerged in a way that felt like both a cry and a lullaby.

The withheld emotions dating back to my experiences as a child through to the current day surfaced. I collapsed. I felt empowered. I sang out and I cried in despair of the harshness. The heat of the desert both exhausted and warmed me. I continued down to the water. The water was cold. Instead of stepping away, I stepped in. I felt that I needed to step in despite my usual distaste for cold water. I allowed myself to express the agony of the inner emotional tenderness that felt called forth in the piercing sensations of the cold water. As I stayed with the needed expression, it moved through my body. I could have chosen to be scared of what it might look like or feel like, but I directed my mindfulness to the commitment to fully express somatically, no holds barred. When I felt a sense of fear or judgment, I redirected my attention to my breath and the connection of my senses to the natural world I was immersed in. As my expressions processed through me, I dedicated myself to breathe and be within the connection with myself, the water, sand, and rock below me. In what felt like a short time (that also encompassed decades), my breath brought me into an embodied peacefulness. The serenity translated into a somatic buoyancy of beautiful pleasure. Suddenly, I was floating on a branch in cold water, completely ecstatic in awe and gratitude.

From this experience, I understood more of the bedrock from my personal history that was influencing patterns of thinking and responding in current day life. I was able to make more conscious choices from the learning gleaned. Since the comprehension happened creatively and psychosomatically, my nervous system began to embed and rewire past patterns through my broader somatic intelligence. The interconnected spirit within convening with nature held, provoked, and inspired me through each step of my Engaged Eco-Psychosomatic process. After each one of these processes I have endured over the last two decades, I am forever changed and grateful. I can utilize experiential learning in my daily life by recalling the sensations psychosomatically. For example, in a moment of stress, I can recall the somatic buoyancy I experienced in the desert waters. Immediately my face softens with a sweet grin as my body calms and feels held. My heart elevates, initiating deep breaths, and often a yawn followed by a deep calming sigh of ahhhh.

By weaving the integration of mindful breath awareness within the therapeutic potentials of Engaged Eco-Psychosomatics, the consciousness of self is heightened. The way our breath ebbs, flows, is blocked or held in our body further instigates and integrates somatic expression. The connective expression develops an in-depth orientation with our body regarding how we feel and act. In writing about cultivating interoception, Dr. Bessel Van der Kolk wrote, *"One of the clearest lessons from neuroscience is that our sense of ourselves is anchored in a vital connection with our bodies. We do not truly know ourselves unless we can feel and interpret our physical sensations; we need to register and act on these sensations to navigate safely through life."* (Van der Kolk, p. 272, 2015) Inviting someone to move in space can trigger sympathetic responses. If the movement is preceded and initiated by breath, however, a feeling of embodiment and parasympathetic regulation can meet and support expression. This expression can further release primal screams, cries, elated pleasure, and other previously withheld energy, now in motion. As Sondra Fraleigh once wrote, *"Somatic experiences have the potential to extend consciousness and transform lives."* (Fraleigh, 2015) Within psychosomatic awareness of the states of our inner and outer natures, we can voluntarily continue to breathe into our unconscious depths, release past limiting patterns and deepen our connection to our core desires and truths. This process can also catalyze new curiosity and embodied empowerment to say yes to



pleasure. Learning to wholeheartedly embrace the sensations of ecstasy, bliss, and connection as a personal birthright soothes and transforms the pain, anxiety, and broken-heartedness within personal and societal ills. The intimate cognizance, shapeshifting breath, and liberation available within the act of communing with self and nature heightens somatic intelligence and enhances holistic embodiment.

> *The voluntary sector of our perceptions and decision-making faculties generally correlates with what is considered our conscious mind: our self-awareness and self-direction. The involuntary sector comprises the unconscious processes: our innate impetuses and our unconscious energy formations, plus the buried experience of our unremembered past. Integration and creativity require freedom of movement from the innermost reaches of the unconscious to the outermost perimeters of consciousness.* (Pierrakos, p. 89, 2005)

Balancing our inner sensations in connection with nature aligns our greater psychosomatic intelligence, where neural pathways fuse with spirit and mindful consciousness. A positive inner-outer merging and discernment develop. This both sharpens and expands perceptions of reality and what is possible. Options emerge that can then be utilized in daily life. Communication opens up within inner dialogue and in relation to others. Vibratory resonance can be restored, and grounding can emerge. Grounding returns calm, grace, and compassionate discernment into a state of being fully present.

In Conclusion

Whether it be in a deep meditation on the dimensionality within a leaf's appearance, or submerging and responding to the tidal flow and temperature of the ocean's currents, nature provides an interactive medium that animates reciprocity and the restorative capacity within genuine expression. Within this conscious awareness, a compassionate agency emerges that can direct us toward new paths of healing. As John Pierrakos wrote:

> *Agency starts with what scientists call interoception, our awareness of our subtle sensory, body-based feelings: the greater that awareness, the greater our potential to control our lives. Knowing what we feel is the first step to knowing why we feel that way. If we are aware of the constant change in our inner and outer environment, we can mobilize to manage them.* (Pierrakos, p. 89, 2005)

Engaged Eco-Psychosomatics joins breath awareness, somatic intelligence, and mindful attention with a creative agency further heightened and supported through convening with nature. As we intimately encounter our unconscious and sensory perceptions, our breath and nature can compassionately nourish our sense of being. Breath and movement provide a fluid platform to interface with the ways our embedded attitudes and forces of personality either interpret or attune to body-based feelings. Through breath and creative agency, we confront the realities within our storied inner landscapes non-judgmentally. As our mindful attention somatically develops, we can begin to course through our feelings, thoughts, behaviors, and emotions like a lantern with audiovisual rays. When we tune in acutely, we see our boundaries and find where our life force is flowing or blocked. In this act of compassionate self-encounter, sensorial attention and creative agency are united, provoked, and regulated. In the process, discernment is refined, and embodiment is vivified. As Bessel Van der Kolk wrote:

> *Direct sensuous reality, in all its more than human mastery remains the sole solid touchstone for an experiential world now inundated with electronically-generated vistas and engineered pleasures; only in regular contact with the tangible ground and sky can we learn how to orient and to navigate in the multiple dimensions that now claim us.* (Van der Kolk, p. 96, 2015)

When I was a young girl, I didn't know each connection of my soles with the Earth, and the wave of movement through my spine, was grounding and awakening my somatic intelligence. I am forever thankful for the Seminole Indians and other peoples who share the rituals that remind us of our interconnection. The practice of Engaged Eco-Psychosomatics reorients us in this interconnectedness. It supports, enlivens, and recuperates the mind-body-spirit connection in an embodiment grounded in conscious awareness of self within the multifaceted depths of nature. It invites reconnection with the brilliance of nature's intricacies, our innate somatic intelligence, and

our inherent creative agency. It calls forth the expression of our sensuous bodies and gut feelings in direct contact with the natural world and our heart's coherence. As Toni Morrison once wrote, *"If you surrender to the air, you could ride it."* If we surrender to the sensations rendered within us in connection to our depths and the natural world, we empower our somatic intelligence and our full potential: engaged, expressed, and embodied.

"There is a voice that doesn't use words. Listen".
Rumi

Alycia Scott Zollinger is a graduate of the Seattle School of Body Psychotherapy, a registered Somatic Movement Educator and Therapist with the International Somatic Movement Education and Therapy Association (ISMETA), and a Practitioner Member of the United States Association of Body Psychotherapy. She is also an International Yoga Alliance Certified Yoga Instructor with over 2,000 hours of training, and a Movement Integration specialist with a Masters of Art from the School of the Art Institute of Chicago. Since 1999, she has taught somatic healing modalities, movement rituals and cathartic practices. As part of her commitment to body-mind integration and study, she continually trains and collaborates with mental health professionals, somatic educators, and creative souls.

REFERENCES

Beamish, J., & Trackman, T. (Directors). (2019, April 25). *The Creative Brain* [Video file]. Retrieved June 25, 2019, from https://www.netflix.com/watch/81090128?trackId=14277281&tctx=0,0,b3d90830-a9a4-4643-bbf7-5893900d2b4c-621272066

Budde, H., Wegner, M., Soya, H., Voelcker-Rehage, C., & McMorris, T. (2016, October 13). *Neuroscience of Exercise: Neuroplasticity and Its Behavioral Consequences*. Retrieved November 1, 2019, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5081452/#B2

Buhner, S. H. (2004). *The Secret Teachings of Plants: The Intelligence of the Heart in the Direct Perception of Nature*. (p. 140). Rochester, VT: Bear & Company

Cohen, B. B., Nelson, L., & Smith, N. S. (2012). *Sensing, Feeling, and Action: The Experiential Anatomy of Body-Mind Centering®*. (p. 161). Northampton, MA: Contact Editions

Dispenza, D. J. (2019). *Becoming Supernatural: How Common People Are Doing the Uncommon*. (p. 165) Place of publication not identified: Hay House UK

Fraleigh, S. H. (2015). *Moving Consciously: Somatic Transformations Through Dance, Yoga, and Touch*. Urbana, IL: University of Illinois Press

Fleischner, T. L., & Fleischner, T. L. (2017). *"Our Deepest Affinity."* In: *Nature Love Medicine: Essays on Wildness and Wellness*. (pp. 11-12) Salt Lake City, UT: Torrey House Press.

Gendlin, E. T., & Hendricks-Gendlin, M. N. (2015). *"The Bodily "Felt Sense" as a Ground for Body Psychotherapies."* In: *The Handbook of Body Psychotherapy & Somatic Psychology* (pp. 248–254). Berkeley, CA: North Atlantic Books

Kaparo, R. (2012). *Awakening Somatic Intelligence: The Art and Practice of Embodied Mindfulness*. Berkeley, CA: North Atlantic

Kaparo, R. F. (2012). *Awakening Somatic Intelligence: The Art and Practice of Embodied Mindfulness: Transform Pain, Stress, Trauma, and Aging*. (p. 18). Berkeley, CA: North Atlantic Books

Kraftsow, G. (1999). *Yoga for Wellness: Ancient Insights for Modern Healing*. (p. 8). New York, NY: Penguin Books

Li, D. Q. (2018). *Forest Bathing: How Trees Can Help You Find Health and Happiness*. New York, NY: Viking

Pierrakos, J. C. (2005). *Core Energetics: Developing the Capacity to Love and Heal*. (p. 89). Mendocino, CA: Core Evolution Publishing

Pierrakos, J. C. (2005). *Core Energetics: Developing the Capacity to Love and Heal*. (p. 109). Mendocino, California: Core Evolution Publishing

Sewall, L. (1999). *Sight and Sensibility: The Ecopsychology of Perception*. (p. 97) New York, NY: Tarcher/Putnam

Sewall, L., & Fleischner, T. L. (2019). "Why Ecopsychology Needs Natural History." ***Ecopsychology***, 11(2), 78-80. Retrieved from https://www.liebertpub.com/doi/full/10.1089/eco.2018.0058

Siegel, D. J. (2009). *Mindsight: The New Science of Personal Transformation*. (p. 43). Carlton North, Victoria, Australia.: Scribe Publications

Shepard, P. (2006). *Traces of an Omnivore*. (p. XIV) Place of publication not identified: Island Press

Van der Kolk, Bessel. (2015). *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma*. (p. 96). New York, NY: Penguin Books

An Introduction to Functional Psychology

The BES Concept in Clinical Work with Depression

Enrica Pedrelli & **Luciano Sabella**

ABSTRACT

In Functional Psychology, Basic Experiences of the Self (BES) are necessary for an integrated and whole development of the Self. The article focuses mainly on the BES of Sensations and Contact, which are always altered in alienation and lack of flow, and related to depressive disorders. We reflect on the need to intervene with such BES for individuals suffering from depressive disorders.

Keywords: depression, Sensations and Contact, cure, Functional Psychology, Basic Experiences of the Self

Submitted: 20.08.2019
Revised: 15.03.2020
Accepted: 31.03.2020

International Body Psychotherapy Journal
The Art and Science of Somatic Praxis
Volume 19, Number 1,
Spring/Summer 2020, pp. 75-81

ISSN 2169-4745 Printing, ISSN 2168-1279 Online

According to the World Federation for Mental Health (WFMH, 2012), depression is the largest cause of mental illness worldwide. More than 350 million people of all ages are faced with a clinical diagnosis of depression.

Depression is a mood-related disorder. In technical terms, it is mood distress that combines cognitive, behavior, somatic, and emotional symptoms that more or less worsen one's mood and affect one's social adaptability and capacity to function. (APA, 2013)

Therefore depression is not, unlike what is often believed, just a change in mood. Depression consists of several more or less severe symptoms apt to heavily alter the way one sees, thinks, and represents oneself, others, and the outside world.

Body psychotherapy is especially beneficial for this depressive disorder, as it addresses the whole person by working not only on the cognitive and emotional aspects, but also on the behavioral and somatic aspects (Rohricht, 2009; Rohricht et al., 2013).

Some results suggest that body psychotherapy may be an effective treatment option for patients with chronic depression. Findings in the Röhricht, F., Papadopoulos, N., Priebe, S. (2013) trial show significantly lower depressive symptom scores in treated patients. In another study, patients who received body psychotherapy treatment showed a reduction in depression and bodily dissatisfaction (Winter, D., Malighetti, C., Cipolletta, S., Ahmed, S., Benson, B., Röchricht, F., 2018).

> ***... each Function assumes a characteristic mode, a shape that is congruent with the vital experience the organism seeks to perform in the world.***

Functional Psychology

Functional Psychology was developed by Luciano Rispoli (1993). It is a body-based psychotherapeutic intervention that addresses the specific manifestations of health and mental health conditions. Functional Psychology epistemology regards the person as a whole organism formed of interconnected and virtually integrated func-

tions. Functional Psychology as a clinical approach allows for individualized focused interventions to address cognitive, affective, behavioral, and somatic symptoms of depression.

The Concept of Function

Each Function (Rispoli, 1993) represents one working mode of the organism: for example, breathing changes according to the quantity of oxygen requested by the Self. In a calm state of mind, breathing is slow, deep, diaphragmatic; in an aroused state of mind, breathing gets faster, thoracic, and involves the upper part of the lungs.

When the Self is suffering, breathing loses its adaptive capacity, becoming still in a symptomatic mode. For instance, in depressive disorders we often see an apnea type of breathing: shallow, almost clinically unnoticeable. From a global point of view, an altered breathing state affects the whole Self, and the low oxygen levels in the blood (hypoxia) cause a consequent state of chronic tiredness, which is typical of the depressed person.

We wish to point out that Functions can be described in their own physiological, emotional, postural, or even cognitive expressions, but each Function is an expression of the entire Self, and therefore affects the whole organism.

Figure 1 is a way to describe the entire Self as a combination of Functions. The whole Self can be descriptively divided into four planes. Each plane is a set of Functions:

- Upper left section: the cognitive-symbolic plane
- Upper right section: the emotional plane
- Lower right section: the postural-muscular plane
- Lower left section: the internal neurophysiological systems.

It is important to specify that the Functions highlighted in the diagram are only part of all the existing Functions.

In each person's daily life, Functions show up in specific forms according to what is experienced at that particular time. These specific forms are called BES – Basic Experiences of the Self.

Basic Experiences of the Self

BES (Rispoli, 2004) are in fact our life foundations, being those capacities that allow human beings to satisfy their needs and live in general well-being. Each experience has its own form of body-mind Functions, and all life experiences can be connected to one or more BES.

The concept of BES was developed by analyzing what Stern (1985) calls wraps of experiences. In his theory, children learn to recognize those elements that remain constant in various circumstances in such a way as to build a model of a world in which they can intervene (Benitez & Sabella, 2014).

Rispoli redefines the concept of experience envelopes as

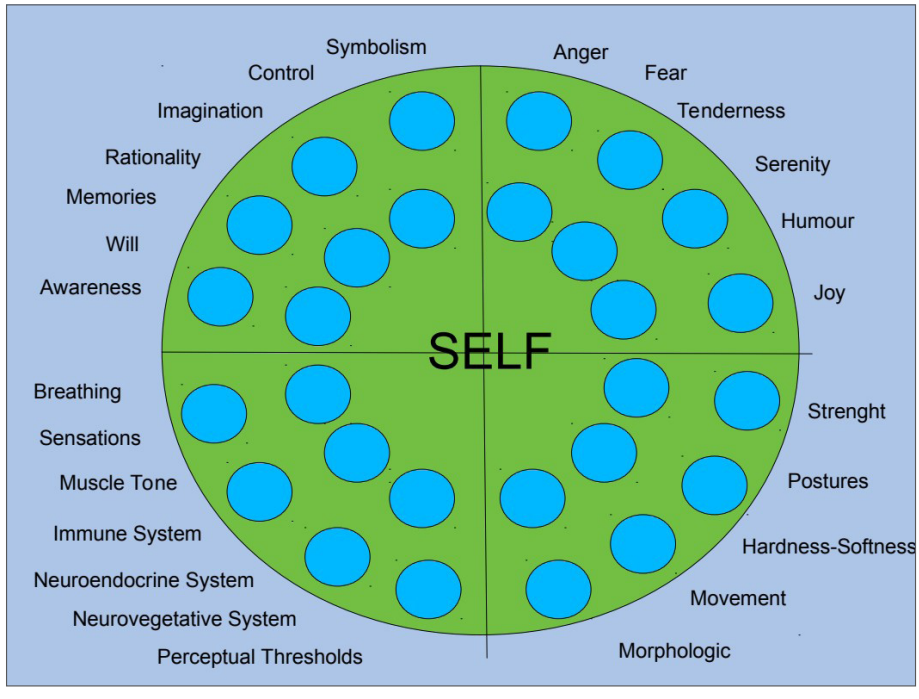


Figure 1. *Diagram of the Self and its Functions*

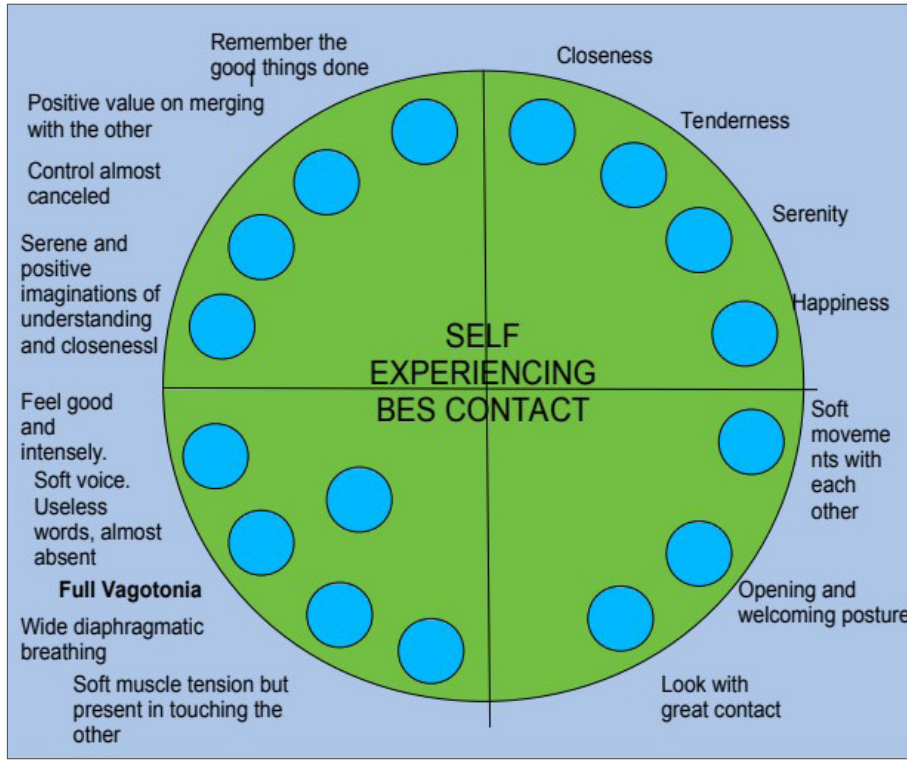


Figure 2. *Functional Configuration of BES Contact*

Functional Processes intimately linked with a given association, and carrying those characteristics that the infant has managed to abstract from the extreme variability of events. He thus theorizes that the particular "shapes" taken by the different Functional Processes can be seen as fundamental ways in which human beings learn and develop. They are organized in specific configurations to meet individual needs and specific requests from the environment. These forms are experiences that every human being goes through, and Rispoli defines their importance as Basic. By going through these Basic Experiences, human beings, from the beginning and throughout life, consolidate them, completing their evolutionary development.

A Basic Self Experience is therefore a configuration of Functions where each Function assumes a characteristic mode, a shape that is congruent with the vital experience the organism seeks to perform in the world. In other words, the Functions are organized in a characteristic configuration of that Basic Experience in the most adaptive way possible to achieve the need the person wants to satisfy (Benitez & Sabella, 2014).

As an example, if Figure 1 shows several Functions present in the Self, Figure 2 shows the prevailing Functions present when a person experiences the Contact BES.

The concept of Experience is used here in a double assertion: it is an experience of a process whereby individuals become involved in an activity with their whole being, with their emotions, thoughts, and sensations. It is also what the individual acquires, learns, and assimilates from this process as the result of this involvement – that is, learning skills.

For this reason, Rispoli conceives BES as fundamental experiences within developmental stages. In adults, BES are called Basic Functional Processes since they generate capacity acquired through the repeated experience of these particular Experiences during development, from the beginning to the end of life.

If the Basic Functional Processes are the basis of the entire range of human behavior, they are also responsible for the general state of well-being an individual experiences in life (thanks to the skills consolidated with the crossing of BES). If altered, however, the Functioning become responsible for any illness or disease, including psychological disorders. This occurs when some BES have not been adequately mastered, thus not allowing the subject to develop adequate capacities or resources to draw on.

Some of the most important BES have been identified (Rispoli, 2004). Each has been analyzed and defined in its developmental progression, or in the way it presents at different ages. Each BES is viewed from the differing perspective of each of the four Functional Planes (emotional,

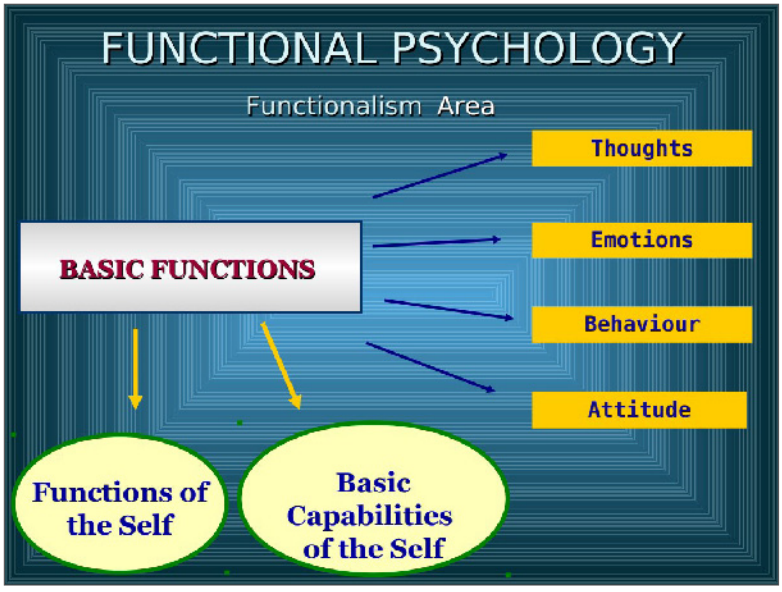


Figure 3. *Functional Psychology*

physiological, postural, cognitive).

In this article, we focus on Contact and Sensations because of their importance in the development of depression. We will look at how they express in the four Functional Planes and in their adaptations.

Contact and Sensations BES

Contact as a BES is not only as per its etymological Latin word "cum tactum" meaning mutual touch. It is also pleasure in closeness to someone, the feeling of someone with us from whom there is no request nor obligation to give or act. It is about developing togetherness. Contact as a BES is the connecting experience between me and another, where two bodies blend into a single one, differing from the earlier "I" and "You."

Correspondingly, there is an empathy through which individual boundaries loosen, allowing one to experience the other's feelings. All forms of Contact – all contact-related experiences – go through a synchronization process that helps mutual knowing and understanding.

This is possible due to the activation of Functions working in a specific mode in the Contact BES. As shown in Figure 2, some Functions become particularly important in the general formation of the Self, assuring the full BES. Among them we find tenderness, peace of mind, closeness, contentment, coming together with an open welcoming look, soft postures, moderate and flowing moves, full touching, relaxed muscular tone, open diaphragmatic breathing, slow and clear voice, few words, full abdominal breathing, openly flowing sensations.

With Sensations as BES, people are able to perceive the other, the world, and even themselves. It is an experience in which they are in touch with their inner self and with the outside world, exploring and feeling, opening up to the new, and finding the new in what is known.

What is the actual meaning of Sensations? Each one of us has our own meaning. In this case, we are talking about BES Sensations. Sensations are always present and inform us of our state. They guide our choices, our behaviors, our reactions; they are similar to a dog's nose, constantly guiding every move. Sensations are, therefore, information from our body on how we are reacting to a given event, to our thoughts or memories. For instance, if our stomach contracts following an examination, we must pay attention to it and manage it.

Depression and Alterations of Contact and Sensations

In Functional Psychology, depression is a disorder where some BES – such as strength, sharing, anger, vitality, pleasure, autonomy – are altered. We now bring the focus on altered states of Sensations and Contact.

As previously seen, Contact is a primary BES allowing us to fully live our needs. Like all other BES, Contact can change (Rispoli, 2004). In depressive disorders, all the activities linked to the experience of exchanging with the other are altered. Closeness does not activate pleasure; there is no capacity to put oneself in the other's shoes, to emotionally share the other's experience. One feels that with such closure, it is no longer possible to receive and absorb affection, warmth, and kindness from a relationship with another. For these reasons, people have difficulty giving to others and to themselves, and are unable to receive.

The alterations of Sensations can branch in two opposite directions:

- We can have a sort of sensory anesthesia in which Sensations are no longer recognized, or sometimes not even felt; we lose the connection.
- Or we limit to already-known sensory data – old, and repeated old tracks which outshine new ones – as if there were no more space for new learning, for example: to learn different feelings, to expand knowledge, to open up to the new.

Expansion of the Self

In depressive disorders, it is difficult to let one's Sensations flow. In fact, what is not recognized as known is left out, avoided, removed. Depressed patients therefore block out their own feelings, and stop the free flow of sensations. So their breathing is shallow, barely visible; pain thresholds are altered and tend to become very high.

In depressive states, we can see how alterations to Sensations and Contact BES are the prime cause of constant states of psychological distress and real pain. Functional Psychology uses specific body-mind techniques to face this kind of distress by working directly and indirectly on all vital systems – cardiovascular, vegetative nervous system, endocrine, etc..

Clinical Intervention for Altered BES

Working on altered BES means promoting free movement and the full range of Functions within that BES. Contact like BES often expresses its alterations through several altered Functions. Working on this BES means to reopen and remodulate its own Functions.

Porges' Polyvagal Theory has greatly contributed to the field of clinical psychology (Porges, 2011). We notice that it has given greater consistency to body psychotherapy and to techniques that activate the ventral vagal complex. When we work with the BES Sensations and Contact, the activation of the ventral vagal complex is intrinsic to the mobilization and modulation of the various Functions activated.

From an emotional perspective, patients will have to experience contentment and joy anew, and let go of any chronic sense of lack. It is important to restore full tenderness, a softness patients can direct onto themselves, leaving out harsh self-judgments and cold hardness. Replacing loneliness and isolation with restored feelings of mutual closeness and togetherness is just as important. From an emotional perspective, feelings of contentment and peace must be restored in order to let go of chronic emptiness.

In order to feel open and welcoming of the other in a body experience, and to enjoy one's flowing and relaxed movements, patient movements and postures can be modified by reopening and expanding what is closed, narrow, rigid, still. Through suggested therapy techniques, touch can be modified from shifty, elusive, and expressing the impossibility of contact and connection with another, to full participation, even coming into close contact and embracing if necessary.

It is essential to work on the more rational-cognitive Functions to modify ancient fossilized notions about self and others, as well as change fixed mental schemas. First, make patients aware that not everything they are and do is negative. Instead, enhance the value of the good they have accomplished, as well as their capacities and resources – which although often wrongly or not at all perceived, are nonetheless always there.

It is necessary to show that closeness is goodness, to feel that deep understanding and empathy can come from others who are not only a source of detachment and indifference, or even disapproval and hostility. Control can soften, even vanish, allowing patients to let themselves go to Contact experiences in a newly alert free state.

Physiologically, the work on breathing aims to shape it back into its deep, broad, slow, diaphragmatic mode, thus replacing the apnea mode. This restoration of vagal tone lowers many neurophysiological parameters, allowing the person to relax and let go. The voice Function in the Contact BES will change to become soft and open, potentially better tuned in and connected with other voices, rather than low and strident. At the same time, words will not be necessary and will yield to sensations.

Sensations are often blocked in the depressed patient, hidden behind a feeling of overall emptiness, killing all other sensations. Sensations are often kept at a distance, as their perception brings back the suffering of old pains and scars. To work on Sensation as a BES means to awaken the awareness of old pains in order to reconnect them to one's Self and newly experience them from a more resourced perspective.

The aim is to feel all proprioceptive body movements internally: the body's own changes, the signals coming from inside, and the information about the feelings. In order to achieve that, patients must acknowledge what is occurring inside.

Throat tightening, muscles tensing, stomach pain surfacing, sudden cramping, dizziness, arrested breathing instead of flowing, floating-like feeling, expansion in the body (amongst many possibilities) are all signs of what is happening inside us. They describe our inner state and how we perceive and react to certain events, memories, or thoughts, to meeting someone, to reading a book, or watching a movie. All these signals must be acknowledged, recognized, and reconnected with so that our patients can identify their significance. To achieve this, it is of overall importance to help patients not feel defensive, as no danger is coming, because these signals belong to part of oneself. They are not alien to the self.

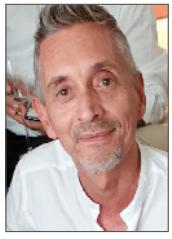
In regard to Sensations and Contact, voice, movements, and breathing Functions are to be mentioned. In body psychotherapy, it is well known that diaphragmatic breathing allows the awakening of both pleasant or stressful sensations. It will be the psychotherapist's job to be present with the distressed, hardened sensations by tolerating and acknowledging them as such. Specific techniques focused on movements and postures, aimed at Sensations BES, will

allow patients to open to the proprioception on their own sensations. Voice is among the techniques in Sensations BES acting as an amplifier of internal experience. Voicing one's own feeling, in all its emotional significance and ways, helps patients better perceive and know themselves. As for the rational-cognitive aspects, the conceptualization of what comes from the body, and the importance given to it will have to be redefined in order to modify the fixed mental schema linked to feelings. Patients learn to better acknowledge and know their inner self, and experience an enhanced clearer, more coherent awareness.

Berlin Presentation

The 2018 Berlin Congress was an opportunity to introduce our colleagues to group work using specific techniques focused on the integration of Contact and Sensations BES. Such group work is always exciting and impactful because group techniques are highly beneficial when carefully guided and aligned with therapeutic goals.

In Functional Psychotherapy, we present experiences focused on the cure of many BES, a comprehensive approach aiming at the processing and integration of Functions. The techniques presented at the Congress, "Discover the world with your hands" and "Discover the other with touch and movement" are two among many used in Functional Psychotherapy, both suitable to work with Sensations and Contact BES, with the aim of guiding patients towards deeper awareness and integration.



Luciano Sabella, psychologist and psychotherapist, is a member of the Italian Functional Psychotherapy Society (SIF, www.psicologiafunzionale.it). Since 2003, he has been a teacher, trainer, and supervisor in the European Functional Psychotherapy School (SEF). A member of the EABP Forum, he has been working for several years in the field of stress.

E-mail: lucianosabella3@gmail.com

Enrica Pedrelli, psychologist and psychotherapist, is member of the Italian Functional Psychotherapy Society (SIF, www.psicologiafunzionale.it). Since 2003, she has been a teacher and trainer in the European Functional Psychotherapy School (SEF). A member of the EABP Forum, she has been working for several years in the field of trauma and parenthood.

E-mail: epedrelli@libero.it

REFERENCES

American Psychiatric Association (APA) (2013). *DSM-5. Manuale Diagnostico e Statistico dei Disturbi Mentali*, tr. it. Raffaello Cortina, Milano, 2014

Benitez, C., & Sabella, L. (2014). *Il Concetto di Esperienza Basilare del Sé. NeoFunzionalismo e Scienze Integrate*, Rivista Sef n°2. Retrieved from http://www.psicologiafunzionale.it/sef/rivista-psicologia-pdf-sif/

Pedrelli, E., Sabella, L., Passarini, M. L., Rosin, R. (2016). Embodied Protection: Body Self Functional Treatment for Cure of Panic (PDA). In: ***The Embodied Self in a Dis-Embodied Society***. Atti Congresso EABP, Atene

Porges, S. (2011). ***The Polyvagal Theory***. New York: Norton & Company, Inc.

Rispoli, L., Vacca, R., Pedrelli, E. (2018). Porges' Polivagal Theory and its Possible Impact on Clinical Practice: The Neo-Functionalism Perspective. In: ***Activitas Nervosa Superior Rediviva***, vol. 60, n.2 2018

Rispoli, L. (2004). *Esperienze di Base e Sviluppo del Sé [Basic Experiences and Development of the Self]*. Milan: Franco Angeli

Rispoli, L. (1993). *Psicologia Funzionale del Sé*. Roma: Astrolabio

Röhricht, F. (2009). Body Oriented Psychotherapy. The State of the Art in Empirical Research and Evidence-Based Practice: A clinical Perspective. ***Body, Movement and Dance in Psychotherapy***, 4:2,135-156

Röhricht, F., Papadopoulos, N., Priebe, S. (2013). An Exploratory Randomized Controlled Trial of Body Psychotherapy for Patients with Chronic Depression. *J of Affective Disorders*, 151, 85-91

Stern, D. (1985). *The Interpersonal World of the Infant*. New York: Basic Books

Winter, D., Malighetti, C., Cipolletta, S., Ahmed, S., Benson, B., Röchricht, F. (2018). Construing and Body Dissatisfaction in Chronic Depression: A Study of Body Psychotherapy. *Psychiatry Res. Dec*, 270:845-851. DOI: 10.1016/j.psychres. Epub 2018 Oct 30

World Federation for Mental Health (WFMH) (2012). *Depression: A Global Crisis*. Retrieved from https://www.who.int/mental_health/management/depression/wfmh_paper_depression_wmhd_2012.pdf

Blending Disciplines

Using Exercise Science to Explain Somatic Psychology

Stacy Reuille-Dupont

ABSTRACT

Exercise has the potential to decrease negative side effects, lower societal medical costs, and increase quality of life. Exposure to physical exercise increased participation and led the way for a variety of pilot testing movement-based interventions with a diverse, rural, clinical mental health patient population in treatment for numerous clinical diagnoses. The original research (Reuille-Dupont, 2015) is briefly outlined before a discussion of theory used to determine and perform movement-based interventions for psychological and physical health goal treatments. Throughout the paper, psychological and exercise science theory and research are overlaid to explain the physical implications and psychological shifts of movement-based treatment. It is important to understand common terminology to engage clients and other health care practitioners in movement-based treatment for psychological and physical health. In addition, as specialists in understanding the body's role in experience, it is the somatic psychologist's responsibility to promote and advocate for "exercise as medicine" when possible. Included are visuals to help outline and overlap the disciplines for better understanding, increased awareness, and expanding the language somatic psychologists need to engage in multidisciplinary healthcare teams.

Keywords: physical movement treatment, movement for mental health, exercise science, somatic psychology

Submitted: 15.08.2019
Revised: 29.02.2020
Accepted: 09.03.2020

International Body Psychotherapy Journal
The Art and Science of Somatic Praxis
Volume 19, Number 1,
Spring/Summer 2020, pp. 82-93
ISSN 2169-4745 Printing, ISSN 2168-1279 Online

Why Blend Disciplines?

Understanding Physical Exercise Participation in a Clinical Mental Health Population

For many, it is common knowledge that mental health impacts physical health, and vice versa. People may know the benefits of physical exercise, yet do not engage in behavior to meet physical health goals (CDC, 2018). Research shows that as little as two 30-minute sessions per week can be as good as a selective serotonin reuptake inhibitor for depression (Wipfli, Landers, Nagoshi, & Ringenbach, 2011). Movement is what we do. It is experience. It does not have to be large movement patterns. Make no mistake, all believed emotion and thought are movements at the cellular level, and shape the human experience. This author and researcher posed the question in a clinically diagnosed mental health population, *"What keeps people from engaging in movement when they know the benefits?"* (Reuille-Dupont, 2015).

> ***The exercise program training window looks very similar to the window of tolerance in many trauma treatment protocols.***

The specific question for this researcher began as *"What is the perception of barriers and benefits those with mental health challenges experience when trying to participate in physical exercise?"* Based on this author's in-office experience, psychological trauma seemed to be a barrier; however, it did not return significant results in the study

(Reuille-Dupont, 2015). In a study with 149 participants engaged in community mental health treatment, it was physical anxiety experiences, specifically panic, that were the true barriers to participating in physical exercise at levels to impact metabolic change (Reuille-Dupont, 2015).

Anxiety as the barrier to physical exercise participation is reasonable. The physical system (nervous system) is overwhelmed, and thus cannot participate in more overload (physical exercise). An interesting result showed significance between those with increased co-morbid mental health and substance abuse diagnoses (Reuille-Dupont, 2015). These participants described the least number of barriers to participation in physical movement, and more participation in physical exercise at levels that could influence physical and metabolic change.

As this author and researcher studied those with fewer barriers and more exercise participation, better understanding emerged around movement-based practices, specifically exposure to movement participation (Reuille-Dupont, 2015). The next question became, *"Can we manipulate the movement experience to promote engagement in physical exercise at appropriate rates and intensity, to "dose" mental and physical health symptomatology?"* Thus, can we create a treatment model with "exercise as medicine" that impacts psychological functioning while addressing physical health markers?

As noted above, the investment in physical exercise as a treatment for mental health symptoms is low; two 30-minute, moderate intensity aerobic sessions per week (Wipfli, Landers, Nagoshi, & Ringenbach, 2011), and the research shows similar benefits for anxiety, depression, bipolar, schizophrenia, ADHD, substance abuse disorders, and trauma (Kucyi, Alsuwaidan, Liaw, & McIntyre, 2010; Carless & Douglas, 2008; Wipfli, Rethorst, & Landers, 2008; Ding, Vaynman, Akhavan, Ying, & Gomez-Pinilla, 2006; Droste et al., 2003; Dunn, Trivedi, & O'Neal, 2001; Doyne et al., 1987). The research is also clear that a large percentage of those with mental health challenges face more physical health problems, utilize approximately 25% more health care services (Spitzer, Kroenke, & Williams, 1999), and die younger than those without a mental health diagnosis (Colton & Manderscheid, 2006). Yet many do not participate in or are guided to engage in physical movement (Spencer, Adams, Malome, Roy, & Yost, 2006) as part of their mental health treatment (Reuille-Dupont, 2015).

Despite the lack of exercise adherence, this author's research illuminated options of intervention promise. The complex diagnosis presentations showed that those with necessity (lost driver's license, jail time, poverty, limited transportation options, physical needs to move/walk) had to use physical exercise at moderate levels to get through typical daily life activities. As a result, they touted the benefits of physical movement in personal mental and physical health states. This information was used to create clinical movement interventions in the author's office. Over time, lessons learned from pilot groups, program development, grant opportunities, and individual work offered refinement and development of a structure to help bridge the gap between physical and mental health treatment. In addition, feedback from study and intervention participants offered fertile ground to form questions that deepened understanding of underlying physical structures and reasons for somatic distress (Reuille-Dupont, 2015).

Psychology and exercise science disciplines are vast. The purpose of this article is to outline common categories and themes of overlapping theory concepts. These were used to create successful exercise-based movement interventions with a clinical population in a rural psychology practice. This is a narrow focus of applied knowledge, leaving much to be explored and expanded upon in future application and research. Below are outlines of several physical systemic operations, possible influences on psychology, and reviews of the overlap between exercise science and psychology theory. The article ends with implications and suggestions for using physical movement in treatment to reduce symptoms and/or build healthy coping skills.

The Importance of Embodiment

Many somatic psychologists intuitively know the internal landscape is reflected in the external environment. Embodiment is a way to return to health homeostasis in both (Calsius, De Bie, Hertogen, & Meesen, 2016). Physical and mental health are inseparable (Kucyi, Alsuwaidan, Liaw, & McIntyre, 2010; Carless & Douglas, 2008; Wipfli, Rethorst, & Landers, 2008; Ding et al., 2006; Droste et al., 2003; Dunn, Trivedi, & O'Neal, 2001; Doyne et al., 1987), and somatic psychologists are in a unique position to communicate the underlying structural shifts (physical) in defined personal experience (psychological/relational).

People with mental health issues, on average, die younger, often have five or more unrelated physical health symptom presentations when seeking physical health care, may have increased substance abuse or addiction behaviors, decreased economic resources, and have dysregulated nervous system activation (Newcomer, Steiner, & Bayliss, 2011; Colton & Manderscheid, 2006; Kroenke, Spitzer, & Williams, 2002). It is suggested that increased physical health conditions are a result of the allostatic load of stress on the body (McEwen, 2007). Medical healthcare staff often struggle to treat and accurately diagnose this population (Ring, Dowrick, Humphris, & Salmon, 2004). This struggle can result in expensive testing and medical care, increased pharmaceutical use, and increased invasive treatments (Kroenke, Spitzer, & Williams, 2002). Thus, these interventions could further exacerbate trauma in physical tissues, bodily structures, and may increase taxpayer costs. Addressing both physical and mental health

in psychological treatment offices has the potential to lower medical costs and increase quality of life (Green et al., 2011; Hunter & Goddie, 2010).

Often people come to physical and mental health care disembodied, and look outside themselves for relief (Kirmayer, Groleau, Looper, & Dao, 2004). This can lead to addictive patterns and disconnected relationships. This lowers the protective factor of physical health as the body deals with difficult internal and external environments (Kiecolt-Glaser, McGuire, Robles, & Glaser, 2002). As this disconnection becomes more pervasive in the individual, collective society at large may experience increases in fear, violence, and disrespect as the internal becomes external (Fleckman, Drury, Taylor, & Theall, 2016; Tandon, Dariotis, Tucker, & Sonenstein, 2012). One way to help individuals develop somatic embodiment is by helping them return to physical activities.

Blending the Disciplines: Exercise Science and Somatic Psychology

Movement facilitates the physical wiring and structure of being (Slepian, Weisbuch, Pauker, & Basian, 2014). Movement creates concrete manifestation of the abstract. The embodied experience becomes tangible because thought and emotion are movement at the cellular level (Lipton, 2008). Somatic psychologists ask questions like: *"What is the energy of the body telling me about this person's beliefs regarding self, others, the world? About the past? About the future?"* They explore the embodied state to shift awareness, relationship, and self-narrative (Schore, 2018; Ogden, Pain, & Fisher, 2006, Aposhyan, 2004; Kurtz, 1990).

The somatic practitioner can use anatomy to look for psychological blocks. For example, by looking at posture, the clinician might ask, *"What was this body built for? How is the client holding themselves in the world? Who do they think they are?"* Or, *"Where does the movement in the body get 'stuck' or transpose itself?"* These questions give a plethora of information to use movement in mental health treatments. Exercise interventions use corrective movement patterns from exercise science to identify and work with postural deviations, physical health problems, and movement misalignments (Calsius, De Bie, Hertogen, & Meesen, 2016), and can be expanded within the somatic psychology principles of relationship/connection, sense of self, environment, and human attachment (Schore, 2018).

Many facets of human experience are impacted as a result of blending disciplines. Systems impacted are those of the physical structures: cardiovascular, musculoskeletal, endocrine, and nervous systems (Walker, 2017; Martini, Ober, Garrison, Welch, & Hutchings, 1998). In addition, when the intention of the movement is psychological, systems of attachment, social engagement, and corrective experience become present (Schore 2018; Porges, 2011; Ogden, Minton, & Pain, 2006; Kurtz, 1990) in the treatment room or on the fitness center floor. This results in a collective and holistic approach to health.

POSSIBLE TARGETS FOR BLENDING EXERCISE SCIENCE WITH SOMATIC PSYCHOLOGY

Physical Structure	Mental Health
Endocrine and lymph systems / Inflammation and immune responses / Chronic pain / Autoimmune disorders / Hippocampal damage	Stress response of the hypothalamus-pituitary-adrenal axis (HPA-axis), trauma, emotional dysregulation
Breath and heart: Respiratory sinus arrhythmia and heart rate variability	Nervous system/ Vagal nerve regulation
High blood pressure	Emotional intelligence / Alexithymia
Gastrointestinal issues / Gut flora / Microbiome / Neuro-transmitter production	Clinical mental health and addiction diagnosis presentations / Emotional regulation
Inflammation and immune responses / Joint issues & range of motion	Trauma and stress responses / Chronic pain disorders / Digestive issues / Emotional regulation
Electrical communication in the body: heart, brain, fascia, neurons	Nervous system / Pressure & trigger points / Meridian lines
Brain / Limbic resonance / Mirror neurons / Right brain-to-right brain relational connection	Co-regulation / Shared regulation / Mammalian interdependence

Stacy Reuille-Dupont, PhD, USABP Conference November 2018

Kinesiology, Physiology, Biomechanics, and Somatic Psychology

Kinesiology is the study of human movement from exercise science perspectives of anatomy and physiology: the study of the body at work and rest, and biomechanics: the study of movement patterns and mechanics of human movement (Wilmore & Costill, 1988). Through study of these areas, many of the physical systems are explored in relationship to movement patterns of the body. The endocrine system functions as the "little nervous system," and helps dictate the role of chemicals throughout the body-neurotransmitters, neurotrophins, hormones (Yoke, 2010). Electrical and chemical systems of the body, such as the heart, fascia, and brain, communicate using waves of energy that influence cellular structures and impact cellular changes such as muscle contractions (Adstrum, Hedley, Schleip, Stecco, & Yucesoy, 2017; Miura, Miki, & Yano, 2010; Martini et al.,1998). Structures in the physical system communicate in vibrational patterns that are sensi-

tive to other vibrational patterns (Walker, 2017; Ferrari, Clemente, & Cipriani, 2018; Fuentes, Gomi, & Haggard, 2012; Ivanenko, Talis, & Kazennikov, 1999). Gross motor movements of the musculature and skeletal systems allow organisms to manipulate environments and manifest action in personal situations. However, each of these systems operates in tandem to create a complete physical experience.

In the words of Hanna, *"the themes of somatic philosophy are, quite simply, perception and behavior"* (Hanna, p. 214, 1970). Utilizing movement and applying exercise science interventions to psychological treatment allows for work with boundaries, trauma, attachment, power, confidence, and relationship issues (Caldwell, 1997; Knaster, 1996) while impacting physical health problems (Walker, 2017; Stauffer, 2010; Martini et al., 1998). It also allows a tangible way to impact brain structures such as the parietal lobe and motor cortex to increase the patient's ability to learn (Lojovich, 2010; Davis, 1977), thus helping them implement the treatment exercises more effectively. Mindful neuromuscular junction work (attention to slow movement) allows for increased awareness of physicality and experiences (Ogden, Pain, & Fisher, 2006). This hyper-awareness of the movement pattern then allows the client to rewrite the narrative around the experience that created it, and offers an opportunity to engage in conscious self-development (Aposhyan, 2004; Hartley, 2004; Caldwell, 1997; Knaster, 1996; Kurtz, 1990). The trained practitioner can see muscle imbalances and postural misalignments, and program movement to help re-balance the physical and psychological structure of being.

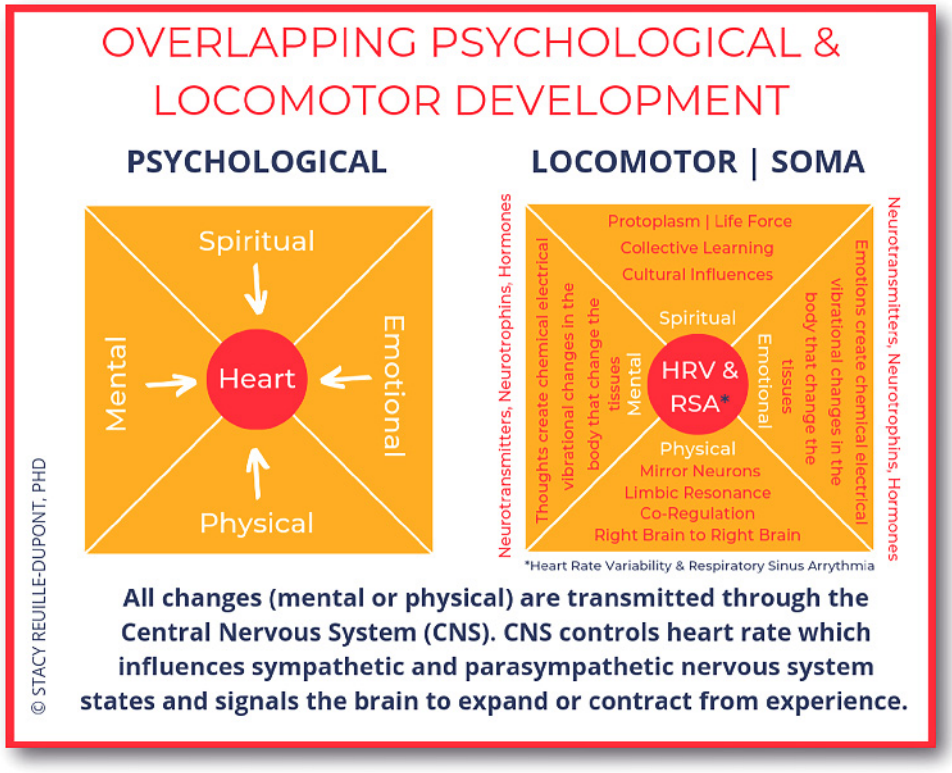
BIOMECHANICS AND SOMATIC PSYCHOLOGY	
Common Muscle Imbalance Areas	Possible Psychology Focus
Feet & Lumbar Spine	Stepping into life/goals/self. Mechanics of walking are impressive and offer conversation around "small structures making big changes." Work with the feet directly impacts the pelvic floor and hip structures, making them a good entry for sexual dysfunction/trauma treatment. Also, working with low back and stability/safety issues as all movement comes from the core. Reliance on the big toe to walk effectively can feel "dangerous". 80% of people have low back pain due to a variety of issues, and this area is critical in digestive and reproductive health, feeling strong, supple, and stable in all movement patterns.
Hips	Hips are chronically tight in many, yet without appropriate flexibility they cannot move freely. The hip joint is designed to move 360 degrees (one of only 3 joints in the body). With limited hip range of motion, many other movement chains become dysfunctional. Flexibility and rotation are concepts around self-regulation and the ability to move with adaptation, focus, purpose, and confidence in the world.
Thoracic Spine	This area is often overlooked for the more popular lower back. However, it is very important in somatic psychology because imbalance in this region leads to difficulties in breathing, collapsing of the chest, and rounding of the shoulders. Many people feel stress through this region, and tension pulls energy away from supple movement options. When the above is disrupted, the nervous system is also disrupted.
Shoulder and Shoulder Girdle	This area includes the scapula and clavicle regions wrapping the top of the torso. Many people have elevated shoulder girdles and feel stress, burdens, and crushing despair through this region of the body. The shoulder, like the hip, is designed to move 360 degrees, yet many do not have that level of flexibility. Internal rotation of the shoulder can lead to collapse of the chest cavity and strain on the neck, thoracic spine, and abdominal cavity organs. This adds stress to elimination (kidneys/liver), digestive, and pulmonary systems. When these are impacted, inflammation and stress rates rise in the body, and breathing impacts heart rate and heart rate variability, thus directly influencing nervous system states.
Neck, Throat and Head	Misalignments and imbalances throughout the head and neck create issues related to communicating clearly, speaking, seeing, hearing, and regulation both from physical and emotional perspectives. Many have neck/headache pain which may decrease ability to regulate during increased stress states, difficulties in connection, learning, attention, and engagement in the environment.
Stacy Reuille-Dupont, PhD, USABP Conference November 2018	

Overlapping Psychological and Physical Information Systems

Based on this author's research with a clinical mental health population, a number of concepts were illuminated. The data suggested that people understood that physical movement could help mental health symptoms, positively impact physical health, and decrease cravings for addictive behavior (Reuille-Dupont, 2015). However, many participants in the study were not exercising at levels needed to shift metabolic measures, such as blood pressure, body composition, or blood sugar levels. In addition, although they knew it would help their mental health, they were not physically moving enough to influence mental health symptomatology. Thus, this author questioned what was getting in the way of physical

EXERCISE-BASED THERAPY – OVERLAPPING PHYSICAL AND PSYCHOLOGICAL TREATMENT

Looking for a way to explain what is physically happening in somatic psychology interventions



Spiritual – The larger realm, wisdom, trust, rest, gifts into the world, unique pieces of the larger whole guides all experience. The unseen connection.

Physical – The base upon which all else is created, the tangible manifestation of the spiritual, grounded in experience and energy, allows for focus through concrete tactile opportunities, connection.

Emotional – Intelligence system #1: Information becomes physical in subtle form, impacting the endocrine and nervous systems, changing physical structures. This impact informs health or disease. Physical sensations are true to form expressions of experience. However, emotion labels and behavior are based on past experience (bio-systems/ancestors, not only individual) and these past experiences may or may not be an accurate lens.

Mental – Intelligence system #2: Thought changes the physical structures by influencing the endocrine and nervous systems, due to judgment and planning abilities of the prefrontal cortex. Judgment and plans are often based on past experiences, which may or may not be accurate in the moment. The conscious mind may not know all influences being judged and planned for.

Heart – Connection not only to others, but to our experience. It links the physical and the spiritual through heart rate variability (HRV, outlined below). It takes our thoughts and emotions, and "pumps" them through the system, bathing the cells with chemical changes. It is controlled by the central nervous system (CNS). The CNS is constantly taking information from our internal viscera (meridians, pressure points, organs, chemical trails) and external sources (senses). As a result, the central nervous system tells the heart how to pump – sympathetic (SNS) vs. parasympathetic (PNS) via the sinoatrial node, which influences the brain. The brain takes this signal and sends the message to rest and digest/stay/play (PNS) or flee/fight (SNS).

For example – Movement X does something. This something changes the endocrine balance, influencing hormones, neurotrophins, and neurotransmitters. The neurotransmitters change physiology by up- or down-regulating the nervous system through the heart rate and heart rate variability. These changes create patterns and postures in neuromuscular junction operations, thus impacting how one moves in and experiences the world.

Stacy Reuille-Dupont, PhD, USABP Conference November 2018

exercise participation. These questions, and the answers provided through a number of pilot studies, test programs, and individual program prescriptions helped shine a light on how emotional experiences were intertwined with the physical experience of embodiment. This led to the concept map for exercise-based therapy (above) as an attempt to bridge understanding of the physical structure experiences leading to the mental health presentation, and conversely.

Explaining How and Why Exercise-Based Therapy Works

Physical Systems of Regulation

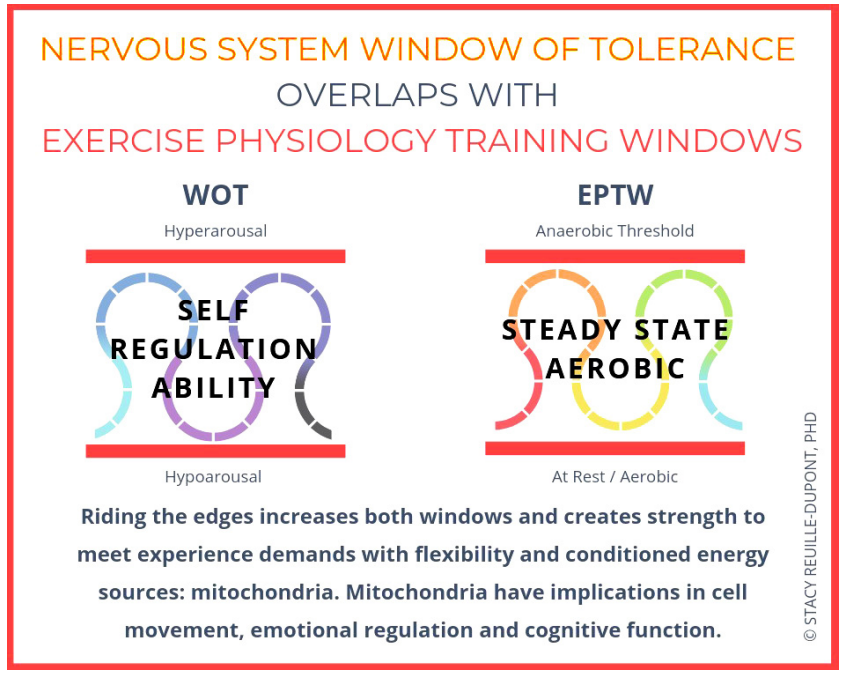
Using movement created within the guidelines of exercise science, one can program movement to impact metabolic change (Yoke, 2010; Wittert, Livesey, Espiner, & Donald, 1996). This is significant, because many with mental health diagnoses have increased physical health challenges (Schnurr & Spiro, 1999; Veiweg et al., 2007), and/or mental illness decreases ability to heal from physical injury or illness (Miller et al., 2013; Arpino, Lavarone, Parlato, & Moraci, 2004). Movement to meet metabolic needs can be done in a variety of ways. It can be as structured or fluid as a client needs, and can be done individually, in groups, with personal trainers, in patient's desired location, and can utilize a variety of equipment, or none.

When considering the physical health of a client, it is common to use heart rate to indicate fitness level (Yoke, 2010; Wilmore & Costill, 1988). Once heart rate is known, it is used to create a target heart rate zone individual to the patient (Yoke, 2010). This zone is used to program appropriate levels of overload to impact metabolic systems. Physical training becomes a function of energy system manipulation (Tjønna et al., 2008; Wilmore & Costill, 1988). The exercise program training window (Wasserman, 1984) looks very similar to the window of tolerance in many trauma treatment protocols (Siegel, 2009). The top edge of the window feels chaotic, out of control, and overwhelming, while the bottom edge is sedentary, operates systemically slower, and can appear still, dissociated, or shut down (Rothschild, 2018). In the middle is the ability to regulate and maintain engagement in the current environment (Porges, 2018; Wasserman, 1984). In both physical training and trauma treatment, the work is to push the edges away from each other (Sales et al., 2019; Yoke, 2010; Siegel, 2009), thus creating a larger window of regulation and the ability to remain in connection with current situations.

Riding the edges of each window creates strength to meet experience demands with flexibility and conditioned energy sources – the mitochondria (Yoke, 2010; Martini et al., 1998, Wilmore & Costill, 1988). Mitochondria are important players in physical movement and cognitive function (Mehdizadeh et al., 2017). They are the energy sources of the cell, and utilize adenosine triphosphate (ATP) to complete many movements from cellular to gross motor patterns (Yoke, 2010; Martini et al., 1998). ATP is indicated and important for a variety of cellular processes, cognitive health, and emotional regulation (Wille, Amort, Singewald, Sartori, & Lusser, 2016).

Understanding the Cardiovascular and Pulmonary Systems in Psychological Function

The function of a healthy cardiovascular system is measured by the heart rate (Wilmore & Costill, 1988). Heart rate (HR) is measured by counting the beats per minute (Shaffer & Ginsberg, 2017). Generally, the lower the HR (to a point), the more healthy the heart and cardiovascular system. A lower HR is usually indicative of a strong, ef-



ficient heart, capable of pumping enough blood through the physical structures with each contraction (Martini et al., 1998). As one becomes more cardiovascularly conditioned, the HR lowers, and the practitioner can gauge the nervous system function (Schaffer & Ginsberg, 2017). According to Schaffer and Ginsberg (2017), *"In a healthy human heart, there is a dynamic relationship between the PNS and SNS [parasympathetic PNS and sympathetic nervous system SNS branches]. PNS control predominates at rest, resulting in an average HR of 75 bpm [beats per minute]"* (p. 3). In addition to measuring HR to gauge activation, one can look to another measurement for better understanding of the nervous system state. This measurement is known as heart rate variability.

Heart rate variability (HRV) is a direct link to the nervous system (Porges, 2018). Heart rate variability measurements examine the fluctuation in time between the heartbeats (Schaffer & Ginsberg, 2017). According to a review by Kim, Cheon, Bai, Lee and Koo (2018), *"HRV represents the ability of the heart to respond to a variety of physiological and environmental stimuli"* (p. 235). They go on to say, *"Low HRV is associated with impaired regulatory and homeostatic autonomic nervous system functions, which reduce the body's ability to cope with internal and external stressors"* (p. 3, 2018). Through adjustment of the HR one can influence the PNS or the SNS (Thayer, Hansen, Sausrose, & Johnsen, 2009) by influencing HRV. Heart rate variability has many implications for cognitive function (Kocsel et al., 2019) as well as emotional regulation (Quintana, Guastella, Outhred, Hickie, & Kemp, 2012; Geisler, Vennewald, Kubiak & Weber, 2010). Thus, the clinician working with cardiovascular training has a direct link to manipulating the nervous system.

In addition to links between heartbeats per minute (HR)

BRINGING HUMAN DEVELOPMENT TOGETHER

The stages listed below are based on several common psychological and human development theories as well as commonly known locomotor development patterns. They are intended to help the psychologist begin to overlap development stages, and are not an exhaustive list of psychological or physical experiences attended to at each stage of development.

Common Psychological Development Stages	Approximate Age of Development	Common Locomotor Development Patters
Security and safety	6 months – 1 year	Exploring body sensations, containment, holding, expanding, unfolding, beginning to rotate
Having needs: Relying on the environment	6 months – 18 months	Cross-diagonal patterns are beginning / Fascial planes
Acceptance and Belonging	18 months – 3 to 4 years	Biped, right/left balance, core development, proprioception
Self-expression	3 – 6 years	Compound movement and co-ordination development
Community	6 – 12 years	Organized sport, socialized learning, continued coordination refinement
Identity	12 to 17 years	Continued refinement and mastery over the body, sexual development, exploration and awareness of connection and somatic countertransference
Engagement (age range depends on culture expectations of adulthood)	18 – 25 years	Continued brain, bone density, organs / limbs development and growth. Deepening of one's somatic connection to the world at large and conscious embodied connection
Contributing and caring: Task and relational management	28 – 65 years	The body movements become specialized for routine tasks and management of daily living activities. Dysfunctional patterns may emerge, movement may become stunted or decreased, burdens may feel "heavy" in the body, and play may decrease.
Legacy, quality of life, and reconciliation. If successful reconciliation, play returns until the body can no longer perform.	65 + years	The body has gone through many changes due to routine living, may have imbalances, disease states, and dysfunctional movement patterns. Decreasing movement may lead to impairments in balance, proprioception, cardiovascular and bone health. May see decreased engagement in environment. Slowing down move-ments, possible joint pains and weight gain due to overuse / sedentary lifestyle, substance use, or medical conditions. Movement needs may return to focusing on basic patterns such as balance, awareness and proprioception.

This table offers a conceptual way to consider overall common psychological themes based in many human development theories and the locomotor development patterns present during that stage of human personality development. It is meant to help the clinician consider how to use appropriate movement patterns throughout the lifespan.

Stacy Reuille-Dupont, PhD, USABP Conference November 2018

and time intervals between the beats (HRV), the HR is directly tied to breathing. This link is called respiratory sinus arrhythmia (RSA), and can be a way to influence HRV (Houtveen, Rietveld, & De Geus, 2002). As the breath rate slows, the HR slows and the converse is true. Therefore, the somatic psychologist can use breathing exercises to offer corrective experiences of nervous system states for the client. The exhale is the key that "turns on" the PNS (Appelhans & Luecken, 2006). By extending the exhale, one can increase the parasympathetic response. Focusing on the inhale influences the sympathetic state (Appelhans & Luecken, 2006). Thus, practitioners can increase or decrease nervous system engagement in the office by offering a variety of breathing exercises to influence mental health symptoms on either side of nervous system activation.

Applying Exercise Science in the Somatic Psychology Treatment Room

There are many schools and options for breathing techniques, psychology interventions and physical training methods. The task for the practitioner becomes choosing the right exercise for the right client at the right time. As biological organisms, human beings develop along a continuum. This is true for both the physical and the psychological. To begin understanding how to embrace and work with movement in the psychology treatment room, it is best to conceptualize what is happening in each stage from both a psychological and physiological point of view.

Using the above table as a guideline, psychological treatment can become an active endeavor of physical movement. Movement allows exploration of the unknown to create space for creativity, and allows experiences to become tangible (Hartley, 2004; Caldwell, 1997; Knaster, 1996). As one gains awareness of embodied experience, the body performs a variety of movement – seen or unseen. Hanna (1970) states *"dilation is a streaming outward of somatic energy that is pleasurable: it is sensual, open, and relaxed. Contraction is a tensing inward of somatic energy that is unpleasant: it is anxious, blocked, and constricted"* (p. 135). These movements provide opportunities for the client to engage in self-awareness via operations of spatial knowing (Stauffer, 2010). Dynamic conscious movement patterns create places clients can explore strength, power, worth, boundaries, and connection. Many somatic models already use movement to explore aspects of personhood. However, there is more to be gained by programming movement into the psychotherapy room for metabolic change. Considering metabolic need can create "movement as medicine" for physical and mental health treatment (Atlantis, Chow, Kirby, & Singh, 2004; Netz & Lidor, 2003; Nicols & Glenn, 1994). When optimal health is obtained, the individual is better able to engage in society with healthy patterns of relationship, personal responsibility, and collective focused choices.

Movement to Heal

All movement comes from the core of the body (Yoke, 2010). Clinical application of movement-based treatment must consider the other body systems (nervous, endocrine, muscular, skeletal, cardiovascular), and how movement organizes the body to bring harmony between physical and mental structures (Siegel, 2009).

BROAD EXAMPLES OF OTHER OPTIONS FOR MOVEMENT-BASED TREATMENTS			
Curling up – back chain of the body / support. Tight hamstrings and low back, thoracic spine difficulties, lower rib jutting, collapsed anterior deltoids, kyphosis / lordosis, tight through the calves and feet, trapezius 1 & 2, neck issues, fear of stability, guilt, anger.			
Expanding out – Front body tightness / protection. Shoulders, chest, hip flexors "stay small," "can't be big," "can't be tall," "can't be full," "can't move forward," "scary to step out," weakness through abdominals "falling out," collapsing through solar plexus "no power."			
Diagonal plane – Right/left imbalance, moving into/away from life, pelvis tipping, twisting/horizontal axis stiffness / locking / vagal freezing, energy systems off-can't flow, masculine / feminine (right / left or front / back) dynamics off, fascial plane flexible sliding vs "stickiness" / stuck movement in the tissues.			
EXERCISE AND WELLNESS PARADIGMS USED IN MOVEMENT-BASED PSYCHOLOGY TREATMENT			
Target Heart Rate Zone	Strength Development	Power / Force / Velocity	Lifestyle Management / Implementation
Biomechanics	Socialized Learning	Incremental Change Theory	Behavioral Activation & Accountability
Weight Management / Nutrition	Metabolic Process Focus	Exercise Physiology	Postural Screenings / Observation
Coaching / Cheerleading	High Intensity Training / Tabata / Fartlek	Cardiovascular Fitness	Structural Analysis
Stacy Reuille-Dupont, PhD, USABP Conference Presentation, November 2018			

Movement done with others provides opportunities for social engagement (Porges, 2018; 2011) and increased exercise adherence (Wing & Jeffery, 1999). Schore (2018) highlights research showing how empathic relationships build right-brain to right-brain connection, thus helping increase creative capacities and developing a stronger sense of self through interoception. Carr, Iacoboni, Dubeau, Mazziotta & Lenzi (2003) show how mirror neurons build empathy between people. Building empathy through social engagement offers individuals ways to increase the ability to self-regulate and decrease SNS activation (Porges, 2018). Through the relational aspects of movement-based psychotherapy interventions, clients can expand personal capacities to engage in stressful environments, and increase the ability to navigate new situations.

Using anxiety, depression, and trauma as examples of beginning stages of movement-based treatment helps explain the concept that exercise is medicine for mental health presentations. Anxiety and depression are opposite nervous system responses (Rothschild, 2018). Anxiety equals flight/fight nervous system energy, whereas depression equals lethargy and helplessness. Trauma oscillates between those two states, as well as hypoarousal and dissociative responses (Porges, 2018; 2011; Ogden, Minton, & Pain, 2006). The trained practitioner can utilize a variety of cardiovascular, strength, and flexibility training models alongside relational exploration of self, others, and environment when treating clients with co-occurring diagnoses for optimal health care treatment. Although well-meaning, typical health standards for physical exercise may be dysfunctional for the nervous system state of the mental health diagnosis. Meeting the energy of the distress at the appropriate level, and then shifting it to a healthier pattern, creates mental flexibility, physical health, and allows for positive life choices from an embodied place.

Conclusion

Somatic psychology posits that the body and mind are inextricably linked. The body houses all experience in physical structure. Cognition cannot be separated from the physical experience of the body, because all thought and emotion create cellular movement (Lipton, 2008). As outlined above, the physical is linked to the psychological, and the abstract concept of thought or emotion is tangible in movement at the cellular level. Meaning derived from experience is based in biology, physiology, neurology, and psychology. Cellular movement, as a result of environmental changes and past learning, creates neural structures to categorize and determine cognitive explanations. These systems create a coherent self-narrative, and may be implicit or explicit knowledge. Through understanding links between the biology, physiology, and neurology of experience, one can influence the psychology and provide corrective experience to change all systems.

Future studies are needed to better understand how somatic psychology influences relational dynamics during movement-based treatments, and how body psychotherapy-led movement diverges from other types of social exercise groups. Further exploration of the differing types of physical activity on physical structures and mental health diagnoses are needed. Specifically, varying chemical pathways such as adenosine triphosphate (ATP), acetylcholine, and brain-derived neurotrophic factor (BDNF) should be explored. These chemical markers are implicated in a variety of physical and emotional regulation systems, as well as neuroplasticity – all of which have large implications in the treatment of psychological disorders. More study is required to better understand what skills are necessary for the somatic practitioner to utilize exercise science interventions in order to implement movement-based treatment options appropriately and confidently for both physical and mental health care.

Stacy Reuille-Dupont, PhD is a licensed clinical psychologist, licensed addiction counselor, certified personal trainer, and certified nutrition coach. She earned her PhD in clinical and somatic psychology from The Chicago School of Professional Psychology – Los Angeles (TCS). She holds an MS in community counseling from the University of Wisconsin – Superior, and BS in kinesiology from Texas A&M University – Corpus Christi. Research support was given by TCS and Axis Health System. Throughout her career, she has worked with adult, children, crisis, and has integrated healthcare teams, and been a consultant to community-based groups and healthcare practitioners regarding clinical mental health and exercise science treatments.

REFERENCES

Adstrum, S., Hedley, G., Schleip, R., Stecco, C., & Yucesoy, C. A. (2017). Defining the Fascial System. *Journal of Bodywork & Movement Therapies*, 21, 173-177. doi: http://dx.doi.org/10.1016/j.jbmt.2016.11.003

Aposhyan, S. (2004). *Body-Mind Psychotherapy: Principles, Techniques, and Practical Interventions*. New York, NY: W.W. Norton & Company, Inc.

Atlantis, E., Chow, C. M., Kirby, A., & Singh, M. (2004). An Effective Exercise-Based Intervention for Improving Mental Health and Quality of Life Measures: A Randomized Controlled Trial. *Preventive Medicine*, 39(2), 424-434. doi: 10.1016/j.ypmed.2004.02.007

Appelhans, B. M., & Luecken, L. J. (2006). Heart Rate Variability as an Index of Regulated Emotional Responding. *Review of General Psychology*, (10)3, 229-240. doi: 10.1037/1089-2680.10.3.229

Arpino, L., Lavarone, A., Parlato, C., & Moraci, A. (2004). Prognostic Role of Depression after Lumbar Disc Surgery. *Neurological Sciences*, 25, 145-147. doi: 10.1007/s10072-004-0248-x

Bordoni, B., & Zanier, E. (2014). Clinical and Symptomatological Reflections: The Fascial System. *Journal of Multidisciplinary Healthcare*, 7, 401-411. doi: http://dx.doi.org/10.2147/JMDH.S68308

Caldwell, C. (Ed.). (1997). *Getting in Touch. The Guide to New Body-Centered Therapies*. Wheaton, IL: Quest Books Theosophical Publishing House

Calsius, J., De Bie J., Hertogen, R., & Meesen, R. (2016). Touching the Lived Body in Patients with Medically Unexplained Symptoms. How an Integration of Hands-on Bodywork and Body Awareness in Psychotherapy may Help People with Alexithymia. *Frontiers Psychology*, (7)253. doi: 10.3389/fpsyg.2016.00253

Carr, L., Iacoboni, M., Dubeau, M. C., Mazziotta, J. C., & Lenzi, G. L. (2003). Neural Mechanisms of Empathy in Humans: A Relay from Neural Systems for Imitation to Limbic Areas. *Proceedings of the National Academy of Sciences*, 100(9), 5497-5502. doi: 10.1073/pnas.0935845100

CDC. (2018). *2018 National Health Interview Survey*. Retrieved from https://www.cdc.gov/nchs/fastats/exercise.htm

Colton, C. W., & Manderscheid, R. W. (2006). *Congruencies in Increased Mortality Rates, Years of Potential Life Lost, and Causes of Death among Public Mental Health Clients in Eight States*. Retrieved from: http://www.cdc.gov/pcd/issues/2006/apr/05_0180.htm

Davis, M. (1977). Movement and Cognition. *Theory Into Practice*, (16)3, 207-211. DOI: 10.1080/00405847709542700Movement and cognition

Ding, Q., Vaynman, S., Akhavan, M., Ying, Z., & Gomez-Pinilla, F. (2006). Insulin-like Growth Factor I Interfaces with Brain-Derived Neurotrophic Factor-Mediated Synaptic Plasticity to Modulate Aspects of Exercise-Induced Cognitive Function. *Neuroscience*, 140, 823-833. doi: 10.1016/j.neuroscience.2006.02.084

Droste, S. K., Gesing, A., Ulbricht, S., Müller, M. B., Linthorst, A. C. E., & Reul, J. M. H. M. (2003). Effects of Long-Term Voluntary Exercise on the Mouse Hypothalamic-Pituitary-Adrenocortical Axis. *Endocrinology*, 144(7), 3012-3023. doi: 10.1210/en2003-0097

Ferrari, F., Clemente, F., & Cipriani, C. (2018). The Preload Force Affects the Perception Threshold of Muscle Vibration-Induced Illusions. *Experimental Brain Research*, 237, 111-120. doi: https://doi.org/10.1007/s00221-018-5402-4

Fleckman, J.,Drury, S. S., Taylor, C. A., & Theall, K. P. (2016). Role of Direct and Indirect Violence Exposure on Externalizing Behavior in Children. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, (93)3, 479-492. doi:10.1007/s11524-016-0052-y

Fuentes, C. T., Gomi, H., & Haggard, P. (2012). Temporal Features of Human Tendon Vibration Illusions. *European Journal of Neuroscience*, 36, 3709-3717. doi:10.1111/ejn.12004

Geisler, F. C. M., Vennewald, N., Kubiak, T., & Weber, H. (2010). The Impact of Heart Rate Variability on Subjective Well-Being is Mediated by Emotion Regulation. *Personality and Individual Differences*, 49, 723-728

Green, B. L., Frank, L., Glennie, M., Subramanian, A., Fritts-Wilson, M., Neptune, D., & Chung, J. (2011). Primary Care Providers' Experiences with Trauma Patients: A Qualitative Study. *Psychological Trauma: Theory, Research, Practice, and Policy*, 3(1), 37-41. doi: 10.1037/a0020097

Hanna, T. (1970). *Bodies in Revolt. The Evolution-Revolution of the 20th Century Man toward the Somatic Culture of the 21st Century*. New York, NY: Holt, Rinehart, and Winston

Hartley, L. (2004). *Somatic Psychology. Body, Mind, and Meaning*. London, England: Whurr Publishers, Ltd.

Houtveen, J. H., Rietveld, S., & De Geus, E. J. (2002). Contribution of Tonic Vagal Modulation of Heart Rate, Central Respiratory Drive, Respiratory Depth, and Respiratory Frequency to Respiratory Sinus Arrhythmia during Mental Stress and Physical Exercise. *Psychophysiology*, 39, 427-436. doi: 10.1017.S0048577202394022

Hunter, C. L., & Goddie, J. L. (2010). Operational and Clinical Components for Integrated-Collaborative Behavioral Healthcare in the Patient-Centered Medical Home. *Families, Systems, and Health*, 28(4), 308-321. doi: 10.1037/a0021761

Ivanenko, Y. P., Talis, V. L., & Kazennikov, O. V. (1999). Support Stability Influences Postural Responses to Muscle Vibrations in Humans. *European Journal of Neuroscience*, 11, 647-654

Kiecolt-Glaser, J. K., McGuire, L., Robles, T. F., Glaser, R. (2002). Psychoneuroimmunology: Psychological Influences on Immune Function and Health. *Journal of Consulting and Clinical Psychology*, 70(3), 537-547. doi: 10.1037//0022-006X.70.3.537

Kirmayer, L. J., Groleau, D., Looper, K. J. (2004). Explaining Medically Unexplained Symptoms. *The Canadian Journal of Psychiatry*, 49(10), 663-672. doi.org/10.1177%2F070674370404901003

Knaster, M. (1996). *Discovering the Body's Wisdom*. New York, NY: Bantam Books

Kocsel, N., Köteles, F., Szemenyei, E., Szabo, E., Galambos, A., & Kökönyei, G. (2019). The Association between Perseverative Cognition and Resting Heart Rate Variability: A Focus on State Ruminative Thoughts. *Biological Psychology*, 145, 124-133

Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2002). The PHQ-15: Validity of a New Measure for Evaluating the Severity of Somatic Symptoms. *Psychosomatic Medicin*e, 64, 250-266

Kurtz, R. (1990). *Body-Centered Psychotherapy*. Mendocino, CA: LifeRhythm

Reuille-Dupont, S. (2015). *Impact Psychological Symptom Severity on Leisure Time Exercise Behavior and Perceived Benefits and Barriers to Physical Exercise (Doctoral Dissertation)*. Retrieved from Proquest. (3686498)

Lipton, B. H. (2008). *The Biology of Belief*. Carlsbad, CA: Hay House, Inc.

Lojovich, J. M. (2010). The Relationship between Aerobic Exercise and Cognition: Is Movement Medicinal? *The Journal of Head Trauma Rehabilitation*. 25(3), 184-192

Martini, F. H., Ober, W. C., Garrison, C. W., Welch, K., & Hutchings, R. T. (1998). *Fundamentals of Anatomy & Physiology*. (4th Ed.) Upper Saddle River, NJ: Simon & Schuster

McEwen, B. S. (2007). Physiology and Nurobiology of Stress and Adaptation: Central Role of the Brain. *Physiological Reviews*, 87, 873-904. doi: 10.1152/physrev.0041.2006

Mehdizadeh, H., Pourahmad, J., Taghizadeh, G., Vousooghi, N., Yoonessi, A., Naserzadeh, P., ... Sharifzadeh, M. (2017). Mitochondrial Impairments Contribute to Spatial Learning and Memory Dysfunction Induced by Chronic Tramadol Administration in Rat: Protective Effect of Physical Exercise. *Progress in Neuropsychopharmocology & Biological Psychiatry*, 79, 426-433

Miller, L. R., Paulson, D., Eshelman, A., Bugenski, M., Brown, K. A., Moonka, D., & Aboulijoud, M. (2013). Mental Health Affects the Quality of Life and Recovery after Liver Transplantation. *Liver Transplantation*, 19, 1272–1278. doi: 10.1002/lt.23728

Miura, T., Miki, T., & Yano, T. (2010). Role of the Gap Junction in Ischemic Preconditioning in the Heart. *American Journal of Physiology: Heart and Circulatory Physiology*, 298, H1115-H1125. doi: https://doi.org/10.1152/ajpheart.00879.2009

Newcomer, S. R., Steiner, J. F., & Bayliss, E. A. (2011). Identifying Subgroups of Complex Patients with Cluster Analysis. *The American Journal of Managed Care*, 17(8), e324-e332

Netz, Y., & Lidor, R. (2003). Mood Alterations in Mindful versus Aerobic Exercise Modes. *The Journal of Psychology*, 137(5), 405-419

Nicols, D. S., & Glenn, T. M. (1994). Effects of Aerobic Exercise on Pain Perception, Affect, and Level of Disability in Individuals with Fibromyalgia. *Journal of the American Physical Therapy Association*, 74(4), 327-332

Ogden, P., Minton, K, & Pain, C. (2006). *Trauma and the Body*. New York, NY: W.W. Norton & Company, Inc.

Ogden, P., Pain, C., & Fisher, J. (2006). A Sensorimotor Approach to the Treatment of Trauma and Dissociation. *Psychiatric Clinics of North America*, 20, 263-279

Porges, S. W. (2018, Nov. 3). *Trauma and Intimacy through the Lens of the Polyvagal Theory: Understanding the Transformative Power of Feeling Safe*. United States Association for Body Psychotherapy Conference Pioneer Award Lecture conducted at the USABP National Conference. Santa Barbara, CA.

Porges, S. W. (2011). *The Polyvagal Theory. Neurophysiological Foundations of Emotions, Attachment, Communication, Self-Regulation*. New York, NY: W. W. Norton & Company

Quintana, D. S., Guastella, A. J., Outhred, T., Hickie, I. B., & Kemp, A. H. (2012). Heart Rate Variability is Associated with Emotion Recognition: Direct Evidence for a Relationship between the Autonomic Nervous System and Social Cognition. *International journal of psychophysiology*, 86, 168-172

Ring, A., Dowrick C., Humphris, G., & Salmon, P. (2004). Do Patients with Unexplained Physical Symptoms Pressurise General Practitioners for Somatic Treatment? A Qualitative Study. *The BMJ*, (328)1057, e1-e5. doi: https://doi.org/10.1136/bmj.38057.622639.EE

Rothschild, B. (2018, Nov. 4). *Revolutionizing Trauma Treatment: Accurately Gauge and Modulate ANS Arousal in Clients and Yourself*. United States Association for Body Psychotherapies Closing Keynote Speaker conducted at the USABP National Conference, Santa Barbara, CA.

Sales, M. M., Sousa, C. V., da Silva Aguiar, S., Knechtle, B., Nikolaidis, P. T., Alves, P. M., & Simões, H. G. (2019). An Integrative Perspective of the Anaerobic Threshold. *Physiology & Behavior*, 205, 29-32

Schaffer, F., & Ginsberg, J. P. (2017). An Overview of Heart Rate Variability Metrics and Norms. *Frontiers in Public Health*, 5(258), 1-17. doi: 10.3389/fpubh.2017.00258

Schore, A. (2018, Nov 2). *Creativity in Psychotherapy: An Adaptive Function of the Right Brain Unconscious*. United States Association for Body Psychotherapies Opening Keynote Speaker conducted at the USABP National Conference, Santa Barbara, CA.

Schnurr, P. P., & Spiro, A. (1999). Combat Exposure, Posttraumatic Stress Disorder Symptoms, and Health Behaviors as Predictors of Self-Reported Physical Health in Older Veterans. ***The Journal of Nervous and Mental Disease***, 187(6), 353-356

Siegel, D. (2009). *Dan Siegel: The Brain and the Developing Mind. Chautauqua Institution.* [Video File]. Retrieved from http://fora.tv/2009/06/30/Dan_Siegel_The_Brain_and_the_Developing_Mind

Slepian, M. L., Weisbuch, M., Pauker, K., Bastian, B., & Ambady, N. (2014). Fluid Movement and Fluid Social Cognition: Bodily Movement Influences Essentialist Thought. ***Personality and Social Psychology Bulletin***, (40)1, 111-120. doi: 10.1177/0146167213506467

Spencer, L., Adams, T. B., Malone, S., Roy, L., & Yost, E. (2006). Applying the Trans Theoretical Model to Exercise: A Systematic and Comprehensive Review of the Literature. ***Health Promotion Practice***, 7(4), 428-443. doi: 10.1177/1524839905278900

Stauffer, K. A. (2010). *Anatomy & Physiology for Psychotherapists. Connecting Body and Soul*. New York, NY: W. W. Norton & Company

Tandon, D., Dariotis, J. K., Tucker, M. G., & Sonenstein, F. L. (2013). Coping, Stress, and Social Support Associations With Internalizing and Externalizing Behavior among Urban Adolescents and Young Adults: Revelations from a Cluster Analysis. ***Journal of Adolescent Health***, 52, 627-e633S

Tjønna, A. E., Lee, S. J., Rognomo, Ø., Stolen, T. O., Bye, A., Haram, P.M, ... Wisløff, U. (2008). Aerobic Interval Training versus Continuous Moderate Exercise as Treatment for the Metabolic Syndrome. A Pilot Study. ***Journal of the American Heart Association***, 118, 346-354. doi: 10.1161/CIRCULATIONHA.108.772822

Thayer, J. F., Hansen, A. L., Saus-rose, E., & Johnsen, B. H. (2009). Heart Rate Variability, Prefrontal Neural Function, and Cognitive Performance: The Neurovisceral Integration Perspective on Self-regulation, Adaptation, and Health. ***Annals of Behavioral Medicine***, (37)2, 141-153. doi:10.1007/s12160-009-9101

Vieweg, W. V. R., Julius, D. A., Bates, J., Quinn III, J. F., Fernandez, A., Hasnain, M., & Pandurangi, A. K. (2007). Posttraumatic Stress Disorder as a Risk Factor for Obesity among Male Military Veterans. ***Acta Psychiatrica Scandinavica***, 116, 483-487. doi: 10.1111/j.1600-0047.2007.01071.x

Walker, L. (2017). *The Energy Medicine Yoga Prescription*. Boulder, CO: Sounds True

Wasserman, K. (1984). The Anaerobic Threshold Measurement to Evaluate Exercise Performance. ***American Review of Respiratory Disease***, 129, S35-S40. doi: https://doi.org/10.1164/arrd.1984.129.2P2.S35

Wilmore, J. H., & Costill, D. L. (1988). *Training for Sport and Activity. The Physiological Basis of the Conditioning Process*. (3rd Ed.) Dubuque, IA: Wm. C. Brown Publishers

Wille, A., Amort, T., Singewald, N., Sarton, S. B., & Lusser, A. (2016). Dysregulation of Select ATP-Dependent Chromatin Remodeling Factors in High Trait Anxiety. ***Behavioural Brain Research***, 311, 141-146

Wing, R. R., & Jeffery, R. W. (1999). Benefits of Recruiting Participants with Friends and Increasing Social Support for Weight Loss and Maintenance. ***Journal of Consulting and Clinical Psychology***, 67(1), 132-138

Wipfli, B., Landers, D., Nagoshi C., & Ringenbach, S. (2011). An Examination of Serotonin and Psychological Variables in the Relationship between Exercise and Mental Health. ***Scandinavian Journal of Medicine and Science in Sports***, 21, 474-481. doi: 10.1111/j.1600-0838.2009.01049.x

Wipfli, B. M., Rethorst, C. D., & Landers, D. M. (2008). The Anxiolytic Effects of Exercise: A Meta-Analysis of Randomized Trials and Dose-Response Analysis. ***Journal of Sport & Exercise Psychology***, 30, 392-410

Wittert, G. A., Livesey, J. H., Espiner, E. A., & Donald R. A. (1996). Adaptation of the Hypothalamo-Pituitary-Adrenal Axis to Chronic Exercise Stress in Humans. ***Medicine and Science in Sports and Exercise***, pp. 1015-1019

Yoke, M. (Ed.) (2010). *Personal Fitness Training: Theory & Practice Textbook* (2nd Ed.) Sherman Oaks, CA: Aerobics and Fitness Association of America

A Review of Psychological Approaches for Treating Schizophrenia

A Focus on Integrated Body Psychotherapy and Japanese Body Psychotherapy (Dohsa-hou)

Yasuyo Kamikura, Ryozo Shimizu, Ichiro Okawa

ABSTRACT

Schizophrenia is a psychiatric disorder requiring many years of treatment, and few patients fully recover. In Japan, few studies have explored psychological approaches for treating schizophrenia; supportive psychotherapy has long been utilized, but it requires long-term intervention. In addition, grading evidence suggests that its efficacy is poor, and novel treatments for schizophrenia are needed. The purpose of this review was to assess the effects of psychological approaches used for treating schizophrenia, and introduce Dohsa-hou to an international audience. The literature showed that social skills training and psychological education have limited impact on improving patients' skills, and discussions on the efficacy of cognitive behavioral therapy have continued. In contrast, evidence supports the use of integrated body psychotherapy (integrated BPT) in reducing negative symptoms. Moreover, the evidence suggests that integrated BPT and Dohsa-hou are applicable in a variety of cases, and are effective even as brief interventions, owing to the utilization of nonverbal communication and a focus on the subconscious mind. Some issues identified with the published studies assessing these treatment approaches included small sample sizes, researcher and methodological biases, and unexplained mechanisms. Further studies are needed to investigate mechanisms and the effects of Dohsa-hou in treating schizophrenia.

Keywords: schizophrenia, treatment effect, psychological approach, integrated body psychotherapy, Dohsa-hou

Submitted: 28.03.2019
Revised: 31.01.2020
Accepted: 12.01.2020

International Body Psychotherapy Journal
The Art and Science of Somatic Praxis

Volume 19, Number 1,
Spring/Summer 2020, pp. 94-106

ISSN 2169-4745 Printing, ISSN 2168-1279 Online

> ***Dohsa-hou focused on ... the subjective experiences that occur when people try to control their body movements.***

Schizophrenia is a severe mental disorder, affecting approximately 1 out of 100 people, and only about 15% of patients recover their premorbid functionality. Owing to advances in pharmacological treatment with atypical antipsychotics, positive symptoms, such as hallucinations and delusions, can be treated more effectively; however, no panacea that can also treat all the negative symptoms, such as social withdrawal, poor motivation, and flat affect, has been developed to date.

In Japan, long-term hospitalization of patients with mental disorders is problematic. For psychiatric treatment, the average length of the hospital stay is 269 days (Ministry of Health, Labor, and Welfare, 2016), which is much longer than hospitalization times in other countries. Thus, the Ministry of Health, Labor, and Welfare has set new targets to increase the likelihood that psychiatric patients can be discharged from the hospital and transition to outpatient treatment within one year. To reduce the number of prolonged hospital stays, the Ministry carried out the *"Survey of Severe Chronic Hospitalized Patients"* (Working Group on the Future of Mental Health Care and Welfare, 2016), which showed that schizophrenia accounts for about 80% of all chronically hospitalized patients with severe symptoms. In addition, 60% of hospitalized patients remain in a

hospital for over five years, while approximately 60% of psychiatric patients cannot be discharged, due to the fact that their symptoms are extremely serious or unstable. Therefore, reducing symptoms is a very important issue for managing these patients. However, only about 5% of mental health institutions reported that psychotherapy for schizophrenia has been fully available and provided without limitations, less than 25% reported that psychotherapy has been minimally practiced, and 40% reported that only limited treatment has been provided due to some combination of a lack of time to properly treat all patients, high medical costs, and lack of staff competence. Accordingly, it is necessary to financially support therapists and develop appropriate training systems for them (Fujisawa, 2007). Moreover, it is important to enhance the use of clinical psychologists in the mental health field, and increase the use of psychotherapy for treating schizophrenia.

In Japanese clinical psychology practice, supportive psychotherapy and psychoanalysis have been used to treat schizophrenia, but these methods primarily focus on listening to the patient and emphasizing psychological stability rather than actively reducing symptoms; as such, schizophrenia treatment often takes an excessive amount of time. Moreover, only ten intervention studies addressing schizophrenia have been published in the *Journal of Japanese Clinical Psychotherapy* in the past 22 years (as of January 5, 2020). In studies that explicitly stated the treatment periods, interventions such as supportive psychotherapy, psychoanalysis, and psychoanalysis, combined with analytical psychology, required 8 to 15 years to complete (Kang, 2010; Okamura, 2009; Shirai, 2018; Takahashi, 2003; Yamada, 2000). These approaches are clearly not cost-effective.

In Japan, few studies have examined the efficacy of psychotherapy for schizophrenia, and most of these were performed by the Health Labor Science Research Group. Specifically, the group explored the effectiveness of cognitive behavioral therapy (CBT) and music therapy (Harada, 2007; Murai, 2007), finding minimal effects with CBT, and no effects with music therapy. However, these studies were quasi-experiments that included only a small number of subjects, focusing solely on these specific therapies; for CBT, the subjects were only 15 patients, and no information was provided about patients' hospitalization; for music therapy, the subjects were only 45 hospitalized patients. No randomized controlled trials (RCT) of CBT or music therapy in treating schizophrenia have been conducted in Japan.

However, in Europe and the United States of America, body psychotherapy (BPT) has been shown to be useful by previous studies. According to the definitions provided by the United States Association for Body Psychotherapy (2017) and Röhricht et al. (2014), BPT is a nonverbal psychotherapy mediated by the body. This therapeutic approach aims to integrate the body and mind, thereby fostering psychological transformation to relieve symptoms. In BPT, therapists address the physical reality and experiences of the subjective body, using physical techniques to strengthen dialogue with clients. BPT includes Core Energetics, Rubenfeld Synergy Method®, Gestalt, Hakomi, Somatic Experiencing®, Integrative Somatics, yoga, dance movement therapy, Reichian therapy, Bodynamics, Bioenergetics, Focusing, and psychodrama. The United States Association for Body Psychotherapy (2017) has stated that body-oriented or body-centered psychotherapy aims to affirm that body, mind, and spirit are inseparable, requiring a more holistic treatment approach.

Recently, integrated BPT, which involves the integration of dance movement therapy, Reichian therapy, and sensory awareness has provided confirmatory evidence for treatment efficacy in patients with schizophrenia in Europe (Martin et al., 2016; Röhricht et al., 2009, 2011; Priebe et al., 2016; Röhricht & Priebe, 2006). In Japan, several body-oriented psychotherapies are also used; for example, dance therapy, psychodrama, Focusing, and Dohsa-hou. However, except for Dohsa-hou, these psychotherapies have not been extensively used for schizophrenia treatment. Dohsa-hou was established by Gosaku Naruse, Ph.D. (1924-2019), and has shown to effectively ameliorate both the positive and negative symptoms of schizophrenia (Kamikura & Shimizu, 2013, 2016; Tsuru, 1992). "Dohsa", in Japanese, refers to a holistic process of motor movement, including the physiological and psychological processing associated with motor activity of the body (Tsuru, 2002).

In this review, we aimed to summarize the main psychological approaches applied to treat patients with schizophrenia, both domestically and abroad, and to describe their effects and clinical outcomes. In particular, this review focused on the use of integrated BPT in Europe and Japanese BPT (Dohsa-hou) in Japan for treating schizophrenia, both of which have been shown to be clinically effective in previous studies. We compared the clinical efficacies of these approaches and outlined future perspectives for their use in schizophrenia management. In addition, an aim of this review was to introduce Dohsa-hou to an international audience, who may be unfamiliar with its use.

Current Status and Issues Surrounding Psychological Approaches for Schizophrenia Treatment

The American Psychiatric Association (APA) and the UK National Institute for Health and Clinical Excellence (NICE) have developed guidelines regarding psychological approaches for schizophrenia treatment based on large-

scale studies of their efficacy (APA, 2004, 2009 Guideline Watch version; NICE, 2014 UPDATE version). The current review focused on the therapeutic effects of these approaches, their application ranges, and issues based on these treatment guidelines. In addition, comparisons were made between the current state of clinical use of these approaches, both overseas and in Japan.

To explore psychological interventions for treating schizophrenia in Japan, the Japanese search engines "CiNii Articles" and "CiNii Dissertations" in Citation Information by National Institute of Informatics were used on January 5, 2020. The initial search used the Japanese terms "Seishin bunretsu-byou" and "Tougou shittyou-syou," both of which translate as "schizophrenia" in English. The second search included the following terms: "social skills training (SST)," "psychoeducation," "cognitive behavioral therapy," "Dohsa-hou," "psychological rehabilitation," "Dohsa therapy," and "therapy;" these are translations of Japanese search terms.

1. Approaches Targeting Daily Life Difficulties: SST and Psychoeducation

Although SST is useful for developing social and autonomous skills in patients with schizophrenia (APA, 2009), its effects on relapse prevention and in reducing symptoms have not been fully explored (Bellack, 2004). The APA (2009) concluded that SST could not be recommended for the treatment of schizophrenia, and NICE (2014) does not recommend the routine use of SST in people with psychosis or schizophrenia; therefore, SST is not routinely used in the UK. Recently, however, SST has been used to target negative symptoms of schizophrenia, and studies have increasingly used the reduction in these symptoms as a primary outcome measure. Turner et al. (2018) performed a meta-analysis of SST for psychosis of 27 RCTs, including 1,473 participants. They found that SST was superior to treatment as usual (TAU), active controls for negative symptoms, concluding that the magnitude of effect for reducing negative symptoms by SST was similar to those commonly reported for the reduction of positive symptoms by CBT.

In Japan, SST has been conducted for patients with schizophrenia in many hospitals as the second most-used treatment method after psychotherapy. Nevertheless, SST's usage rate remains low among patients chronically afflicted with severe schizophrenia at only 11% (Working Group on the Future of Mental Health Care and Welfare, 2016). Additionally, only nine studies on SST for patients with schizophrenia have been published in Japan to date, because therapists utilize SST only as part of daily clinical practice and rarely conduct studies on SST. Although psychoeducation increases social functionality, the APA (2009) and NICE (2014) do not recommend its use for schizophrenia because it does not seem to reduce symptoms. On the other hand, psychoeducation is effective for preventing relapse. In Japan, in contrast to SST, psychoeducation has been studied very actively as a psychological approach for treating schizophrenia, with 42 papers published to date. In practice, however, its usage in patients chronically afflicted with severe schizophrenia has remained at 11% among all practices (Working Group on the Future of Mental Health Care and Welfare, 2016).

SST and psychoeducation are components of rehabilitation; their main goal is to maintain patients in a stable mental state. Researchers and clinical psychologists recognize that these approaches aim to improve social skills and cognitive functions, promote compliance with medication regimes, and prevent relapse and re-hospitalization, rather than reducing symptoms.

2. Cognation and Behavior-Oriented Psychotherapy: CBT

The APA (2004) indicated that CBT reduced the severity of positive symptoms and could lessen treatment-resistant hallucinations and delusions in chronically ill outpatients after a few months of sessions (Rector & Beck, 2001). However, the APA (2004) also suggested that CBT had limited efficacy in reducing negative symptoms, and patients with chronic, severe negative symptoms who were provided CBT were likely to refuse or drop out of CBT. Thus, the APA indicated that weekly CBT counseling would be a heavy burden for patients. In the more recent guidelines, both the APA (2009) and NICE (2014) recommend CBT for treating the positive and negative symptoms of schizophrenia; for instance, NICE (2014) makes the recommendation to "offer CBT to all people with psychosis or schizophrenia." These suggestions about negative symptoms were based on the findings of a small-scale report (Rector et al., 2003), and the possibility of natural recovery unrelated to treatment could not be excluded, as the study reported no improvement in negative symptoms in the immediate post-intervention period. Additionally, NICE (2014) states that "despite these positive effects for hallucination-specific measures, the evidence for there being any effect on delusions was inconsistent," and the efficacy of CBT for positive symptoms is limited.

Older studies have claimed that CBT was effective in reducing positive symptoms; Zimmermann et al. (2005) conducted a meta-analysis of 14 studies, including a total of 1,484 participants, and found that CBT resulted in a significant reduction in positive symptoms (effect size of -0.37), but the effect size was higher in those suffering from an acute psychotic episode than in those with a chronic condition (effect size of 0.57 vs. 0.27). More recently, however, researchers have begun to question the effect size of CBT in these populations. The Cochrane Collaboration (2012) stated that "trial-based evidence suggests no clear and convincing advantage for CBT over other – and sometimes much less sophisticated – therapies for people with schizophrenia," and there were no

significant differences between CBT and other psychotherapies in preventing relapse and re-hospitalization, or in improving positive and negative symptoms, based on 20 RCTs on CBT (Jones et al., 2012). Furthermore, Jauhar et al. (2014) performed a meta-analysis to assess potential biases in studies reporting on the efficacy of CBT for treating schizophrenic symptoms, and concluded that CBT had small effects on both classes of symptoms (-0.25 in 33 studies of positive symptoms and -0.13 in 34 studies of negative symptoms). Moreover, Velthorst et al. (2014) performed a meta-analysis and meta-regression for evaluating the usefulness of CBT for reducing negative symptoms, and concluded that the beneficial effect of CBT on negative symptoms was not supported by recent studies. Hence, there was criticism that NICE had overestimated the role of CBT as a panacea (Taylor & Udayanga, 2015); as such, discussions on the efficacy of CBT for schizophrenia have continued.

Most recently, Bighelli et al. (2018) evaluated the efficacy of CBT for reducing positive symptoms in 53 randomized controlled trials of seven psychological interventions, including a total of 4,068 participants; this network meta analysis showed that, based on 40 studies, CBT caused a greater reduction in positive symptoms compared with inactive controls, TAU, or supportive therapy. Further, the researchers concluded that CBT "seems to be effective on positive symptoms in moderately ill patients with schizophrenia, with effect sizes in the lower to medium range." The researchers claimed that the earlier CBT studies had identifiable biases. Based on 36 RCTs of CBT, Cochrane (2018) further concluded that there were no significant differences between CBT and other psychotherapies in ameliorating positive and negative symptoms, improving social functioning, and enhancing patients' quality of life (Jones et al., 2018). Jauhar, Laws, & McKenna (2019) stated that although NICE (2014) recommends CBT for treating schizophrenia, current evidence suggests it is ineffective in reducing negative symptoms, and does not prevent relapse.Therefore, the effect size of CBT for positive symptoms would be in the lower to medium range, and, to date, the efficacy of CBT in reducing negative symptoms has not been fully established. Accordingly, novel treatments for negative symptoms are required.

In Japan, CBT is not as popular for treating schizophrenia as it is for treating depression relative to all other treatment options; its usage rate in patients chronically afflicted with severe schizophrenia is only 0.9% (Working Group on the Future of Mental Health Care and Welfare, 2016). Only 7% in mental health institutions reported that the use of CBT for reducing symptoms of was efficacious for patients with schizophrenia (Working Group on the Future of Mental Health Care and Welfare, 2016). 22 studies in relation to CBT have been published in Japan, which is consistent with European trends in the use of psychotherapy; however, no large-scale study of the effectiveness of CBT has been conducted to date in Japan.

3. Body-Oriented Psychotherapy: Integrated BPT and Dohsa-hou

A. Integrated BPT in Europe

Recently, BPT has been attracting attention as a useful psychological approach for treating the negative symptoms of schizophrenia, which are difficult to improve, even through pharmacotherapy. NICE (2014) stated that medical health professionals should "consider offering arts therapies which include art therapy or art psychotherapy, dance movement therapy, body psychotherapy, drama therapy and music therapy, particularly for the negative symptoms" from acute psychotic to residual phases, based on evidence from RCTs of the effects of BPT on negative symptoms (Duraiswamy et al., 2007; Röhricht & Priebe, 2006).

The academic database PsycINFO was searched for intervention studies using BPT for schizophrenia on January 5, 2020, with "schizophrenia" as the primary search term and "body psychotherapy," "body therapy," "body-oriented psychotherapy," "body-oriented therapy," and "somatic psychotherapy" as secondary terms. Five papers were extracted. Furthermore, by a manual search, four integrated BPT studies on schizophrenia were obtained. Seven papers were extracted in total after excluding two studies; one study was not an intervention study, and one study was ongoing (Table 1). Two papers (Priebe et al., 2016; Savill et al., 2017) shown in Table 2 analyzed the same participants, but focused on different viewpoints.

One paper focused on yoga (Duraiswamy et al., 2007), and six papers focused on integrated BPT (Martin et al., 2016; Röhricht et al., 2009, 2011; Priebe et al., 2016; Röhricht & Priebe, 2006; Savill et al., 2017). Among the RCT studies with follow-up surveys (four months after the intervention), there were two comparative studies: one on the effects of integrated BPT and supportive psychotherapy in 45 patients with schizophrenia (Röhricht & Priebe, 2006), and another on the effects of yoga and exercise in 41 patients with schizophrenia (Duraiswamy et al., 2007). These studies showed a significant reduction in negative symptoms by both integrated BPT and yoga, and the effects were maintained even four months after the interventions. Recently, a study comparing of the effects of integrated BPT, as outlined in the manual (Röhricht, 2000; Röhricht & Priebe, 2006), and Pilates was conducted in a multi-center RCT for 275 patients with schizophrenia experiencing negative symptoms (Priebe et al., 2016; Savill et al., 2017). The results indicated that, compared with Pilates, integrated BPT resulted in a significantly greater reduction in negative symptoms in female patients (Savill et al., 2017).

In RCTs of integrated BPT, interventions are performed in groups, twice a week for 90 minutes, for 20 sessions in to-

TABLE 1 RESEARCHES OF THE EFFECTIVENESS OF INTEGRATED BODY PSYCHOTHERAPY

Author (Year)	Aims	Participants	Details of intervention	Term	Main findings
Röhricht & Priebe (2006)	Comparison of the effectiveness of BPT with Supportive counseling (SC) (RCT)	Out-patients suffering from schizophrenia *n*=45 (BPT *n*=24, SC *n*=21)	• For the BPT group, a dance therapist intervened by integrated BPT based on self-made treatment manual (by integration approach). • For the SC group, trained 2 nurses intervened by Supportive counseling.	twice a week (1-1.5 hour each), total of 20 sessions, for 10 weeks	• Compared with the SC group, the BPT group has significantly lowerd their negative symptoms, affective blunting and motor retardation. • After 4 months, these effects were hold in the BPT group. • The drop-out rate in the BPT group was very fewer than the SC group (recieved intervention : BPT *n*=22, SC *n*=14).
Durais-wamy et al. (2007)	Comparison of the effectiveness of Yoga Therapy (YT) with Physical Exercise Therapy (PT) (RCT)	Out- and in-patients suffering from schizophrenia *n*=61 (YT *n* = 31, PT *n* = 30)	• For the YT group, a trained Yoga therapist conducted YT (meditation was not included) based on handbook. • For the PT group, a trained therapist conducted PT (walking, jogging etc.) • A therapist in YT and PT was same person.	5 days a week (1 hour each), total 15 sessions for 3 weeks	• Compared with the PT group, the YT group significantly improved their negative symptoms, social and occupational functionings and quality of life. • After four months, the effect-sizes in the YT group were moderate to large; negative symptoms (*ES*=0.78), social and occupational functionings (*ES*=0.48). • The total drop-out rate was 26% (recieved intervention: YT *n* = 21, PT *n* = 20).
Röhricht et al. (2009)	Assessment of the effectiveness of BPT (Pilot RCT)	Out-patients and patients using community-based mental health services suffering from schizophrenia (*n*=24)	Therapists conducted manualised form of body psychotherapy (integrated BPT: predominantly Dance Movement Psychotherapy, Neo-Reichian body psychotherapy and sensory awareness.) Therapist's type was not mentioned.	twice a week (1.5 hour each), total 20 sessions for 10 weeks	• Negative symptoms and ego-disturbance were significantly lessened. • No drop out. • Even though ego-pathology is not reduced, negative symptoms may be reduced.
Röhricht et al. (2011)	Assessment of the effectiveness of BPT (RCT)	Out-patiens suffering from schizophrenia *n*=18	• For three groups, an accredited dance movement therapist by Association for Dance Movement Psychotherapy UK (ADMP UK) conducted integrated BPT based on treatment manual (the development version of Röhricht, 2006).	twice a week (1.5 hour each), total 20 sessions for 10 weeks	• Negative symptoms, anergia, affective blunting and general psychopathology were significantly lessened. These results were the same as the Röhricht & Pribe (2006)'s. • Positive symptoms did not change. • Nine of participants could attend more than 10 sessions. • Three participants dropped out.
Martin et al. (2016)	Comparison of the effectiveness of a combination of BPT and Dance Movement Therapy (BPT/DMT) with Treatment as usual (TAU) (MRCT)	Out-patients suffering from schizophrenia *n*=68 (BPT/DMT *n*=44, TAU *n*=24)	• For the BPT/DMT group, trained and accredited dance movement therapists and co-theraists (students) conducted a combination of BPT and DMT based on the treatment manual (Röhricht & Papadopoulos, 2010). • The TAU group was conducted medical treatment only.	twice a week (1.5 hour each), total 20 sessions for 10 weeks	• Compared with the TAU group, the BPT/DMT group significantly lessened their severity of overall negative symptoms, affective blunting and attention. • After four months, the effect-sizes in the BPT/DMT group were moderate; severity of overall negative symptoms (*ES*=0.41), affective blunting (*ES*=0.34), and attention (*ES*=0.42). • The total drop-out rate was 31% (finished post test: BPT/DMT *n*=31, TAU *n*=16).
Priebe et al. (2016)	Comparison of the effectiveness of BPT with Pilates (MRCT)	Out-patients suffering from schizophrenia *n*=275 (BPT *n*=140, Pilates *n*=135)	• For the BPT group, trained and accredited dance movement therapists by ADMP and co-facilitator conducted the integrated BPT based on the treatment manual (Röhricht & Priebe, 2006; Röhricht, 2000). • For the Pilates group, trained Pilates instructor with co-facilitator conducted beginner's Piraltes classes based on the Pilates manual.	twice a week (1.5 hour each), total 20 sessions for 10 weeks	• No significant differences between the BPT group and the Pilates group in the negative symptoms. • In the BPT group, expressive deficits and movement disorder symptoms were slightly improved. • After 20 sessions and 6 months, negative symptoms were not lessened in the BPT group; it indicated that there were no benefit from BPT. • The total drop-out rate was only 7% (finished follow-up test: BPT *n*=131, Pilates *n*=124).
Savill et al. (2017)	Re-examine in Pribe et al. (2016) the effect of BPT for women with schizophrenia	Out-patients women suffering from schizophrenia *n*=72 (BPT *n*=37, Pilates *n*=35)	• The same procedure with Pribe et al. (2016). • In the data of Pribe et al. (2016), there was a bias in sex ratio (24% of the total female), so, re-analyzed only women data.	twice a week (1.5 hour each), total 20 sessions for 10 weeks	• Compared with the Pilates group, the BPT group was significantly lessened their negative symptoms. • It was indicated that BPT has effects for the lack of representation in women with schizophrenia.

tal (Martin et al., 2016; Röhricht et al., 2009, 2011; Priebe et al., 2016; Röhricht & Priebe, 2006). On the other hand, in clinical practice, different procedures can be used depending on patients and therapeutic needs. Röhricht et al. (2011) emphasized six main elements in their integrated BPT treatment manual for schizophrenia (Röhricht & Pribe, 2006):

1. Improving communication channels through the introduction of nonverbal communication techniques;
2. Refocusing cognitive and emotional awareness towards the body (physical reality coordination and orientation in space);
3. Stimulating activity and emotional responsiveness;
4. Promoting exploration of self-potential by focusing on the strength and capability of the body, and experiencing the body as a source of creativity, reliability, pleasure, and self-expression;
5. Modifying dysfunctional self-perception;
6. Addressing common psychopathological features, such as loss of boundaries, somatic depersonalization, and body schema disturbance.

According to the manual (Röhricht & Pribe, 2006), sessions of integrated BPT consist of five components:

1. **Opening circle:** feeling one's body and increasing bodily awareness;
2. **Warm-up section:** warming up through exercises, such as stretching, exploring oneself, and the spatial dimensions within and outside the body, and focusing on one's bodily experiences and movements;
3. **Structured task section:** exploring oneself in three dimensions by performing certain exercises, such as delineating one's own boundaries using a rope; exploring the body-ego as a consistent, self-evident, and active construct by exercises, such as copying each other's movements; and exploring emotional movements by exercises, such as stamping and stroking;
4. **Creative moment section:** moving creatively using the body as a source of creativity and pleasure through exercises, such as moving the body with rhythmic music or according to a specific topic, creating group sculptures, and reflecting on feelings; and
5. **Closing circle:** reflecting on group experiences and re-focusing on oneself through self-touch, and communicating feelings and ideas openly. All sessions focus on increasing bodily awareness and emotions based on body movements.

Studies have shown that integrated BPT had fewer dropout patients than supportive psychotherapy; this may be attributed to its more pleasant elements, which focus specifically on body sensations, stimulation of creativity, and shifting attention to the body (Röhricht et al., 2009). Röhricht et al. (2009) indicated three main effect factors in integrated BPT. The first involved focusing on body feelings and expressing these feelings in words. The second involved changing one's body feelings and movements, and the third involved activating self-sensation and creativity. As a result, the original somatic functions are regenerated by using nonverbal communication via the body. Subsequently, recovery of these functions ameliorates the patient's ego-disturbance, poor motivation, and flat affect. Integrated BPT has many merits for addressing negative symptoms of schizophrenia; however, there would be methodological issues with studies investigating BPT for schizophrenia. First, only a few studies have been conducted, and some of these may be biased, as they were conducted by the same researchers (e.g., Röhricht) and addressed only integrated BPT. Second, the therapeutic mechanisms and applicability of integrated BPT in severe cases have not been sufficiently explored, except for one study that investigated why and how BPT is effective through the use of interviews with participants who experienced manual-based (Röhricht, 2010) integrated BPT (Galbusera, Fellin, & Fuchs, 2019). Third, the efficacy of integrated BPT in reducing positive symptoms have not been fully established. Therefore, further studies are required to confirm the effects of integrated BPT in patients with schizophrenia.

B. Dohsa-hou

Dohsa-hou is a Japanese psychotherapy approach that aims to induce therapeutic psychological changes and integrate the body and mind by changing body movements (Naruse, 2014). Gosaku Naruse, Ph.D. trained in and practiced various psychological approaches, such as psychoanalysis, behavioral therapy, hypnosis, autogenic training, and psychodrama, and he established Dohsa-hou based on these clinical experiences. Through his clinical practice of hypnosis, he realized the importance of experiences to feel mental imagery with a sense of reality. Also, trance states and the unconscious were clues to the development of Dohsa-hou. In his practice of psychoanalysis, he considered that the therapeutic effects would be brought by the "conscious and unconscious experience modality (how to experience)" that occurred in free association. Through his practice of behavioral therapy, he came to realize the importance of the psychological processes that determine behavior. In 1988, as a "self-control technique," he introduced autogenic training based on self-hypnosis to Japan (Naruse, 1988). Based on autogenic training, he deduced that self-treatment, experiences of mental imagery with a sense of reality, and self-hypnosis in mild trance states would be important in treatments. However, since the effect of hypnosis is temporary, he thought it would be important to develop a "self-treatment theory" to help clients treat themselves. Later, based on elements of psychodrama, he thought that it would be important in psychotherapy to "strain oneself moderately and to perform the intended action feeling mental imagery with a sense of reality (Naruse, 2014)". Through these

experiences, he advocated image therapy and formed the basis of a theory of mind-body unity.

The use of Dohsa-hou began in the mid-1960s in Japan (Osaka university, 2015). Initially, it was found to be effective in treating people with cerebral palsy (Figure 1).

Since the 1980s, Dohsa-hou has been mainly used for patients with schizophrenia requiring long-term hospitalization. It focuses on the processes and experiences of psychological activities, which are schematized as the internal processes of "intention – making efforts – execution of the body movement." It occurs as the client intends to imagine a body movement and makes an effort to do the movement, and then finally, executes the movement. When clients perform a body movement, the therapists focus on clients' movement, namely the psychological processes related to generating their motor activity ("Dohsa").

Figure 2 shows an example of an arm-raising movement in a university student; the first picture was taken before a Dohsa-hou session, and the second picture shows the process of arm-raising movement with self-active relaxation. The last picture in Figure 2 was taken after a Dohsa-hou session; the student can move his arm smoothly while feeling comfortable. In the case of the arm raise, "intention" refers to imagining the action, "making efforts" refers to making a psychological effort to initiate the movement by slowly trying to raise the arm while keeping it straight, and "execution of the body movement" refers to achieving this movement by raising the arm straight above the head.

Tsuru (2002) defined Dohsa-hou as a therapeutic approach focused on psychological processes, namely the subjective experiences that occur when people try to control their body movements. The therapy combines two theories of treatment: therapeutic experiencing theory ("Taiken-chiryo-ron" in Japanese), which focuses on clients' experiences, and self-treatment theory ("JIko-chiryo-ron" in Japanese), which emphasizes that clients could transform how to feel their environment through changing their body movements by themselves.

Clinical use of Dohsa-hou for treating schizophrenia is usually conducted in groups, on a weekly basis for 40-60 minutes, requiring 6-15 sessions in total. Therapists ask patients to perform body movements slowly. These include "arm raising," "shoulder raising," "bending the upper body forward," and "standing against gravity." Based on the Dohsa-hou treatment manual for schizo-

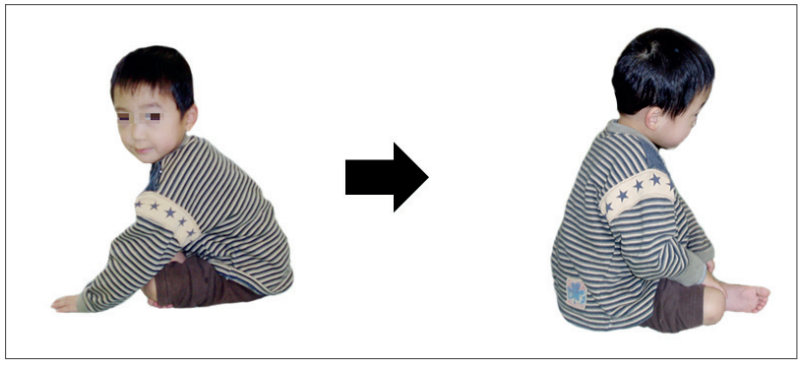


Figure 1. *Sitting posture of cerebral palsy child before and after seven Dohsa-hou sessions*

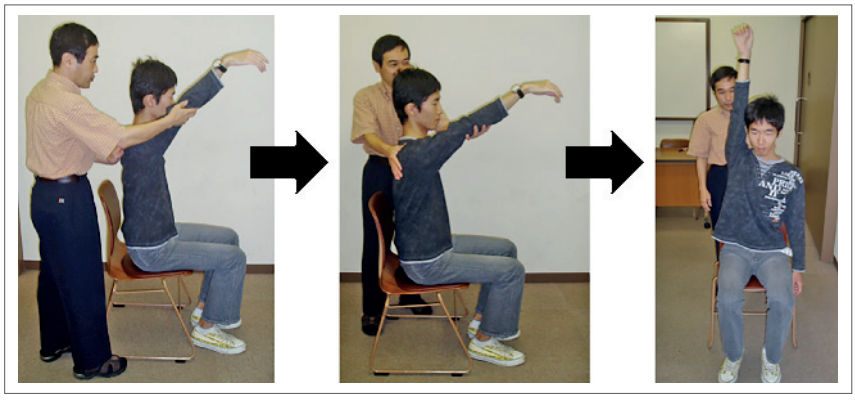


Figure 2. *An example of the arm-raising movement*

phrenia (Kamikura & Shimizu, 2018), we have described how to conduct a Dohsa-hou session where the therapist conducts the "arm raising" movement of the client in the seated position.

The following is a list of instructions typically issued during a treatment session along with explanations of their purpose. The therapist's remarks are enclosed in double quotation marks.

1. *"On performing the arm-raising movement, your muscle tension will be eased. You will then be able to raise your arms more easily."*
2. *"Please raise your arms one-at-a-time, slow and straight. First, please raise your left arm."* To demonstrate, the therapist would raise his or her arm at the same time. *"Please raise your arm slowly at the same pace as me, no faster."* The therapist would then pay attention to the movement and the speed with which it occurred, while assessing the client's psychological and chronic muscle tension. The therapist checks that the client's arm has been raised straight up. Raising the arm straight is slightly difficult because it requires the client's attention.
3. *"Which arms did you feel were hard to raise?"* With the question, the client can clarify his or her difficulties regarding the movement and the muscle tension felt.
4. *"Please raise the arm. Stop the movement when you feel that it is hard to move or has become slightly stuck."* This enables the client to concentrate on the muscle tension and make efforts to ease the muscle tension. *"Please release your shoulder's muscle tension, then your tension will ease and you might be able to raise your arm more easily."*
5. "*Let's raise your arms one-at-a-time. Please compare the movements of the left and right arms. You would have felt that it was easier to raise the same arm that was hard to raise before. That is to say, you were able to ease its tension."*

During this time, therapists do not focus on the clients' achievements, but on their self-controlling activity.

For patients with schizophrenia, 20 intervention studies have been conducted using Dohsa-hou. In qualitative studies, this therapy has been shown to have many beneficial effects in patients with schizophrenia, including its ability to alleviate positive and negative symptoms (Ikeda, 1992; Tsuru, 1995, 1998, 2002, 2005), enhance social adaptability (Kamahara et al., 1980; Tsuru, 1995), and improve interpersonal interactions (Tsuru, 2005). In addition, it is effective in treating severe cases (Kamikura & Shimizu, 2015; Kamikura & Shimizu, 2016). For example, Tsuru (2002) examined the effects of Dohsa-hou in five patients in the chronic phase of schizophrenia. The intervention was applied in a hospital, once a week, for 14 sessions in total (time unknown for each session). Alleviation of negative symptoms and physical and psychological relaxation were observed in all cases; moreover, positive symptoms, such as auditory hallucinations of persecution, were reduced. Tsuru concluded that Dohsa-hou is useful for chronically ill patients with schizophrenia because it can promote self-activation experiences through unconscious processing. Tsuru emphasized two important roles for therapists treating patients through Dohsa-hou; first, they should clarify the clients' goals by selecting simple body movements, and at the same time, they should assist clients in becoming more autonomous in performing their body movements. Tsuru also insisted that the processes of "intention – making efforts – execution of the body movement" and "promotion of subjective experiences" are crucial for improving clients' symptoms. Through the processes, clients acquire "subjective activity experiences" as well as "self-utilizing experiences," such as acceptance, challenge, and self-activation.

In a quantitative study, Kamikura and Shimizu (2013) examined the effects of Dohsa-hou by evaluating 12 patients with schizophrenia in the chronic or acute psychotic phases using the Self-evaluation for Adaptive Functioning Scale (SAFE; primary outcome; Harvey et al., 1997). Group-based Dohsa-hou was conducted in a hospital, once a week for 40 minutes per session, for a total of six to eight sessions. Outcomes, including SAFE scores, and positive symptoms and motivations (secondary outcomes) evaluated on the basis of a case study were assessed at baseline and after treatment. After Dohsa-hou, patients showed significantly lower social adaptive disturbance (SAFE); a low score in SAFE indicates high social adaptation. In addition, the case study indicated fewer auditory hallucinations and delusions, as well as recovery of patients' motivation. The authors assumed that "self-adjustment experience in sub-conscious" in Dohsa-hou processes promoted the activation of "self-existence" in patients, leading to the amelioration of both negative and positive symptoms.The authors assumed that subconscious experiences stimulated by Dohsa-hou therapy promoted the notion of "self-existence" in patients, leading to the amelioration of both negative and positive symptoms.

Most related studies have suggested that Dohsa-hou treatment have a less than 5% drop-out rate and would be highly cost-effective, as it requires only short-term intervention (Kamikura, 2015; Kamikura & Shimizu, 2013). In addition, even patients who refused to participate in SST and hospital events due to their negative symptoms chose to continuously participate in Dohsa-hou treatment. Therefore, the "accompanying experiences with Dohsa-hou" (Naruse, 2014), such as relaxation and comfort, make the intervention less psychologically invasive for the patients. Conventionally, the effective factors in Dohsa-hou have been focused on the experience modality; "Taiken-Youshiki" (Naruse, 1988) in Japanese, which means the modification of the experience modality, induces changes in clients'

cognitions and lifestyles, and "Jitai-Kan" (Tsuru, 1993) in Japanese, which means the sense of self-body, integrates the mind and body in a stable, active, and positive state. However, many researchers have presumed that various factors drive the therapy's effectiveness, such as "self-adjustment experience in sub-conscious" (Kamikura & Shimizu, 2013). Thus, no consensus currently exists regarding what the effective factors are. Therefore, further research on the mechanisms underlying Dohsa-hou effects is critically important.

C. Similarities and Differences between Integrated BPT and Dohsa-hou

Integrated BPT and Dohsa-hou have three main similarities. First, both therapies focus on the body's feeling and awareness. Even if clients have difficulties in verbal communication, they can still build relationships with other people through these therapies. Second, clients can communicate with themselves proactively and deeply because integrated BPT exercises and body movements in Dohsa-hou are clearer and easier to understand than those of verbal psychotherapies. Hence, both methods address clients' psychological states at a more unconscious level than do verbal psychotherapies. Finally, both approaches have a low drop-out rate (Kamikura, 2015; Kamikura & Shimizu, 2013; Röhricht et al., 2009), which may be due to the features of integrated BPT exercises and body movements in Dohsa-hou. Generally, clients enjoy engaging in the exercises and movements included in both therapies, and feel comfortable in their body and mind due to the activation of somatic feelings and awareness, such that they continue participating in the groups.

The therapies differ, however, in their effects and application range. Integrated BPT is useful for treating patients with negative symptoms of schizophrenia who tend to have poor body awareness and flat affect; but, its efficacy in alleviating positive symptoms and in treating intractable cases has not been established. In contrast, it has been reported that Dohsa-hou can improve both positive and negative symptoms while increasing adaptability, activity, and interpersonal interactions. Therefore, it is likely that adaptation occurs both internally and externally. Dohsa-hou also has the added benefit of requiring shorter interventions than integrated BPT, and is applicable for more severe cases (Kamikura, 2016; Kamikura & Shimizu, 2015). In general, Dohsa-hou interventions occur once a week, with a total of 6-15 sessions of 40-60 minutes each (Ikeda, 1992; Kamahara et al., 1980; Kamikura & Shimizu, 2015; Tsuru, 1988; 1992; 1995; 2005), whereas integrated BPT is conducted twice per week, with a total of 20 sessions of 90 minutes each (Martin et al., 2016; Röhricht et al., 2009, 2011; Savil et al., 2017).

The differences between the effects and the intervention durations would be ascribed to these differing approaches that target different layers of the mind. Dohsa-hou aims to integrate body and mind, and obtain a "sense of self." Thus, it deals with the holistic processes of motor activity, "Dohsa", including mental activities that are mainly subconscious and unconscious. Dohsa-hou therapists ask clients to perform a simple movement slowly in order to increase their self-awareness. Therefore, after Dohsa-hou intervention, clients would be able to focus consciously, subconsciously, or unconsciously to allow for maximum flexibility suited to the situation. In contrast, the goal of BPT is to attain the "embodied self."

Galbusera, Fellin, & Fuchs (2019) found that Integrated BPT involves six main themes:

1. Being whole by achieving a body-mind connection;
2. Being agentic and able;
3. Being unique, worthy, and accepted for who one is;
4. Changing interactions: engaging in authentic interpersonal contact;
5. Being part of a group: feeling integrated;
6. Hope and investment in the future.

Therefore, it focuses on increasing body awareness and emotions through body movements to activate cognition, emotion, and physical and social integration, mainly through consciousness and sub-consciousness. Dohsa-hou places value on clients' self-treatment capacity and encourages autonomy; thus, clients would have more positive attitudes regarding the psychotherapy processes in Dohsa-hou. Dohsa-hou would transform clients' awareness and experience modality of their bodies and their environments, and promote self-treatment and body awareness. Therefore, Dohsa-hou may affect deeper layers of consciousness compared with other psychological approaches, and the duration of treatment is shorter than that of BPT.

Another difference between integrated BPT and Dohsa-hou lies in the history of their studies. Researchers began empirically exploring the effect of integrated BPT on schizophrenia in 2006 (Röhricht & Priebe, 2006). However, only nine published studies exist, though large-scale studies investigating their clinical efficacy have been conducted recently. In contrast, the use of Dohsa-hou for treating schizophrenia has been studied since 1980 (Kamahara et al., 1980), and 21 studies have been published this far. However, these are mainly case studies, so additional empirical studies are required.

Summary

Outside Japan, research on psychotherapy for schizophrenia have flourished; however, in Japan, few RCTs have been conducted, and the application of effective psychological approaches has also failed to progress. Both in Japan and abroad, very few psychological approaches are effective in reducing the symptoms of schizophrenia. Supportive

psychotherapy requires long-term intervention and is unlikely to reduce psychological symptoms, while social skills training and psychological education have limited impact on improving patients' skills. In contrast, although the APA and NICE recommend CBT for patients with schizophrenia, recent studies showed that the effect size of CBT for treating positive symptoms is smaller than that in older studies, and suggested that CBT is not effective in reducing negative symptoms. Moreover, few mental health institutions provide CBT in Japan. Thus, further examination of the therapeutic effect of CBT on schizophrenia is required.

In contrast to supportive psychotherapy, integrated BPT and Dohsa-hou can reduce symptoms, even with short-term interventions. Since verbal psychotherapy primarily treats symptoms at the conscious level by using language, its targets and effects are limited; therefore, nonverbal psychotherapy, such as integrated BPT and Dohsa-hou, have shown effectiveness in treating the negative symptoms of schizophrenia, including intellectual decline, decreased cognitive ability, and reduced speech production. Compared with integrated BPT, Dohsa-hou, which is primarily used in Japan, is clinically effective in treating not only the negative but also the positive symptoms of schizophrenia. Additionally, Dohsa-hou has many advantages over other psychological approaches for treating schizophrenia: it is less psychologically invasive, and can be applied to all cases, including intractable cases. In addition, studies have suggested that Dohsa-hou treatment would have a lower drop-out rate and be highly cost-effective, as it requires only short-term intervention. Moreover, practical clinical knowledge of this method has accumulated over many years; therefore, it is important to expand the empirical knowledge related to Dohsa-hou for providing more effective psychological aid for patients with schizophrenia. In addition to promoting Dohsa-hou in clinical practice, researchers should aim to provide knowledge regarding the mechanisms of its effects to other medical health professionals and psychotherapists who are oriented toward other approaches. In conclusion, further research on and application of integrated BPT and Dohsa-hou are expected for patients with schizophrenia.

Acknowledgements

We would like to thank Editage (www.editage.com) for the English editing.

Correspondence concerning this review should be addressed to Yasuyo Kamikura at the Faculty of Human Sciences, University of Tsukuba, 3-19-1, Otsuka, Bunkyo-ku Tokyo, 112-0012. Contact: kamikura. yasuyo.xu@alumni.tsukuba.ac.jp

Yasuyo Kamikura has a Ph.D. in Counseling Science, University of Tsukuba, Japan. She is a visiting researcher at the Faculty of Human Sciences, University of Tsukuba, Japan.

E-mail: yasuyo.kamikura.xu@alumni.tsukuba.ac.jp

Ryozo Shimizu is a professor at the Faculty of Psychology, Meijigakuin University, japan. He is a board member of the Association of Japanese Clinical Psychology, and an executive director of the Association of Japanese Clinical Dohsalogy.

E-mail: shim@psy. meijigakuin.ac.jp

Ichiro Okawa has a Ph.D. in Psychology (University of Tsukuba, Japan). He is a professor at the Faculty of Human Sciences, University of Tsukuba, Japan and is a board member of the Japanese Association of Counseling Science.

E-mail: iot21005@human.tsukuba.ac.jp

REFERENCES

American Psychiatric Association. (2004). *Practice Guideline for the Treatment of Patients with Schizophrenia* (2nd ed.) Retrieved from http://psychiatryonline.org/pb/assets/rawsitewide/practice_guidelines/guidelines/schizophrenia.pdf

American Psychiatric Association. (2009). *Guideline Watch: Practice Guideline for the Treatment of Patients with Schizophrenia*. Retrieved from http://www.valueoptions.com/providers/Handbook/treatment/Schizophrenia_Guideline_Watch.pdf

Bellack, A. (2004). Skills Training for People with Severe Mental Illness. *Psychiatric Rehabilitation Journal*, 27, 375-391. http://dx.doi.org/10.2975/27.2004.375.391

Duraiswamy, G., Thirthalli, J., Nagendra, H. R., & Gangadhar, B. N. (2007). Yoga Therapy as an Add-on Treatment in the Management of Patients with Schizophrenia: A Randomized Controlled Trial. *Acta Psychiatrica Scandinavica*, 116, 226-232. doi: 10.1111/j.1600-0447.2007.01032.x

Fowler, D., Garety, P., & Kuipers, E. (1995). *Cognitive Behaviour Therapy for Psychosis: Theory and Practice*. New Jersey, Wiley

Fujisawa, D. (2007). The Research on Implementation Status of Psychotherapy in Japan. *Ministry of Health, Labor and Welfare, Fiscal Heisei 16-18 Comprehensive Research Report, Tokyo, Japan*. Retrieved from http://mhlw-grants. niph. go. jp/niph/search/NIDD00. do? resrchNum=200632011B (in Japanese)

Galbusera, L., Fellin, L., & Fuchs, T. (2019). Towards the Recovery of a Sense of Self: An interpretative Phenomenological Analysis of Patients' Experience of Body-Oriented Psychotherapy for Schizophrenia. *Psychotherapy Research*, 29, 234-250. doi: 10.1080/10503307.2017.1321805

Harada, S. (2007). Manual Preparation and Effect Study of Cognitive Behavioral Therapy for Patients with Schizophrenia. *Ministry of Health, Labor and Welfare, Fiscal Heisei 16-18 Comprehensive Research Report, Tokyo, Japan*. Retrieved from http://mhlw-grants. niph. go. jp/niph/search /NIDD00. do? resrchNum=200632011B (in Japanese)

Harvey, P. D., Davidson, M., Mueser, K., Parrella, M., White, L., & Powchik, P. (1997). Social-Adaptive Functioning Evaluation (SAFE): A Rating Scale for Geriatric Psychiatric Patients. *Schizophrenia Bulletin*, 23, 131-145. doi: 10/1093/schbul/23.1.131

Ikeda, T. (1992). Application of Dohsa-hou to Patients with Schizophrenia. In: G. Naruse (Ed.), *Clinical Dohsalogy Series 1: Modern Esprit Additional Volume, Theory and Treatment of Clinical Dohsa-hou* (pp. 248-257). Tokyo; Shibun-dou. (in Japanese)

Jauhar, S., Laws, K. R. & McKenna, P. J. (2019). CBT for Schizophrenia: A Critical Viewpoint. *Psychological Medicine*, 49 (8), 1233-1236. doi: https://doi.org/10.1017/S0033291718004166

Jauhar, S., McKenna, P. J., Radua, J., Fung, E., Salvador, R., & Laws, K. R. (2014). Cognitive-Behavioural Therapy for the Symptoms of Schizophrenia: Systematic Review and Meta-Analysis with Examination of Potential Bias. *British Journal of Psychiatry*, 204, 20-29. doi: 10.1192/bjp.bp.112.116285

Jones, C., Hacker, D., Cormac, I., Meaden, A., & Irving, C. B. (2012). Cognitive Behaviour Therapy versus other Psychosocial Treatments for Schizophrenia. *The Cochrane Database of Systematic Reviews*, 18, CD008712. doi: 10/1002/14651858.CD008712.pub2

Jones, C., Hacker, D., Meaden, A., Cormac, I., Irving, C. B., Xia, J., ... Chen, J. (2018). Cognitive Behavioural Therapy plus Standard Care versus Standard Care plus other Psychosocial Treatments for People with Schizophrenia. *Cochrane Database of Systematic Reviews*, 11, CD008712. doi: 10.1002/14651858.CD008712.pub3

Kamahara, K. (1980). For Application of Psychological Rehabilitation on Schizophrenics. *Journal of Rehabilitation Psychology*, 8, 22-27. (In Japanese with English abstract)

Kamikura, Y. (2015). Perspectives on and Future Issues in the Study of Dohsa-hou for Patients with Schizophrenia. *Rissho Clinical Psychology*, 13, 49-56. (In Japanese)

Kamikura, Y. (2018). *Mechanism of Dohsa-hou and its Effects for Patients with Schizophrenia (Doctoral dissertation)*. (In Japanese)

Kamikura, Y., & Shimizu, R. (2013). Effects of Dohsa-hou on the Promotion of Social Adaptiveness and of the Discharge From Psychiatric Hospitals of Patients with Schizophrenia. *Journal of Clinical Dohsalogy*, 18, 27-38. (In Japanese with English abstract)

Kamikura, Y., & Shimizu, R. (2015). The Function and Psychological Change Process of Dohsa-hou for a Patient with Treatment-Resistant Schizophrenia: Focus on the Changes Emotional Expression in Reading Aloud of "Anne of Green Gables." *23rd Congress for Japanese Clinical Dohsalogy*, 54-55. (In Japanese)

Kamikura, Y., & Shimizu, R. (2016). Effects of Dohsa-hou on a Schizophrenic Patient with Persistent Cenestopathies, Delusions of Control and Hallucinations. *15rd European Congress for Body Psychotherapy*, 69

Kang, J. (2010). A Therapeutic Approach to a Schizophrenic Client (Adolescent Male) who has Returned to Society in spite of still Having Auditory Hallucinations and Delusions. *Journal of Japanese Clinical Psychology*, 27, 716-726. (In Japanese with English abstract)

Martin, L. A., Koch, S. C., Hirjak, D., & Fuchs, T. (2016). Overcoming Disembodiment: The Effect of Movement Therapy on Negative Symptoms in Schizophrenia – A Multicenter Randomized Controlled Trial. ***Frontiers in Psychology***, 7, 483. doi: 10.3389/fpsyg.2016.00483

Ministry of Health, Labor and Welfare. (2016). *Summary of Static/Dynamic Survey of Medical Institutions and Hospital Report, 2016*. –. Hospital Report. Retrieved from https://www.mhlw.go.jp/toukei/saikin/hw/iryosd/16/dl/01_tyousa.pdf (In Japanese)

Murai, Y. (2007). Manual Preparation and Effect Study of Music Therapy for Patients with Schizophrenia II. Effects of Music Therapy on Patients with Schizophrenia. ***Ministry of Health, Labor and Welfare, Fiscal Heisei 16-18 comprehensive research report, Tokyo, Japan***. Available January, 5, 2017, from http://mhlw-grants. niph. go. jp/niph/search/NIDD00. do?resrchNum=200632011B (in Japanese)

Naruse, G. (1988). *Self-Control Technique*. Tokyo: Seishin Shobo. (in Japanese)

Naruse, G. (2014). *Development of Dohsa Therapy – Body-Mind Harmony and Activation*. Tokyo: Seishin Shobo. (in Japanese)

Okamura, Y. (2009). Meaning of Listening to the Repeated Words: Significance of Psychotherapy for a Schizophrenic and a Frame of Support Structure. ***Journal of Japanese Clinical Psychology***, 27, 301-311. (In Japanese with English abstract)

Osaka university. (2015). *Introduction to Dohsa-hou – An Integrated Japanese Body-Mind Therapy*. Retrieved from https://www.hus.osaka-u.ac.jp/sites/default/files/Introduction_to_Dohsa-hou.pdf

Priebe, S., Savill, M., Wykes, T., Bentall, R. P., Reininghaus, U., Lauber, C., ... Röhricht, F. (2016). Effectiveness of Group Body Psychotherapy for Negative Symptoms of Schizophrenia: Multicentre Randomised Controlled Trial. ***The British Journal of Psychiatry***, 209, 54-61. doi: 10.1192/bjp.bp.115.171397

Rector, N. A., & Beck, A. T. (2001). Cognitive Behavioral Therapy for Schizophrenia: An Empirical Review. ***Journal of Nervous and Mental Disease***, 189, 278-287. Retrieved from: https://insights.ovid.com/crossref?an=00005053-200105000-00002

Rector, N. A., Seeman, M. V., & Segal, V. Z. (2003). Cognitive Therapy for Schizophrenia: A Preliminary Randomized Controlled Trial. ***Schizophrenia Research***, 63, 1-11. doi: 10.1016/s0920-9964(02)00308-0

Röhricht, F. (2000). *Body-Oriented Psychotherapy in Mental Illness: A Manual for Research and Practice*. Hogrefe.

Röhricht, F., Gallagher, S. Geuter, U., & Hutto, D. (2014). Embodied Cognition and Body Psychotherapy: The Construction of New Therapeutic Environments. ***A Journal of Mind, Brain & Culture***, 10, 11-20

Röhricht, F., Papadopoulos, N., Holden, S., Clarke, T., & Priebe, S. (2011). Therapeutic Processes and Clinical Outcomes of Body Psychotherapy in Chronic Schizophrenia – An Open Clinical Trial. ***The Arts in Psychotherapy***, 38, 196-203. doi: 10.1016/j.aip.2011.06.001

Röhricht, F., Papadopoulos, N., Suzuki, I., Priebe, S. (2009). Ego-Pathology, Body Experience, and Body Psychotherapy in chronic Schizophrenia. ***Psychology and Psychotherapy: Theory, Research and Practice***, 82, 19–30. doi: 10.1348/147608308X342932

Röhricht, F., & Priebe, S. (2006). Effect of Body-Oriented Psychological Therapy on Negative Symptoms in Schizophrenia: A Randomized Controlled Trial. ***Psychological Medicine***, 36, 669-678. doi: 10.1017/S0033291706007161

Savill, M., Orfanos, S., Bentall, R., Reininghaus, U., Wykes, T., & Priebe, S. (2017). The Impact of Gender on Treatment Effectiveness of Body Psychotherapy for Negative Symptoms of Schizophrenia: A Secondary Analysis of the NESS Trial Data. ***Psychiatry Research***, 247, 73-78. doi: 10.1016/j.psychres.2016.11.020

Shirai, S. (2018). Psychotherapy Aimed at Improved Recovery of Long-Term Hospitalization for a Chronic Schizophrenia Client. ***Journal of Japanese Clinical Psychology***, 36, 109-119. (In Japanese with English abstract)

Takahashi, Y. (2003). A Process of Psychotherapy with an Adolescent with Schizophrenia: A Strata Model of Psychotherapeutic Support for a Client and his Family. ***Journal of Japanese Clinical Psychology***, 21, 362-373. (In Japanese with English abstract)

Taylor, M. & Udayanga, P. (2015). NICE CG178 Psychosis and Schizophrenia in Adults: Treatment and Management – An Evidence-Based Guideline? ***The British Journal of Psychiatry***, 206, 357-359. doi: 10.1192/bjp.bp.114.155945

The National Institute for Health and Care Excellence. (2014). Psychosis and Schizophrenia in Adults Treatment and Management (updated ed.) ***National Clinical Guideline***, Number 178. Retrieved from https://www. nice. org. uk/guidance/cg178/evidence/full-guideline-490503565

Turner, D. T., McGlanaghy, E., Cuijpers, P., van der Gaag, M., Karyotaki, E., & MacBeth, A. (2018). A Meta-Analysis of Social Skills Training and Related Interventions for Psychosis. ***Schizophrenia Bulletin***, 44, 475-491. doi: 10.1093/schbul/sbx146

Tsuru, M. (1988). Therapeutic Approach to the Disabilities in the Motor Action: Motor Action Therapy to the Schizophrenia. **Journal of Rehabilitation Psychology**, 16, 65-71. (In Japanese with English abstract)

Tsuru, M. (1992). Application of Dohsa-hou to Patients with Mental illness. In: G., Naruse. (Ed.), ***Clinical Dohsalogy Series 1: Modern Esprit Additional Volume, Theory and Treatment of Clinical Dohsa-hou***. (pp. 169-177), Tokyo, Shibun-dou. (in Japanese)

Tsuru, M. (1993). Dohsa-Therapy to High Aged Schizophrenic Patients. ***Journal of Rehabilitation Psychology***, 20, 65-74. (In Japanese with English abstract)

Tsuru, M. (1995). The Experiencing to Make the Most Effective Use of Oneself Ability of a Chronic Schizophrenic Person to Clinical Application of Dohsa-hou. ***Journal of Rehabilitation Psychology***, 21, 1-9. (In Japanese with English abstract)

Tsuru, M. (2002). Invitation to Clinical Dohsa-hou 4: Clinical Application of Dohsa-hou for Schizophrenic Patients. ***Japanese Journal of Clinical Psychology***, 2, 685-690. (in Japanese)

Tsuru, M. (2005). The process of Dohsa-therapy for schizophrenia, Japanese Journal of Clinical Psychology, 2, 685-690. (in Japanese) United States Association for Body Psychotherapy (2018). What is Body psychotherapy and Somatic psychology? Retrieved from https://usabp.org/

Velthorst, E., Koeter, M., van der Gaag, M., Nieman, D. H., Fett, A. K., Smit,... de Haan, L. (2015). Adapted Cognitive-Behavioural Therapy Required for Targeting Negative Symptoms in Schizophrenia: Meta-Analysis and Meta-Regression. ***Psychological Medicine***, 45, 453-65. doi: 10.1017/S0033291714001147

Working Group on the Future of Mental Health Care and Welfare. (2016). The second sectional meeting, ***"The States of New Community Mental Health Care System."*** Retrieved from https://www.mhlw.go.jp/file/05-Shingikai-12201000-Shakaiengokyokushou-gaihokenfukushibu-Kikakuka/0000122522.pdf (In Japanese)

Yamada, M. (2000). Some Consideration for Psychotherapy with Schizophrenic: On the Role of Empathy and Making a Boundary. ***Journal of Japanese Clinical Psychology***, 18, 288-298. (In Japanese with English abstract)

The Magic of Epigenetics

Recipes for a Healthier Life

Milena Georgieva & **George Miloshev**

ABSTRACT

Genetics has long been accepted as a deterministic factor that shapes our psychosomatic features and characteristics. But recent data show that genes are not our destiny and we are the masters of our heredity. Unmistakably, modern genetics proves the fact that by the way we eat, the way we breathe and treat ourselves, we regulate the activity of our genes and their outcomes. New genetic data link education, intelligence, food, and lifestyle as powerful factors that shape our genes. By inducing chemical modifications on the molecule of DNA and the proteins that organize it in the nucleus, factors like stress, lack of physical activity, and chronic illness change the way genes work. The science that studies the molecular mechanisms by which the environment inherently drives the work of our genes is called epigenetics. Epigenetic inheritance, just like genetic inheritance, goes beyond our time and is transmitted to our descendants. Here, we summarize one of the most canonical mechanisms of epigenetics, and link it with certain types of human metabolism, disease, and psychosomatics. The bond between our lifestyle and the choices we make in our daily life with the way genes work is as dominant as genetics per se. Epigenetics holds the key to a healthier and smarter way of living.

Keywords: genetics, epigenetics, psychosomatics, brain, stress, environment, food, DNA methylation, PTMs, folic acid

Submitted: 23.04.2020
Revised: 29.04.2020
Accepted: 30.04.2020

International Body Psychotherapy Journal
The Art and Science of Somatic Praxis
Volume 19, Number 1,
Spring/Summer 2020, pp. 107-115
ISSN 2169-4745 Printing, ISSN 2168-1279 Online

> ***Who in the world am I?***
> ***Ah, that's the great puzzle.***
>
> Lewis Carroll,
> Alice in Wonderland

We often hear that "it's all in the genes." In general, this paradigm is true, and the fact is that the program of our biological life is encoded in the tiny DNA structure we inherited from our parents. However, strictly speaking, besides our genes, in our DNA we also inherit an unknown amount of additional information that is not encoded in our genes. Therefore, regardless of the enormous amount of information gathered about our inheritance, we feel just like Alice. We feel like we are in the "wonderland" called human inheritance, where "still we don't know who we are, and that's the great puzzle!"

The Puzzle of Epigenetics

The concept of epigenetics can be traced back to 350 BC when the Greek philosopher Aristotle proposed that the individual development of the organic form is generated from unformed matter by a "vital cause." Nowadays we assume that the idea of this "vital cause" is covered by the term "epigenetics." Dr. C. H. Waddington (1905-1975), who in the first half of the last century was interested in the developmental events leading from the fertilization of the oocyte to its transformation into a whole organism, is generally accepted as the "father" of epigenetics. As Waddington proposed, these events are regulated processes that begin with the genetic material and shape the final step by which every living organism is born (Waddington, 1963, 2012). Nowadays, it is commonly assumed

that epigenetics represents the execution of complicated programs that serve to finely tune gene expression, thus enabling cells and the whole organism to cope with changes in the environment. Importantly, a process can be epigenetic only when it is inherited without being coded in the DNA sequence. Epigenetics literally means "above" or "on top of" genetics. It refers to processes that regulate the level of gene activity, including the possibility to turn genes "on" and "off." In other words, these processes are not encoded in the DNA sequence, but instead, they affect how cells "read" genes.

> *Epigenetics is the study of heritable changes in the level of gene expression that do not involve changes to the underlying DNA sequence, i.e., epigenetics leads to a change in the phenotype without a change in the genotype – which in turn affects how the genes are expressed.*

It is appreciated that the activity of genes, i.e., how genes work, can be affected by environmental factors. Therefore, we can state that the environment strongly influences the epigenetic regulation of the organism (Marsit, 2015). The environmental effects on gene activity, especially on the process of embryo development, have been actively studied. The reason for this is that during embryonic development, genes are dynamically switched on and off, reminiscent of a "real storm of changes." However, the environmental factors, which can be different pollutants, changes in temperature and behavior, but also psychological stress, influence the epigenetics of the early years after birth, as well as the entire life of an organism. Notably, special attention should be given to the effects of the individual's behavior on his/her epigenetic mechanisms and vice versa. This line of investigation flourished in a set of data called behavioral epigenetics (Lester et al., 2011).

From the point of view of epigenetics, the term "behavior" is understood as the whole amalgam of human activities like eating habits, physical activity, bad habits like smoking, drug, and alcohol addiction, etc. Therefore, knowledge of epigenetic mechanisms is very important in order to understand the so-called universal and specific laws of healthy living. In summary, behavior in accordance with these laws can lead to a long and healthy life (Young, 2014). As of now, mechanisms of epigenetics encompass several more-or-less understood processes and dynamic changes of genetic structures. In order of their recognition, these processes include methylation of DNA, histone modifications, small ncRNAs (non-coding RNAs), and higher-order chromatin organization. To a greater extent, epigenetic processes also determine phenotypic characteristics. In general, epigenetic mechanisms and processes regulate the accessibility of genes to cellular enzyme complexes, which in turn regulate transcription, and thus determine where and when a gene will be activated, as well as the level of its activity. Epigenetic mechanisms play a central role in the regulation of gene expression, and thus enable the body to adapt to its environment. Recently, there has been evidence that multiple environmental factors such as nutrition, body structure, and social environment can influence epigenetic processes, often with long-lasting effects on the whole physiology of the organism including metabolism, and recurrently leading to various diseases.

Smart Strategies for Healthier Life

In our daily lives, we are all confronted with people, situations, and factors that affect us and determine the choices we have to make every day. Small choices at first glance, like what to wear, where to go on our way to work, or what to eat for lunch. But could it be those little pebbles that predetermine our whole destiny? What happens when we chronologically arrange in a general context a series of these small, insignificant choices and situations we fall into daily? Moreover, what happens if we develop different reactions to seemingly banal everyday situations? Have you ever considered what would happen to you if, in a given situation, a conflict on the road, for example, you approached with calmness and respect for your opponent? How would this affect your emotional state? What if you reacted violently, being intolerant, experiencing stress: wouldn't that hurt you? How about if all those little situations you get into every day, and even more the way you respond to each one of them, leave a mark not only on your current mental state but also on your genes? What's more, do these small situations that lead to stress, aggression, or pleasure leave a mark not only on your genes but also on the genes of your future children?

It is good to know that every emotional state is controlled by hormones. Genes in the cells of different organs synthesize hormones. In other words, our ability to express, understand, and to some extent control the various types of emotional responses in our daily lives depends on our genetics. And not only!!! It depends on how the genes work (Nicoglou & Merlin, 2017; Rusconi & Battaglioli, 2018).

Can we Develop Smart Strategies for Being Healthier by Modulating the Way our Genes Work?

The answer is first, we have to know the logic behind these epigenetic mechanisms in order to understand them. Many mental health difficulties have developmental origins. Understanding these mechanisms is a turning point for many mental health disciplines. In recent years, epigenetic processes have emerged as a potential mechanism mediating the long-lasting weakness following the experience of misfortune (Kumsta, 2019). Second, it is good to feel and understand our bodies. It is well-known that meditation, healthy food, and moderate physical activity are the foundation of healthy epigenetics (Allis, Jenuwein, & Reinberg, 2007; Wolffe, 1998). And although we live in a stressful world, through modern techniques for mental health treatment and for alleviating signs of stress and mental fatigue like psychotherapy, for example, one can very proficiently

modulate the way his/her own genes work. This, together with healthy habits, can completely change our way of reacting to stress. Canonical techniques for psychotherapy, together with modern fields like psychosomatic psychotherapy, are those priceless little nuggets that could very masterfully change our whole life. This is a smart strategy for a healthier life. So let's see how we can do it.

The Colors of DNA

We should not forget that the eukaryotic genome is represented by a DNA molecule with a size of approximately 2 meters. On the other hand, the size of the nucleus is 10 µm, and DNA is compacted 1700 times to fit in this tiny nucleus. Compaction is achieved by contacts of DNA with positively charged proteins called histones. The strength of histone contacts with DNA is modulated by specific enzymes, which add specific chemical moieties to the molecules of histones and DNA, which in turn changes the access to DNA, and hence leads to differences in gene activity (Turner, 2001). Both DNA methylation and histone modifications are the most common and best-studied epigenetic mechanisms that alter the accessibility of transcription enzymes to DNA, and thereby provide a possibility for dynamic modulation of gene activity.

DNA methylation uses enzymes called DNA methyl transferases, which covalently add methyl groups to the cytosine bases of eukaryotic DNA. Methylated cytosines are called CpG dinucleotides (CpGs). They form clusters called CpG islands. The genome consists of 1-2% CpG islands, most of which are located in the promoters of different types of genes, where they play an important role in regulating gene expression. Over the years it has become known that CpG islands can be either hypomethylated or hypermethylated. Many cancer genes have been found to have a high percentage of hypomethylated genomes (Asadollahi, Hyde, & Zhong, 2010). DNA methylation has significant physiological consequences when it is on a cytosine in CpG dinucleotide (Youn, 2017). The 5-Methyl-cytosine obtained by this methylation can be 2 to 5% of all cytosines in mammalian genomes. Cytosine methylation is often found in the promoters of the genes and is associated with repression of these genes (Orphanides & Reinberg, 2002). Importantly, improper DNA methylation can be induced by environmental factors such as pollutants, cigarette smoking, and psychological stress (Philibert, Beach, & Brody, 2014; Rusconi & Battaglioli, 2018). At present, the mechanism by which DNA methyl transferases target sites is not well understood. However, some of these DNA-methyl transferases have been found to be part of chromatin-remodeling complexes, and play a role in chromatin remodeling processes (Burgers, Fuks, & Kouzarides, 2002).

Recent studies show a link between nutrition and DNA methylation. Polymorphism in the methylenetetrahydrofolate reductase (MTHFR) gene has been observed in many people with colorectal cancer. A methionine-rich diet leads to increased methylation in this gene. Accordingly, patients with such a diet have a lower incidence of cancer. On the other hand, increased alcohol consumption is associated with a decrease in MTHFR levels and hypomethylation, which can lead to the development of colon cancer (Feinberg & Tycko, 2004).

The Epigenetic Regulation of Genes

Besides DNA methylation, histone modifications are the next level for the epigenetic regulation of gene expression. Histones are the proteins that organize DNA in chromatin, thus allowing its compaction and spatial organization. These protein molecules are the playground for numerous post-translational epigenetic modifications like methylation, acetylation, ubiquitination, phosphorylation, and many others (Allis et al., 2007; Nicoglou & Merlin, 2017). Histone post-translational modifications (PTMs) are involved in all processes with molecules of DNA and RNA (Dhanasekaran, 2012; Kurdistani, 2011), and have implications throughout the whole life of the organism. The growing list of histone PTMs has exploded in the last several years due to the considerable advances in modern science technologies, available antibody reagents, peptide and modern protein array procedures, and mass spectrometry–based proteomics (Zhao & Garcia, 2015). These technologies allowed identification of histone PTMs at specific chromatin sites, as well as throughout the whole genome. The combination of different PTMs along the chromatin fibre is thought to form the so-called "histone code" (Jacobs, Fischle, & Khorasanizadeh, 2003).

The histone code is accepted as a secondary hereditary code that is formed on top of the genetic backbone. It governs and masters the way the genetic information is expressed. On the surface of our genes, we have additional colors formed by these PTMs together with the DNA methylation. These combinations are innumerable. Thanks to billions of years of evolution, epigenetic mechanisms are realized through the use of complex and highly specialized systems of enzymes, enzyme complexes, and protein factors. These enzyme systems can change the epigenetic profile of cells, tissues, or even organs for a very short time (on the order of seconds and minutes). This altered epigenetic profile can very quickly be "deleted" and "erased," or, under certain conditions, preserved for life and even passed down through generations. This is what arouses great interest in epigenetic studies. All of these mechanisms have evolved, and are applied to cells to rapidly adapt the body to changes in environmental conditions.

In 1965, it was first hypothesized that histone modifications could regulate transcription (Littau, Burdick, Allfrey, & Mirsky, 1965). Important components of these reactions are the enzyme complexes like histone-acetyltransferases (HAT) enzymes, histone deacetylases (histone deacetylases – HDAC), histone methyltransferases (HMT), and histone-demethylases (HDMT). The function of these

complexes is to modify chromatin, and thus to suppress or stimulate transcription (Taby & Issa, 2010). Histone acetylation was originally discovered in 1968 (Yang & Seto, 2007). This type of modification is part of processes such as DNA repair, transcription, and chromatin structure remodeling. There are two major enzyme components in the histone acetylation process – histone acetyltransferases and histone deacetylases. They were first described in the mid-1990s (Yang & Seto, 2007), with two different types of histone deacetylases – cytoplasmic and nuclear. For example, when lysine residues are deacetylated in the N-terminal tails of the H3 and H4 dimers of DNA nucleosome complex, they become positively charged. This results in chromatin condensation. Conversely, chromatin structure becomes less compact when these residues are acetylated. Histone deacetylation is performed by histone deacetylases (HDACs). They are divided into two families – classic HDACs and Sir2 HDACs families. The function of histone deacetylases is to remove acetyl groups, resulting in a more compact chromatin structure and gene silencing. They also act on non-histone proteins, and are classified as nuclear or cytoplasmic (Taby & Issa, 2010; Yang & Seto, 2007). In some types of cancer, mutations in the histone deacetylases lead to abnormal expression of genes controlling cell proliferation, apoptosis, and cell cycle. Histone deacetylase inhibitors have been the topic of research in the development of drugs for the treatment of cancer. The American Food and Drug Administration (FDA) has already approved compounds such as trichostatin A (TSA) for the inhibition of certain histone deacetylases in various diseases, including cancer (Fraga, Ballestar, Villar-Garea et al., 2005; Ropero & Esteller, 2007).

Histone methylation is a chemical modification discovered in the 1980s. Essentially, histone methylation is carried out on the lysine residues at the N-terminus of their molecules (Feinberg & Tycko, 2004). The significance of this modification depends on the particular amino acid involved, and can lead to both silence and activation of gene expression. The methylation reaction can be reversible, and is also regulated by specific enzymes (Taby & Issa, 2010). The two major enzymes that carry out methylation or demethylation of histones are histone methyltransferases (HMTs) and histone demethylases (HDMTs). The latter are divided into two families: lysine specific demethylase 1 (LSD1) and Jumonji domain-containing enzymes.

All environmental factors are relevant to our epigenetics. Epigenetic markers, although more stable during adulthood, remain dynamic, and can be modified by lifestyle choices and environmental influences. Therefore, the epigenetic profile is formed not only in the womb, but throughout the entire scope of human life. In other words, epigenetic changes can be reversible. There are numerous studies showing how different lifestyle choices and environmental factors can alter markers on DNA, and be determinative of human health (Mario F. Fraga, Ruben Agrelo, & Manel Esteller, 2007; Fraga, Ballestar, Paz et al., 2005; Heyn, Moran, & Esteller, 2013).

The Environment and our Lifestyle Can Modulate our Epigenetics and Control our Genes

The term lifestyle is extensively used to describe the typical lifestyle or basic habits and practices specific to an individual or group. Many aspects of a person's lifestyle have been identified as factors that can modify the epigenome. These are diet, all behavioural habits, any types of stress – mechanical, psychological, lack of physical activity, obesity, work habits (especially night shifts), smoking, alcohol consumption, taking certain medications, and aging. Starting from the conditions in which the fetus develops in the womb (maternal diet, smoking) and continuing with food (selenium, EGCG green tea folates), high alcohol intake, physical activity, environmental pollutants (such as arsenic, chromium, benzene, long-lived organic pollutants, etc.), stress, night-shift work, and aging are all factors that can affect and alter DNA methylation, and hence the expression of underlying genes (Fuso et al., 2008; Fuso, Seminara, Cavallaro, D'Anselmi, & Scarpa, 2005; Sapienza & Issa, 2016; Wolfram, 2007).

Two major groups of factors can have a very strong influence on epigenetic mechanisms, and they are the environment and our lifestyle (Georgieva, Staneva, & Miloshev, 2016; Gravina & Vijg, 2010). A growing body of research has shown the relationship between exposure to potential toxic chemical agents and the occurrence of pathological changes in DNA methylation and histone modifications (Bollati & Baccarelli, 2010). The environmental pollutants most commonly regarded as epigenetic toxins are arsenic, polluted air, aromatic hydrocarbons, and other organic pollutants. Two different studies found that DNA isolated from the blood of individuals chronically exposed to toxic levels of arsenic had both global DNA hypermethylation and significant hypermethylation in the promoter regions of the p.53 and p.16 protein genes, compared to controls. Moreover, this effect is not only dependent on the dose of arsenic found in plasma, but also on the folate present in plasma, indicating that arsenic-induced increased methylation of DNA is directly dependent on the presence of methyl groups (Chanda et al., 2006; Pilsner et al., 2007). Exposures to polluted air, especially dust particles, is associated with increased morbidity and mortality due to cardiorespiratory diseases, as well as an increased risk of lung cancer. In a human study, methylation in the promoter of the iNOS gene (inducible nitric oxide synthase) was found to decrease in the blood samples of casting workers taken after exposure to dust particles for a four-day working week, compared with baseline samples (Tarantini et al., 2009). As a result of the demethylation of the iNOS gene, the expression and activity of the iNOS protein, which is

one of the key players in the processes of inflammation and oxidative stress, is expected to increase, and thus the acute health problems observed during breathing in polluted air. Long-term exposure to both dust particles and black carbon correlates with reduced methylation of Alu and LINE-1 (Castro et al., 2003). Because hypomethylation of LINE-1 has been found in the blood samples of patients with various types of cancer or cardiovascular disease, this change in DNA methylation status, on the one hand, reproduces the epigenetic processes associated with the development of these diseases, and on the other, explains the mechanisms by which airborne dust contaminates human health. Another group of epigenetic toxins are aromatic hydrocarbons. A recent DNA test from the blood samples of traffic police officers and gas station employees who regularly inhale gasoline (benzene) vapor through their breathing showed decreased methylation of Alu, LINE-1, as well as hypomethylation of the MAGE-1 (cancer-antigen) gene and tumor hypermethylation of the p.15 suppressor gene (Bollati & Baccarelli, 2010). A number of other organic pollutants such as polyaromatic hydrocarbons, bisphenol A, have also been found to influence epigenetic mechanisms (Rusiecki et al., 2008).

Food as a Powerful Epigenetic Factor

Food is a powerful epigenetic factor. On a daily basis every one of us eats at least two, three, or even more times. Thus, over 10,000 different types of biologically active compounds accumulate and begin to circulate freely in our bodies. They are the result of our daily intake of food, drinks, and medicines. Anything we consume can enter the cells and contact the DNA, resulting in chemical modifications on our genome, thus modeling and changing it epigenetically. Covalent modifications of histones can be modified by food (zinc, iron, selenium, polyphenols in vegetables, etc), which in turn affects the chromatin structure, and ultimately affects the regulation of transcriptional activity. In turn, physical activity and smoking influence the regulation of expression of a number of miRNAs by DNA methylation of miRNA loci, resulting in repression of translation or degradation of the transcripts (M. F. Fraga, R. Agrelo, & M. Esteller, 2007; Fraga, Ballestar, Paz et al., 2005; Georgieva et al., 2016; Nicoglou & Merlin, 2017).

Food and its active ingredients leave marks on DNA. This is how they affect our genes and those of our future generations. It is no coincidence that the mother's diet influences future generations very extensively and thoroughly. Now this is a very hot topic not only for scientists, but also for women who are mothers or will be. Of course, this also excites their relatives and friends. We have to realize that diet and the type and quality of food affect not only our metabolism, but even the way our genes work. And the way our genes work determines not only us, but also what we pass on to our children: their susceptibility to diseases, allergies, and even certain psychological traits. A typical example of the importance of nutrition for gene expression is the agouti mouse and the female bees from a hive. The agouti mice are a gold standard for studying the way diet influences the epigenome. These mice have a different methylation of the ASIP gene (agouti-signaling protein) in comparison to the wild type, which is responsible for the distribution of melanin pigment in mammals and rigorously controls the metabolism, results in its silencing and all subsequent changes in the overall metabolism (Wolff, Kodell, Moore, & Cooney, 1998). In one beehive, in the time span of individual development, some bees turn into worker bees and others into mother bees (Kucharski, Maleszka, Foret, & Maleszka, 2008). The diet of the latter, fed mainly on royal jelly, results in a change in the methylation status of more than 500 genes. This process affects the external morphology of the mother bees, their brain development, and completely different behavior later on during their individual life.

DNA methylation plays a role in cancer development, too. Scientific evidence shows that tumor cells have low levels of DNA methylation, which explains the global high level of gene activity in these cells (Ali Khan et al., 2015; Khan et al., 2015). Between diet and cancer, although not yet fully understood, there is a link that is subject to serious research. The EPIC (https://epic.iarc.fr/), a European scientific consortium with the aim of seeking to find the link between food and cancer, was recently created. The tasks of this grand project are to explore how lifestyle – diet, diet, exercise and stress – affect the incidence of cancer and various other chronic conditions. The survey is scheduled to be conducted over a period of 15 years on a large group of people: half a million. The research group is widely represented by ten different European countries. Primarily, the connection between food and the onset and type of tumor diseases is sought. All these efforts are not in vain, and even less accidental. As a result of human and animal studies, data have been accumulated suggesting a link between food and a large number of human diseases. A long list of various foods and nutrients (from alcohol to zinc) has been created, and has been shown to influence DNA methylation, and hence the onset and development of various diseases. Folic acid-poor diets, for example, lead to a decrease in DNA methylation levels, and to various diseases like head or neck cancer, stomach cancer, etc. (Newberne, 1986; Pogribny, Tryndyak, Muskhelishvili, Rusyn, & Ross, 2007). A well-known fact is that folic acid is not naturally produced in the body. It is a water-soluble form of Vitamin B9. Its biological activity only manifests itself after being metabolized in the body (mainly in the liver) to Vitamin B9 (folate) (Zeisel, Mar, Howe, & Holden, 2003). It plays an important role in the production of nucleic acids (DNA and RNA), and is involved in cell division processes. It is necessary for the formation of the placenta and for the construction of the bone marrow of the embryo. Consumption of folic acid reduces the risk of birth defects

in the baby. It also has a positive effect on the body of the expectant mother; it regulates and lowers the level of stress hormones. The fact that the human body cannot produce folate necessitates its supply through food.

Folic Acid — the Miraculous Substance that Marks our Genes

There is a very complex and well-controlled mechanism for the metabolism of folic acid in the human body. Vitamin B6 and B12 are included in this cycle (Fuso et al., 2005; Giles, Kittner, Anda, Croft, & Casper, 1995). Together with folate, they are involved in controlling the body's levels of homocysteine and converting it to methionine. Methionine, for its part, is a major source of methyl groups that can bind to specific stretches of DNA, leading to their methylation and, in general, to the silencing of genes located in these regions. In other words, folate, methionine, homocysteine, vitamins B6 and B12 as well as zinc (the major transport molecule in the folate metabolism cycle) are the leading molecules that are actively involved in DNA methylation processes. Methionine-rich foods are green leafy vegetables (cabbage, spinach, broccoli, Brussels sprouts, lettuce, iceberg lettuce, etc.). They are followed by legumes, sunflower seeds, liver, whole grain bread, and nuts. They are all known for their rich folic acid content. There are over 1,000 different species of green leafy vegetables alone. To improve the levels of methionine in our bodies, it is good to consume spinach, garlic, and tofu. Fish is also rich in Vitamin B12 (Obeid et al., 2009; Pilsner et al., 2007; Wolff et al., 1998; Zeisel et al., 2003).

Still, DNA methylation is not so straightforward in the cell at all; things are never just black and white. Depending on which genes will be methylated, this can both prevent the body from developing cancer, and (in the case of excess) lead to the onset of other diseases. For example, people suffering from epilepsy should be careful with folic acid, as high levels of methylation in DNA can lead to increased brain reactivity and increased seizure frequency. Therefore, folic acid and foods that are rich in it should not be abused. Particular care should be taken when folic acid is taken by pregnant women. The right quantities are extremely important. Specific changes can be detected in the new-born's DNA that indicate the mother's feeding patterns before, at, and after conception (Georgieva et al., 2016). Some authors point to the fact that the mother's nutrition around the time of conception may affect some regulatory areas of the child's DNA, even during its development in the womb. The study was conducted on women from West Africa (Gambia) and their children (Waterland et al., 2010). The weather in West African countries is divided into two distinct periods - rainy and dry. These two periods divide very precisely the diet of people in these countries. This is because they eat products directly from nature. Therefore, the foods they consume during these two periods are different. Scientists at the London Institute of Hygiene and Tropical Medicine have examined how different eating patterns affect the DNA of children conceived at one time or another. These scientists examined the DNA of both mother and baby blood, looking for specific changes in DNA methylation. Moreover, DNA methylation levels have been shown to be highly influenced by maternal nutrition. This level of DNA methylation is transmitted to newborn infants (Dominguez-Salas et al., 2014). But it also means inheriting the way genes work in children, which is the result of the type of food that mothers ate. This study proves that the level of DNA methylation is important for the amount of homocysteine, folate, and vitamins B absorbed. Changes in the profile of DNA methylation are known to lead to the development of diabetes and cardiovascular disease (Fetita, Sobngwi, Serradas, Calvo, & Gautier, 2006). These and similar other studies prove that women's nutritional diet is important for their future children not only during their pregnancy, but rather before and during conception.

The Way Epigenetics Functions in Reality

Recent studies on identical twins have shown that although they carry genes responsible for the onset and onset of a specific type of disease (rheumatoid arthritis or schizophrenia), one twin never develops the disease unlike the other (Felson et al., 2000; Pallister, Spector, & Menni, 2014). The reasons for this lie in the epigenetic profile of these individuals, i.e. not in the hereditary information, but in the factors and events that control its functioning. Most identical twins have been shown to differ in their epigenetics even at the time of birth. In the course of their prenatal development, they receive different stimuli from the mother, the intake of nutrients is not exactly the same, and the location in the womb and the size of the placenta are factors act differently (Metrustry et al., 2018). All these differences during prenatal development lead to differences in their epigenetic profile (Pallister et al., 2014; Starnawska et al., 2019). Moreover, twins differing in height and weight show epigenetic differences in the genes responsible for a particular type of metabolism (Pallister et al., 2014).

These and other scientific data underline the importance of environmental factors for the way genetic information is implemented, i.e., which genes to include, which ones to exclude, how to work, when and at what intensity. All this seriously influences the further development of the human body. In other words, epigenetics is the bridge between our life and the way our genome works.

Acknowledgements

This work was supported by the Bulgarian National Research Fund [grant number: DN 11/15].

In a series of subsequent articles, we shall dive into the world of epigenetics and its mechanisms for control of our genes. Our intention is to discover the mechanisms through which we influence our genes through our daily choices and activities. We shall unveil the role of psychotherapy and body psychotherapy for maintaining our mental health on a sensible and well-balanced level where our stress response is maintained by our mindful behavior. And this conscious behavior is sustained by the knowledge of epigenetics in behavior and our mental health, epigenetics in aging and age-associated diseases, and epigenetics and stress.

"What a journey!" Alice would have exclaimed...

Associate Professor Milena Georgieva, PhD, Molecular Genetics Lab, Institute of Molecular Biology, BAS. Milena is an Associate Professor of Molecular Biology. Her current work investigates the interplay between DNA and the environment during normal development, aging and age-associated diseases. As a specialist in Molecular Biology, Genetics, and Epigenetics, Milena believes that in modern biomedicine we can now very clearly distinguish between the time "before" and "after" the project "The Human Genome." The time "after" not only marks the beginning of the new millennium but also highlights the beginning of a turning point in modern medicine, where the handwriting of our genes and the specificity of our DNA are studied in the light of epigenetics. As a zealous communicator of science, Milena strives to present trends in modern science in accessible and interesting language.

E-mail: milenageorgy@gmail.com
LinkedIn: https://www.linkedin.com/in/milena-georgieva/
ORCID ID: https://orcid.org/0000-0002-2371-7544
Website: www.chromatinepigenetics.com

Professor George Miloshev, PhD, Head of the Laboratory of Molecular Genetics, Institute of Molecular Biology, Bulgarian Academy of Sciences. Professor Miloshev is a full professor of Molecular Genetics, and head of the laboratory. His main interests are in the field of chromatin, with special emphasis on the interplay between the environment and chromatin structure and dynamics. His scientific interests and research efforts are aimed at gaining deeper understanding of general cellular mechanisms, specifically about epigenetic phenomena. The intention of his work is to acquire information for practical use in medicine, criminology, and ecology. The areas of his research include epigenetic mechanisms, nuclear organization, and chromatin structure and dynamics, especially at higher order levels of organization.

E-mail: H1resteam@gmail.com
LinkedIn: https://www.linkedin.com/in/george-miloshev-b7595148/
ORCID ID: https://orcid.org/0000-0003-2979-8899
Website: www.chromatinepigenetics.com

REFERENCES

Ali Khan, M., Kedhari Sundaram, M., Hamza, A., Quraishi, U., Gunasekera, D., Ramesh, L., . . . Hussain, A. (2015). Sulforaphane Reverses the Expression of Various Tumor Suppressor Genes by Targeting DNMT3B and HDAC1 in Human Cervical Cancer Cells. *Evid Based Complement Alternat Med*, 2015, 412149. doi:10.1155/2015/412149

Allis, C. D., Jenuwein, T., & Reinberg, D. (2007). *Epigenetics*. Cold Spring Harbor Laboratory Press

Asadollahi, R., Hyde, C. A., & Zhong, X. Y. (2010). Epigenetics of Ovarian Cancer: from the Lab to the Clinic. *Gynecol Oncol*, 118(1), 81-87. doi:10.1016/j.ygyno.2010.03.015

Bollati, V., & Baccarelli, A. (2010). Environmental Epigenetics. *Heredity (Edinb)*, 105(1), 105-112. doi:10.1038/hdy.2010.2

Burgers, W. A., Fuks, F., & Kouzarides, T. (2002). DNA Methyltransferases Get Connected to Chromatin. *Trends Genet*, 18(6), 275-277. doi:10.1016/s0168-9525(02)02667-7

Castro, R., Rivera, I., Struys, E. A., Jansen, E. E., Ravasco, P., Camilo, M. E., . . . Tavares de Almeida, I. (2003). Increased Homocysteine and S-Adenosylhomocysteine Concentrations and DNA Hypomethylation in Vascular Disease. *Clin Chem*, 49(8), 1292-1296. doi:10.1373/49.8.1292

Chanda, S., Dasgupta, U. B., Guhamazumder, D., Gupta, M., Chaudhuri, U., Lahiri, S., . . . Chatterjee, D. (2006). DNA Hypermethylation of Promoter of Gene p53 and p16 in Arsenic-Exposed People with and without Malignancy. *Toxicol Sci*, 89(2), 431-437. doi:10.1093/toxsci/kfj030

Dhanasekaran, K., Arif, M., Kundu, T. K. (2012). Cancer: An Epigenetic Landscape. In: T. K. Kundu (Ed.), *Epigenetics: Development and Disease* (Vol. 61): Springer Netherlands

Dominguez-Salas, P., Moore, S. E., Baker, M. S., Bergen, A. W., Cox, S. E., Dyer, R. A., . . . Hennig, B. J. (2014). Maternal Nutrition at Conception Modulates DNA Methylation of Human Metastable Epialleles. *Nat Commun*, 5, 3746. doi:10.1038/ncomms4746

Feinberg, A. P., & Tycko, B. (2004). The History of Cancer Epigenetics. *Nat Rev Cancer*, 4(2), 143-153. doi:10.1038/nrc1279

Felson, D. T., Lawrence, R. C., Dieppe, P. A., Hirsch, R., Helmick, C. G., Jordan, J. M., . . . Fries, J. F. (2000). Osteoarthritis: New Insights. Part 1: The Disease and its Risk Factors. *Ann Intern Med*, 133(8), 635-646. doi:10.7326/0003-4819-133-8-200010170-00016

Fetita, L. S., Sobngwi, E., Serradas, P., Calvo, F., & Gautier, J. F. (2006). Consequences of Fetal Exposure to Maternal Diabetes in Offspring. *J Clin Endocrinol Metab*, 91(10), 3718-3724. doi:10.1210/jc.2006-0624

Fraga, M. F., Agrelo, R., & Esteller, M. (2007). Cross-Talk between Aging and Cancer. *Ann N Y Acad Sci*, 1100(1), 60-74. doi:10.1196/annals.1395.005

Fraga, M. F., Agrelo, R., & Esteller, M. (2007). Cross-Talk between Aging and Cancer: the Epigenetic Language. *Ann N Y Acad Sci*, 1100, 60-74. doi:10.1196/annals.1395.005

Fraga, M. F., Ballestar, E., Paz, M. F., Ropero, S., Setien, F., Ballestar, M. L., . . . Esteller, M. (2005). Epigenetic Differences Arise during the Lifetime of Monozygotic Twins. *Proc Natl Acad Sci U S A*, 102(30), 10604-10609. doi:10.1073/pnas.0500398102

Fraga, M. F., Ballestar, E., Villar-Garea, A., Boix-Chornet, M., Espada, J., Schotta, G., . . . Esteller, M. (2005). Loss of Acetylation at Lys16 and Trimethylation at Lys20 of Histone H4 is a Common Hallmark of Human Cancer. *Nat Genet*, 37(4), 391-400. doi:10.1038/ng1531

Fuso, A., Nicolia, V., Cavallaro, R. A., Ricceri, L., D'Anselmi, F., Coluccia, P., . . . Scarpa, S. (2008). B-Vitamin Deprivation Induces Hyperhomocysteinemia and Brain S-Adenosylhomocysteine, Depletes Brain S-Adenosylmethionine, and Enhances PS1 and BACE Expression and Amyloid-Beta Deposition in Mice. *Mol Cell Neurosci*, 37(4), 731-746. doi:10.1016/j.mcn.2007.12.018

Fuso, A., Seminara, L., Cavallaro, R. A., D'Anselmi, F., & Scarpa, S. (2005). S-Adenosylmethionine/Homocysteine Cycle Alterations Modify DNA Methylation Status with Consequent Deregulation of PS1 and BACE and Beta-Amyloid Production. *Mol Cell Neurosci*, 28(1), 195-204. doi:10.1016/j.mcn.2004.09.007

Georgieva, M., Staneva, D., & Miloshev, G. (2016). Epigenetic Significance of Chromatin Organization During Cellular Aging and Organismal Lifespan. In: D. Hollar (Ed.), *Epigenetics, the Environment, and Children's Health across Lifespans* (pp. 21-66). Cham: Springer International Publishing.

Giles, W. H., Kittner, S. J., Anda, R. F., Croft, J. B., & Casper, M. L. (1995). Serum Folate and Risk for Ischemic Stroke. First National Health and Nutrition Examination Survey Epidemiologic Follow-up Study. *Stroke*, 26(7), 1166-1170

Gravina, S., & Vijg, J. (2010). Epigenetic Factors in Aging and Longevity. *Pflugers Arch*, 459(2), 247-258. doi:10.1007/s00424-009-0730-7

Heyn, H., Moran, S., & Esteller, M. (2013). Aberrant DNA Methylation Profiles in the Premature Aging Disorders Hutchinson-Gilford Progeria and Werner Syndrome. *Epigenetics*, 8(1), 28-33. doi:10.4161/epi.23366

Jacobs, S. A., Fischle, W., & Khorasanizadeh, S. (2003). Assays for the Determination of Structure and Dynamics of the Interaction of the Chromodomain with Histone Peptides. In: *Methods in Enzymology* (Vol. 376, pp. 131-148): Academic Press

Khan, M. A., Hussain, A., Sundaram, M. K., Alalami, U., Gunasekera, D., Ramesh, L., . . . Quraishi, U. (2015). (-)-Epigallocatechin-3-Gallate Reverses the Expression of Various Tumor-Suppressor Genes by Inhibiting DNA Methyltransferases and Histone Deacetylases in Human Cervical Cancer Cells. *Oncol Rep*, 33(4), 1976-1984. doi:10.3892/or.2015.3802

Kucharski, R., Maleszka, J., Foret, S., & Maleszka, R. (2008). Nutritional Control of Reproductive Status in Honeybees via DNA Methylation. *Science*, 319(5871), 1827-1830. doi:10.1126/science.1153069

Kumsta, R. (2019). The Role of Epigenetics for Understanding Mental Health Difficulties and its Implications for Psychotherapy Research. *Psychol Psychother*, 92(2), 190-207. doi:10.1111/papt.12227

Kurdistani, S. K. (2011). Histone Modifications in Cancer Biology and Prognosis. *Prog Drug Res*, 67, 91-106

Lester, B. M., Tronick, E., Nestler, E., Abel, T., Kosofsky, B., Kuzawa, C. W., . . . Wood, M. A. (2011). Behavioral Epigenetics. *Ann N Y Acad Sci*, 1226, 14-33. doi:10.1111/j.1749-6632.2011.06037.x

Littau, V. C., Burdick, C. J., Allfrey, V. G., & Mirsky, S. A. (1965). The Role of Histones in the Maintenance of Chromatin Structure. *Proc Natl Acad Sci U S A*, 54(4), 1204-1212

Marsit, C. J. (2015). Influence of Environmental Exposure on Human Epigenetic Regulation. *J Exp Biol*, 218(Pt 1), 71-79. doi:10.1242/jeb.106971

Metrustry, S. J., Karhunen, V., Edwards, M. H., Menni, C., Geisendorfer, T., Huber, A., . . . Valdes, A. M. (2018). Metabolomic Signatures of Low Birthweight: Pathways to Insulin Resistance and Oxidative Stress. *PLoS One*, 13(3), e0194316. doi:10.1371/journal.pone.0194316

Newberne, P. M. (1986). Lipotropic Factors and Oncogenesis. *Adv Exp Med Biol*, 206, 223-251. doi:10.1007/978-1-4613-1835-4_18

Nicoglou, A., & Merlin, F. (2017). Epigenetics: A Way to Bridge the Gap between Biological Fields. *Stud Hist Philos Biol Biomed Sci*,

66, 73-82. doi:10.1016/j.shpsc.2017.10.002

Obeid, R., Schadt, A., Dillmann, U., Kostopoulos, P., Fassbender, K., & Herrmann, W. (2009). Methylation Status and Neurodegenerative Markers in Parkinson Disease. *Clin Chem*, 55(10), 1852-1860. doi:10.1373/clinchem.2009.125021

Orphanides, G., & Reinberg, D. (2002). A Unified Theory of Gene Expression. *Cell*, 108(4), 439-451. doi:10.1016/s0092-8674(02)00655-4

Pallister, T., Spector, T. D., & Menni, C. (2014). Twin Studies Advance the Understanding of Gene-Environment Interplay in Human Nutrigenomics. *Nutr Res Rev*, 27(2), 242-251. doi:10.1017/s095442241400016x

Philibert, R. A., Beach, S. R., & Brody, G. H. (2014). The DNA Methylation Signature of Smoking: an Archetype for the Identification of Biomarkers for Behavioral Illness. *Nebr Symp Motiv*, 61, 109-127. doi:10.1007/978-1-4939-0653-6_6

Pilsner, J. R., Liu, X., Ahsan, H., Ilievski, V., Slavkovich, V., Levy, D., . . . Gamble, M. V. (2007). Genomic Methylation of Peripheral Blood Leukocyte DNA: Influences of Arsenic and Folate in Bangladeshi Adults. *Am J Clin Nutr*, 86(4), 1179-1186. doi:10.1093/ajcn/86.4.1179

Pogribny, I. P., Tryndyak, V. P., Muskhelishvili, L., Rusyn, I., & Ross, S. A. (2007). Methyl Deficiency, Alterations in Global Histone Modifications, and Carcinogenesis. **J Nutr**, 137(1 Suppl), 216s-222s. doi:10.1093/jn/137.1.216S

Ropero, S., & Esteller, M. (2007). The Role of Histone Deacetylases (HDACs) in Human Cancer. *Mol Oncol*, 1(1), 19-25. doi:10.1016/j.molonc.2007.01.001

Rusconi, F., & Battaglioli, E. (2018). Acute Stress-Induced Epigenetic Modulations and their Potential Protective Role toward Depression. *Front Mol Neurosci*, 11, 184. doi:10.3389/fnmol.2018.00184

Rusiecki, J. A., Baccarelli, A., Bollati, V., Tarantini, L., Moore, L. E., & Bonefeld-Jorgensen, E. C. (2008). Global DNA Hypomethylation is Associated with High Serum-Persistent Organic Pollutants in Greenlandic Inuit. *Environ Health Perspect*, 116(11), 1547-1552. doi:10.1289/ehp.11338

Sapienza, C., & Issa, J. P. (2016). Diet, Nutrition, and Cancer Epigenetics. *Annu Rev Nutr*, 36, 665-681. doi:10.1146/annurev-nutr-121415-112634

Starnawska, A., Tan, Q., Soerensen, M., McGue, M., Mors, O., & Børglum, A. D. (2019). Epigenome-Wide Association Study of Depression Symptomatology in Elderly Monozygotic Twins. 9(1), 214. doi:10.1038/s41398-019-0548-9

Taby, R., & Issa, J. P. (2010). Cancer Epigenetics. *CA Cancer J Clin*, 60(6), 376-392. doi:10.3322/caac.20085

Tarantini, L., Bonzini, M., Apostoli, P., Pegoraro, V., Bollati, V., Marinelli, B., . . . Baccarelli, A. (2009). Effects of Particulate Matter on Genomic DNA Methylation Content and iNOS Promoter Methylation. *Environ Health Perspect*, 117(2), 217-222. doi:10.1289/ehp.11898

Turner, B. M. (2001). Higher-Order Chromatin Structures and Nuclear Organization. In: *Chromatin and Gene Regulation* (pp. 75-100): Blackwell Science Ltd.

Waddington, C. H. (1963). Ultrastructure Aspects of Cellular Differentiation. *Symp Soc Exp Biol*, 17, 85-97

Waddington, C. H. (2012). The Epigenotype. 1942. *Int J Epidemiol*, 41(1), 10-13. doi:10.1093/ije/dyr184

Waterland, R. A., Kellermayer, R., Laritsky, E., Rayco-Solon, P., Harris, R. A., Travisano, M., . . . Prentice, A. M. (2010). Season of Conception in Rural Gambia Affects DNA Methylation at Putative Human Metastable Epialleles. *PLoS Genet*, 6(12), e1001252-e1001252. doi:10.1371/journal.pgen.1001252

Wolff, G. L., Kodell, R. L., Moore, S. R., & Cooney, C. A. (1998). Maternal Epigenetics and Methyl Supplements Affect Agouti Gene Expression in Avy/a Mice. *FASEB J*, 12(11), 949-957

Wolffe, A. P. (1998). Epigenetics. Introduction. *Novartis Found Symp*, 214, 1-5

Wolfram, S. (2007). Effects of Green Tea and EGCG on Cardiovascular and Metabolic Health. *J Am Coll Nutr*, 26(4), 373s-388s. doi :10.1080/07315724.2007.10719626

Yang, X. J., & Seto, E. (2007). HATs and HDACs: from Structure, Function and Regulation to Novel Strategies for Therapy and Prevention. *Oncogene*, 26(37), 5310-5318. doi:10.1038/sj.onc.1210599

Youn, H. D. (2017). Methylation and Demethylation of DNA and Histones in Chromatin: the most Complicated Epigenetic Marker. *Exp Mol Med*, 49(4), e321. doi:10.1038/emm.2017.38

Young, S. (2014). Healthy Behavior Change in Practical Settings. *Perm J*, 18(4), 89-92. doi:10.7812/tpp/14-018

Zeisel, S. H., Mar, M. H., Howe, J. C., & Holden, J. M. (2003). Concentrations of Choline-Containing Compounds and Betaine in Common Foods. *J Nutr*, 133(5), 1302-1307. doi:10.1093/jn/133.5.1302

Zhao, Y., & Garcia, B. A. (2015). Comprehensive Catalog of Currently Documented Histone Modifications. *Cold Spring Harb Perspect Biol*, 7(9), a025064. doi:10.1101/cshperspect.a025064

Practical Ethics

David Trotzig

ABSTRACT

The work of the ethics committee of a professional association ranges over a series of topics that, in theory, can be seen as straightforward, but that in practice depend on many variables: the expectations of the different agents or parties involved, the scope of what is considered to be the concerned subjects of the ethics committee's activities, the cultural and legal contexts in which it can act, etc. The consequences of the Ethics Committee's actions and/or lack of actions are significant for the organization as well as its members, clients, patients, or trainees. Adhering to the Ethics Guidelines implies a social responsibility that the ethics committee must regulate and enforce among the Association's members. This responsibility includes caring for the public image of the association, and avoiding unethical behavior among both individual and organizational members, such as training Institutes and professional associations. Changes in customs and values in time, and across many different countries and cultures, give the ethical guidelines an important role as a safeguard of the association's spirit, as defined in its articles of association. This means that special care must be given to teaching ethics so that all members and trainees can share the same values, and feel involved and connected to members who come from different countries and cultures.

Keywords: EABP, ethics guidelines, organizational ethics, social responsibility, cultural diversity, ethics and quality, quality, ethics complaints, ethics and law

Submitted: 10.03.2020
Revised: 15.03.2020
Accepted: 31.03.2020

International Body Psychotherapy Journal
The Art and Science of Somatic Praxis

Volume 19, Number 1,
Spring/Summer 2020, pp. 116–121

ISSN 2169-4745 Printing, ISSN 2168-1279 Online

This article, rather than being a dissertation on ethics in general, is a description of the practical aspects of its application within the framework of the day-to-day work of the Ethics Committee of the European Association for Body Psychotherapy (EABP). The intention is, from a pragmatic point of view, to fill the gap that exists between the services the Ethics Committee (EC) can give, and the expectations or assumptions of the receiving public, typically Association members and officials, clients, patients, and trainees. It is my hope that this article can be a useful guide for all the affected parts.

> ***Following the Ethics Guidelines becomes an act of social responsibility, as any breach lowers the quality level of the whole organization.***

1. EABP and Its Ethics Committee

EABP is a private association of body psychotherapists who have freely joined and signed an agreement to respect and follow its Ethical Guidelines. To maintain full membership, members must fulfill three basic requirements: meet the membership criteria, respect the Ethical Guidelines, and pay the annual fee. If any of these requirements are not fulfilled, the Association has the right to terminate memberships at its discretion. As a private association, the EABP determines its relationship with its members only by its own internal regulations, as set up in its Articles of Association and Ethics Guidelines as defined by the General Assembly – the regular meeting where all Association's members decide, through discussions fol-

lowed by voting, on questions of strategy and orientation, organization, finances, ethics, and other matters.

The Ethics Committee of the EABP has the mandate from the General Assembly to ensure that members behave according to the Ethical Guidelines (see EC Guidelines article 2, *"Ethics Committee function and structure"*), and to apply the measures detailed in the Guidelines when members are out of compliance. These measures include, among others, mandatory sanctions or, as a last resort, the recommendation to the EABP Board to exclude members from the Association (see EC Guidelines article 4.4.2., *"Categories of sanctions"*). The goal of these measures is to help re-establish professional ethical function whenever possible, and to maintain high ethical standards of behavior in the EABP. The work of the EC, when it comes to complaints and unethical behavior, is thus limited to regulating the professional behavior of EABP members. This means it cannot in any way compensate anyone who files a complaint, above and beyond fairly addressing the complaint and the member whose behavior provoked it. It specifically cannot give or authorize financial compensation to a complainant.

1.1. Filing a Complaint

The option to file a complaint against a member of an association is a clear sign that the association feels responsible for the quality of the services rendered by its members, and has the intention to protect clients, patients, and trainees from unethical behavior by any of its members. The protocol to file a complaint is quite simple. The complainant must write a description of the events that led to the complaint, and send it, in English, to a current member of the EC. The EC will, within a day or two, acknowledge receipt of the complaint, and later send a more detailed letter to the complainant, explaining the procedure by which the complaint is treated, as well as an explanation about what the EC can and cannot do. All information and communications with the EC are confidential and, should the EC need legal counsel or second opinions, the information is anonymized and decontextualized as a protection for all parties.

It is very important to stress that some complaints fall outside the remit of the EC and cannot be processed further, as some complainants see the EC as a kind of court of justice, and may have a series of expectations that are outside the scope of an ethics procedure. An example of this would be the demand for financial compensation, which must be dealt with by a court in the complainant's country of residence.

Moreover, the complainees, i.e. the individuals or entities that are being complained about, might have expectations about the functions of an ethics committee. For example, there is the notion that the EC functions as a protector of the members of the Association. It is important for all parties to understand that the role of an ethics committee is to protect the victim of unethical behavior when the incriminated party is a member of the Association, and thus also protect the public image of the Association.

After having received a complaint, the EC begins the inquiry phase of the procedure. During this phase, the EC gathers information about events that led to the complaints, and is tasked to clarify what actually happened. Sometimes body psychotherapists commit unethical acts, and sometimes clients, patients, or trainees can falsely accuse their therapist or trainer for different reasons. Here, the attitude of both parties is an important aspect. It is expected that a body psychotherapist who is a full member of EABP has undergone a personal therapy process and training that will enable her/him to understand and feel empathy for a person who files a complaint against him/her. If this is the case, the complainee will respond with an attitude of cooperation with the EC, and a willingness to find out what the problem is. If she/he is responsible for an unethical action, the normal reaction is, as a responsible body psychotherapist, to recognize the fact, feel sorry for it, and try to repair the relationship as much as possible and make amends to the complainant. If the therapist does not feel he/she has acted unethically, she/he will still react as a professional body psychotherapist, empathize with the complainant, and try to understand what led to the complaint. If the complainee reacts defensively, aggressively, refuses to cooperate, or tries to cover things up with procedural tricks, etc., this is in itself a breach of the Ethics Guidelines and, of course, does not help signal his/her innocence.

1.2. On the attitude of the Ethics Committee towards the Complainant

One aspect that has become clearer and clearer in our society during the past few years is the high degree of vulnerability of victims of sexual, psychological, or narcissistic power abuse by figures of authority. Through the press, and as psychotherapists, we are seeing more and more cases where the perpetrator has been a parent, priest, teacher or, at times, even a psychotherapist. The individual who has been subjected to this kind of abuse feels very vulnerable, lonely, afraid, and often subjected to strong feelings of self-criticism, guilt, and shame. In later years, the social and emotional climate, primarily in western Europe, has become more sensitive to this issue, and the number of complaints has grown – not because there has been more abuse, but because more people who have been subjected to abuse are daring to confront it. In order for victims to overcome their feelings of loneliness and inadequacy, they have to be able to feel confident, accompanied, and safe enough to be able to file complaints. In an association such as EABP, the members are often on the "powerful" side of asymmetrical relationships, whether they are in the role of psychotherapist, teacher, or trainer – or, at times, within the organization: an officer with a "superior" hierarchical position.

Filing a complaint under these circumstances may be very difficult for a person who feels lonely and vulnerable, and he/she may feel the need to be accompanied and taken care of by EC members. Unfortunately, the EC can be sympathetic, but cannot take sides in the conflict. It's very important for EC members to remain neutral, and avoid getting emotionally involved with either side of the conflict, since that would entail being biased, and thus make it impossible to do the work correctly. The general rule, to which there can never be any exceptions, is that any EC member who is in any way emotionally involved, or has a conflict of interest, with any of the parties in an ethics case, must recuse him/herself from that case.

As experienced body psychotherapists, EC members are used to listening carefully to complainants, and try to perceive the content as well as the authenticity of the complaint. The EC can take action relative to the failure of the complainee, but cannot resolve the disappointment and, at times, deep pain and hurt of the complainant. This support needs to be addressed by a psychotherapist or professional helper.

2. EABP Ethics and Legal Systems

EABP is a private association registered in the Netherlands, and is therefore subject to Dutch laws and, Holland being a member state of the European Union, also to EU laws and regulations. This means that as an organization, EABP has to follow the Dutch and EU regulations in all legal matters – for example, the newly created European General Data Processing Regulation (GDPR).

As an international Association, however, the Ethics Guidelines must be applied according to the ethical principles of the association, and not, necessarily, according to local legal legislation. Actually, there are clear differences in treatment with regard to violations of law and order on the one hand, and ethical guidelines on the other (Sollmann 2019). The Ethics Guidelines have been written and are constantly revised and upgraded by the Ethics Committee, and all changes are subject to the approval of the GA. This means that they represent the ethical and moral code of the EABP, and the guidelines that all EABP members must follow. On the other hand, legislation in the different countries where there are EABP members is based on politics and ideology, more than ethical or moral considerations. This means that what is legal in one country might be illegal in another. The response by the Ethics Committee must thus be solely based on the internal ethical regulations of the Association, without taking the legal situation into account. Due to the EC's limited resources when it comes to investigating a member's breach of ethics, decisions of courts of law can be taken into account as proof of the member's culpability when the Ethics Guidelines and the local legislation coincide. This would be the case, for instance, where the member has been charged for abuse of some kind against a client, patient, or trainee.

In other cases, for instance in a country where gender, ethnicity, religious belief, political activity, or LTBGI status may be a legal impediment to practice body psychotherapy or any other type of activity that does not violate EABP Ethics Guidelines, the EC would not open an Ethics case on that topic, nor yield to any pressure by any institution from the said country to sanction, expel, or exclude the member.

It is very important to take into account that the ethics process is not a legal one. The relationship between the Ethics Committee and the members is a peer relationship among colleagues who share the same goals as expressed in the EABP Articles of Association and Ethics Guidelines. One of the assignments of the EC is to protect the clients of members of our Association against any abusive behavior by its members. When a client, patient, or trainee files a complaint against an EABP member, the EC begins the procedure described in the Ethical Guidelines paragraph 4 – i.e., the EC assesses whether the accused member has behaved unethically, according to the Ethical Guidelines and, if it finds that is the case, what measures of mediation or repair can be taken and, ultimately, what kind of sanctions should be applied in order to restore the Association's trust in the member.

The EC can apply sanctions that the complainee has the obligation to abide, but it cannot exclude a member or terminate a membership. It can only recommend such actions to the EABP Board. The affected member has the right to appeal to the General Assembly, which can corroborate the decision or go against it. This means that the ultimate responsibility for such decisions lies only with the GA.

3. The Need for Teaching Ethics in the European National Associations and Training Institutes

> ***Body psychotherapists respect the dignity and worth of the individual and strive for the preservation and protection of fundamental human rights.***
>
> Excerpt of the Preamble of the EABP EC Guidelines

EABP, as a professional association, spans a multitude of different cultures, values, and ways of interpreting reality. The Ethics Guidelines can therefore also be interpreted in many different ways according to local beliefs, values, and customs. Customs also change with time; values and attitudes can vary with fashion, conventions, or cultural changes, and also these change from one country to another.

Many EABP members and trainees in different countries,

however, share a strong sense of belonging to a common project, and a will to share the same values. One could say that moral and ethical values are a common ground between body psychotherapists who work with different modalities, speak different languages, and belong to different cultures.

In order to strengthen that common ground, body psychotherapists and trainees belonging to different national associations and different training institutes must have the opportunity to openly discuss, question, and eventually internalize the essence of our Ethics Guidelines so that they can *"seek to embody the spirit of the Association's ethical guidelines in all internal and external dealings."*

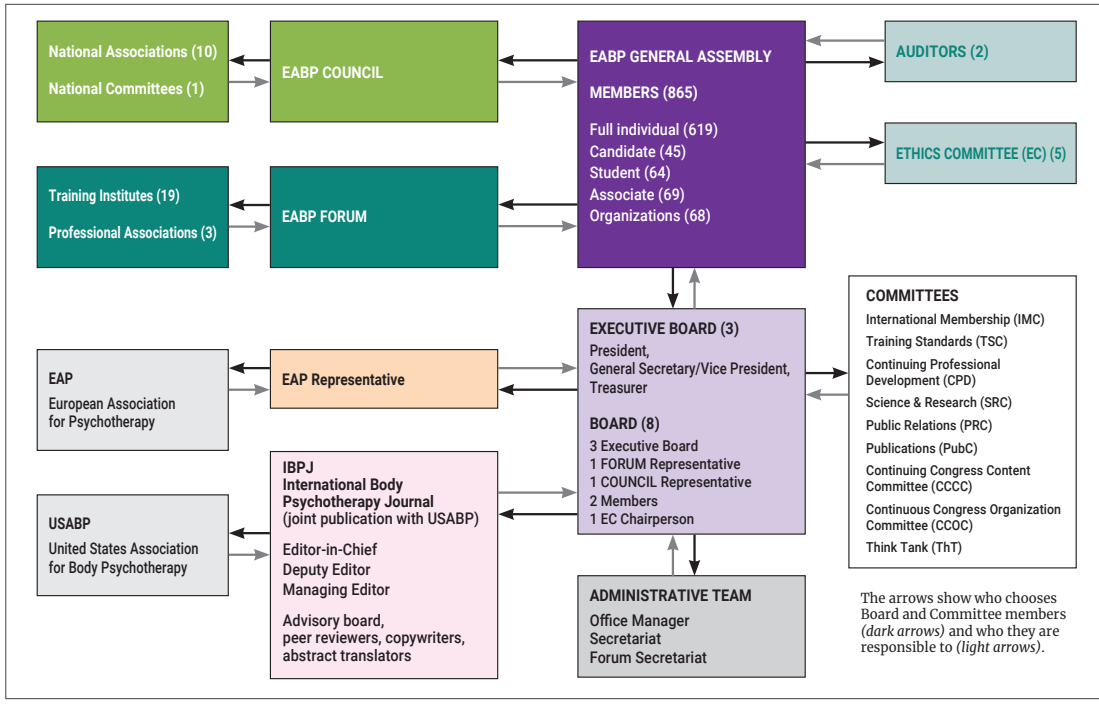
This should be done through classes or workshops in which people from different places and cultures can meet and discuss different ways of interpreting the EC Guidelines, propose changes, and thus get involved in the constant adaptation and co-creation of our ethical code. Therefore, it is very positive that, from now on, the EABP Training Standards will include classes in ethics, inviting all accredited training institutes who still haven't done it to include this in their curricula.

4. Organizational Ethics

EABP has Ethics Guidelines that address the ethics of its individual members, and are based on the profession of body psychotherapists, in a therapist/client relationships, as the agents covered by these guidelines. However, as can be seen on the chart published on the EABP website, EABP is also a complex organization founded on a series of goals (stated under the rubric "About us" on the website), moral principles upheld by the Ethics Guidelines, and functional principles such as direct democracy – i.e., the final authority is the General Assembly of its members, and that all other entities, including the Board of Directors and Ethics Committee, have to yield to its decisions. These rules are compiled in the EABP Articles of Association. The Association was also founded on a culture and a vision that all members, officers, and staff must help maintain.

Since the years of its foundation, EABP has undergone a series of changes that affect both its goals and structure. During this time, the Association has introduced new elements that do not formally comply with its ethical guidelines because they are not necessarily covered by the concept of body psychotherapists, or therapist/client relationships. Part of its administration has been professionalized and it has begun to accept other professional organizations as members, and has also created the designation of Accredited Training Institutes, i.e. organizations, as stated above, whose level of quality of services is guaranteed by EABP. This means that, apart from the professional ethical code, there must be an organizational ethics code that *"is concerned with standards and principles for human behavior within an organizational structure" and "promote those behaviors that ensure an ambiance of fairness, trust, honesty and respect"* (Letendre, 2015).

From the point of view of EABP's organizational ethics, there are several important issues that need to be kept in mind. The main one is maintaining the essence of EABP



in spite of external cultural and economical changes, and maintaining balance between informal, flexible, but less efficient functioning, and formal, more efficient, but also more rigid bureaucratic functioning of the association. As an organization grows and evolves, there is always the automatic development, due to the constant creation of new rules to cover its needs, towards greater rigidity and bureaucracy. Over time, and if not controlled, this process can choke the organization, hinder its proper functioning, and make it lose its bearing.

Here, one of the roles of the Ethics Committee is to help the Board and committees maintain balance between those two extremes, and be aware of the consequences for the spirit of the Association to lean too much in either direction. (See the EABP Ethical Guidelines article 2.1.1.)

When it comes to the external organizational ethics, the issues are around professional associations and training institutes that are EABP members, which, consequently, must abide by EABP ethical principles. The growing demand from society for higher quality guarantees has made it important to clearly differentiate between organizational members whose trainings are EABP accredited and those that are not. As strong organizational ethical standards are an intrinsic part of the accreditation criteria for training institutes, a higher degree of control is a way to be fair towards those training institutes that have made the effort, both structural and financial, to obtain accreditation. The function of the EC is thus here to make sure that no organizational member that has not fulfilled the accreditation criteria can present itself as an Accredited Training Institute.

5. Ethics as a Guarantee of Quality

From the moment the EABP began to implement clear training standards as membership criteria, the Association became a social and financial agent giving its members, as it were, a professional stamp of quality that the Association backs as a brand of professionalism, seriousness, and excellence. This means that an EABP member must acknowledge the EABP Ethics Guidelines, and sign a document stating his/her adherence to them. Following the Ethics Guidelines becomes an act of social responsibility, as any breach actually lowers the quality level of the whole organization in the eyes of the public.

The role of social and financial agents derives from guaranteeing the quality of services rendered by its members, raising their value of trust in the eyes of the public, and thus also securing a better competitive position. The presence of an ethics committee is an essential part of the Association's capacity to back up the guarantee of quality, and also, of course, security for those who receive the services rendered.

Through the process of self-assessment and mutual recognition in the FORUM of body psychotherapy organizations, the EABP grants accreditation to training institutes that fulfill EABP Training Standards, and through their structure and way of functioning, can show that they function within the framework of the Association's Ethical Guidelines. Every five years, as a guarantee that the training institutes maintain their level of quality and adherence to the ethical spirit of EABP, they must go through a reaccreditation process in order to keep their status.

Whereas the accreditation process of a training institute has always been very thorough and often implied structural changes to meet the EABP criteria, the reaccreditation process has been a relatively easygoing self-assessment. In view of the growing need for quality assurance, however, the reaccreditation process must involve the Ethics Committee to some degree. Here, the ethical problem is how to control the behavior of training institutes and enforce sanctions, while at the same time maintaining the principle of confidentiality and also fairness towards all the people involved. Revoking or not renewing an accreditation may have important financial consequences for a training institute, but not doing so will certainly have important negative consequences for the whole Association that risks losing its credibility and becoming regarded as untrustworthy.

David Trotzig, BS is a Reichian Body Psychotherapist and orgnomist specialized in childhood prevention and complex post traumatic disorders. He did his training as a Body Psychotherapist at the Spanish School of Reichian Therapy (ES.TE.R) under Xavier Serrano and training in EMDR at the Spanish EMDR Association. He is full member of EABP since 2005 and is a holder of the European Certificate of Psychotherapy (ECP). He works full time in his private practice in Barcelona and is currently the Chair of the EABP Ethics Committee and member of the Board of EABP.

REFERENCES

EABP (2016). *Articles of Association*. https://eabp.org/wp-content/uploads/2019/12/EABP-Articles-of-Association-13-12-2016-new-design.pdf

EABP (2019). *Ethical Guidelines*. https://eabp.org/wp-content/uploads/2020/03/2019-EABP-Ethics-Guidelines.pdf

Letendre, M. (2015). *Organizational Ethics*. Encyclopedia of Global Bioethics, pp. 1-10, 10.1007/978-3-319-05544-2_320-1

Sher, G., et. al (2012). *Ethics: Essential Readings in Moral Theory*. First published 2012 by Routledge 711 Third Avenue, New York, NY 10017

Sollmann, U. (2019). Ethics and Ethos as Essential Elements of Professionalization of Body Psychotherapy. *International Body Psychotherapy Journal*, Volume 18, Number 2, Fall/Winter 2019/2020, pp. 208-227

The Development of Body-Oriented Psychotherapy in Russia

Boris Suvorov

ABSTRACT

This article provides a brief overview of the history and current state of body-oriented psychotherapy in Russia. This review of the main areas of body-oriented psychotherapy in Russia includes a presentation of biosynthesis, Bodynamics, Bioenergetic Analysis, and thanatotherapy.

Keywords: psychotherapy, body-oriented psychotherapy, Biosynthesis, RABOP, Bodynamics, Bioenergetic Analysis, Thanatotherapy, trauma work, Hakomi, SOBBORUS, Bioenergetic Analysis Society, International Association of Thanatotherapy

BODY PSYCHOTHERAPY AROUND THE WORLD

Submitted: 29.02.2020
Revised: 10.03.2020
Accepted: 11.03.2020

International Body Psychotherapy Journal
The Art and Science of Somatic Praxis

Volume 19, Number 1,
Spring/Summer 2020, pp. 122-124

ISSN 2169-4745 Printing, ISSN 2168-1279 Online

I first find it necessary to say a few words about the general development of psychotherapy in Russia before talking about the development of body-oriented psychotherapy in particular.

Unfortunately, according to the USSR official communist ideology, disorders of the neurotic spectrum could be found only in a decaying capitalist society, whereas there could be no such disorders in a prosperous society of developed socialism. Psychoanalysis was considered a bourgeois pseudoscience; therefore, the development of psychotherapy in the USSR was extremely limited. While academic psychology was actively developing and the names of academic psychologists from the USSR are known all over the world, psychotherapy was developing in isolation from international schools of psychotherapy. This led to the fact that domestic psychotherapy was represented mainly by cognitive-behavioral therapy, and even that modality was presented by "the reinventors of the wheel."

Now let's turn to the development of body-oriented psychotherapy in Russia.

The pioneer of the field was Vladimir Baskakov, the founder and first president of the Russian Association of Body-Oriented Psychotherapy.

This is how Baskakov, in his book Russian Body-Oriented Psychotherapy, describes the first steps toward body-oriented psychotherapy in our country:

> *"At that time, it was impossible to talk about the existence of body psychotherapy in our country as about a number of schools, directions, with its well-organized methodology, experience in providing professional assistance and the institution of supervision. Single copies of western books on body therapy at that time could only be obtained by getting them under the table at international book fairs. The Iron Curtain was not a metaphor for us, we could feel it everywhere. With the beginning of perestroika, remarkable specialists*

> ***The Iron Curtain was not a metaphor for us, we could feel it everywhere.***

came to our country, for example, an English Bioenergetic specialist, Rosslyn Langdon, or Eric Westfal, professor of the University of Oldenburg (hereinafter - co-founders of the International program 'Body Culture'). A great impetus in understanding the basics of body psychotherapy was given to us by the German specialist Heinrich Werner... Besides wonderful trainers unconcealed charlatans rushed to our country. The reverence that existed at the time for everything imported, based on the Soviet pattern 'everything imported is the best,' led to the fact that many of us visited such 'specialists.'"

The first conference on body psychotherapy, ***Russia:** Soul and Body*, held in Moscow in July 1999, can be considered a significant milestone in the development of Russian body psychotherapy. During the preparation for this conference, the lack of a clear definition of the field of body psychotherapy led to the representation of all approaches that, to one degree or another, worked with the body – massage, yoga, etc. – many having nothing to do with body psychotherapy. Later on, we proposed criteria that differentiated body psychotherapy from other kinds of bodywork.

The Russian Association for Body-Oriented Psychotherapists was created in 1999. In 2000, RABOP became a full member of the European Association for Body Psychotherapy (EABP). Since then, RABOP has been the national EABP representative in Russia – and the National Russian Association in EABP – and had the right to accept Russian body psychotherapists as members of the EABP.

In 2014 RABOP organized a meeting of the Council of National Associations in Moscow. Five body-oriented conferences were held during RABOP's existence. Further popularization of the field of body psychotherapy was facilitated by the publication of *The Body Psychotherapy Anthology* edited by Vladimir Baskakov, regular releases of RABOP Bulletins, a RABOP Training Program, the organization of international programs on Biosynthesis, Bodynamics, work with shock trauma, and the participation of RABOP members in interdisciplinary conferences.

Unfortunately, in 2015, the RABOP ceased to exist due to disagreements between its members regarding the further development of the association. At that point, the RABOP had 20 full EABP members, one candidate, and eight associates.

Four schools of body-oriented psychotherapy are active in Russia:

1. **Biosynthesis**, established in 1994, is the first international long-term training program in body-oriented psychotherapy. Five groups have graduated from the international training program in collaboration with the International Institute for Biosynthesis. Currently, the Russian branch of the Institute is recruiting for a sixth training in Moscow and the second training in Rostov-on-Don. During this time, three international trainers, four trainers, six assistant trainers, and 32 Biosynthesis therapists were trained and are members of the International Biosynthesis Foundation (IFB) and the European Association of Biosynthesis (EABS). In May 2019, the international meeting of Biosynthesis psychotherapists was held in Moscow with the participation of Sylvia Specht-Boadella and other international trainers, as well as professionals from Russia, Switzerland, Germany, Greece, Cyprus, Spain, Israel, Ukraine, Brazil.
2. **Bodynamics** came to Russia in 2004. In collaboration with the International Institute for Bodynamics, there have been ten foundation trainings offered.
   - Foundation courses in Moscow (2005-2014): 183 students
   - Foundation courses in other cities (2012-2016): 73 students
   - Bodynamics shock trauma training program (2006, 2015-2016): 63 students
   - Bodynamics work with birth trauma: 73 students

   In May 2015, to celebrate the 10th anniversary of Bodynamics in Russia, Moscow hosted the world's first International Bodynamics Conference with the participation of Erik Jarlnaes and Lisbeth Marcher.

   Unfortunately, cooperation with the Bodynamics International Institute was terminated in 2018. Erik Jarlnaes continues to conduct separate authorial programs in Moscow and Lisbeth Marcher plans to come to Moscow in June 2020.
3. **Bioenergetic Analysis** came to Perm in 2007. The first graduation of seven certified bioenergetic therapists took place in 2014. The first international training program started in 2011 in Moscow and in 2017, the first graduation of 12 certified bioenergetic therapists took place. Currently, a second group is graduating, and a third group is being organized.
4. **Thanatotherapy** was created by Russian psychotherapist Vladimir Baskakov in the 90s. The Institute of Thanatotherapy was created in 2001, and the International Association of Thanatotherapy was created in 2008. This method studies the process of dying, attitudes toward death, and the total relaxation of the body. Our attitude toward death affects our whole life and the deepest issues of our psyche.

The Concept of Thanatotherapy

Thanatotherapy addresses the contact with the process of dying and death itself; the main goal of Thanatotherapy is to make this contact full and real. Everyone knows that one must die; nobody believes that one will die. Thus, the transition from a "permanent" state of dying to a terminal, final phase is a great emotional and physical shock.

The phenomenon of right, natural dying, as well as the notion of a biological and social body, lie at the base of Thanatotherapy. Life and death are nothing but two sides of the same reality. When we try to ignore death, we deprive ourselves of a great source of energy – the energy of the fear of death.

Thanatotherapy is intended for use by:

- *All mortals* – to arrive at a more complete awareness of their life task and of their place in the universal life/death process; to establish full contact with their inner and outer resources; to achieve the greatest possible relaxation, similar to the state of the body just after death, and still come back to life.
- *People seeking personal growth* – for the great transpersonal experience that is the separation from the body and the "quest of the soul."
- *People who are physically ill* – to trigger and activate the biological reactions of the self-healing process.
- *Psychotherapists and practical psychologists* – to make a strong effect on problem patterns without pushing a client into acting out.
- *People with sleep disorders* – to regain contact with this kind of "minor death."
- *Men and women who have problems with sexual relationships* – to recognize the cause of their difficulties and find a solution.
- *Pregnant women* – to come into contact with their biological body and its healthy reactions as a basis for natural and painless birth.
- *People who fear death* – to step over the barriers of their fear, to see their problems as the root of their fear, and to find ways toward a solution.
- *Patients who are terminally ill* – to recognize and accept their pain, and thus find relief.
- *Those who take care of the terminally ill (professionals and relatives of patients)* – to learn how to relax patients, take away their pain, distract them from destructive and painful thoughts, raise their spirits, and give way to optimism and acceptance.

There are currently several professional associations of body-oriented psychotherapists in Russia:

- SOBBORUS, the Community for Professional Practitioner Support, established in 2016. Research projects on Biosynthesis, Bodynamics, and other approaches are conducted by the association. In May 2017, SOBBORUS organized the All-Russian Conference for Biosynthesis, The Russian Biosynthetic Therapists Meeting, and in May 2019, the International Biosynthesis Therapists Meeting.
- The Bioenergetic Analysis Society which conducts training in Bioenergetic Analysis and is developing this approach in Russia.
- The Institute of Thanatotherapy and the International Association of Thanatotherapy.

In addition, the following training programs are being conducted:

- Hakomi
- Peter Levine's Somatic Experiencing® trauma work
- Work with shock and developmental trauma

The following books are published in Russian:

- Bodynamics. (2010). *Body psychotherapy*.
- *The Development of Bodynamics in Russia.* (2015) A collection of articles and abstracts from the First All-Russian Conference dedicated to the 10th anniversary of Bodynamics in Russia.
- Biosynthesis. (2016). *Life Streams: Interviews with David Boadella*.
- Biosynthesis. (2017). *Inspiration and Embodiment*.
- M. Bentzen. (2017). *The Neuroaffective Picture Book*.

Boris Suvorov, MD, is a body-oriented psychotherapist and full member of EABP, CBT.

REFERENCES

Baskakov, V. (2006). *Russian Body-Oriented Psychotherapy*. Moscow

Information from Victoria Berezkina-Orlova, representative of RABOP in EABP (2003-2013), director of the Russian Institute of Biosynthesis, founder of SOBBORUS

tanatoterra.com

sobborus.ru

The Infinite Subtleties of Sensation

A Look at Peter Levine's Two Key Works on Trauma

Adam Bambury

BOOK REVIEW

Waking the Tiger: Healing Trauma
Peter A. Levine with Ann Frederick
North Atlantic Books, 1997

In an Unspoken Voice: How the Body Releases Trauma and Restores Goodness
Peter A. Levine
North Atlantic Books, 2010

It's been 23 years since Peter Levine, with Ann Frederick, published *Waking the Tiger* – a popular and pivotal book about connecting with the body to heal trauma. It brought body-focused techniques to the wider awareness of both self-help readers and therapy professionals. Together with its associated approach, Somatic Experiencing®, it made Levine one of the key figures in the now burgeoning field of trauma recovery.

Reading *Waking the Tiger* now is a fascinating snapshot of a key moment on this journey. In it, Levine seems a man on a mission to share the insights he's gleaned from 25 years as a Reichian-trained *"scientist-healer"* who has worked with *"people who have been traumatized in almost every conceivable fashion."* As the quote that began this article indicates, he is suggesting nothing less than a total reassessment of how we typically deal with trauma, both on a personal and societal level – and paying attention to the sensations in our bodies is key.

Levine draws much of his inspiration from the natural world, of which we *"human animals"* are just another part. His own observations of animal predator-prey behavior, coupled with research from the growing field of psychophysiology, have yielded the *"missing link"* in healing trauma: namely, the *"fluid adaptation of wild animals"* that have been attacked and survived the ordeal, *"as they shake out and pass through the immobility response and become fully mobile and functional again"* (p. 18).

For us humans, it's not quite so simple. Drawing on neuroscientist Paul Maclean's triune brain model, Levine explains how this natural healing response can be interrupted. Confronted by shock trauma (longer-term, developmental trauma is mentioned briefly in the book, but isn't its focus) we may experience an instinctual fight, flee, or freeze response. However, our highly evolved neocortex (rational brain) can kick in to interfere with the gentle discharge of energy initiated by the evolutionarily older reptilian part of the brain. If this *"instinctual cycle"* is not allowed to finish or resolve itself, the energy becomes *"trapped in the nervous system where it can wreak havoc on our bodies and spirits"* (p. 19). Symptoms of trauma thus exist in us as *"incomplete physiological responses suspended in fear"* (p. 34).

> ***Most trauma therapies address the mind through talk and the molecules of the mind with drugs and both of these approaches can be of use. However, trauma is not, will not and can never be fully healed until we also address the essential role played by the body.***
>
> Peter Levine

Accessing these physiological responses and allowing them to complete does not, says Levine, necessitate reliving the experience through techniques like flooding, or even necessarily reliving the original experience at all. Nor does it require dramatic emotional catharsis. Rather, these trapped responses need to be paid gentle attention to in the form of bodily sensations – *"tracked"* by a suitably attentive therapist in touch with their own embodiment, and by a client who is encouraged to bring a gentle awareness to bear on their inner experience.

Given space in this way, the stuck trauma will shift, and move towards completion. The book's titular tiger emerges from the undergrowth in a 1969 session with a client called Nancy, who starts having an anxiety attack after Levine tries to lead her through a relaxation exercise. Levine sees the tiger in his mind's eye, and finds himself compelled to urge her to run from it.

Sure enough, her legs and body begin to tremble. A memory later emerges for Nancy of undergoing a tonsillectomy at the age of three, strapped to a table, and hallucinating from the ether used as anesthetic. Levine explains that the relaxation exercise freed up Nancy's long-held *"immobility reaction"* from the experience, releasing arousal in the form of rage and terror. The tiger allowed Nancy to finally take action, to escape, and to discharge this heightened arousal that had been held in for so long.

From this formative early experience, the ground is set for the rest of *Waking the Tiger*. Levine goes on to explore what he sees as the four key components of trauma: hyperarousal, constriction, dissociation, and freezing/immobility/helplessness. He discusses the many ways acute trauma can occur in an individual, from pre- and perinatal trauma to violence and abuse, with some particular attention paid to childhood surgery. He explains how symptoms of trauma, which can often emerge in the body as *"psychosomatic"* complaints, can emerge months or even years after the event. In one thought-provoking chapter, he explores Freud's repetition compulsion with regard to trauma: *"Frequent re-enactment is the most intriguing and complex symptom of trauma.This phenomenon can be custom-fit to the individual, with a startling level of 'coincidence' between the re-enactment and the original situation. While some of the elements of re-enactment are understandable, others seem to defy rational explanation"* (p. 184).

Wider connections are made with references to myth and shamanism; like Perseus, we cannot face the Medusa of trauma head on lest we be immobilized by fear. We must instead approach through the *"reflection"* of sensation in the shield of our bodies. Levine has worked with shamans *"of several cultures"* (as well as spending a year as a stress consultant at NASA working with the first space shuttle pilots – definitely an interesting CV), and explains that while his approach is not in itself shamanic, it is still connected to these traditions – not least by the warm sweat, trembling, and shaking that both shamanic healing and body-oriented therapy clients might experience.

What Levine doesn't do a great deal of in *Waking the Tiger* is go very far into how the therapist – as opposed to a reader working on themselves – can actually work with trauma, and how Somatic Experiencing actually works in practice (although there is a practical appendix on helping children and adults remain free from trauma after accidents). An all-too-brief section on *"transformation"* near the end of the book looks at how the nervous system regains its capacity for self-regulation through the *"renegotiation"* of trauma. This is explained as involving a slow rhythmic pulse into and out of the trauma, via a conscious awareness of sensations that become more and more bearable: *"we begin to mend the ruptured bank by circling around the peripheries of the healing and trauma vortices, gradually moving toward their centers"* (p. 199).

The relative absence of technique is certainly remedied in the book's follow up, *In an Unspoken Voice*. Published 13 years later in 2010, this book contains more – a lot more – on this, and expands on *Waking the Tiger* in almost every way (while also, it must be said, lifting a few portions of it completely). While *Waking the Tiger* feels like the imparting of an important message, and has the sense of discovery, excitement, and future potential that goes with that, *In an Unspoken Voice* feels more complete and weighty, more defined. It's a pleasure to spend time with Levine as he shares what he's learned over his many years of research and practice. The message is still there, still energized, but explored from different angles and in new directions.

The above process of working with trauma is soon elaborated in a set of nine *"building blocks."* After establishing a sense of relative safety and awareness of sensations can come a process termed *"pendulation:" "experiencing the innate organismic rhythm of contraction and expansion."* Pendulation is, Levine explains, *"about getting unstuck by knowing (sensing from the inside), perhaps for the first time, that no matter how horrible one is feeling, those feelings can and will change"* (p. 78).

Similarly important is the concept of *"titration."* To prevent retraumatization through overwhelm, the client is instead guided to *"[touch] into the smallest 'drop' of survival-based arousal, and other difficult sensations"* (p. 75) – helping them to build stability and resilience. It is important to balance this process with the accessing of more benign-seeming sensations, which Levine terms *"islands of safety."* These could be located in an area of the body, a posture, or movement, and can be linked to form a *"landmass"* that helps clients negotiate and tolerate increasing levels of traumatic arousal.

With this filling out of the theory with the practice, the book becomes more of a manual for the practicing therapist looking at ways to work with trauma in their clients. There is an explanation of Levine's SIBAM model from the 1970s, which draws on the power of somatic resonance and subtle observation, as well as a very interesting chapter, *"In the consulting room,"* which presents a series of case studies.

Levine also takes time to fill in some of the influences on his work not mentioned in the 1997 book, paying credit to the scientists and researchers that inspired him, including Nina Bull's work in the late 1940s and 50s on the bodily postures and internal experiences associated with different emotions (p. 331). But he also connects it to the contemporary scene, drawing on the explosion of mainly neuroscience-backed research into the body-mind con-

nection over the past 20 years.

This is most obvious in the chapter *"A Map for Therapy"* (p. 97), where Stephen Porges's polyvagal theory of emotion is explained and connected to Levine's model. For Levine, as for many body-oriented therapists, Porges' work both provides a *"treasure map"* of psycho-physiological systems that govern the traumatic state, and it underscores the importance of somatic approaches – including face-to-face engagement, movement exercises, and touch, in helping clients effectively work through trauma and reconnect with themselves and the wider world.

As well as situating the work in contemporary research, Levine locates it, to some extent, within the body psychotherapy tradition. A chapter on *"The Embodied Self"* (p. 271) moves away from a more or less explicit focus on the problem of trauma to a wider look at embodiment more generally, and the healing power of interoception combined with gentle non-judgmental awareness, with reference made to the work of body psychotherapists throughout the 20th century. He makes the case that insight, or knowing why, in therapy isn't enough – and can even be demoralizing or disturbing, as it doesn't in itself produce change. This is contrasted with focusing on awareness, and the increased capacity for noticing and tolerating bodily sensations, which can *"seemingly, as if by magic, prevent or dissolve entrenched emotional and physical symptoms"* (p. 290).

Readers of this journal will probably agree with the power inherent in this approach, and indeed the book is framed by Levine's own experience of being knocked over by a car and managing to emerge free of trauma through practicing this very awareness of subtle sensation. But for me, it brings up one aspect of the work not particularly addressed – that some clients may find the requested bracketing of their verbal or emotional expression by the therapist for a repeated return to their inner awareness itself demoralizing or dissociating. In short, they may not feel fully *"met."* While the importance of gentle, compassionate connection is emphasized by Levine, the relational turn in body psychotherapy is not addressed.

Levine then takes a long look at *"Emotion, the Body and Change,"* beginning with the assertion that *"the process of change has to do primarily with being able to alter one's internal feeling states"* (p. 309). It includes a brief look at the work of pioneering therapists like Freud, Reich, Lowen, and Perls. Who knew that Reich referred to Lowen as *"the uppity uptown tailor"* and Perls as *"the dirty old man from the Bowery"* (p. 311))? Relatively short shrift is given to the catharsis-based techniques of the 60s and 70s. For Levine, it's the *"feelings accessed through body awareness, rather than emotional release"* that *"bring us the kind of lasting change that we so desire."*

There is much more to explore in this book, and like the first, the reader is carried along by an admirably accessible prose style, as befits a book that aims for a wider audience than only professionals in the field. The in-depth discussions of psychophysiology and neuroscience in both books are lifted into a wider context by the many quotes that introduce the various sections. From the wisdom of the Chinese divination text the I Ching to the deep vision of D. H. Lawrence and William Blake (and even some reptile-referencing excerpts from Michael Crichton's novel Jurassic Park), these provide a welcome broadening of context and color.

It's clear that despite his eye for the evolutionary complexity of our fascinating physiology, Levine doesn't get lost in the details. Reading both these books, one is left in no doubt of his compassionate big picture view, and his excitement at our human potential for transforming trauma – the reward for such a grave endeavor being no less than an *"awakening of our life force"* that can feel like *"a gift from the gods"* (p. 356). This reviewer was left with a simple but powerful gift: a renewed appreciation for my embodied inner awareness – that which connects the very small with the very large, and back again.

Adam Bambury is a body psychotherapist, writer, editor, and music maker. He lives and works in London, UK.

E-mail: adambtherapy@gmail.com
Web: www.adambambury.com

REFERENCES

Bull, N. (1951). *Attitude Theory of Emotion*. New York: Nervous and Mental Disease Monographs

Porges, S. W. (2001). The Polyvagal Theory: Phylogenetic Substrates of a Social Nervous System. *International Journal of Psychophysiology*, 42, 123-146

North Atlantic Books

Publisher of

Waking the Tiger and **In an Unspoken Voice**
by **Peter Levine**

is offering EABP & USABP a **40% discount** on all Peter Levine books site wide
(hard copies, eBooks, audiobooks)

Coupon code for the 40% discount

TIGER40

This discount is valid between
June 10th – August 31st, 2020

Before you order, please make sure that you read the following explanations carefully.

- Hard copies are only available in the USA. The mailing cost is additional. For details visit NAB customer service: https://www.northatlanticbooks.com/customer-service
- The coupon cannot be combined with other offers or products on sale. It is not valid on gift certificates.
- In Europe, the 40% discount will only work for ebooks and audiobooks, as NAB does not ship internationally. There is no shipping fee on eBooks.
- Any European member who wants hard copies should use Amazon instead of the NAB website. The discount will not work on Amazon. It will only work on the NAB's website.
- Almost all of NAB books come as eBooks. When you pull up the book page on the NAB site, you will see several options - print, eBook, and audio. Click on the one you want and add it to your cart. The eBooks are delivered in pdf form. When bought on Amazon, they are delivered in Kindle form.

Please before you order, read carefully the customer service section:
https://www.northatlanticbooks.com/customer-service/

Our Questionnaire

JOIN US AND
BE PART OF THE *IBPJ* TRANSFORMATION

The *International Body Psychotherapy Journal*
is celebrating **19 years** of publication
and its passage into adulthood.

Our goal is to expand our reach and transform *IBPJ* into the Worldwide Voice of Body Psychotherapy and Somatic Psychology.

We aim to become our profession's go-to resource for cutting edge information, rubrics, points of view, references, articles for you and from you, and more!

Your input will contribute to shaping this goal.

Give *IBPJ* just five minutes and tell us what is important for you to find in the *Journal*'s pages.

You can answer the *IBPJ* questionnaire at:

https://forms.gle/G1zjFe6aBELBHSQs7

Your opinion of your professional Journal matters

INTERNATIONAL BODY PSYCHOTHERAPY JOURNAL
The Art and Science of Somatic Praxis
Volume 19 · Number 1 · Spring/Summer 2020

The *International Body Psychotherapy Journal (IBPJ)* is a peer-reviewed journal, published twice a year in spring/summer and fall/winter. It is a collaborative publication of the European Association for Body Psychotherapy (EABP) and the United States Association for Body Psychotherapy (USABP). It is a continuation of the *USABP Journal*, the first ten volumes of which can be found in the *IBPJ* archive.

The *Journal*'s mission is to support, promote and stimulate the exchange of ideas, scholarship, and research within the field of body psychotherapy and somatic psychology as well as to encourage an interdisciplinary exchange with related fields of clinical theory and practice through ongoing discussion.

Correspondence Addresses
Editor-in-Chief: submissions@ibpj.org
Change of Address: secretariat@eabp.org
Advertising: managingeditor@ibpj.org

The *IBPJ* is available free online.
Print subscriptions: http://www.ibpj.org/subscribe.php
Printed single issue: Members €17.50, Non-members €20
Yearly subscription: Members €30, Non-members €35
Two-year subscription: Members €55.00, Non-members €60.
Payment through bank transfer: American Express or PayPal

Translation: The *Journal* is published in English.
Article abstracts can be found on the *IBPJ* website in Albanian, Bulgarian, French, German, Greek, Hungarian, Italian, Japanese, Portuguese, Russian, Spanish, and Turkish at: www.ibpj.org/archive.php.
If an article originally written in another language has been accepted for publication in English, the full article may also be found in the original language.
Abstract Translators: Albanian, Elmedina Cesko, Arber Zeka; Bulgarian, Meglena Beneva; French, Marcel Duclos; German, Anton Darakchiev; Greek, Alia Panetsou; Hungarian, Marton Szemerey; Italian, Fabio Carbonari; Japanese, Yasuyo Kamikura; Russian, Evgeniya Soboleva; Spanish, Eva Palicio; Turkish, Celal Eldeniz.

Note: The accuracy or premises of articles printed does not necessarily represent the official beliefs of the USABP, EABP, or their respective Boards of Directors.

I***SSN 2169-4745 Printing***, ***ISSN 2168-1279 Online***

USABP: usabp@usabp.org ■ www.usabp.org
EABP: secretariat@eabp.org ■ www.eabp.org
IBPJ: www.ibpj.org

Letters to the Editor

The editors are eager to receive letters, particularly communications commenting on and debating works already published in the *Journal*, but also suggestions and requests for additional features. A selection of those received will be published in the next volume of the Journal.

Advertising Information

The *IBPJ* accepts advertisements for books, conferences, training programs, etc., of possible interest to our members. For more information please contact **Antigone Oreopoulou** at **managingeditor@ibpj.org**.

Criteria for Acceptance

The *Journal*'s mission is to support, promote and stimulatethe exchange of ideas, scholarship, and research within the field of body psychotherapy and somatic psychology, as well as to encourage an interdisciplinary exchange with related fields of clinical theory and practice.

First consideration will be given to articles of original theory, qualitative and quantitative research, experiential data, case studies, as well as comparative and secondary analyses and literature reviews.

Submission of an article to the *International Body Psychotherapy Journal* represents certification on the part of the author that it presents original, unpublished work not under consideration for publication elsewhere.

Our editors and reviewers will read each article with the following questions in mind:

- How does material in this manuscript inform the field and add to the body of knowledge?
- If it is a description of what we already know, is there some unique nugget or gem the reader can store away or hold onto?
- If it is a case study, is there a balance among the elements, i.e., background information, description and rationale for chosen interventions, and outcomes that add to our body of knowledge?
- If it is a reflective piece, does it tie together elements in the field to create a new perspective?
- Given that the field does not easily lend itself to controlled studies and statistics, if the manuscript submitted presents such, is the analysis forced or is it something other than it purports to be?

Author Guidelines

Submission: For full submission details please consult the EABP website. Articles must be submitted by e-mail.

Format: Please consult the latest edition of the Publication Manual of the American Psychological Association. Manuscript should be single-spaced in 10 pt. type, with a one-inch (25 mm) margin on all four sides. Please include page numbers. Paragraph indent – 1.27 cm. The manuscript must be free of other formatting.

Order of Information: Title, full authorship, abstract (±100-350 words), keywords (3-5), text, references, biography (100 words). The biography should include the author's degrees, institutional affiliations, training, e-mail address, acknowledgment of research support, etc.

References: References within the text should include the author's surname, publication date, and page number. Full attribution should be included in the references at the end. Copyright permission must accompany any diagrams or charts copied, or altered from, published sources.

We follow ***American Psychological Association (APA) standards*** for citations.

- ***Citation Simplifier*** takes the fuss out of writing the bibliography! If you need to use a different citation style, it can be found on the left-hand side of the page. Click on the type of resource cited (book, blog, article, etc.) and fill in the required information (click the + button to add an author if your source has more than one). When complete click "Make Citation" and there you have it, a formatted bibliographic citation that can be copy-and-pasted directly to your work. Of course, you may wish to consult a more comprehensive resource about APA style guidelines.
- ***In-line citations***. To find the information you need for citation, referring to the primary source you used is best. If you no longer have access to it, a Google search with the information you do have (book/article title/author's name) will often provide the rest in the first few hits. Start by clicking on the first Google result, and by eye, search for the information that the citation machine website specifically requests. Browse the next few Google links if need be. If the information needed (i.e., page numbers) can't be found in the first few hits, it is unlikely to be online at all.

Language: Authors are responsible for preparing clearly written English language manuscripts, free of spelling, grammar, or punctuation errors. We recommend ***Grammarly***, an automated proofreader and grammar coach. Authors are also responsible for correct translations. If the article is originally written in a language other than English, please submit it as well and we will publish it on our websites.

Peer Review: All articles are peer reviewed by three reviewers. During this process, suggestions for changes or alteration will be sent to the author. Final decisions for changes are made at the joint discretion of the author and editors. Before the Journal goes to print, authors will receive a copy of their article to check for typographical errors, and must return corrections by email within the time limit specified.

Confidentiality: To ensure the confidentiality of any individuals who may be mentioned in case material, please make sure that names and identifying information have been disguised to make them anonymous, i.e., fictional and not identifiable.

Copyrights: It is a condition of publication that authors license the copyright of their articles, including abstracts, to the IBPJ. This enables us to ensure full copyright protection, and to disseminate the article and the Journal in print and electronic formats to the widest readership possible.

Authors may, of course, use their material elsewhere after publication, providing that prior permission is obtained from the IBPJ. Authors are themselves responsible for obtaining permission to reproduce copyrighted material from other sources.

By submitting a manuscript, authors agree that the exclusive right to reproduce and distribute the article has been given to the Publishers, including reprints, photographic reproductions of a similar nature, and translations.

European Association for Body Psychotherapy

USABP United States Association for Body Psychotherapy
The Hub of Somatic Psychology

Journal (ISSN 2169-4745)