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Title of article:

Widening the Map of Hypo-states: A Methodology to Modify Muscular Hyporesponse and Support Regulation of Autonomic Nervous System Arousal

Author:

Merete Holm Brantbjerg, Copenhagen

Short bio:

Merete Holm Brantbjerg is a psychomotor-trainer and co-creator of Bodynamic Analysis, a bodypsychotherapeutic tradition developed in Denmark. MHB is naming her approach "Relational Trauma Therapy" - combining psychomotor skill training and systems oriented work with the goal of establishing systems in which mutual regulation of what has been held in dissociation can happen.

She has worked in the field of body-psychotherapy since 1978 as an individual therapist, supervisor and trainer. She is offering workshops and trainings in Stockholm, Copenhagen, London and Tilburg in Holland.

Abstract

The human muscle system participates in psychological defences related to stress and trauma. Methodologies that work with muscles in a hyperresponsive state using relaxation and releasing held back impulses and emotions have been described. What is often missing, and potently more challenging, is hypo response— giving up, taking energy out of the muscle system. Experiences and impulses involved in being stressed or threatened go unnoticed, unfelt, resulting in the inability to access psychomotor skills necessary for resilience. The therapeutic problem becomes, how do we access what we no longer feel?

This article will present two case studies to demonstrate a method of Hypo Response Muscular Dosing. The method works with small slow muscle activation, allowing the psycho-physical system to habituate to more vitality and with that regain access to impulses and emotions, and support regulation of both hyper- and hypoarousal in the autonomic nervous system.

Key words: Hyporesponse, Hypoarousal, Autonomic arousal regulation, Stress- and Traumatherapy

Widening the Map of Hypo-states: A Methodology to Modify Muscular Hyporesponse and Support Regulation of Autonomic Nervous System Arousal

Introduction: A review of established concepts How do we access what we no longer feel? How do we rebuild resilience in areas of the body that have gone into a hypo-state as part of how we survive and manage life?

These questions point to challenges embedded in working with hypo-states in the body and addressing reactions where tissue goes into flaccidity, bodily systems give up, go passive, lose energy, and go into low functioning modes.

Hypo-reactions can be experienced in many bodily tissues such as hypotension (low blood pressure) and hypoglycaemia (low blood sugar). Hypoarousal connotes high activation in the parasympathetic nervous system, otherwise known as collapse. A hypo-reaction is also found in the muscle system. Within body psychotherapy and physiotherapy, the low energized muscle state is known as: hypotonus (Bunkan, 2008; Johnsen, 1978; Stauffer, 2010; Wall, Grieg & Rasmussen 1978); under-armouring (Heller, 2012); hypo-response (Brantbjerg, 2012; https://www.bodynamic.com/theory/bodymap, 2019); and potentially more. Based on psychomotor training approaches, this article will reference the concepts of hyper- and hyporesponse in terms of our muscle response system.

Differentiation between hypo-arousal/collapse in the autonomic nervous system (ANS) and a calm relaxed state, where we can rest and process, has been described in several traditions (Jørgensen, 1993; Ogden & Fisher, 2015; Porges, 2017). Babette Rothschild (2017)

presented a new map of ANS states in her latest book on trauma therapy. She included three types of sympathetic states: Active Alert, Flight/Fight, and Hyper Freeze, and three types of parasympathetic states: Calm, Lethargic, and Hypo Freeze, with varying degrees of arousal. Rothschild's differentiation between three parasympathetic states is a new contribution to mapping stress and trauma reactions. The low energy versions of these reactions have long been less differentiated. What is new in Rothschild's map is her naming a parasympathetic state in between the calm and the collapsed states—Lethargic—and with that focusing on different degrees of arousal in the parasympathetic system (PS). This is a relevant widening of the states that trauma therapists can encounter in the field of trauma reactions.

This article adds another aspect to the map. It includes the low energy state in the muscle system as relevant to understanding stress and trauma reactions and to develop methodology that can support regulation of ANS states, both hyper- and hypo-arousal. This article will present the Hypo Response Muscular Dosing method, which focuses on slowly building energy in hyporesponsive muscles and using it as a key component in working with stress and trauma. Two case examples will demonstrate how a clinical focus on low energy in muscles can support regulation of both hyper- and hypoarousal in the ANS and thus be an element in working with stress and trauma.

Relational aspects, e.g., therapist participation in mutual regulation when working with hyporesponse, are also presented.

Body Psychotherapy Approaches that Work with Muscles

Muscles hold psychomotor skills (i.e., grounding, centring, boundaries) (Brantbjerg & Ollars, 2006; Marcher & Fich, 2010; Stauffer, 2010), and they participate in establishing and maintaining

defence strategies and coping styles. This understanding has been documented by different body psychotherapeutic traditions (Heller, 2012) and by psychomotor-oriented approaches (Bunkan, 2008; Brantbjerg & Ollars, 2006; Marcher & Fich, 2010).

In body psychotherapy, the focus has been on modifying tension, hyper-tonus, and over-armouring (Heller, 2012). Many methodologies have been described focusing on how to modify tension, release armouring, relax, let go, and express held back emotions (Heller, 2012).

Hypo-states have also been described with an early representative in Otto Fenichel (as cited in Heller, 2012, pp.424 - 426), and later Nic Wall, Lillemor Johnsen, Lisbeth Marcher and others (Johnsen, 1978; Marcher, 2019; Wall et al., 1978).

Biodynamic therapy (Heller, 2012; Southwell, 1988) includes a focus on hypo-tonus and its use in hypo-tonus-massage (Heller, 2012). Lillemor Johnsen developed Integrated Respiration Therapy focusing on work with hypo-tonus in muscles (Johnsen, 1978). In Bodynamic Analysis, hypo-response is an integrated aspect in understanding how character structures are created and maintained bodily and in working with the defensive strategy (Bernhardt, Bentzen, & Isaacs, 2004). Stephen Johnson characterises the oral character structure as weak, flaccid and in need of muscular strengthening, which parallels the concept of hypotonus (Johnson, 1985). Berit Bunkan (2008) includes hypo-tonus in her mapping of the body. David Boadella (as cited in Warnecke, 2003) worked with involuntary muscle movements and included a differentiation between gamma and alpha muscle systems. Paying attention to the gamma-directed movements means to work with slow subtle activity in the muscles, which in my experience resembles working with hyporesponsive muscles (Warnecke, 2003).

In neurological training and pain science, hypo-states are present in methodology being developed. In pain science "gradual exposure" is used (Moseley & Butler, 2013), and research on

arthro-kinetic reflexes (Cohen & Cohen, 1956) has led to methodology within fitness training that works with joints (ZHealth Videos, 2010) to generate muscle strength. The arthro-kinetic approach as well as Boadella's work focusing on different muscle systems brings forth a question regarding the dynamics behind the low energy state: how are low energy states created? Is it a giving up of life energy that would naturally fuel psychomotor impulses and emotions but given external conditions must be given up to adapt to what is happening? (Marcher & Fich, 2010; Stauffer, 2010). Is it an under-armouring? (Heller, 2012). Or is it a mechanism in the joints that causes a decrease in muscle strength (ZHealth Videos, 2010).? I leave this question open.

My understanding of hypo-response comes from psychomotor traditions and Bodynamic Analysis. I see it as part of a defence strategy that lowers access to psychomotor impulses and emotions and through that supports adaptation to a 'not ideal' outer context, resulting in a loss of access to skills and emotions. I believe that awareness about this phenomenon exists in many traditions because clinicians may potentially encounter the hyporesponsive strategy both in themselves and in their clients. Although low energy states are considered a normal muscular and psychological response in our muscles, less has been written about methodologies that work specifically to modify them.

Modification of hypo-response through dosing: The emergence of the methodology

Hypo-response is an aspect of how we survive and adapt to challenging outer contexts – including both developmental and traumatic contexts. We can remove our awareness and ownership of a part of us by giving up muscular impulses, and thus improve our chances for survival and necessary adaptation. But it comes with a cost, thus motivation to develop a methodology to help negotiate with the giving up.

A clinical focus on hypo-response as part of trauma-patterns evolved slowly. The kinds of shock-trauma-methodology available (Brantbjerg, 2006, 2012; Ehlers & Clark, 2000; Jørgensen, 1993; Levine, 2010; Rothschild, 2017; Shapiro, 1998) did not provide answers in terms of how to adapt working with hypo-response to trauma-therapy or how to work in depth with hypoarousal. Impacted by my own unregulated collapse hidden under hyper-patterns, I had a hard time working with collapse in the clinical setting. I knew hypo-response- work as a general psychotherapeutic method, but I had not yet developed it as a trauma-therapeutic method.

Working with students in psychomotor skill training, I became aware of relational challenges—people with hyporesponsive patterns may end up in passive, withdrawn relational positions. In my experience, a potential bias for seeing hyper-response as 'strong' and hyporesponse as 'weak' exists, which may invite people into a stuck dynamic with other people and also within each person between the hyper- and hypo-responsive parts of ourselves (Brantbjerg, 2012). In a different language this equals dynamics we can enter inside of ourselves and between us around polarities like "weak and strong", "assertive and passive", "extrovert and introvert" etc. How do we get space for both sides of a polarity and how do we give them equal value?

Including hypo-response in our awareness of who we are is a process that often needs a widening of our identity so our hyporesponsive parts can be positioned as equal-in-value together with the hyperresponsive parts and the naturally filled out parts.

A first step in including hypo-response lies in how we track it bodily. It is typically easier to track what is tense in the body compared to tracking what is more flaccid. This equals the challenge of including our shadow (Jung, 1964), what is not visible, hidden in the background. Hypo-response is a concrete bodily mechanism that keeps aspects of sensations, emotions,

impulses away from consciousness and thus keeps them as part of our shadow side. A practical way to support tracking hypo-response and thus starting the process of bringing some of what is kept in the shadow into consciousness is by comparing parts of the body. Is there more energy on the front side compared to the backside? — or comparisons between upper body and lower body, inside and outside, left and right side etc.

To address ways of incorporating hypo-response in clinical settings called for experimentation with dosing psychomotor exercises. Dosing is a principle available in all aspects of psychotherapeutic process. Cognitive, emotional, bodily and relational methodologies can be dosed differently. The question becomes: Is there a way to do this movement or that exercise that opens access to resources, and that gives access to a part of us that is normally being avoided or protected against through not sensing it? When using the principle in muscle work, dosing is designed as a process whereby psychomotor activity can be conducted with more or less physical strength; slower or faster; and bigger or smaller (Brantbjerg, 2007, 2008; see also Maurer, 2004). Instructing psychomotor exercises with the inclusion of the dosing principle appeared to impact the relational exchange: when dosing, lower and/or higher are both normalized and given equal value, it supports curiosity and exploration to look for a dosage that makes a psychomotor movement resourcing rather than taxing. The right dose can also be to not do the exercise or to do it in a tiny way.

To clarify the methodology mentioned above, an example of the dosing process related to a psychomotor movement that activates chest and stomach muscles follows. Activating these specific muscles supports containment and boundaries on the front side of the body and with that support for staying in oneself in relationship with the outer context (Brantbjerg, 2017; Marcher & Fich, 2010).

Relax your shoulders and let your palms contact each other. Push your hands together. This movement activates muscles on the front side of your trunk. Experiment with how to dose the push. You can use a certain amount of physical strength when the hands push into each other or you can push with less strength. You can try a very small dosage by changing positions, let the tips of your fingers push into each other. Look for a dosage that works for your body, where you can breathe freely, a dosage that doesn't feel like hard work. Be open to the possibility that different dosages may work for you and can open different sensations and potential resources.

Pushing with strength has a chance to regulate hyper-response by inviting the muscles to shift from a static tension to a dynamic use of power and after that energy release.

Dosing lower allows you to bring energy into hyporesponsive areas. A tiny dosage like pushing the fingertips lightly into each other or just thinking that you do the movement can start the process of bringing energy into an area that is quite absent and with that start to include the low energized part in who you are.

We often relate to hyporesponsive areas in the body by avoiding them. We may not want to feel them, or we may want to protect what is held in the hypo-response by not sensing it and acknowledging its existence. This is a parallel to dynamics around pain—patterns of avoidance and protection are often seen in relation to pain (Moseley & Butler, 2013).

Bringing energy into muscles in a low dose supports the potential to shift from avoidance to approach. We can approach the reality that hypo-response is a normal muscular strategy and through dosing we can get closer to what is held in the giving up. Finding a suitable dosage for each person in a psychomotor movement creates potential empowerment and support for accessing what was held in the giving up, no matter which dosage fits.

Ownership and empowerment are key aspects of working with hypo-response. How do we include parts of us where our capacity to cope is low? How do we regain our capacity to cope or build it for the first time?

Seen from a muscular perspective, what works for hypo-responsive muscles in terms of negotiating the giving-up pattern and inviting in what lies embedded is to build energy in a dosage that the person can maintain after the muscle activation ends. If you choose too high a dose when working with a hypo-responsive area, the tendency is to give up again when the activation ends. If you find a precise dosage, no matter how small it is, you can slowly go out of the activation and keep the energy generated by the movement. This muscular process supports finding a way out of giving up and into more ownership, energy, and choices. The dosing process has the potential for widening identity and building resilience and with that change relational positioning to others and to one's self.

Exploring this style in psychomotor skill training, where dosing is included as a key component, has impacted my clinical approach to trauma work.

Trauma-states, both hyper- and hypo-arousal, are challenging to face for both therapists and clients. We can easily be pulled into reactions like collapse (hypo-arousal), panic or rage (hyper-arousal), or we can go into avoidance, or polarisation to the states by working hard to get ourselves or somebody else out of them (Brantbjerg, 2012).

Bringing energy into low energized muscles is working with a giving up pattern in a dosage that is doable also when facing or approaching trauma-states. It is possible to do something when focusing on muscles, when you do it with an eye on precise dosing. Through bringing energy into the muscle system, containment is improved. You can bring enough energy

into the muscle system, so it becomes possible to stay on the edge of, for example, a collapsed state instead of being pulled into it, thus establishing a boundary between the self-awareness in the here and now and the memory of a survival reaction.

Hypo-arousal is a strong activation of the parasympathetic nervous system (Porges, 2017). The body goes into a kind of hibernation or collapse as a way of surviving extreme impact. A full description of therapeutic work with hypoarousal goes beyond the boundaries of this article and is left for future writing. The same goes for a fuller differentiation between the concepts of hypo-response in the muscles, hypoarousal in the ANS and dissociation. They are all aspects of how the body and the psyche can go into flaccidity, collapse and lack of presence related to stress and trauma and they play different roles in how we survive and cope.

Case Examples: Robert and Annie

The following anonymised case examples are shared with written permission; case notes taken right after the sessions augment my presentation. I have discussed both cases in supervision and I follow the EABP's code of ethics. The cases were chosen to show that stress and trauma patterns hold aspects of both ANS states and muscular states: Hyper- and hypo-arousal and hyper- and hypo-response in the muscles. The arousal states and the muscle responses are interwoven. These also show that hyper- and hypo-response work together in the creation of a defence pattern and that bringing energy into hypo-responsive muscles first often leads to a reduction in tension in the muscles that were hyper-responsive. Information lies hidden within the hypo-responsive muscles: impulses and emotions that were given up in relation to a stressful situation. Slowly activating muscles offers the chance to bring the information back into consciousness and with that establish contact to skills that build self-compassion and resilience. These examples also demonstrate clinical work based on the hypothesis that the mentioned complexity in stress and trauma patterns can be opened by tracking which muscles have gone into hypo-response and using slow and gentle muscle activation to modify the hypo-response early in the clinical process.

In relational psychotherapy, mutual regulation is key and relational aspects when working with hypo-response are essential. The therapist's role is understood as 'being in the boat' with the client, participating in sensing and experiencing what emerges in the therapeutic process and regulating arousal states and emotions in mutuality (Ben-Shahar, 2014; Stauffer, Medina, & Chipperfield, 2007). While the trauma therapeutic approach I developed is based on this belief, one must ask what mutual regulation means when working with hypo-states. I interpret this to

mean that the therapist feels and processes the low energized states, hidden or overt, together with the client, and thus depends on having included hypo-states in one's own identity and having developed skills to manage them.

This methodology leads to regulation of arousal states. When there is more fullness in the muscular body, safety is optimized, the safety that comes from being more contained, oriented, and more in contact with impulses and choices. Robert's case offers an example of this. From the start of our session, I felt an underlying collapse. I felt a pull in my own body towards withdrawal and deep tiredness when he spoke about his stress situation. This awareness was part of what guided my choice to start with tracking the hyporesponsive muscles. My ownership of my own hypoarousal and my capacity to modify my hypo-response supported me in offering mutual regulation of the collapse when it came to the foreground in Robert. In this case the mutual regulation happened nonverbally.

The dosing principle is also part of this relational process. Approaching and meeting a hypo-state means being able to match the low energy level. Matching a hypo-state means that the therapist can dose speed, tone of voice, energy level, amount and type of words etc, so the client feels met in the hypo-state instead of being overwhelmed by what comes from the other person.

Another relational aspect in working with hypo-response comes with the fact that hypo-response is a defence mechanism, not a basic emotion. This means that it isn't enough to resonate with the low energy state to provide change. Modification of hypo-response can happen by energy being brought into the low energized areas, thus paving the way for gaining access to emotions and arousal states that can be mutually regulated. In my experience this modification process doesn't start by itself. It can start by consciously choosing to bring energy in. Different

aspects of this choice process hold the other relational aspect in the methodology (Brantbjerg, 2008). Examples are described in the following paragraphs.

Tracking what you do not feel is not easy and depends on relationship and normalization. The process of tracking hypo-response happens in contact with an instructor or therapist who is experienced in including hypo-response in awareness and who can match the low energy level. The therapist communicates verbally and nonverbally that hypo-response is normal, it is okay to sense it, and we can be curious about it together. This kind of support opens the possibility for choosing to explore and own the low energy strategy.

Tracking hypo-states depends on slowing down. Receiving many reminders from a therapist is not only useful but necessary in the process of slowly integrating the voice inside that can guide us to slow down and remember that hypo-response is part of our stress patterns and with that regain our capacity to track it and modify it.

The process of dosing psychomotor activities depends on the same kind of relational input: nonverbal and verbal acceptance of all levels of dosage, experience with dosing low, inclusion of dosing low as normal and valuable.

Dosing holds a choice process, not just following an instruction or adapting to what somebody asks or suggests you do. Dosing challenges clients to find their own choices and orientation, skills that have often been lost within a hyporesponsive strategy. The relational process around dosing thus holds a potential for change but also a challenge (Brantbjerg, 2008; Maurer, 2004). How do we, as therapists, offer possibilities and support clients in finding their own choices instead of taking over, which often is easier with a client who has a hyporesponsive, passive behaviour.

Annie's case holds an example of this kind of choice process. As Annie tracks hyporesponsive muscles in her body, I ask her which of these muscles feels the most approachable. I point out that she has a choice, that she is in charge.

This dynamic touches into how we negotiate authority when working with hypostates, a potent aspect of therapy in general and even more potent in trauma therapy. The depth of this issue goes beyond the goal of this article, an issue for future writing.

When hypo-response starts being modified, impulses, arousal states and emotions can emerge. This process is typically slow and gradual. Coming out of a hypo-state happens slowly – it takes time to reach verbal consciousness. In this gradual process the therapist can bring energy into the process by asking about emergent impulses or emotions, knowing that they are likely on their way towards consciousness.

This is happening in Annie's case. I, as the therapist, ask about awakening impulses and emotions. I accept when Annie does not have an answer. I wait. She finds her own orientation in relation to the emerging information, in this case showing up as words "Too much", and, "I wish I had moved away".

Annie

Annie attended my two-year trauma-therapy training program. As a result, she later booked individual sessions to address specific situations. Given that we live in different countries the individual sessions happen over the internet – we see each other on screens. The transference relationship we developed during the training program supports our individual work.

At the time of this session, Annie was looking for a new job and, in this process, she was highly activated, scared, and showed signs of disorientation. In her two previous jobs as an assistant to the boss, she was fired when the company's finances faltered. In both cases she was blamed and scapegoated in indirect ways.

My hypothesis was that, from the beginning of the session, Annie was impacted by a polarity in her ANS. There were obvious signs of hyperarousal: high fear level, talking fast and hectic, as well as more hidden signs of hypoarousal.

We tracked where Annie went tense while discussing the situation: in her right shoulder, chest muscles, throat, and front side of her thighs. It was easy for Annie to track the hyperresponsive parts. They bothered her often. We slowed down to be able to get curious about body parts that had gone into hypo-response. I stayed aware of both my own body and Annie's body, while waiting to hear what she was tracking. If she hadn't been able to track the flaccid parts of her body, I would have given her suggestions based on what I saw in her body and maybe also based on how my body resonated with low energized parts in her body. This kind of intervention from the therapist can support the client in discovering their flaccid parts. Given that Annie had been trained in tracking hypo-response, she didn't depend on input from me, she discovered that her feet, centre, forehead, and left arm were all impacted by flaccidity.

We worked slowly. I asked which of the hyporesponsive areas felt the most approachable. Annie chose the centre (the physical balance point in front of lumbar vertebraes, deep inside the stomach). She started bringing energy into the area by making a tiny cross movement where right shoulder and left hip moved towards each other and vice versa (Brantbjerg, 2017). I asked if any emotions showed up, the answer was no. What showed up after a while were the words "Too much". I asked if any impulses emerged in the body with those

words. Annie discovered an impulse to push outwards with her hands, which I interpreted as the beginning of Annie re-establishing a boundary. I guided her to do the pushing movement while breathing in, thus filling more energy into her body and space around her. Doing the push while breathing out could have supported a release of energy, letting go of something. Doing the 'push' the way I guided Annie while she was breathing in resulted in building up energy and with that she came into a more contained and stable state emotionally.

Annie discovered that her feet were now a little more energized; new words emerged: "I wish I had moved away".

What happened to the feet with those words now? Annie discovered a natural flight impulse. I normalized this as a natural reaction in a situation where she was being verbally attacked by her boss.

I guided Annie to use the cross movement again, in a low dosage, while imagining running away. It worked in terms of Annie having an experience of moving away. I asked where she wanted to move to, home she said. She used the cross movement to support an experience of arriving in her home and simultaneously arriving in the here and now with me.

In this process Annie remembered how unpleasant it was when her previous bosses twisted reality and how strongly she lost orientation and went passive.

She now re-established orientation by knowing that her body could move away from the situation and move to a place where she could settle in her body, process emotionally and get space for re-establishing her orientation. Natural tiredness emerged after this, and with that she felt touched, teary, grateful, and compassionate to herself.

By paying attention to the hypo-response first and modifying it second, the stuck dynamic between a visible hyperarousal (fear) and an underlying invisible hypoarousal gained

motion. She moved away from the edge of overwhelm and transitioned into a state where natural regulation of a flight reflex became accessible by moving from being exposed to a stressor into safety here and now, where regulation can happen—a key component in trauma therapy (Levine, 2010; Ogden, 2015; Rothschild, 2017).

We ended by looking at the situation again with the two jobs she was fired from. We focused on the fact that she had not re-established her orientation and centring after the loss of the first job before she looked for the next which resulted in choosing a new situation that held a risk of repetition.

Robert

At the time of the session described here, Robert had been seeing me clinically for three years. We typically met once a month, and sometimes more often.

This session shows the inter-relatedness between hyper- and hypo-response. My hypothesis is that they are not separate defensive styles. They are connected and show up together in different versions. In some patterns the tension is dominant like in Robert's case, and the hypo-response lies hidden underneath. In other patterns both reactions are visible, and in others the hypo-response is the dominant one, with underlying hidden tension.

From the start of this session, Robert was in hyperarousal and had high levels of tension in some muscles. He was in contact with fight impulses. A more traditional path could have been to make space for his anger, explore his fight and revenge impulses, which means going for regulating the hyperarousal directly. I chose a different pathway, starting with tracking the hypo-response embedded in the stuck fight state, an underlying collapse surfaced. I see an interesting discussion in what we vector first: working with ownership of rage or ownership of

hypoarousal/collapse. I do not see it as an either or. Both processes are useful and necessary components in trauma therapy. The question for me is the sequence. We see an example of this with Robert. When paying attention to body sensations as part of centring, Robert discovered that his jaws and shoulders were very tense. He related this to the fact that he was under huge pressure in his work. He hadn't had time off for many months and was going to use his next weekend for volunteer work. He wanted to fight against the situation.

I invited Robert to get curious about where his body had gone into hypo-response connected to the tensions. Hyper- and hypo-response together can build a defence pattern (Brantbjerg, 2012). Robert accepted the invitation. He first tracked places in his body that had been injured during the stressful period: a toe that was only slowly regaining sensation capacity, a painful and collapsed area in his back. Then he felt his eyes and with that an impulse to protect them. He held his hands in front of both eyes, allowing them to close and rest. He accessed the overwhelmed part of him, the part that did not get space or attention when he was working all the time, the part that wanted time for himself. Robert became aware of a given up area behind his heart in the surface muscles between his shoulder blades.

In response, I invited Robert to gently bring energy in between his shoulder blades, a tiny movement backwards with the elbows. We negotiated the dosage together. Even a little bit of a too-high-a-dose brought him to the edge of overwhelm and of falling into a collapsed state (hypoarousal). Robert found that the possibility of just thinking that the elbows could move backwards provided the beginning of feeling support from his back and for his heart. These sensations brought Robert into a fuller sensation of himself. He was now in better contact with all of him. He registered a regulation in the ANS from hyperarousal into lower activation, less readiness to fight, more wholeness, and filling out in the body. Through accessing the places

missing energy, owning that slower part of him and building energy, the tension stepped into the background and decreased.

We then focused on seeing and feeling both parts of him: The part that was fighting and pushing through and the part that was giving up, holding them in awareness at the same time. This awareness opened a new kind of assertion. Robert felt an impulse to use his anger to establish functional boundaries, to clarify what he will and will not do.

Robert benefitted from a very low dosage in activating his support muscles in the back. Using a little too-high-a-dose opened feelings of overwhelm. Finding a tiny dosage made it possible for him to stay on the edge, not drown in the collapse but find a good enough container for himself in contact with me. The inclusion of the underlying collapse paved the way to using his anger from a lower arousal level where freer choices are available. He found self-compassion and inclusion of the giving-up part of him, and he discovered that he could use his anger in his own favour instead of acting out in survival.

Conclusion

In working with stress and trauma optimizing safety is a key component. In trauma, our basic safety is impacted, showing up in our relationship to ourselves, to other people and to our perception of reality (Calhoun & Tedeschi, 2013).

Modifying hypo-response through slow, low dosed activation of muscles is, in my experience, an element in optimizing safety. When parts of the body are not filled out with our own energy, we have difficulty protecting ourselves against and relating to input from the outer world. The skills needed for the interaction are not available. In hypo-response we are typically in states of overwhelm, lack of differentiation, and lack of out-going impulses.

Including and modifying hypo-response by bringing energy back into the muscles and the connected psychomotor skills starts a process of change in how we relate to the body and to our perception of who we are.

Working with hypo-response is a bottom-up approach, where attention is given to the most silent link in a system, parts that we usually avoid and use as protection by not sensing and feeling. When including and modifying these parts, it becomes easier to negotiate the avoidance, look at ourselves with kinder eyes, and improve our capacity for orientation and for choice making. These aspects are contributions to optimizing our level of safety through strengthening self-compassion and resilience.

The case examples in this article have shown examples of how tracking and modifying hypo-response early in a process led to regulation of ANS states, both establishing a boundary to hypo-arousal and down-regulating hyper-arousal.

Working with hypo-response is working with voluntary muscles. The dosing principle supports the possibility for consciously choosing to bring energy back into a muscle that has gone flaccid. The methodology thus holds the hypothesis that optimizing safety through modifying hypo-response in voluntary muscles has a regulating impact on arousal states and with that also on involuntary muscles active in stress and trauma reactions.

Two issues have been mentioned as relevant for future articles - the authority issue connected to working with hypo-states and a fuller description of trauma therapeutic work with hypoarousal including a differentiation between hypoarousal and dissociation.

References

Ben-Shahar, A. R. (2014). Touching the relational edge. London: Karnac Books

Bernhardt, P., Bentzen, M., & Isaacs, J. (2004). Waking the body ego 1. Core concepts and principles. In I. Macnaughton (Ed.), *Body, Breath and Consciousness* (pp.131-160). Berkeley, CA: North Atlantic Books.

Brantbjerg, M. H. (2007). *Resource oriented skill training as a psychotherapeutic method*. Retrieved from www.moaiku.com.

Brantbjerg, M. H. (2008). *The relational aspect in resource oriented skill training*. Retrieved from www.moaiku.com.

Brantbjerg, M. H. (2012). Hyporesponse: The hidden challenge in coping with stress. In *International Body Psychotherapy Journal*, Vol.11, No 2, Fall/Winter 2012.

Brantbjerg, M. H. (2017). ROST – Presence Skills. Retrieved from www.moaiku.com.

Brantbjerg, M. H., & Ollars, L. (2006). *Musklernes Intelligens* [Muscle Intelligence]. Copenhagen, Kreatik

Bunkan, B. H. (2008). *Kropp, respirasjon og kroppsbilde: teori og helsefremmende behandling.*[Body, respiration and body-image: theory and healthpromoting treatment]. Oslo: Gyldendal Akademisk

Calhoun, L.G., & Tedeschi, R.G. (2013): *Posttraumatic growth in clinical practice*. London: Routledge.

Cohen, L. A., & Cohen, M. L. (1956). Arthrokinetic reflex of the knee. *American Journal of Physiology*, *184* (2), pp. 433–7.

Ehlers, A., & Clark, D. M. (2000). A cognitive model of posttraumatic stress disorder. *Behaviour Research and Therapy 38* (2000), pp. 319-345.

Heller, M. C. (2012). *Bodypsychotherapy. History, concepts, methods*. New York, NY: W.W. Norton & Company.

Johnsen, L. (1978). Integrated respiration therapy. Energy and character. *Energy and Character.*The Journal of Bioenergetic Research. No 1, pp.12-21, January 1978

Johnson, S.M. (1985). *Characterological transformation: The hard work miracle*. New York: W.W.Norton.

Jørgensen, S. (1993). Bearbejdning af choktraumer/posttraumatisk stress i Bodynamic Analyse. [Processing shocktrauma/posttraumatic stress in Bodynamic Analysis]. In S. Jørgensen (Ed.), Forløsning af choktraume [Releasing shocktrauma], (pp. 9-36). København: Forlaget Kreatik.

Jung, C.G. (1964). Man and his symbols. J.G.Ferguson Publishing Company.

Levine, P. (2010). *In an unspoken voice: How the body releases trauma and restores goodness.*Berkeley, CA: North Atlantic Books.

Marcher, L. (2019). *The bodymap*. Retrieved from https://www.bodynamic.com/theory/

Marcher, L. & Fich, S. (2010). Body encyclopedia. Berkeley, CA: North Atlantic Books.

Maurer, R. (2004). *One small step can change your life: The Kaizen way.* New York, NY: Workman Publishing Company.

Moseley, G.L., & Butler, D. S. (2013). Explain pain. Adelaide, Australia: Noigroup Publications.

Ogden, P., & Fisher, J. (2015). *Sensorimotor psychotherapy. Interventions for trauma and attachment.* New York, NY: W.W. Norton & Company.

Porges, S. (2017). *The pocket guide to the polyvagal theory: The transformative power of feeling safe*. New York, NY: W.W. Norton & Company.

Rothschild, B. (2017). *The body remembers, Volume 2. Revolutionizing trauma treatment.* New York, NY: W.W. Norton & Company.

Shapiro, F. (1998). *EMDR: The breakthrough "Eye Movement" therapy for overcoming anxiety, stress and trauma.* New York, NY: Basic Books.

Southwell, C. (1988). The Gerda Boyesen method: biodynamic therapy. In J. Rowan, & W. Dryden (Eds.), *Innovative therapy in Britain* (pp. 178-201). Maidenhead: Open University Press.

Stauffer, K. A. (2010). *Anatomy & physiology for psychotherapists.* London: W.W. Norton & Company.

Stauffer, K., Medina, L., & Chipperfield, D. (2007). Relational psychotherapy and the wounded healer. Chiron Association of Body Psychotherapy Newsletter, No 35, pp 33-35, Summer 2007.

Wall, N., Grieg, A., & Rasmussen, M. (1978). The psychodiagnosis of the body. *Energy and Character. The Journal of Bioenergetic Research. No 1*, pp.3-11, January 1978

Warnecke, T. (2003). Some thoughts on involuntary muscle. *Chiron Association of Body Psychotherapy Newsletter No 25*, pp 20-28, Autumn/Winter 2003.

ZHealth Videos (2010). Arthrokinetic Reflex Demo,

https://www.youtube.com/watch?v=d977d7NmOyQ,