Mental Health and Cellular Somatizations in the Somatic Method PME

DAN 4760 Critical Review of Research Project
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Introduction

This text is a critical review of two inquiries: Firstly of a theoretical inquiry into new possible concepts of mental health for the somatic method 'Physio-Mentale Entwicklung' (PME), and secondly of a somatic research into aspects of cellular somatization in the method 'Physio-Mentale Entwicklung' (PME). I will set the base by defining and describing my method PME and its wider context before I will lead into my first methodology and the description and analysis of my first research, before I guide you through the same structure of my second research. The findings about theoretical explanations of mental health and healing on the one hand and the somatically experienced effects of gravitational push and pull on the other hand have been connected and merged in the process of the research, in an act of holistic development, into practical applications for education and therapy.

The research questions of this inquiry were firstly: What approved concepts of mental health & healing can be applied to the existing theory and practice of the somatic method PME?

And secondly: How can new practices of cellular somatization be utilised for supporting helpful and healing processes in the professional practice of PME?

This inquiry is important in order to form a wider framework for PME. It can help to create more applications of PME, especially for mental problems, developing a more safe practice, especially in the trauma context, and also to develop more depth in its practice through cellular somatizations. These cellular somatizations could be a dialogue with the essences of life, both individual and social, to foster health and wellbeing, and they could serve as a bridge from the physical into transpersonal spiritual experiences.

Another important reason for this inquiry is to bring the somatic method PME, that is mostly based on individual experience, into the field of academic critical thinking and to find an understanding of whether the somatic dialogue which is an important part of PME can be used as a methodology for qualitative research.

Context

The definition of "Somatics" that I use in this text is that a somatic method is using sensing the body and moving, and therefore is actively focusing on the body and the mind equally. Or as the somatic scholars Sondra Fraleigh, Thomas Hannah and Bonnie Bainbridge Cohen are defining it:

The body is the affective and conscious medium for somatic movement and perception.' (Fraleigh 2015, prologue xx). 'Somatics is the research of studying the self from within. (Hannah, 1986) (Bainbridge Cohen, 1993,p1.) And in an unpublished text I wrote: 'The researcher and the object of research are the same person.' (Rehberg, 2022).

An overall inspiration and guidance for my research journey were Susan Aposhyan with her book: 'Body-Mind Psychotherapy' (Aposhyan,2004) and Linda Hartley with her book: 'Somatic Psychology' (Hartley,2004) because both tried and succeeded in the same task that I am trying to reach with this text, which is coming from a Somatic Movement background to leap into the wild ocean of mental health. They both describe quite openly their initial training and background as well as the roots and heritage of their applied new theory and practice, but also their process and experiences to come to their new format. In the end I took different turns and decisions for my new theory and practice but it was a good learning and starting point for me.

For the definition, knowledge and practice of PME the most important reference is my body and the practical experience of being an educator and therapist in the method PME, because I developed PME creatively based on my training in different other methods and my professional experience.

PME stands for 'Physio-Mentale Entwicklung', which is german for Physio-Mental Development, which does already define the aim of the method: Body and mind should develop. Development means for me here that the ongoing change can find a helpful and healing direction through the practice of this method, which does not necessarily mean becoming bigger, stronger and better, but could also mean to do less and find one's essence and centre. Development in PME can means four things: 'Firstly improving the performance of body and mind, secondly connecting and balancing body and mind, thirdly supporting health of body and mind and fourthly solving problems in the connection between body and mind.' (Rehberg, 2023)

PME is resource supportive, client centred and process oriented, which incorporates a bottom up approach into the practice of PME.Resource supportive means for me that pain and suffering are only a starting place in the process and that the helpful and healing development does not arise from examining the pain and suffering, but from discovering and supporting one's resources, joys and pleasures. Therefore PME is timewise centred in the here and now and looking towards the future. From the past we can only acknowledge the patterns that we learned, but through sensing and moving we can actualize and develop our patterns for todays and future demands.

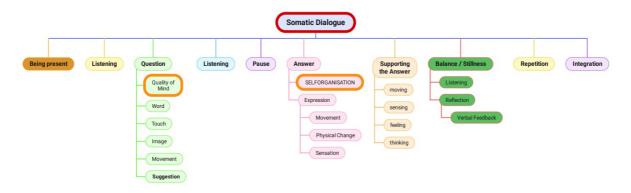
Client-centredness in PME means that the clients always bring their solution with them, although most of the time the solution is not known cognitively and consciously and it needs a listening and supportive co-regulator to help to uncover and unfold the solution from the experiential, physical and unconscious self into a cognitive realisation. But nevertheless, the client is always the expert, which places the healing concept of PME into the 'wise women tradition' in opposite to the heroic patriarchal tradition (Weed,1989)

Process-orientation in PME means that finding the solution needs time and space and listening and trust and courage and is always a journey that starts into the unknown, before eventually an understanding and experience of pleasure, freedom and happiness can unfold.

The four keystones of PME, that are distinguishing PME from other somatic methods are the following:

- 1. Working with the quality of sensing, which utilises buddhist psychology for somatic work.
- 2. The somatic dialogue, which describes the steps of the somatic process in great detail, and will be used as the methodology in this research as well.

- 3. Self-Organisation as the basic principle of healing and development, meaning that all helpful and healing change is coming from the somatic self, the unconscious body, on its own, in its own timing.
- 4. Reflection within the somatic dialogue as an essential part of the process to foster cognitive knowing and holistic understanding.



[picture of the steps of the somatic dialogue]

PME developed into different branches that all have the same base and theory: Somatic Movement, Somatic Coaching, Anatomical Embodiment, Somatic Touch, Healing Dance and Somatic Movement Therapy.

To get an understanding of the practice and theory of PME it is also good to have a look at the roots and heritages and inspirations that contributed to the development of PME: German expressive dance, authentic movement and dance improvisation are the base for somatic movement explorations in PME, that let healing development unfold in free movement. (Artus et al,1999). From the Alexander Technique the sense of structural alignment was adopted, but its concept of inhibition was replaced by the resource supportive concept, which is following pleasure. From release technique, as taught by Mary Fulkerson and Eva Karczag, which is using the anatomical images from Alexander Technique and Idiokinese for better movement alignment, PME incorporated the knowledge of imagination for helpful and healing development.

Through Contact Improvisation, as invented by Steve Paxton (Paxton,2018) the knowledge and practice of healing co-co-regulation through touch and improvised movement became part of PME, as well as a playful interaction with gravity. The ongoing practice of push and pull in Contact Improvisation got an underlying theory from the concept of developmental movements from the somatic Method Body-Mind Centering. (Bainbridge Cohen, 1993, 2018). Through Body-Mind Centering I also learned for my own method that everyone can sense very specifically their own body in a very anatomical way and that anatomical

pictures and explanations enhance and support the sensing and moving process of anatomical embodiment.

Trager Psycho-Physical Integration taught me to experience gravity and weight not only through outside push and pull but also as an inside sensation as well as the importance of the quality of intention of the therapist. (Trager et al.1996)

Becoming a certified psychological counsellor, specified in the method 'Idiolectics' showed me the power of healing self-regulation through supporting the resources in authentic self-expression, in spoken words and beyond. (Poimann, 2010).

A huge impact on the practice and theory of PME had my study and practice of Buddhism, especially its definition of mind and the quality of mind. In his book 'The Mind and its functions' (Rabten, 2003) the buddhist monk Geshe Rabten is describing the sophisticated buddhist theory and practice, which is not scientifically proven but incorporates 2500 years of experience and reflection. I extensively use Rabten's theory and practice in my teaching and therapeutic treatments and made excellent experiences, as my work really improved.

Mental health is defined by the World Health Organisation as 'a state of mental well-being that enables people to cope with the stresses of life, to realise their abilities, to learn well and work well, and to contribute to their communities. Mental health is an integral component of health and well-being and is more than the absence of mental disorder'. (WHO,2022) 'Mental health exists on a complex continuum with experiences ranging from an optimal state of well-being to debilitating states of great suffering and emotional pain'. (WHO,2022)

As the aim of Buddhism is to free yourself from suffering (von Allmen, 2007), I also use strongly in this text Buddhist theory and practice as tools to enhance and promote mental health.

Important for my philosophical stance in my professional practice is the concept of radical constructivism from Ernst von Glasersfeld, that claims that everybody is finding its very own way through reality ('viability') and that it is not possible to find the ultimate truth. The only way for larger group learning is to share in a non hierarchical way, like in a circle culture, what I really would like to do as a next step with this research.(Glasersfeld,1995) Cyclic thinking and practice is for me also one possible solution for the ongoing philosophical debate in the somatic field between the phenomenologist side represented by Merleau-Ponty's claim for the 'primacy of perception'(Merleau-Ponty, 1964) and the other side that is represented by Maxine Sheets-Johnstone's opus magnum 'The primacy of movement' (Sheets-Johnstone, 2011). Primacy means linear hierarchy, but human life is

organised in a nonlinear way in a lot of different and sometimes opposing half closed feedback loops that enable both repetition and learning. That is why I prefer to use the cyclic philosophy and practice of Pat Ogdens 'Sensory-Motor Therapy', which is also a very useful concept for mental healing with somatic means.(Ogden,2006)

Theoretical Inquiry

For the theoretical inquiry I was using the very dry and cognitive step-by-step approach as it is presented in the book: 'Philosophical **Methodology** - From Data to Theory 'by John Bengson, Terence Cuneo and Russ Shafer-Landau (Bengson et al,2022). Their approach places philosophical-theroretical research very close to qualitative research in contrast to a wonder-like inspirational philosophy of a 'Master Philosopher'.

After collecting written data, my method to reach a theory was: the data needed to:

- match with existing theory and practice of PME.
- make sense to my prior lifelong somatic educational and therapeutic experiences.
- have value for the formation of new frameworks of PME.
- have potential for transforming my own practice.
- have at least some scientific academic value.
- work in the stress test of my somatic research.
- be practically applicable for education and therapy.

A lot of books and articles were collected as data both digital and printed and the methodological processing with the above criteria was done partly consciously, partly in an unconscious, experiential way that I call composting-composing.

Following are the **findings** that did fulfil the above criteria to form a new theory of mental health for PME: Even during my training to become a psychological counsellor I could not bridge the big classical theories of psycho-therapy, which are psychoanalysis and cognitive-behavioural therapy, to my somatic work. But Idiolectics, developed by David Jonas, was a concept and practice that uses talking in a poetic and 'Para-logical way, where through a deep listening dialogue authentic self-expression is triggered (Poimann,2010). Idiolectics easily fits into somatic practices, helps to extend the sensing-moving practice into talking and is an ongoing inspiration for PME.

The intimate relationship between the body and mental health is discussed and researched intensively in recent trauma theories in ways I can incorporate it in my existing theories, although not all trauma theories. I rely for trauma theory on the scholars Bessel van der Kolk, Babette Rothschild and Pat Ogden. (van der Kolk, 2015), (Rothschild, 2017,2021), (Ogden,2006) They all are explaining how traumatic impact has a big impact also on the

body, especially the nerve system, and why that is the reason to also use physical and somatic therapeutic methods for healing and resolving trauma

The 'Felt Sense', the unity of physical sensing, feeling and realising as described in Eugene Gendlin's work 'Focusing' (Gendlin, E. T. (2020) is a key factor for success in psychotherapy and therefore a good explanation why the somatic sensing of PME is supporting mental healing. Gendlin also explains very well the psychological steps in sensing the body for healing purposes, including the 'shift' that is happening as a result of self-organisation. In the 'Somatic Coaching' Part of PME the steps of the process are organised in a quite similar way, but in 'Somatic Coaching' there is also movement and touch involved, based on an embodied knowledge of anatomy and physiology.

The Concept of Co-Regulation, as derived from the attachment theory is very helpful for the theory and practice of PME as it can explain one way of how self-regulation is learned and can be relearned. (Sbarra & Hazan, 2008) (Butler & Randall, 2013). How important resource activation is in an therapeutic relationship was intensely researched and proven by Klaus Grawe and supports therefore the client-centeredness and resource-orientation of PME. (Grawe & Grawe-Gerber, 1999). More useful basic research, also for somatic practice, about structure and function of the mental was done by Klaus Grawe (Grawe,2004) and Stefanie Stahl (Stahl,2022), who defined the basic mental needs by researching the practice of psychotherapy and by the psychoanalyst Fritz Riemann, with his influential books 'Basic Forms of Fear' (Riemann, 2002) and 'The Ability to Love'. (Riemann et al., 1991)

A concept of self that most schools of psychotherapy as well psychotherapy science could agree on and therefore is also very useful for somatic work is the self concept of Epstein, that divides the self into the experiential branch and the cognitive branch. (Epstein,2003). Rachelle Tsachor did prove in her research that somatic movement supports emotional resiliency through voluntary choice of one's posture and movements and is therefore useful for supporting mental health. (Tsachor RP,2017).

An old concept and therefore tested for a long time through practice as research, is the concept of Buddhism. The goal of Buddhism is to help you to free yourself from suffering, it can therefore be seen as some sort of theory for mental healing. Buddhist psychology is an integral part of the theory and practice of PME. (von Allmen, 2007)

Analysing the above findings, I can say that the following aspects of mental health can be seen as **themes** that I found in my inquiry: Co-regulation, positive attachment, felt sense, free choice of movement, authentic self expression, following the shift as an inner self-regulation, raising self esteem, supporting resources, following the pleasure, sensing mindfully and compassionately, working with the experiential self as well as the cognitive self. All of these theories of mental health are more or less present in the practice of PME and I can position therefore PME in line with body-psychotherapy, which causes implications for my self-esteem as a therapist, outside marketing, teaching advanced students and working with clients.

The above findings also set the base and can be used as an extra theory and explanation for the following somatic research.

Somatic research

For the **content** of my somatic research I was using both, somatic theories and findings from natural science about gravitational biology and cellular mechanotransduction. For the theory of cellular somatization I was relying on the somatic scholars Susan Aposhyan and Bonnie Bainbridge Cohen. Susan Aposhyan writes in her book: 'Body-Mind Psychotherapy' (Aposhyan,2004):

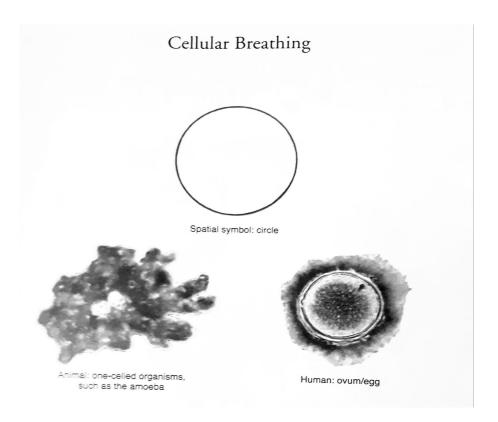
'The general discoveries of psychoneuroimmunology and behavioural medicine make it clear already that cellular functioning and psychological dynamics are absolutely connected'.

In her book she gives insight into her theory, working method and case studies, but she stays at and outside the membrane of the cell with her approach.



Also Bonnie Bainbridge Cohen keeps her investigation and practice on or at the membrane of the cell as described in her book: 'Basic Neurocellular Patterns'. (Bainbridge Cohen,2018) She writes:

'Cellular breathing is the expanding and condensing within a cell due to the exchange of gases through the cell membrane. It is the first organic pattern'.



Just like Aposhyan and Bainbridge Cohen I am using cellular somatization in my professional practice, especially in teaching somatic movement and working with clients with somatic touch.

Although it seems cognitively weird and strange to say that I work with my own cells, I do have the experience, just like my somatic scholars, that in the end it is quite easy to use and it is also accessible to most of not very experienced people.

I am defining cellular somatization as an active intention of the mind that involves both, imagining and sensing at the same time. So you try to imagine and sense your cells and focus on a specific function or design of the cell. Using a dialogical method, you then listen to a reaction that could be a bodily movement, an emotional experience or a cognitive realisation.

Aposhyan writes:

'For some people this experience is incredibly profound, I have seen professional, grown men crying after this experience. (...) Many people also experience increased confidence in their abilities and more trust in their lives' (Aposhyan, 2004, p226)

Both Aposhyan and Bainbridge Cohen do not write about the effects of gravity on cells expressed in movement and the mind, which became my particular interest especially through recent scientific research in gravitational biology and cellular physiology. Eberhard Horn writes in his essay 'Gravitationsbiologie' (Horn,1999)

"Cell biology work has shown that forces caused by gravity are apparently sufficient to cause significant physiological and morphological changes at the cellular level (cell).

(....)

The basic idea here is that mechanical signals (which also include non-gravity-dependent ones) are combined with other environmental signals and converted into a biochemical response via force-dependent changes in the scaffold geometry and the molecular mechanics"

Martino et al (2018) write in their overview article: 'Cellular Mechanotransduction: From Tension to Function':

"The concept that cells can interpret and respond to mechanical cues is not exactly new to the scientific community. Nonetheless, only lately, the elucidation of the molecular mechanisms by which the cell perceives and transforms the mechanics of the extracellular matrix has become the subject of intense investigation and a number of intracellular molecules has been identified that can react to mechanical stimulation and - in turn – modify cell function."

(see picture below)

Martino et al. Cellular Mechanotransduction

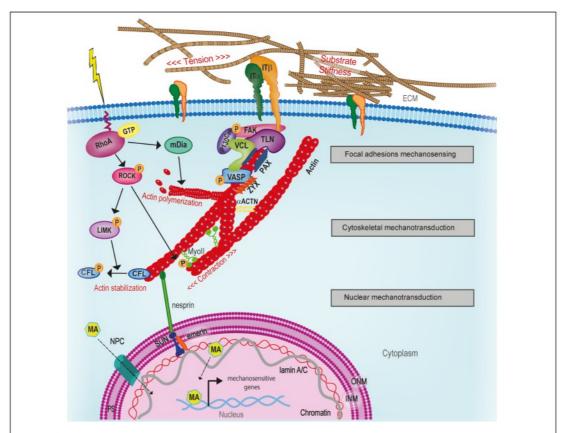
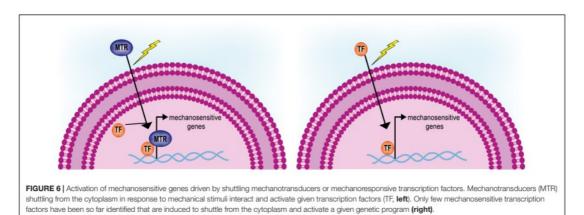


FIGURE 5 | Schematic representation of cellular mechanotransduction layers. Extracellular physical stimuli are perceived by FAs at the cell-ECM interface; the signals are propagate by the cytoskeleton and transferred to the nucleus where mechanosensitive genes are activated by mechanoactuators (MA). MA can be shuttling mechanotransducers or mechanosensitive transcription factors. Adapted from Nardone et al. (2017). ACTN, actinin; CFL, cofilin; FAK, focal adhesion kinase; INM, inner nuclear membrane; IT, integrin; LIMK, LIM kinase; mDia, Diaphanous-related formin-1; Myoll, myosin II; NPC, nuclear pore complex; ONM, outer nuclear membrane; PAX, paxillin; PS, perinuclear space; ROCK, Rho-associated protein kinase; TLN, talin; VASP, vasodilator-strinulated phosphoprotein; ZYX, zyxin.



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For my research **methodology** I took, as recommended, a creative approach, relying on Helen Kara's Book: 'Creative Research Methods', (Kara, 2020). I chose to design a new qualitative somatic inquiry, based on the somatic dialogue, which is a keystone of the method PME. For this new methodology I tried to apply the criteria for good qualitative research as suggested by Sarah Tracey, which are: 'on a worthy topic, richly rigorous, sincere, credible, resonant, significant, ethical and coherent (cited from: Kara,2020, p91). Or, as I wrote in my proposal, in a more comprehended version: 'According to Lea Genau (Genau, 2020) there are 3 main standards of qualitative research: Transparency, intersubjectivity, and outreach'.

I see my methodology in line with Glenn Hartelius 'Somatic Phenomenology' as described in his article in the book: 'The Art and Science of Embodied Research Design' (Tantia,2021, p87ff), because its base is self-reflecting inward attention on the own body with a always shifting focus.

The Somatic Dialogue also supports data collection according to the key elements for embodied research, according to Tantia (Tantia, 2021, p43f), which are presence, memory and metaphor. It also fulfils the requirement of being situated in time and space as raised by Michael Changaris in Tantias book (Tantia,2021,p3ff).

These are the stages of my methodology 'the somatic dialogue':

- 1. Preparation:
 - 1. Theoretical preparation see theoretical inquiry.
 - 2. Practical preparation:
 - 1. setting a timeframe
 - 2. preparing a space for undisturbed sensing and moving.
 - 3. make preparation for written reflection. (paper, pen, computer)
 - 4. Prepare an audio with guiding ('teaching') the stages as a guide for listening
- 2. Deciding of the specific research question, theme or area for one cycle of research
- 3. Being present: Calibrating the mind of the researcher: focus on the attention of the own body in the here and now.
- 4. Quality of perception: intentionally applying helpful and healing mind factors such as trust, mindfulness and compassion to:
 - 1. Overriding other biases by deciding to use specific intentions.
 - 2. Directing the research into a helpful and healing direction.
 - 3. Taking care of the health of the researcher.
- 5. Somatic Movement: unspecific free sensing and moving to warm up and getting body and mind ready for a somatic process.
- 6. Somatic Self-Coaching: 3 guided cycles for ethical self-care and holistic involvement

- 7. Apply the given research question, theme or area to sensing and moving in helpful and healing mind-factors.
- 8. Explore in a given amount of time.
- 9. Be aware of the polymorphic nature of the mind. All following entities can be happening separately, overlapping at the same time, or in any other combination:
 - 1. Physical sensation
 - 1. In the here and now
 - 2. Memory of past sensations
 - 3. Imagination of future sensations
 - 2. Emotions and feelings
 - 1. In the here and now, connected to the physical body
 - 2. Old feelings, connected to memories
 - 3. Feelings about future considerations
 - 3. Thinking in words:
 - 1. In the here and now:
 - 1. Finding words
 - 2. Somatic expression
 - 3. Somatic reflection
 - 2. About the immediate past:
 - 1. Cognitive reflection
 - 3. About future considerations & ideas
 - 1. Creative analyses
 - 4. Abstract intellectual realisations
- 10. Listen to any answer, outcome of the exploration that is:
 - 1. A change and development in the body
 - 2. A change and development in the mind
- 11. Be aware of the cyclic and fluid nature of this research process:
 - 1. Any change in body and mind is a new reality on which the research question can be applied again
 - 2. This is happening at the speed of the stream of consciousness.
 - 3. The border between data/capta and reflection/analyses is fluid.
- 12. Consciously step out of the immediate somatic exploration at a given time (guided by the audio)
- 13. Use automatic walking for integration, finding words and reflection.
- 14. Write or share your experiences:
 - 1. Poetic list / free association
 - 2. 3 word sentences
 - 3. 7 word sentences
 - 4. Cognitive reflection

15.On the next days do a creative analyses with future research considerations and future outside consideration for theory and professional practice

Following is a formal **description** of the somatic research: For graphic analysis I kept a digital research journal that is accessible through this link: https://www.somatic-training.com/research-journal

I did eight days of research with approximately three hours length, mostly done in our little studio 'zentrum paradies'. On the first day I was doing two somatizations and was audio-recording my instruction for later use. I was doing a preparation / somatic warm up and one somatization about the chosen content, applying the theme mostly into lying and moving on the floor in somatic dialogue. I did another three days of research in the studio, following my recordings, followed by one day where I was writing about the somatizations, realisations and reflections that I had about the given theme at a prior intensive, that I was teaching.

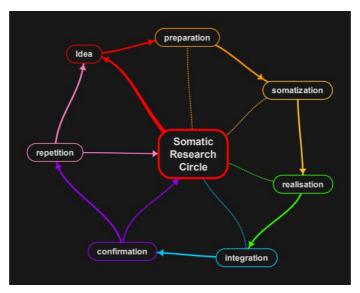
At the next assigned research date I felt sick and not fit to do the work, so I decided not to do research and noted that down in my research journal. This brings up the question of **ethics** in this research design. As the object of the research is very much alive and brings its existing health or sickness into the research I tried in my role as researcher to acknowledge the fact of sickness and take care about the researched object. Although this sounds quite schizophrenic, it worked quite well for me. One learning for future research designs that I got through this situation was the idea to incorporate more bottom-up and grounded theory approaches into the research design to accomplish that the needs of the alive research object can be fulfilled in a better way.

Day seven was the highlight of my research, it was a kind of 'eureka!' experience: First I was sitting in my armchair for an hour and a lot of realisations were flushing through my mind. Not only did I realise how all the theoretical research did connect and form into a consistent theory of mental health for PME also I got clear ideas how I could use this rather esoteric theory of cellular somatization in very easy down to earth exercises of push and pull, of stretching and isometric push. The second part of day seven I went to the studio to the prepared computer and was writing down three pages of theory and exercise instructions, in a very clear and well structured way. (see research journal). This also felt like an emotional catharsis and I was very exhausted afterwards.

On day eight I went to the studio and into the recorded instructions again, which I experienced as reassurance and confirmation of day seven.

'Any form of **analysis** is ultimately a process of choices a researcher makes', during the research, I would add. (Leigh,Brown,2020,p59). A lot of choices have been made in the course of the research that form the picture of how it presents itself now, so I could argue that analysis was an ongoing process and happening already during the whole research. A specific characteristic of somatic research is that the data is alive and living, which means it changes its content and appearance with the time passing. The forming of that complex is still alive and living, both in data collection and analysing but the basic structure was found in this research.

Reflecting on the structural progression of the somatic research I am discovering that the 8 days somehow made a complete circle of holistic learning: the steps of this circle could be described as follows: idea- preparation - somatisation - realisation - integration - application - confirmation and I would also add repetition. I will name this circle 'Somatic Research Circle' and try to use it as a defined pattern and research format for future research.



[mind map of somatic research circle]

Besides the findings and realisations that were happening already on the inside as part of the data collection and the structural findings, other **themes** emerged from my analyses of the research.

> The most important theme was that I found theory through somatic research.

I found a concise, coherent and explainable theory of mental health with a scientific base, that is connected and merged with the knowledge from the theoretical research that I presented earlier in this text. I realised the patterns of mental health, how we learn our

patterns through Co-regulation and life experience, how these mental patterns are related to physical patterns and movement patterns, and how we can change these patterns through PME.

> The theoretical realisation developed into ideas of pedagogy of structured exercises, and doing the conceived exercises had a profound positive effect on me. I noted down the following experiences: 'Balance between relaxation and activation in the body - Better alignment - Compactness - Easier movability - More energy and readiness - Calmness, contentedness and little happiness? - Mental relief'.

(see: https://www.somatic-training.com/research-journal/october-18th-2023)

>A recurring theme in the somatic research of cellular gravitation was that my body fell into movement patterns that I could identify as developmental movement patterns as defined by Body-Mind Centering. I could experience an ongoing either push into the floor against gravity or a pulling away that brought me into a kind of automatic movement on the floor. Sensing gravity on a cellular level seemed to be a helpful base to establish the developmental movement patterns and to work with them also in a therapeutic way. These developmental patterns do not only connect to movement but also to the use of the special senses and to cognition. Reentering these patterns therefore is also supporting mental health if it is done in a helpful and healing way and setting.

>A theme that showed itself was a result of moving in push and pull patterns. Through the inscribed analyses in the research I was questioning myself during the sensing and moving how to make these push and pull patterns more accessible for practical use, and came up with exercises in somatic stretching as well as somatic isometric exercises.

>Through the theoretical as well as the somatic research a cognitive theme emerged, which is the idea, that all cellular somatizations, in all different aspects have an intimate relationship to the basic mental needs, and that these needs could be fulfilled through somatic somatizations on a very basic, and therefore very deep and satisfying level. More research on this needs to be done to come to a valuable answer.

>Following self-recorded instructions felt at some times as self hypnosis, which could be an effective and possibly healing way from the cognitive self into the experiential self. Further research into hypno-therapy and its effects on mental health would be needed to make a more distinct analysis.

>One important finding was realising the increased ability to come into a cellular state of mind much more easily and to realise other possible research themes on cellular level such as communication and decision making ('the mobile brain'), desire and sexuality, bonding and cellular attachment , psycho-neuro immunology, changing the energy level through sugar and oxygen, healing the epigenetical effects of transgenerational trauma as suggested by Harvard University - Center on the Developing Child (Harvard, 2023) through cellular somatizations, and others.

Conclusion and Outlook:

Looking back on the process of doing and combining these two researches I can **conclude** that this process brought a different type of knowledge production and content communication than I was used to. The structure of the study forced me to break down all knowledge into communicable units. But because of that I could earn quite a lot:

- I found my theoretical method
- · I designed my own somatic research method
- I designed my own somatic research methodology
- I found the patterns of mental health, how we achieve these patterns through coregulation and life experience, and how we can develop these patterns through PME in a helpful and healing way.
- I realised that PME stands in line with Body-psychotherapy!
- I found a step by step exercise-approach how to easily work with cellular somatization

Gaining new knowledge entails responsibility to use that knowledge for the good of the world and all humans, and doing that means a lot of work. So **looking out** into the future I see the following projects arising:

- Doing both researches again with peers
- Researching other cellular qualities and their connection to the basic mental needs
- Writing on the patterns of mental health and their development
- Writing academic articles and finding possibilities for publishing
- Finding alternative ways of sharing knowledge like cyclic group sharing, podcasts etc.
- Adapting content and curriculum for THE ADVANCED SOMATIC TRAINING
- Designing a pedagogy and a set of exercise somatic stretch/isometric push/free movement
- Doing quantitative research on the set of exercises

- · Marketing and management for the new content
- Developing an online institute for somatic research
- Finding accessibility to somatic work for not paying audience, in other cultures and languages

In the **end** I want to share one big realisation that I had during the process: Somatics is another big complete possibility to explain life to humans. It is one of the big stories the can answer the basic human questions of

- Who am I?
- Who was I in the past?
- · Where shall I go?
- · What can I know?

And it has the same power, strength and validity as the other big stories which are: Religion/Spirituality, Art, Philosophy and Science.

So, keep sensing and moving!

Word count: 5478

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