MIND FOUNDATION

In the beginning was the breath? Breath-work in practice and science

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JUNGABERLE: Dear Martha Havenith, dear Isabel Dziobek, you recently received a research grant from the Tiny Blue Dot Foundation for a Breathwork study. What are you planning to do and how did you become interested in this topic?

DZIOBEK: As a psychotherapist, I have always been interested in body-based approaches. Among other things, I have also worked on body-based dance therapy studies, I am a yoga teacher myself and that is how I came to Breathwork. I also experienced this myself in various settings and that's how I got to know Martha. And Martha then inspired me to take part in her research proposal.

HAVENITH: For me, Breathwork came into my research through my own experiences with the method. I was able to process personal traumas and emotional injuries that I was never able to fully resolve through meditation and other therapies using this body-based method. It has even changed the way I experience myself and my life. I then trained as a facilitator in a specific Breathwork method. On a scientific level, Breathwork is almost completely unexplored. And we want to address this gap.

JUNGABERLE: You have two study locations, one in Frankfurt at the Ernst Strüngmann Institute and the other at the Humboldt University in Berlin at Isabel Dziobek's institute. Where do you see the different focuses? And what happens in practice in empirical research?

HAVENITH: We both want to use our strengths. My background is in basic neuroscientific research. That's why we are conducting mechanistic studies here in Frankfurt, i.e., what happens in the brain during breathwork, what are the typical neuronal signatures? Are there similarities to psychedelics? And can we relate subjective experiences to structures that can be measured, for example in behavior or facial expressions? We use EEG,

deep learning analysis of videos and affective computing, i.e., the recognition of emotions and affects using AI.

DZIOBEK: We are doing the clinical part here in Berlin. In other words, we are looking at the effect that four sessions of Breathwork and corresponding "integration" within six weeks has on the psychopathology and mental health of trauma-exposed people. We are also investigating social cognition at the brain and behavioral level because we believe this is an important mediator of any positive effects. We also believe that, as with psychedelics, set and setting play a major role. And this is now to be investigated for the first time in 80 people with an active control group in a controlled, randomized study design. There are a few studies, but to date there has not been a single really rigorously conducted large randomized controlled study internationally.

JUNGABERLE: It's not so easy to define breathwork, what exactly do you mean by that?

HAVENITH: At the moment, the Breathwork field is very diverse. There are different schools and variations. We would define Breathwork as relatively new methods that deliberately use deep breathing that deviates from the normal breathing rhythm to improve mental and/or physical well-being. I would differentiate it from "pranayama", which is a separate tradition of breathing modification that has existed for thousands of years and from which Breathwork has learned. We are looking in particular at circular, fast-paced or high-ventilation Breathwork. This is a more intense form in which altered states of consciousness are more likely to occur.

DZIOBEK: Decelerated, deep breathing, also known as abdominal breathing or coherent breathing, is much better known and better evaluated. This has relaxing effects and is also used as a behavioral therapy, body-based technique within the framework of psychotherapeutic guideline procedures. It is the same "tool", the breath, but the effects are very different, which is why these techniques should not be confused.

HAVENITH: Exactly, and there is currently hardly any research on this fast-paced breathwork. Current meta-analyses and reviews often mix the two and group them together under the name of breathwork, but they are really two different branches. For example, Guy Fincham found 16 studies in his 2023 review, 13 of which worked with slowed breathing and only three with accelerated breathing.

JUNGABERLE: The best-known form of breathwork is perhaps Holotropic Breathwork, which Stanislav Grof popularized in the 1970s. What is your research on Holotropic Breathwork?

HAVENITH: There are a few breathwork techniques that emerged at that time. These include Holotropic Breathwork, Rebirthing, Consciously Connected Breathwork, Transformational Breathwork. Each of these techniques has its own dogmas, beliefs and additions. These can be useful, but in our opinion they are not responsible for the core effect of Breathwork. We want to focus on the common, central aspects of these techniques. What almost all traditions can more or less agree on is deep, intensive breathing, music and social support, i.e., from a facilitator and/or a group.

JUNGABERLE: Does that mean you can also make statements about Stan Grof's Holotropic Breathwork via the mechanistic part of your research?

HAVENITH: Yes, and we have a study in review where we have already compared Consciously Connected Breathwork (CCB) and Holotropic Breathwork and found that they have the same effect at the measured level. Which in my view means that the effect is not based on the additives, such as the presence of a sitter or special interpretations such as re-experiencing the birth trauma during rebirthing, but on the underlying technique.

JUNGABERLE: I would like to go into this again. The breathwork methods you are talking about are currently still firmly in the hands of paramedical, sometimes anti-medical or New Age groups. How do you deal with this?

DZIOBEK: I run the university outpatient clinic at the Humboldt University in Berlin and I want to bring this instrument into the mainstream, make it available and affordable. We need lots of good studies to do this. It was the underground and the settings mentioned above that developed Breathwork in the first place and made it possible to experience it. And now it is time for Breathwork to reach the mainstream, science and clinics at the same time. Psychotherapists are of course professionals who know a lot about safety, techniques, areas of application and exclusion criteria. Which technique makes sense for which problem? Where do you need to be careful? In which cases do you need help or a consultation with a doctor? This approach was and is common in psychotherapy and has helped to establish psychotherapies as effective and safe methods. I would like to see the same for Breathwork, so that this tool can be integrated into a setting in which it can be used as safely and effectively as possible with exactly the population that will benefit from it. Only science can do that through evidence-based practice.

HAVENITH: I believe that the contrast between psychology and neuroscience and the practitioners is not so great. There are Breathwork facilitators who are thrilled that there is now science about it. They have been waiting for it. They work with great awareness of safety, the importance of integration and are open to different interpretations. Of course, there are also people who have more rigid opinions.

DZIOBEK: Yes, I think so too. We are also planning a workshop where we want to meet with people who have been using these techniques for a long time, also to show openness on our part. Something like science meets practice, to talk about aspects such as safety, set and setting and to discuss whether we can agree on minimum safety standards.

JUNGABERLE: The MIND Foundation has been training doctors and psychotherapists in a 45-minute individual breathwork process for three years. The topic of physical contact has emerged as one of the most important topics in teaching. It serves to intensify the therapeutic process and maintain contact. However, all body techniques also invite people to transgress boundaries. This repeatedly leads to debates within the guideline psychotherapy methods: "How much physical contact is necessary, possible and desired between people in a professional environment? How would you like to approach such safety issues? Do you envision some kind of consensus building?

HAVENITH: We definitely need a framework in terms of informed consent. However, the amount of physical contact that is useful and desirable varies from patient to patient. Personally, I think it would be very problematic to completely exclude physical contact. Breathwork is a body-based technique and when people are really deep in the inner process, words no longer really work. Nevertheless, it is often important to experience physical support. As a facilitator, you have to learn a special balance. Because it can also happen that people come into contact with traumatic experiences or childhood experiences of helplessness or being left alone, for example, where a lack of support can be as traumatizing as too much physical contact. However, a framework and clear communication about options are needed to ensure that only physical contact that is helpful for the client takes place.

DZIOBEK: I have experienced a lot of different things in Breathwork sessions. Sometimes I would have liked more physical contact, sometimes it was too much for me. That's why I think the keyword informed consent is very important. How does it feel to be touched in this way? How many people are present in a group setting? And who touches which parts of the body? Physical contact should only take place at all if there is explicit consent. Of course, it is also possible that things are experienced differently in a state of altered

consciousness, in which people are highly emotionalized and vulnerable. And, of course, it is also important whether physical contact takes place in the first session or after people have been working with the breathwork facilitator or therapist for a while. I think that touch should be used very slowly and moderately - according to the motto start low, go slow. And then you have to approach the respective requirements in the therapeutic situation.

JUNGABERLE: Some of our therapists at the OVID Clinic Berlin follow the Holotropic Breathwork school. They do not combine this with a self-exploration framework, but with psychotherapy - in other words, a contract that someone who defines themselves as a patient for a certain period of time concludes with an expert. These therapists make agreements with the patients in an informed consent model, also in writing, for example by drawing areas of touch and non-touch on a body map, in order to find out where the respective boundaries are defined by the patient. These can expand over time, whereby any form of eroticizing touch is avoided - and this is also included in the explicit agreement.

HAVENITH: I also think that this framework is important and that there should be in-depth training for companions who then learn to feel their way around and sense what a person needs. Above all, this requires practical training.

DZIOBEK: In research on breathwork, there is actually no data on the extent to which touch helps which people, in which setting and with which indication. That is why we have developed a survey on the extent to which the set and setting, including education, touch, number of companions, etc., affect the actual experience. We also want to integrate these insights into the studies.

Click here to participate in the Breathwork Online Survey!

JUNGABERLE: Are there any other topics in the surveys apart from the security aspect?

DZIOBEK: It's mainly about effects and side effects. We focus on the person's last Breathwork experience, in which setting it took place, with how many people and for how long? Was music played? What physical and psychological effects occurred acutely? Which effects occurred post-actively in the afterglow and within two weeks? How do these correlate?

JUNGABERLE: Is the survey mainly aimed at people who have carried out Breathwork themselves or are facilitators and psychotherapists also surveyed?

DZIOBEK: Anyone who has done at least one Breathwork session with the fast-paced breathing approach can participate. The aim is not to assess Breathwork from a facilitator's or expert's perspective, but to look at sessions and settings that are as heterogeneous as possible and, if necessary, to establish connections.

HAVENITH: We look at anything that involves at least fifteen minutes of fast breathing. For example, Holotropic Breathwork, Consciously Connected Breathwork, Transformational Breathwork.

JUNGABERLE: And how long has it been since your last experience?

HAVENITH: It doesn't matter as long as you can remember it.

JUNGABERLE: Let's talk about set and setting and placebo again. The subject of placebo is an ongoing topic in psychedelic research, for example in our planned phase III psilocybin study. How do you deal with so-called placebo effects, or in terms of learning psychology, with expectations? How is this incorporated into your research?

HAVENITH: Of course, all breathwork traditions have found contextual factors that support the process. In our first study, we had already inserted a very interesting experimental condition in this respect, in which a third of the participants were present, listened to the music and heard the sharing, but continued to breathe normally. Here we measured that the effect was about 30-40% of that of actively breathing in the session. This means that the context definitely has an effect, but the breathing technique seems to me to be central to the overall effect. In the new studies we are aware of this and want to add a slower breathing technique as a control condition so that you can contrast the breathing techniques but still include the social and musical context,

DZIOBEK: Immersive storytelling should also be taken into account, which is really active control that always activates something. And slow-paced breathing also activates the corresponding physiological system. The empathy effect and the synchronization of physiological processes are also exciting. I think that what was measured there goes beyond the placebo effect because, of course, when people lying among other people have strong emotional experiences through rapid breathing, they are "infected". We already know from animal studies that empathy effects are very strong.

JUNGABERLE: This is also an important topic in psychedelics research, which patients you should go into group therapy with - and how this often-observed emotional contagion actually works in groups. Can breath-work settings, which are as different as festivals, be compared at all via online media and in psychotherapy?

HAVENITH: That's a good question. Personally, I'm a big fan of breathwork outside of psychotherapy. However, I'm not a fan of settings in which you can't specifically address the individual's experience. For example, I find festival experiences problematic because sometimes hundreds of people are breathing and there are often only a few facilitators on site. Some of the participants will have intense experiences that cannot be supported. On the other hand, such settings or online settings can be a great experience for people who want to feel their own potential more clearly, who want to become clearer about their emotions or about certain challenges they are currently facing in life. Breathwork doesn't always have to be psychotherapeutic in the sense of "we need to fix something now" or "work through trauma". It can simply be a tool for well-being.

DZIOBEK: You asked about the comparability of the settings. We also have group settings in psychotherapy. And in festival settings, many well-described effective factors of group psychotherapy come into play, for example when you observe in the sharing sessions that others may not be doing so well either and realize that "the others are also suffering from trauma". We call this the "universality of suffering" with Yalom. Or people learn from models, they experience group cohesion through music or by moving together. These are many effective factors that we also use in group psychotherapy. So there are similarities. Of course, I like the psychotherapy setting very much because it is very well defined and much of it - though not all of it - is safer. With transparency and quality control mechanisms for patients, it offers the greatest possible safety. And different "scenes" cannot achieve this. That's why it's important that we look at this in science. But I can certainly see comparability between these settings.

HAVENITH: Yes, absolutely.

JUNGABERLE: Here comes my final question. What happens in a Breathwork room is often very different from everyday life. It's not uncommon - seen from the outside - for a form of "madness to break out": people scream, roll around on the floor, you observe cathartic movements, twitching and seemingly uncontrolled acting out. This is unusual in the modern social world, even for psychotherapy. We are more familiar with it from anthropological contexts. What should people who teach Breathwork learn?

DZIOBEK: We too often exclude the body, especially in talk-oriented psychotherapy. Emotionalizing methods are missing. There are problems where psychotherapists can't get any further by talking. Parts of psychotherapy lack a certain openness towards new methods. And outside of psychotherapy, I would like to see an openness to potential side effects as well as self-reflection and a willingness to reflect on oneself and question things.

HAVENITH: I would completely agree with that. Sometimes it would be useful for practitioners to bring in more sobriety. Breathwork can be fantastic, but it won't solve humanity's problems. There are side effects. And from a psychotherapeutic perspective, it is probably a big step for many therapists to overcome the fear of big emotions. There are sometimes really big emotions with this method - which cannot and should not be managed immediately. That's what it's about afterwards. But the session is often about what the body is feeling at the moment. And you have to get used to that first.

DZIOBEK: We have now also planned a study in which we invite psychotherapists to self-awareness workshops. The vast majority of psychotherapists are not familiar with the method and have never experienced it themselves. We have 35 therapists working in our university outpatient clinic, two of whom have experience with it. And then we will ask these therapists: "What do you think, for which indications is the method useful? Where could it be used? What are the limitations? What do you need to integrate it into your everyday therapeutic practice? A completely different study, but an important step that is still missing.

JUNGABERLE: Thank you for the interview. It will fascinate our readers. And it will be exciting when we return to the topic in two years' time.