

EDITORIAL

Gernot Hauke

Embodiment in Psychotherapy.

Embodiment refers to both the embedding of cognitive processes in brain circuitry and to the origin of these processes in an organism's sensory-motor experience. Thus, action and perception are no longer interpreted in terms of the classic physical-mental dichotomy, but rather as closely interlinked (Fuchs, 2009). Embodiment research has shown impressively that the line between mind and body is not a one-way street. As a consequence the body has a strong influence on the mind. Can the body and its actions be used to help change the minds of our clients? The answer is yes. This special issue of European Psychotherapy is trying to explicate this more differently.

The unity between body and psyche raises several questions. A basic question in psychotherapy research is what really works in the encounter of clients and their therapists. In the opening article "*Embodiment in Psychotherapy – A Necessary Complement to the Canon of Common Factors?*" **Wolfgang Tschacher and Mario Pfammatter** start by discussing the ongoing debate in psychotherapy research that factors common among all therapies are what account for patient improvement, rather than the specific techniques used by a given school of therapy. The authors state that in this debate, a third factor is systematically neglected. They point to the remarkable fact that psychotherapy typically is a real-time meeting between two embodied agents with the goal of behavior change in one party. Therefore the role of the body and of non-verbal behavior in the session could be given more attention in academic psychotherapy research. They show that the current taxonomy of core constructs of psychotherapy appears to not cover the embodiment of interaction in psychotherapeutic sessions. To demonstrate the importance of this aspect the authors report their own findings on the effects of nonverbal synchrony in different settings. Therapeutic dyads with higher synchronies were the ones that had increased patient self-efficacy as an outcome. Insecure attachment patterns of patients, distress due to interpersonal problems and higher levels of psychopathology were all correlated with lower synchrony during sessions. The authors show that processes of embodiment are not only included in psychotherapeutic encounters but also in psychopathology. The authors conclude that the prevailing set of common factors of psychotherapy should be complemented in order to map all therapeutically effective techniques and that "embodiment" is important in these common factors.

Problems with emotional regulation characterize more than 75% of the diagnostic categories of mental health disorders (Werner & Gross, 2010). Emotional regulation can occur inside people's heads. However neuroscience inspired research also shows that there are emotion-generating systems that include the many embodied ways in which emotions unfold. These include facial expressions, bodily postures, voluntary and involuntary motor movements and psycho-physiological responses. In her article *"Emotion is motion: Improving emotion regulation through movement intervention"* **Marianne Eberhard-Kaechele** presents a stage model of the embodied emotional process integrating elements of several cognitive behavioral and psychodynamic approaches. The different stages of emotion regulation and dysregulation can be observed and yield clear instructions for movement based interventions. Movement lends itself to the development of emotion regulation, not only because the body is always involved in emotional processes but also because movement is simultaneously functional and semantic and we can choose which aspect we wish to focus on. This approach reflects the spirit of the famous movement analysts Rudolf Laban and Judith Kestenberg. Movement techniques enable therapists to facilitate emotion regulation on a functional level before addressing the more challenging semantic level. Conceptualizing emotion as a bodily process gives therapists clear guidelines for diagnosis and for assisting their patients in "going with the flow" of emotions and (re)gaining their ability to evaluate, communicate and take action, while fully experiencing their vitality and sensuality.

The following three contributions focus more strongly on the interaction topic. In applying recent models of social cognition, the function of a possible mirror neuron system is placed within a general framework ranging from perception to co-action. Such models of social cognition rely on a unit of analysis that is minimally dyadic (Senim & Cacioppo, 2008). Of particular importance is that embodiment approaches suggest a mediating role for interpersonal synchronization in the development and deepening of empathy (Koehne, S., Hatri, A., Cacioppo J.T., Dziobek, I., 2016). Dyadic relating has an onset in early interaction patterns advancing developmental processes to create concepts of self and self-other relatedness. In their article *"Being moved: Kinaesthetic reciprocities in psychotherapeutic interaction and the development of enactive intersubjectivity"* **Rosemarie Samaritter and Helen Payne** present an art-based frame of reference to psychotherapeutic intervention. The kinaesthetic encounter between patient and therapist is conceptualised from this somato-sensory perspective as kinaesthetic intersubjectivity. This idea of an enactive, embodied attunement between individuals has direct application in the clinical setting. Clinical Dance Movement Therapy (DMT) serves as an example to investigate the specific contributions of kinaesthetically informed interactions to experiential psychotherapy. In DMT non-verbal structures of interpersonal attunement are used to create a situation that addresses and supports the patient to engage in corporeal shared, improvised, movement experiences. The authors propose that this engagement may contribute to the co-creation and co-regulation of the therapeutic relationship. Embodied atti-

tude during dance duets is taken as an example of active nonverbal attunement between interaction partners. Here shared movement situations serve as an example of how a sense of intersubjectivity and self-other differentiation can be perceived through movement structures. Embodied as they are, the experiences of mutual non-verbal relating, social engagement and understanding transfer easily from the therapeutic context ahead into everyday life.

Another dyad to which therapeutic efforts are directed to is the partner system. In their contribution "*Connecting Couples Intervention: Improving couples' empathy and emotional regulation using embodied empathy mechanisms*" to this issue **Tania Pietrzak, Gernot Hauke and Christina Lohr** adopt findings from the research on embodied cognition to supplement traditional marital therapy as a starting point for the development of an innovative understanding of the couple's relationship. Based on this, partners and their body movements constitute a very special class of stimulus: each partner influences the other's emotions and movements. So every action – even if it is only presented internally – acts as a stimulus. If the action is significant in any way, it activates both an objective and a process possibly culminating in what the authors call a "frustrating partner dance". The aim is to foster emotional regulation, multifaceted empathy and conflict resolution by incorporating embodied elements of imitation, movement synchronisation and embodied cooperation into a CBT model for couples. This intervention method offers an effective and time-saving alternative to discover a network of emotions when the couples are in conflict. Results showed that after the individual dysfunctional schema and emotions was choreographed and imitated by their spouse both couples reported greater emotional attunement, relief, validation and a deeper perspective of their spouse's previous hidden intentions and primary emotions. Concrete action projects for the individuals and for the couple are designed to develop emotional mastery. Broader applications are discussed with suggested adaptations to group couples' therapy.

The potential of an embodied psychotherapeutic approach to enhance empathy in high functioning individuals with autism is demonstrated by the work of **Andrea Behrends, Sybille Müller and Isabel Dziobek** in their paper "*Dancing supports empathy: The potential of interactional movement and dance for psychotherapy*". The authors examine the therapeutic role of imitation and interpersonal movement synchronization on empathic functions in neuroatypical individuals on the autism spectrum disorder (ASD). After giving an overview of the conceptualization and implementation of a manualized dance and movement intervention with the aim of fostering kinaesthetic, cognitive and emotional empathy through interactional movement and dance therapy the authors provide arguments for choosing imitation, synchronization and embodied cooperation, complemented with elements of self-expression and self-perception in the treatment of adults on ASD. ASD is a developmental disorder that includes a "spectrum" of symptoms, deficits in social and communication and levels of disability. Individuals with ASD have difficulties understanding the minds of others and in their ability to imitate and synchronize their movements with other people. The author's intervention is a promising and

vitalising complement tailored to the specific problems of this group. This is demonstrated by discussing excerpts of their observations and participants' feedback in sessions. Finally the authors give an outlook on suggested further adaptations and evaluations for different therapeutic indications.

We are surrounded by movement even in purely verbal therapy. Most movement shows typical rhythm patterns which are linked to different stages of psychological development. This is a hot topic for psychotherapists and is explained vividly by **Susanne Bender** in her article *"The Meaning of Movement Rhythm in Psychotherapy"*. If the mind and body are closely integrated as the embodiment paradigm states, then it is reasonable that we should be able to gain information about the mind by observing the body. Relevant information is gathered and displayed by the Kestenberg motion profile. It was developed by psychoanalyst Judith Kestenberg and is a micro-analytical research tool for describing, categorizing and examining nonverbal movement and expressive behavior. In addition to the psychological and movement therapy diagnostics the Kestenberg profile is used for research purposes to analyze and interpret a developmental phase, differential personality traits and interactive communication behavior of a person. It is grounded in early psychoanalysis namely the developmental theory of Anna Freud. Kestenberg discovered that particular tension flow rhythms typically originate from specific body zones and are associated with specific biological functions. Throughout development they spread from the zone of origin to all parts of the body. In accordance with the psychoanalytic theory, Kestenberg related these rhythms to the oral, anal, urethral, inner genital, and outer genital body zones with their related psychological issues. The author shows how information is obtained for the diagnosis and therapeutic interventions and what evidence can be found on the strengths and resources of a person.

Cognitive Behavioral Therapy (CBT) is an indispensable part of today's therapy landscape. Can it gain profit from embodied cognition research? In *"Moving the mind: Embodied Cognition in Cognitive Behavioural Therapy (CBT)"* **Gernot Hauke, Christina Lohr and Tania Pietrzak** attempt to shed more light on this question. Numerous findings of modern cognitive neuroscience suggest that acting in any situation, the body has direct influences on cognitive, motivational and emotional processes, e.g. through its posture, facial expression, gestures, direction of motion etc. Up to now, such insights have been under-represented in the practice of traditional psychological therapies, of which CBT has a strong evidence base. Expanding the classical concept of cognition brings body and mind together and allows the development of embodiment techniques which are bottom up in orientation. They can serve as a supplement to the predominantly top-down oriented methods of CBT. These bottom-up strategies offer several advantages: pre-lingual aspects, or aspects which are difficult to grasp in lingual terms, can be more easily identified and given a lingual format. It is also initially work with clients who have fundamental difficulties with verbalization or only restricted access to their emotions. With

the aid of specific embodiment techniques, emotions can be deliberately "manufactured" and their problematic regulation investigated. Certain positions in the room allow the embodiment of power and powerlessness, proximity and distance etc. The starting point for the development of embodiment techniques are the common factors of psychotherapy research.

An impressive final accord of this issue is given by the article of **Lily Martin, Valerie Pohlmann, Sabine C. Koch and Thomas Fuchs**. Their article *"Back into Life: Effects of Embodied Therapies on Patients with Schizophrenia"* introduces illness as a form of "disembodiment of the self" which is based upon phenomenological findings regarding a range of disturbed body experiences in different disorders. In Schizophrenia this includes a weakening of the basic sense of self, a disruption of implicit bodily functioning and as a result, a disconnection from the intercorporeality with others. While medication can successfully address positive symptoms of the illness, it can only slightly influence negative symptoms. The authors focus on a mind-body connection demanding a treatment, which not only aims at symptom reduction, but strives for the increase of individual well-being. In the light of high depression and suicide rates of patients with schizophrenia, the integration of embodied therapy into established treatment plans might constitute a way to address challenges of the disorder as well as unmet therapeutic needs of patients. In their empirical research the authors apply a special Body Psychotherapy/ Movement approach. Important goals are to apply body-oriented non verbal interventions to reconstruct a basic and coherent ego- structure, as a pre-requisite for safe social interaction. To widen and deepen the range of emotional responses to environmental stimuli and to help patients explore a range of expressive and communicative behaviors (movement and speech) in order to reduce emotional withdrawal and improve affective modulation. This intervention resulted in a decrease of negative symptoms and an increase in measures of well-being.

Literature

- Fuchs, T. (2009). Embodied cognitive neuroscience and its consequences for psychiatry. *Poiesis & Praxis* 6, 3-4, 219-233.
- Koehne S., Hatri A., Cacioppo J.T., Dziobek, I. (2016). Perceived interpersonal synchrony increases empathy: Insights from autism spectrum disorder. *Cognition* 2016, 146, 8-15.
- Semin, G.R., & Cacioppo, J.T. (2008). Grounding social cognition: Synchronization, entrainment, and coordination. In G.R. Semin & E.R. Smith (Eds.), *Embodied grounding: Social, cognitive, affective, and neuroscientific approaches* (pp. 119-147). New York: Cambridge University Press.
- Werner, K., & Gross, J. J. (2010). Emotion regulation and psychopathology: A conceptual framework. In A. Kring & D. Sloan (Eds.), *Emotion regulation and psychopathology*. (pp. 13-37) New York: Guilford Press.