

Dissertation- Summary

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Title:

The development of empathy perception and awareness relaxation through the physical method of Ergosoma and the meaning of balanced vegetative functions during a situation of relaxation and modification of the brain activity during mental relaxation

Keywords:

Empathy, physician/therapist-patient relationship, perception, vegetative and cerebral relaxation, global cortico-cortical coherence, heightened awareness, creative work process

Summary:

Background: Change in brain activity and the vegetative functions during expanded perception are the focus of a research project at the University of Witten-Herdecke. The perceptual performance under examination is then applied to the quality of a doctor-patient relationship. Empathy plays a decisive role in this relationship, whereby empathic perception represents a holistic view of the patient in which his needs, resources and situation can be more comprehensively recognised. Higher quality of perception demonstrates in an applied sense that the physician gains competence if he is sensible of his own mental resources and integrates subjective impressions into the diagnosis. Research aim: The aim of the study is to analyse the influence of the vegetative and cerebral state on the quality and spectrum of perceptual impressions. Conclusions drawn on the physical and psychological constitution are related to the capacity for empathy. Methodology: A relaxation method was combined with a perceptual experiment and the recorded vegetative and cerebral measurements were correlated with the evaluation of quality of perception. To this end, a pre-trial without relaxation and a main study with relaxation were carried out, each with 33 test participants of a median age of 25.9. The measurement curve of the vegetative and cerebral parameters was determined by calculating an average, and from this a vegetative portrait was generated. The curve of the average values was correlated with the respective perceptual performance of the test persons, and their capacity for sensorimotor perception and visual recognition was categorised according to a high (RQ1-2) or low (RQ3-4) perceptual quality. In order to investigate the flexibility and stability or rigidity and imbalance of the respective systems during changed perception, the difference between the vegetative and cerebral average values in the four test phases was calculated. Results: The quality of perception and perceptual sensibility were successfully correlated to the vegetative and cerebral measurements in the vegetative portrait. A characteristic autonomic nervous system was displayed during empathetic perception. At the same time a trend emerged concerning the characteristics in the autonomic nervous system during alert and relaxed attention, and a relevant difference was registered between test persons with higher and lower perceptual performance. The correlation between vegetative, cerebral functional states during expanded perception produces a tendency towards typical measurement curves in the autonomic nervous system, a particular frequency spectrum in the EEG, and a significant increase in global cortico-cortical coherence. Alpha blockade was observed during this process. Conclusions: The calm, inner composure and mental preparation of the physician and therapist fosters his empathic capacity, which serves as the basis for developing the physician/therapist-patient relationship. Expanded quality of perception and an

increased capacity for empathy are promoted by vegetative balance and cerebral flexibility. This creates in the physician or therapist conscious access to broad, subjective perception of self and of the patient, and fosters an atmosphere of trust in the physician-patient relationship.

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