

The Chemnitz Holistic Intervention against Pain

According to recent data from the German Pain Society (Deutsche Schmerzgesellschaft; DSG), approximately 17% of the German population suffers from chronic pain (Nobis & Rolke, n.d.). As we already know, the predominantly somatically oriented search for symptoms may be quite time-consuming, resulting in a frequent utilisation of already overburdened emergency rooms (Dinkel & Lahmann, 2016) as well as general and specialised physician practices (e.g. Frießem et al., 2010). At the same time, more and more people are suffering from chronic pain (Zajacova et al., 2021, Wörz et al., 2022), a situation promoted by the previous pandemic resulting in new pain-associated syndromes (Lavin et al., 2023). To improve this situation, the present dissertation proposes a new kind of holistic group intervention.

Firstly, we will present an overview of current standards of health care for chronic pain patients as well as methods and techniques from alternative but empirically supported theories and concepts, such as logotherapy (e.g. Frankl, 1946), resilience (e.g. Werner & Smith, 1982) and salutogenetic research (e.g. Antonovsky, 1990).

Secondly, we will outline a new manualised holistic group intervention that brings together techniques and methods from all three aforementioned schools of thought, which will be structured in a practitioner-friendly way.

Thirdly, we will validate this intervention at the Chemnitz Hospital (Klinikum Chemnitz gGmbH) in cooperation with the Department of Anaesthesia, Intensive Care, Emergency Medicine and Pain Medicine under the direction of Chief Physician Dr habil Eichelbrönner. Data assessment will include self-report measures as well as physical and biological markers such as heart rate variability (HRV), as a higher HRV indicates better autonomic nervous system adaptation (e.g. Uhlig, 2018; Ernst, 2017).

Therefore, a positive influence on HRV (and other biological markers) is expected to lower symptoms in chronic pain patients.

All four quarters of 2026 are targeted for the implementation of the intervention and data collection; the expected group size of $N \approx 30$ (4 groups á 7-8 subjects) could fall short of statistical significance if a mean treatment effect of $d > .50$ (with $p < .05$, G*Power: Faul et al., 2007) is expected. As treatment effects of chronic pain interventions are typically smaller (Williams et al., 2020), qualitative individual case studies will be conducted in parallel.

Literature

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