PAGES -Abstract Poster 4th International Conference of the Society for Interdisciplinary *Placebo* Studies (*SIPS*). 10 - 13 May, *2023, Duisburg*

Dierolf, Angelika [1]; angelika.dierolf@uni.lu; van der Meulen, Marian [1]; marian.vandermeulen@uni.lu

Miltner, Wolfgang [3]; wolfgang.miltner@uni-jena.de

[1] Universität Luxemburg; Department of Behavioural and Cognitive Sciences; Institute for Health and Behaviour; Stress, Pain, and Gene-Environment Interplay

[3] Friedrich-Schiller-Universität Jena, Klinische Psychologie

Title: Cognitive control of pain in Aging – comparison of different pain modulation strategies

Abstract: 200 Words

Background.

While older people report acute and chronic pain more often than younger people, and, therefore, would benefit significantly from non-pharmacological pain treatment, little is known about how age affects different psychological strategies of pain modulation. The few studies on cognitive distraction from pain suggest a reduced pain relief in older adults, whereas studies on placebo analgesia revealed inconsistent results. So far, distraction and hypnotic analgesia have hardly been investigated in aging.

Methods.

Healthy young and older participants underwent either a cognitive pain distraction task (working memory task), a placebo analgesia realized with a sham TENS intervention, a hypnotic analgesia intervention or a verbal pain distraction intervention, while receiving non-painful and moderate painful individually adjusted transdermal electrical pulse trains to the inner forearm. Pain ratings and pain-related evoked potentials via 64-channel EEG were recorded.

Results.

First analyses on the currently small sample suggest a differential impact of age on pain modulation strategies. Since the current sample size is too small to draw reliable conclusions, results will be presented and discussed at the conference.

Conclusion.

Our results will contribute to a deeper understanding on the efficacy of cognitive pain modulation in aging, helping to optimize pain treatments in this population.