

The Role of Progressive Muscle Relaxation (PMR) on Subjective Pain Perception & Music Performance Anxiety in Music Students

Intro

Making music at a high level requires an equally high level of physical and mental commitment. Often, due to the **constant performance demands**, the **regenerative aspect falls by the wayside** and manifests itself, i.e. in

- **physical pain [1]** or in
- **increasing music performance anxiety [2]**.

PMR

is already widely used in the **medical field to treat pain [3]** and **anxiety symptoms [4]**, and this **relaxation method** is also recommended for professional musicians and conservatoire music students in music medicine and music psychology [5].

RQ

Does the use of PMR have an impact on the subjective perception of pain and perceived stage fright in music students?



Wait list control group design

Online-Intervention
6 weeks audio files
à 20-30 min.
1x per week

Expected Outcomes

- **Significantly lower scores** in the experimental group on both constructs, assuming a medium effect size
- **Positive impact** of PMR on subjective pain perception and stage fright
- **Effectiveness** of the investigated six-week program

Methods



1st
measurement
week 1

PMR-
intervention
weeks 1-6



2nd
measurement
after week 6

Musculoskeletal Pain Intensity and Interference Questionnaire for Musicians (MPIIQM-G) (Möller, Ballenberger & Zalpour, 2018)

Kenny Music Performance Anxiety Inventory (K-MPAI) (Kenny, 2017)

References

- [1] Ackermann, Driscoll & Kenny, 2012; Fishbein, Middlestadt, Ottati, Straus & Ellis, 1988; Gembris, Heye & Seifert, 2018; Spahn, & Möller, 2011
- [2] Kopitzki, 2008; Osborne & Kirsner, 2022; Spahn, Krampe & Nusseck, 2021
- [3] Bernstein & Carlson, 1992; Deepika, Thenmozhi & Kalabarathi, 2020; Meyer, Keller, Müller, Wöhlbier & Kropp, 2018
- [4] Cogle et al., 2020; Deepika et al., 2020; Pawlow & Jones, 2002; Rankin, Gilner, Gfeller & Katz, 1993
- [5] Spahn, C., Richter, B. & Altenmüller, E. (2010)