

COping with PAin through Hypnosis, mindfulness and Spirituality (COPAHS)

ABSTRACT:

Background

Hypnosis (H), mindfulness (M), and as prayer (P) are useful practices in adults with chronic pain. Though, their effects are only moderate, due to interindividual variability in baseline individual characteristics. Their effects on acute pain are less studied, and H, M and P have not yet been compared in head-to-head studies.

Aims

Examined: the effects of short audio-guided H, M, and P, relative to a control (CN) on Cold Pressor Arm Wrap (CPAW) outcomes, in healthy adults; and the moderators of H, M, and P effects on outcomes.

Method

Participants (N= 224) completed a baseline assessment (T0) of potential moderators and of heart rate variability (HRV) and underwent a pre-test (T1) and a post-test (T2) CPAW trial. Outcomes were assessed at T1 and T2. Audio-guided practice of H, MM, or P occurred after T1. The CN group listened to a reading from a natural history book.

Results

Interactions for all outcomes were not significant. Time and gender main effects were found for pain intensity and pain tolerance. A time main effect was found for HRV. Pain intensity: At T2, differences between H and M, P, and CN were small; H group reported lower pain intensity; H and M reported small decreases. Pain tolerance: At T2, differences between H, M and P were small, and between H and CN were medium; CN showed lower tolerance than P and MM conditions; H and M groups reported, respectively, medium and small increases. Significant moderators were: religion, religiosity, spirituality hypnotic suggestibility.

Conclusions

A single H and M short session might be useful for pain (self-)management. H is more useful for Christians with high hypnotic suggestibility. M is more useful for spiritual and religious individuals, regardless of religion.

Keywords

Hypnosis, Mindfulness meditation, Prayer, Experimental pain, Cold pressor arm wrap

Published Work:

Ferreira-Valente, A., Jarego, M., Queiroz-Garcia, I., Pimenta, F., Costa, R. M., Day, M. A., Pais-Ribeiro, J., & Jensen, M. P. (2021). Prayer as a pain intervention: Protocol of a systematic review of randomized controlled trials. *BMJ Open*, *11*, e047580. doi: 10.1136/bmjopen-2020-047580

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Ferreira-Valente, A., Van Dyke, B. P., Day, M. A., Teotónio do Carmo, C., Pais-Ribeiro, J., Pimenta, F., Costa, R. M., & Jensen, M. P. (2022). Immediate effects of hypnosis, mindfulness meditation, and prayer on cold pressor outcomes: A four-arm parallel experimental study. *Journal of Pain Research*, *15*, 4077–4096. doi: 10.2147/JPR.S388082

Jarego, M., Ferreira-Valente, A., Queiroz-Garcia, I., Day, M. A., Pais-Ribeiro, J., Costa, R. M., Pimenta, F., & Jensen, M. P. (2022). Are prayer-based interventions effective pain management options? A systematic review and meta-analysis of randomized controlled trials. *Journal of Religion and Health*. Advance online publication. doi: 10.1007/s10943-022-01709-z

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