The effectiveness of music videos appreciation in elderly people with depressive mood

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Aims and objectives: To compare the effects of meaningful fast music videos (MV) and soothing music MV on HRV (heart rate variability), SC (skin conductance), and EMG (electromyography) and depression in elderly people with depressive mood.

Background: Evidence-based nursing care and research are increasingly popular, however, up to date, there are not enough scientific data and consistent research results to support therapeutic effect of music, particularly, lack of the evidence of the meanings of music for clients and the effectiveness of music are still inconsistent. Therefore, the application of music for clinical use is limited. Researchers suggested that the selections and application of music and meaningfulness of music for listeners both need further study to confirm their effects.

Design: Randomized crossover controlled trial.

Method: Thirty participants were randomly assigned to a meaningful fast music/soothing music MV sequence or soothing music/ fast music MV sequence. The MV music was played on an iPad. Each intervention lasted 30 minutes, and was held at the participant’s home. Continuous measurements of HRV, SC and EMG were taken throughout the procedure. Depression was measured before and after each intervention.

Results: Both interventions had beneficial effects on HRV, SC and EMG and depression. Significant differences between the two interventions were also observed for depression, and HRV. Fast music was more effective in lessening depression ($p < 0.05$). All participants rated that both MV were meaningful to them.

Conclusions: Both MV interventions were beneficial, as measured on psycho-physiological indices. The beneficial effects of fast MV were more powerful than those of soothing MV in reducing depression and improving the low/high frequency (LF/HF) ratio component of heart rate variability.

Keywords: meaningfulness of music, music videos, depression, heart rate variability, skin conductance, electromyography, iPad.