

SSPlus Pilot study

Introduction: SSPlus uses binaural beat technology as a personal development and health improvement tool. It was proposed that participants would benefit from regular listening to binaural beats including reduced stress and anxiety, and increased focus, concentration, motivation, confidence, and depth in meditation. Binaural beats are auditory brainstem responses that originate in the superior olivary nucleus of the brain as a result of different frequency auditory stimuli provided to each ear. Listeners to binaural beat “hear” a beat at a frequency equal to the difference between the frequencies of the applied tones.

Objectives: The objectives of the pilot study were to gather preliminary data on psychological effects of 60 days daily use of Soundscience.

Design: Uncontrolled pilot study.

Subjects: Twenty eight healthy adults participated in the study.

Intervention: Participants listened to a 20 minute alpha (8–12 Hz) binaural beat frequency(SSPlus) daily for 60 days.

Outcome Measures: Psychological data was collected before and after a 60-day intervention. Depression (Beck Depression Inventory-2), anxiety (State-Trait Anxiety Inventory), mood (Profile of Mood States), absorption (Tellegen Absorption Scale) and quality of Life (World Health Organization-Quality of Life Inventory).

Results: There was a decrease in trait anxiety ($p = 0.004$), an increase in quality of life ($p = 0.03$), observed between pre- and postintervention measurements.

Conclusions: Binaural beat technology may exhibit positive effect on self-reported psychological measures, especially anxiety. Further research to explore the effects on anxiety, motivation and resilience (SSPlus) using a larger, randomized and controlled trial is currently underway.