

Physiological Effects of Relaxing Stimuli on Heart Rate and Brain Activity with Respect to Autonomous Sensory Meridian Response

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Poster Presentation Abstract:

To gain a better understanding of Autonomous Sensory Meridian Response (ASMR), brain activity and heart rate were examined under varying auditory ASMR triggers. ASMR, a psychophysiological response which can be brought on by auditory, visual, and touch stimuli, is described as a feeling of deep relaxation that can originate as a tingling sensation in the scalp and can travel down the spine and limbs in some cases. Many people use ASMR as a means of dealing with stress, anxiety, insomnia, and even depression. For this investigation, 25 participants were asked to listen to a 10 minute audio track composed of a variety of ASMR triggers. These triggers and their effects on brain activity and heart rate were recorded via EEG and ECG, respectively. The recorded data was analyzed based on frequency, amplitude, and deviation from the baseline. Comparisons were made between distinct sections of the audio track and special attention was given to segments of the track that participants described as inducing the most relaxing effects for them. The data sets were also divided into groups based on participants' familiarity with this phenomenon as well as by demographic parameters. Some noteworthy correlations have been identified through this preliminary investigation, an important contribution toward quantitative analysis of the ASMR phenomenon.

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