

The Effect of Autonomous Sensory Meridian Response on Electroencephalography and Autonomic Nervous System

Objective: Insomnia is one of the most common sleep disorders. While many people take sleeping pills as a remedy, they are not recommended for long-term use. Autonomous sensory meridian response (ASMR) is a sensation phenomenon associated with positive emotions and has been widely used recently to aid sleep, with claims that it promotes relaxation. However, the effectiveness remains inconsistent in current studies. Therefore, the aim of this study is to explore the effects of ASMR on brainwaves and the autonomic nervous system (ANS).

Methods: The clinical trial enrolled healthy participants between 18 and 65 years old. The participants were asked to watch a 10-minute video containing multiple ASMR trigger sounds. We investigated the effects of ASMR on brainwaves and heart rate variability using multi-lead mini-physiological recorders.

Results: Sixteen healthy participants were recruited. The results indicate an elevated δ power percentage ($p < 0.05$) during the intervention compared to pre-intervention, and a decreased α power percentage ($p < 0.05$) during the intervention compared to both pre-intervention and post-intervention. There are no significant differences in ANS.

Conclusion: This study suggests that ASMR may have the potential to promote relaxation. However, further recruitment expansion and long-term effects studies are needed to confirm the effectiveness of ASMR in relieving insomnia symptoms.

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