## POSTER 95

## SELECTIVE REVIEW OF TDCS AND COGNITIVE TRAINING STUDIES ENHANCING COGNITIVE PERFORMANCE IN HEALTH AND DISEASE

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**Introduction:** Cognitive decline is an inevitable part of the normal aging process that has been shown to impact a person's functioning in daily life. Despite this, there is a lack of evidence which supports practical and effective methods of cognitive intervention for home or clinic use. The purpose of this study is to identify if anodal transcranial direct current stimulation (tDCS) can augment cognitive computer trainings for a practical and comprehensive cognitive intervention.

**Methods:** A database search was conducted to review literature on: 1. the effects of tDCS on cognitive performance and 2. effects of cognitive training programs on cognitive performance. From the search, 7 articles were selected and synthesized to show the effects of both tDCS and cognitive training programs on cognitive performance.

**Results:** It is proposed that the literature review will help us determine: 1. the effects of cognitive training programs on baseline performance in health and disease, 2. the effects of tDCS on cognitive performance in health and disease.

**Discussion:** Non-invasive brain stimulation and cognitive training programs together is an area that has not been addressed in the literature. Learning the evidence behind both modalities will provide insight into the use of tDCS and a computer program as comprehensive and practical cognitive intervention. This select review will help indicate the need for further research on this topic and usefulness in a home or clinic setting.