

27th International Conference on

PSYCHIATRY & PSYCHOLOGY HEALTH

June 18-19, 2018 Paris, France

Can the Working Memory be trained in older adults with a dual adaptive N-back task?

Agnieszka Chojak

SWPS University of Social Sciences and Humanities, Poland

Recent studies indicate that neural plasticity processes endure across the lifespan and that cognitive stimulation in the environment can contribute to enhancement and maintenance of cognitive functioning until very advanced age. Many studies have shown that sustained engagement in cognitively stimulating activities can impact neural structure, even in older people (Ball et al., 2002). The society is growing older and there is a substantial need for older people to remain agile. The current study took place in a small town in order to assess if older people (60-75 years old) in potentially non-stimulating environment would reach measurable cognitive gains after WM training. After signing the informed consent thirty participants were randomly assigned to two groups with different training paradigms: experimental group training with adaptive dual N-back and active control group engaged with an adaptive general knowledge quiz. The current study had a between-Subjects design with a between-Subjects factor – assignment to a training group. Critical within-Subjects factors were the results of the cognitive tasks (Go-No-Go task, Sternberg task, Running Span task, Linear Syllogism Task) performed before and after the 25-day training sessions on the internet platform. Accuracy or reaction times or both were examined in the analyses. The GLM repeated measures analyses in SPSS Statistics showed the general mean improvement between pre- and post-testing sessions in both groups (only deterioration in the Sternberg task), however the differences between groups are differentiated across the tasks. The cognitive trainings either employing Working Memory or declarative memory are therefore recommended for older adults.

Biography

Agnieszka Chojak graduated from the Gdynia Maritime Academy, Poland as MSc of commodity science. She engaged in the English language teaching for ten years. She is currently a student of psychology at SWPS University of Social Sciences and Humanities, Poland.

achojak@st.swps.edu.pl

Notes: