Treatment & Research

Severe Mental Illness

happyneuron

Duration, Frequency, Intensity Meta-Analysis

This complied meta-analysis aims to identify structures necessary for maximizing the effectiveness of an adaptable cognitive training program for different disorders and diseases.

More specifically, we compiled the current research to answer these overarching questions:
- How much should someone train to significantly improve his/her cognitive profile?
- Is there an ideal regimen or approach to brain training that produces the optimal results?

Research has proven that brain training conducted in certain criteria may yield positive results for certain populations. As with any form of rehabilitation, cognitive training exercises' duration, frequency, and intensity should be determined based on appropriate diagnosis/assessment. These assessments and diagnoses should be completed by a trained professional with the individual functional needs of the individual in mind.

Disclosure:
This meta-analysis aims to create a place for clinicians to find the research connected with brain training easily. HappyNeuron is not claiming that participating in any form of brain training will result in higher functions, full recovery, or delayed disease onset. The information below is non-bias compliance of the evidence of computerized brain training to be used as a source reference or a supporting document for clinicians to use to help with the care of their clients. Some of this research uses our product, while others use other digital tools.

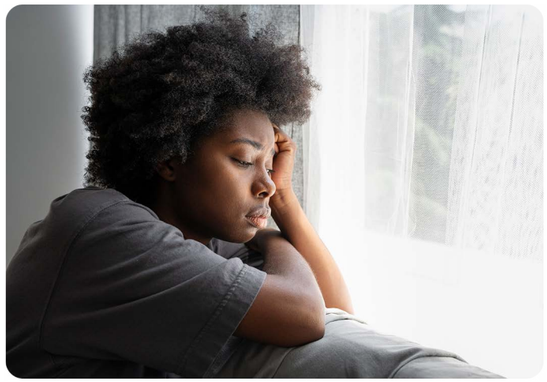
Severe Mental Illness

Cognitive impairment is a core feature of severe mental illness. For example, major depressive disorder (MDD) is broadly characterized by reductions in executive functioning, learning, and memory. These deficits are a powerful predictor of poor outcomes. Executive Functioning is a highly important factor for community functioning for people with severe mental illness. Fortunately, these deficits are amenable to treatment with cognitive remediation therapy, which has been shown in the research referenced to improve cognition in severe Mental Illness significantly (West, 2019).

Conclusion

Returning or acquiring a job is a top priority for most people with severe mental illness. However, this goal remains out of reach for the majority of individuals with a severe mental illness who remain on benefits or are unemployed. According to the research found in Harris et al's study, "Employment can significantly increase the likelihood of individuals with severe mental illness obtaining and keeping a job. **Results revealed more hours worked and more money earned for those in the Cognitive Training Group compared to the control group who did not receive web-based Cognitive Remediation Therapy".**

Additionally, participants in the Executive Functioning training experienced significantly greater improvement in Executive Functioning ability, as measured by neurocognitive tests than the control condition. However, the availability of Cognitive Remediation Therapy is limited in many settings (Harris, et al.).



Recommendations

Based on these results, we can conclude that at least 2 weeks of 1-hour training sessions, 3 times per week with 40 minutes of daily home training, should yield improved executive functions.

Research

In the first study, 86 people with severe mental illness who were unemployed and had joined a Supported Employment program were randomized to either a Web-based CRT program or an Internet-based control condition. The primary outcome measured was hours worked over 6 months post-treatment. At 6 months, those participants randomized to digital cognitive training had worked significantly more hours (P=.01) and had earned significantly more money (Harris, 2017).

(West, et al.): 25 people with severe mental illness were randomized to either 2 weeks of computerized Executive functioning training or control training. Training consisted of 1h training sessions 3 times per week and 40 min of daily home training.
participants in the Executive Functioning training experienced significantly greater improvement in EF ability as measured by neurocognitive tests than the control condition.

References

Harris, A. W. (2017, September 20). Web-Based Cognitive Remediation Improves Supported Employment Outcomes in Severe Mental Illness: Randomized Controlled Trial. JMIR Mental Health, 4(3). 10.2196/mental.6982

West, M. B. (2019, January). Brief executive function training for individuals with severe mental illness: Effects on EEG synchronization and executive functioning. Randomized Control Trials, 203, 32–40. 10.1016/j.schres.2017.08.052

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