

Intrinsic Motivation Assessment of the First Patients Enrolled in DisCoVer Trial – Innovative Major Depressive Disorder Treatment

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Background. Major depressive disorder (MDD) is a highly prevalent and disabling disorder, hence the importance of introducing novel and efficacious treatment approaches. The main goal of the collaborative DiSCoVeR project is to examine the synergistic effects of a novel treatment approach for MDD – a home-administered treatment, combining simultaneous self-administered non-invasive prefrontal transcranial direct current stimulation along with a cognitive control videogame. The effects of this treatment on alleviating depressive symptoms and modulating cognitive control functions in depressed patients will be tested in a multi-site, two-arm, double-blind, sham-controlled, randomized controlled trial conducted at three clinical trial sites (Hadassah, Israel; Riga Stradiņš University, Latvia; Ludwig-Maximilian-University, Germany).

Aim. The goal of the current study was to examine patients' intrinsic motivation after completing the first five days of the treatment; and to examine the patients' interest/enjoyment, perceived competence, effort, felt pressure/tension, and perceived choice following the first week of treatment. Intrinsic motivation has been associated with enhanced learning and performance, so it can be used as one of the predictors for patient compliance of the treatment.

Methods. We assessed the first 21 patients that were enrolled in the trial from all 3 study sites using the Intrinsic Motivation Inventory (IMI). Patients filled out the IMI following the fifth treatment session, regardless of group assignment. We used the following subscales from the IMI: interest/enjoyment, perceived choice, perceived competence, effort/importance and felt pressure/tension. Each item was scored on a 7-point Likert scale, ranging from 1 (“not at all true”) to 7 (“very true”), with the higher scores indicating more of the concept described in the subscale name.

Results. Participants rated their overall interest and enjoyment at 4.55 out of 7 (SD±1.25; with probability 95% CI 4.02 to 5.09), the perceived choice score was 5.82 points (SD±1.05; CI 5.37 to 6.27), perceived competence was 4.55 (SD±1.25; CI 4.02 to 5.09), effort and importance subscale score was 5.38 (SD±1.11; CI 4.90 to 5.86) and in the pressure and tension subscale it was 3 points (SD±1.04; CI 2.55 to 3.45).

Conclusion. We conclude that overall patients were interested in the interventions and had inherent pleasure while doing the sessions, felt that it was their choice to do them, felt that they performed the task quite effectively, were invested in doing the sessions and the experienced pressure and tension were low. The perceived choice and competence are positive predictors of intrinsic motivation.

Acknowledgements. The DisCoVeR project is funded by ERA NET NEURON. The NEURON ‘Network of European Funding for Neuroscience Research is established under the organization of the ERA-NET ‘European Research Area Networks’ of the European Commission. National funding agencies are the Federal Ministry of Education and Research (Bundesministerium für Bildung und Forschung [BMBF]) for LMU Munich, the Ministry of Health (MOH) for HUJI and Hadassah, the Swiss National Science Foundation (SNSF) for UNIGE and EPFL and the State Education and Development Agency (VIAA) of Latvia for RSU.