CENTRAL MASSACHUSETTS MIND NETWORK

July 2022 — Summer Newsletter

Thank you for your ongoing support for UMass MIND! The Central Massachusetts MIND Network was developed to create a more inclusive community surrounding mental health among patients, family members, mental health advocates, local organizations, and providers within the Greater Worcester area. Over the years, we have shared groundbreaking mental health research, provided local mental health services, hosted various community events, and connected over 500 community members. We hope that this network will continue to serve as a catalyst to promote collaboration among the Central Massachusetts community!

2 RECOVERY THROUGH MUSIC: AN UPCOMING MUSIC THERAPY STUDY

by Brenna Chuang

UMass MIND's newest endeavor in exploring expressive art therapies is music therapy! The most recent addition to the MIND program, known as the "Recovery Through Music" program, will explore the effectiveness of music therapy in mental health recovery of those with serious mental illness. Music therapy has been shown to offer a creative outlet through which patients can express themselves through nonverbal means. This type of treatment has promise among individuals with various mental illness diagnoses.

The 12-week study will be led by Louis Beers, a second year UMass Chan Medical School student who has maintained a strong interest in the therapeutic effects of music and even plays a few instruments of his own. The music therapy sessions will be led by UMass Memorial Health's very own music therapist, Mary-Carla Macdonald. The team also includes Dr. Lisa Summer, Director of Music Therapy at Anna Maria College, who assisted with drafting the music therapy protocol for this study, and is supported by additional UMass MIND staff and interns.

This study aims to help participants to develop deeper therapeutic connections between themselves and the music they listen to. In these sessions, participants will be guided to listen to music and express their inner thoughts and feelings through art in response to that music. Sessions will also include team bonding between participants, grounding skills through the use of music, and the construction of a music playlist based on participant preferences!

This pilot study shines a light on how music can be perceived and used in mental health recovery and is set to begin in July!

1 FINDINGS OF ZENTANGLE: A MINDFULNESS-BASED THERAPY

by Tarynn Pacheco

Zentangle, a method of mosaic art created by Rick Roberts and Maria Thomas, has recently been investigated as a potential mindfulness-based art therapy for patients with serious mental illness, such as schizophrenia, major depressive disorder, and bipolar disorder, in a study conducted by UMass MIND.

This art method was initially utilized by Maria in the creation of her own personal artwork. After noticing the meditative state Zentangle often put her into, Maria wondered if Zentangle could potentially do the same for others. The benefits of entering a "flow state" like the one described by Maria have been discussed widely across positive psychology literature. There are also reported benefits of other mindfulness-based therapy in the treatment of serious mental illness.

Over the course of an eight-week program, six patient participants engaged with and completed a guided Zentangle course, led by Rick and Maria. Throughout the course, they created Zentangle artwork and learned about the power of mindfulness in mental health. Their symptoms and general mental well-being were assessed at baseline, one week post-intervention, and four weeks post-intervention.

Following their participation in the Zentangle program, patients experienced a significant reduction in psychiatric symptoms. They also experienced an overall increase in mindfulness behaviors. These findings indicate that Zentangle is a potentially feasible therapeutic intervention for serious mental illness. While Zentangle is a promising intervention, more research is necessary into the overall efficacy for the treatment of serious mental illnesses.

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3 SHORT-CHAIN FATTY ACIDS AS A POTENTIAL TREATMENT TARGET IN SCHIZOPHRENIA

by Jill Jones

Cognitive dysfunction, one of the primary defining features of schizophrenia, significantly impacts patients' daily function, quality of life, and the recovery journey. Studies have reported that lipid dysregulation could be a potential risk factor of cognitive dysfunction. Short-chain fatty acids (SCFAs) are involved in the regulation of lipids, along with glucose and cholesterol metabolism. The three most common SCFAs in serum are acetate, propionate, and butyrate. Previous studies have shown that enhanced propionate production might correlate with cognitive dysfunction. UMass MIND collaborated with other psychiatric researchers to examine the relationship between serum levels of SCFAs, lipid metabolism and cognitive function in drug naïve first-episode schizophrenia patients.

Forty-four schizophrenia inpatients and 35 healthy controls were recruited in the study. The patient group showed significantly higher serum levels of total SCFAs, acetic acid, acetid acid/ propionic acid ratio, as well as poorer cognitive performance, in comparison to the control group. The study suggested that abnormal serum levels of SCFAs and cognitive dysfunction occur in the early phase of schizophrenia, and lipid metabolism and serum levels of SCFAs may be associated with cognitive dysfunction in schizophrenia either independently or interactively. Future research will further explore the role of SCFAs as a potential treatment target to improve cognitive function during the early phase of schizophrenia.

Li, X., Yuan, X., Pang, L., Zhang, S., Li, Y., Huang, X., Fan, X., & Song, X. (2022). The effect of serum lipids and short-chain fatty acids on cognitive functioning in drug-naïve, first episode schizophrenia patients. Psychiatry research, 313, 114582. https://doi.org/10.1016/j.psychres.2022.114582

CURRENT STUDIES: ACTIVELY RECRUITING!

Study #1: Substance Use Study

The purpose of this study is to see whether Brexpiprazole, an FDA approved antipsychotic medication for schizophrenia treatment, may help reduce substance abuse in individuals with schizophrenia or schizoaffective disorder. This study is 3 months in length with weekly meetings.

Study #2: Negative Symptom Study

Are you or someone you know living with schizophrenia and struggling with negative symptoms such as social withdrawal or apathy? The Negative Symptom study seeks to determine if an investigational medication, AVP-786, is effective in the treatment of negative symptoms.

Our studies are conducted at 26 Queen Street, Worcester, MA 01610. You will be compensated for your time being involved in the study. If you are interested or would like more information about any of our studies, please call 508-856-MIND (6463) or email MIND@umassmed.edu

WE'RE HIRING

UMass MIND is looking for a Clinical Research Coordinator I and a Clinical Research Assistant. Responsibilities of these positions include independently performing delegated tasks and procedures involving human subject research, coordination of regulatory activities, collection and management of data for research protocols related to treatment, ancillary services, and prevention practices.

If you are interested or would like more information about the job opportunities, please call 508-856-MIND (6463) or email MIND@umassmed.edu.

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