

Cognition in Psychological Disorders Lab



CPD Lab News


- Welcome to our new graduate student, Lindsay Simourd and Post-Doctoral Researchers, Drs. Matthew Vandermeer & Chloe Stewart!
- Congratulations to Stephanie Woolridge for receiving the Vanier Scholarship! This award recognizes Stephanie's contributions to research and leadership and is the most prestigious student award in Canada!
- Welcome to our new undergraduate thesis student, Ian Doell, and our new research assistants, Mayah Palmer, Sachpreet Grewal, Andrea Santalla Escobar, Brenna Hartleib, Kirstin Carlisle, & Jazmin Eadie!

CPD Lab Posters

CPD Lab Summer Work Experience Program (SWEP) students, Maya McGregor & Isabelle Hau had the opportunity to present posters at the Department of Psychiatry Research Conference this past summer which are featured below! Great work Maya and Isabelle!

BARRIERS TO THE IMPLEMENTATION OF ACTION-BASED COGNITIVE REMEDIATION IN EARLY PSYCHOSIS CLINICS

Maya McGregor, Chelsea Wood-Ross, Stephanie Woolridge, Melissa Milanovic, & Christopher Bowie
Queen's University, Kingston, Ontario

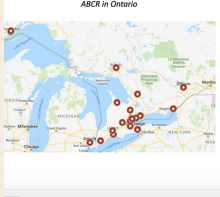


BACKGROUND
Action Based Cognitive Remediation (ABCR) integrates goal-setting procedures and role-plays to address neurocognitive impairments. ABCR further improves cognition and functioning compared to what is seen in traditional cognitive remediation. Uptake of the treatment has been limited at some sites.

OBJECTIVES
Identify barriers that clinics face in implementing ABCR. Measure differences in barriers faced by therapists who modified ABCR compared to those who did not. Analyze whether patient completion of ABCR sessions is associated with patient-related barriers.

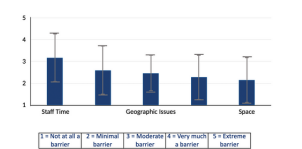
METHODS
Trained ABCR therapists completed a survey on their clinic's experiences with ABCR.
• Greatest barriers they faced with implementation
• Whether they modified number and/or duration of ABCR sessions.

ABCR in Ontario

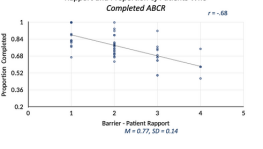


RESULTS

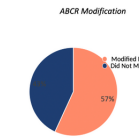
Greatest Therapist-Reported Barriers



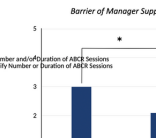
Report and Proportion of Patients Who Completed ABCR



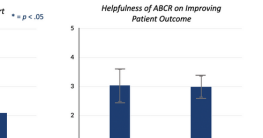
ABCR Modification



Barrier of Manager Support



Helpfulness of ABCR on Improving Patient Outcome




CONCLUSIONS

- Staff time was the greatest therapist-reported barrier to the implementation of ABCR.
- Therapists who modified ABCR dosage reported greater barriers of manager support compared to those who did not, but there were no differences in barrier of staff time, geographic issues, equipment, or space.
- This research gives us a preliminary understanding of the barriers to implementing novel treatments.

ACKNOWLEDGEMENTS
Thank you to my supervisors, Dr. Christopher Bowie, Chelsea Wood-Ross and Stephanie Woolridge, and to the team at the Cognition in Psychological Disorders Lab for all their support.

Cognitive Ability and Depressive Symptom Severity have Differential Relationships with Productive Activities vs Social Relationships in Major Depressive Disorder

Isabelle Hau, Chelsea Wood-Ross, Stephanie Woolridge & Christopher Bowie
Queen's University, Kingston, Ontario




BACKGROUND

- Major depressive disorder (MDD) is often characterized cognitive deficits even during remission.
- Poorer cognitive functioning has been related to real-world functioning issues.
- Little is known about the direct and mediating effects of cognitive problems on everyday functioning outcomes in MDD.

OBJECTIVES

- Identify the direct and mediating effects of cognitive problems on everyday functioning outcomes in major depressive disorder.
- Highlight how different functioning outcomes are associated with unique pathways for neurocognition and depressive symptom severity.
- Analyze and apply findings to improve the social and productive functioning of individuals with major depressive disorder.



MATERIALS & METHODS

Participants

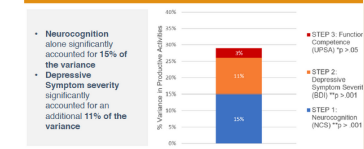
- Cognitive Remediation studies
- N = 111
- Aged 18-65

Assessments

- Neurocognition
- Social Cognition
- MATRICS battery
- Bell-Lysaker Emotion Recognition Test
- Functional Competence
- Real-World Activities
- World Health Organization Performance Based Skills Assessment
- Schedule - II
- Depressive Symptom Severity
- Beck Depression Inventory

RESULTS

Predictors of Productive Activities



Predictors of Social Functioning

- Neurocognition alone significantly accounted for 8% of the variance.
- Depressive Symptom severity significantly accounted for an additional 31% of the variance.

CONCLUSIONS

- Unique pathways for neurocognition and depressive symptom severity.
- Significantly depend on type of functioning outcome.
- Treatment priorities based on functional deficits or functional goals.
- Improve cognition and real-world functioning for people with MDD.

ACKNOWLEDGEMENTS
Thank you to my supervisors, Dr. Christopher Bowie, Chelsea Wood-Ross, Stephanie Woolridge and the team at the Cognition in Psychological Disorders Lab for all their support.

From the Lab Library

- Published in the Australian & New Zealand Journal of Psychiatry, Groves, Douglas, Milanovic, Bowie, and Porter conducted a systematic review to determine whether evidence-based therapies can improve neurocognitive functioning in mood disorders. Read more about it [here](#)
- In the Money Talks study, Michael Grossman and Christopher Bowie learned that performance deficits in social cognition, particularly in early psychosis, can be eliminated with a monetary reward for correct responses. Read more about it [here](#)



Welcome to Our Newest CPD Lab Members: Drs. Chloe Stewart & Matt Vandermeer!

Q: What is your academic background?

A: I completed my B.Sc at the University of Toronto with a double major in Psychology and Criminology & Sociolegal Studies. I then went to University College London where I got an M.Sc in Cognitive Neuroscience. There, I focused on the development of executive functions in term and preterm infants at one year of age. Finally, I completed her PhD in Neuroscience at the University of Western Ontario, where I worked on guilt and the autonomic nervous system in health and neurodegenerative diseases.



Q: What are you currently working on in the lab?

A: Currently, I am working on ACED, a study looking at outcomes following the first episode of major depressive disorder.

Q: What are you most excited for in the lab?

A: I am looking forward to getting involved in this new and very promising area of research!

Q: What is your academic background?

A: I earned my B.Sc from the University of Toronto with a double major in Integrative Biology and Mental Health Studies, where I conducted research on research on kidney tissue and helped validate several neuropsychological assessment tools for a VR environment. I then completed his M.A. in Counselling Psychology at the University of Western Ontario, where I studied the relationship between alexithymia and secondary traumatic stress in teachers and contributed to the development of mental health training programs for student teachers. I then worked as a senior research assistant with the Prevention and Early Intervention Program for Psychosis (PEPP) in London, conducting research with a general focus on rehabilitation and self-stigma in psychosis. Finally, I completed his PhD in Clinical Science and Psychopathology (i.e., Clinical Psychology) at the University of Western Ontario as part of the Lifespan Study of Emotion and Personality (LEAP) Lab. My dissertation research focuses on using MRI to identify biomarkers of vulnerability to depression in never-depressed youth. Before joining the CPD Lab I completed my pre-doctoral residency in clinical psychology with the London Clinical Psychology Residency Consortium where I trained in clinical rotations in adult inpatient psychiatry, adult ambulatory CBT services, and geriatric mental health research.



Q: What are you currently working on in the lab?

A: My principal responsibility lays in supporting the development of methodology for the ACED study, a longitudinal study of risk for depression recurrence in adults. I am also developing a few research studies related to archival neuroimaging data as part of the CAN-BIND consortium.

Q: What are you most excited for in the lab?

A: Matt is excited to be part of research projects emerging from the CPD Lab and has been touched by the warm welcome he's received from his colleagues and is impressed by their commitment to conducting high-quality, impactful research in psychopathology and mental health care.