

Addiction services' clients' perspective on the Brain Disease Model of Addiction (BDMA)

Michael Egerer¹ & Samantha Rundle^{2,3}



¹Centre for Research on Addiction, Control and Governance (CEACG), Faculty of Social Sciences, University of Helsinki, Finland
²Graduate Department of Psychology, University of Toronto
³Centre for Addiction and Mental Health, Toronto, Canada



Background & Objectives

- A key limitation for neuroethics research in addictions is the lack of a comprehensive and valid understanding of client's beliefs toward the BDMA
- This limitation hinders researchers to:
 1. Characterize aspects of the BDMA in different populations
 2. Evaluate the possibility that altering BDMA-related beliefs can lead to desirable outcomes among healthcare providers (e.g., increasing empathy)
 3. Evaluate whether and how neuroscientific evidence and equipment can be ethically utilized in practice
- Aim of the CAMH component of the A-BRAIN project will be to conduct focus groups with patients with lived experience of addiction at CAMH in order to **gather their beliefs toward the BDMA and understand their perspective on how neuroscientific knowledge can and should be used in practice**

Recruitment

Subject Recruitment and Inclusion/Exclusion Criteria

- Basic Eligibility: Age 18 or over and ability to read, write, and speak in English
- Recruitment: passive (e.g. advertisements) and targeted/active (see below)

Target Population	Eligibility Criteria
CAMH Research Registry/Research Connect	a) Received an assessment or treatment at CAMH for an addictive disorder (either current outpatient, former outpatient, or inpatient), b) No prior history of psychosis or a developmental disorder c) Judged capable of understanding the elements of participation

Assessment Instruments

Focus Groups

- 11 focus groups
- Focus group size: 5 – 10 participants
- Altogether 69 participants (women: 25 / men: 44)
- Duration: 60 – 90 minutes
- Compensation: \$50 cash

Procedure

- Following the demographics questionnaire, participants were asked to answer and partake in the interview protocol developed based on the analytical group interview approach. It consisted of open-ended questions, a “sorting task,” and other discussion stimuli. The interview protocol was structured following three themes:

- (1) Knowledge, Hopes, Beliefs and BDMA specific questions
- (2) Practice and Implementation
- (3) Policy Implications

Analysis

1. Indexing of interview data according to the three main themes of the A-BRAIN project:
 - a) Action capacity and possibilities ascribed to the BDMA
 - b) Evaluations of outcomes of BDMA
 - c) Decisions and interpretations of the BDMA
2. Refined thematic analysis based on initial indexing

Preliminary Results

- Demonstrate surprisingly elaborated lay knowledge in brain mechanisms
“Interviewee 3: But that's what he's saying anyway, that it's because you're still seeking that reward system, that dopamine in your brain.” (Group 8)
- Hopes in improved treatment and prevention of addiction
“Interviewee 1: I'd say both. I could see the images being used, to prevent drug addiction for showing you the A-B-C of it, and how to treat drug addiction for the same reason, being able to see the A-B-C of it, here's what's happening, this is what your brain is doing.” (Group 1)
- Criticism towards implementation of BDMA outside the “medical realm”
“Interviewee 3: Any brain scan that's used in the criminal justice system rather than a medical system is going to be problematic [group agreement].” (Group 2)
- “Disease” most disputed component of the BDMA concept
“Interviewee 10: Its harsh, disease is like a harsh word.”
Interviewee 8: If it's disability you can kind of feel like, I got this but how do I go through with it, with disease, you're kind of, you got a disease, what are you going to do, you know.” (Group 6)
- Hold a compensatory model for their addiction
- Express a more complex stance on agency and stigma than proponents and opponents of the BDMA:

	Increased agency	Reduced agency
Increased stigma		“During active” addiction
Reduced stigma	During recovery / life “after active” addiction	

Preliminary Conclusion

- Clients beliefs in the BDMA suggest that it might **hamper help-seeking**, but helps them to **keep their individual agency** in light of a seemingly self-inflicted disorder.
- Participants believe that it may be possible to ethically implement technical solutions based on neuroscientific research into treatment and practice, but nothing beyond this

References

- Brickman, P., Rabinowitz, V. C., Karuza, J., Coates, D., Cohn, E., & Kidder, L. (1982). Models of helping and coping. *American Psychologists*, 37(4), 368-384.
- Deterding, N. & Waters, M. (2018). Flexible Coding of In-depth Interviews: A Twenty-first-century Approach. *Sociological Methods & Research*, 1-32.
- Heather, N., Best, D., Kawalek, A., Field, M., Lewis, M., Rotgers, F., Wiers, R., & Heim, D. (2017). Challenging the brain disease model of addiction: European launch of the addiction theory network. *Addiction Research & Theory*, DOI: 10.1080/16066359.2017.1399659.
- Hyde, J., Hankins, M., Deale, A., & Marteau, T. (2008). Interventions to increase Self-efficacy in the Context of Addiction Behaviours. *A Systematic Literature Review. Journal of Health Psych* 13(5): 607-623.
- Sulkunen, P., & Egerer, M. (2009.). Reception analytical group interview: A short introduction and manual. Helsinki: Helsingin yliopisto, sosiologian laitoks.