Abstracts for Posters at the TSIL 2021

Feasibility of the 'Leapfrog' Trial Design for the Optimization of Psychological Treatments: Application to an Internet-delivered Intervention to Reduce Anhedonia
- Simon E. Blackwell

This poster presents a feasibility RCT using the 'leapfrog' trial design (Blackwell et al., 2019), a method intended to accelerate development and optimization of psychological treatments. This may offer particular benefits when expected effect sizes are small and there are many unknowns about optimal implementation, for example in precision medicine.

Depression, Anxiety, and Eating Disorder Symptom Dynamics: A Time-Intensive, Idiographic Approach to Exploring Depression Heterogeneity
- Claire E. Cusack

Objective: Explore individual symptom dynamics based on highly endorsed and highly labile symptoms.

Method: Thirty-one participants experiencing moderate–severe depression completed ecological momentary assessment 4x/day for 20 days.

Results: Depression, anxiety, and ED symptoms were central for many individuals.

Conclusions: Treatment for depression should assess anxiety and eating disorder symptoms

Comparison of diagnostic lifetime measures versus self-reported clinical diagnosis of anxiety and depressive disorders
- Molly Davies

Large studies on anxiety/depression are typically unable to utilise "gold-standard" methods to ascertain diagnoses. We compared two self-report diagnostic methods. Agreement was moderate for MDD, any anxiety and GAD. For anxiety disorders, single-item diagnoses classified most participants as GAD, whereas algorithm-based diagnoses distributed participants more evenly. Further validation is required.

Multimodal Depression Detection Using Self-Supervised Text and Speech Embeddings
- Sri Harsha Dumpala

Application of deep learning techniques to mental health analysis is hindered by the non-availability of large depression datasets. In this work, we show that embeddings extracted from models pretrained on large amount of unlabeled data (text and speech) can be considered to improve the depression detection performance.

Association of depression symptom network connectivity and treatment response to internet-delivered cognitive behavioural therapy
- Sharon Chi Tak Lee

iCBT non-responders have a more connected symptom network at baseline, suggesting that stronger associations between depression symptoms make depression more difficult to treat. Findings converged with the network theory of mental illness where increased associations between symptoms suggests elevated psychological vulnerability, thus leading to treatment non-responsiveness.

Predicting Transdiagnostic Symptom Change in an RCT of Single-Session Interventions for Adolescent Depression
- Riley McDanal

Objective: Are demographic factors associated with differential internalizing response to single-session interventions (SSIs)?

Method: We incorporated several demographic covariates into a latent internalizing model to explore differential response (N=2,452).

Results: No demographic factor significantly predicted differential SSI response.

Conclusions: These SSIs are not differentially effective across demographic groups.

Trajectories of Anxiety and Depression Symptoms throughout internet-enabled Cognitive-Behavioural Therapy
- Megan Skelton

We analysed records from 52,029 NHS IAPT patients who received internet-enabled cognitive-behavioural therapy. Using growth mixture modelling, we identified four classes of symptom trajectories throughout therapy for both anxiety (GAD7) and depression (PHQ9). Class membership was associated with several baseline variables.

More Abstracts coming soon