

# **Lives Worth Living for All: Efficacy of an Accessible Telehealth-Administered 24-week Pilot DBT Skills Group for Adults**

**Alayna Gretton (BA Hons.), Baylie McKnight (MSW), Christina Robillard (PhD)**

## **Summary**

- Evaluated the efficacy of a 24-week, accessible, virtual Dialectical Behaviour Therapy (DBT) skills group for adults with borderline personality disorder (BPD) living in the province of British Columbia, Canada.
- $N = 10$  adults with BPD: Either 1) self-identified with the disorder, or 2) were diagnosed by a mental health professional, *and* met the clinical cut-off on MSI-BPD (endorsed 7 or more features).
- Data were collected at the outset, midpoint, and conclusion of DBT (baseline, 3-month, and 6-month intervals).
- Measures were:
  - Borderline Symptom List Short Version measuring borderline symptomatology
  - Difficulties in Emotion Regulation Scale measuring emotion regulation difficulties
  - Patient Health Questionnaire 9 measuring depressive symptoms
  - General Anxiety Disorder Assessment 7 measuring generalized anxiety
  - Item subjectively assessing quality of life
  - Item subjectively assessing quality of health
  - Suicide Behaviours Questionnaire-Revised measuring suicidality
  - Brief Reasons for Living Scale measuring reasons for living
  - Emergency service use: Number of hospitalizations, number of days in hospital, ambulance rides, police contact
  - Polypharmacy

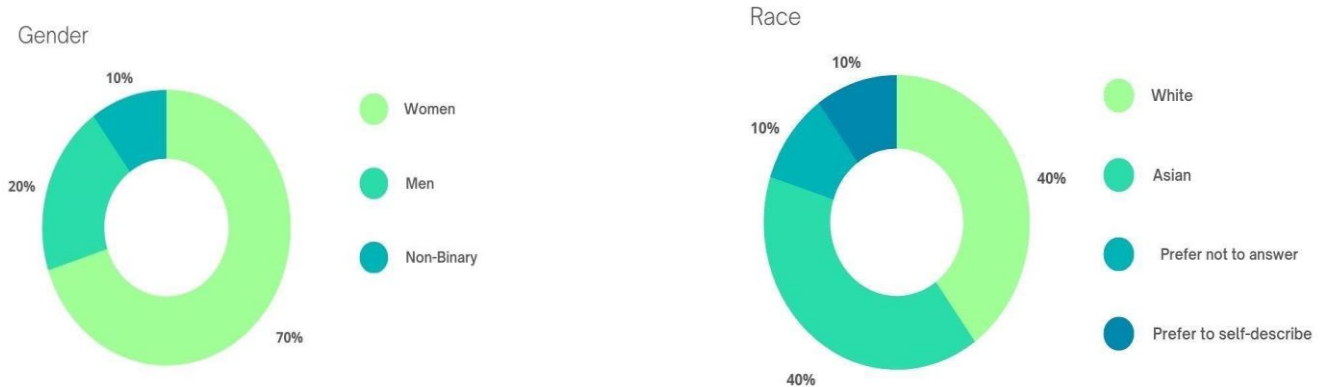
## **Analyses**

- Very small sample size of  $N = 10$ , which would render  $p$  values and associated standard errors unreliable. Decided to de-emphasize  $p$  values and focus on effect size using Hedges  $g$  statistics.
- During data collection did not assign individual anonymous study ID to participants allowing us to compare individual scores across separate assessments. For this reasons, repeated measures ANOVA was not possible (this limitation is addressed for future analyses).
- Due to small sample size, more informative to use descriptive analysis for emergency service use.

## Participants

- $N = 10$  participants with clinically significant BPD features
- Participants' mean age was 31.10 ( $SD = 6.43$ ), with ages ranging from 21- 41 years.
- All participants located in the province of B.C.

## Participant Characteristics

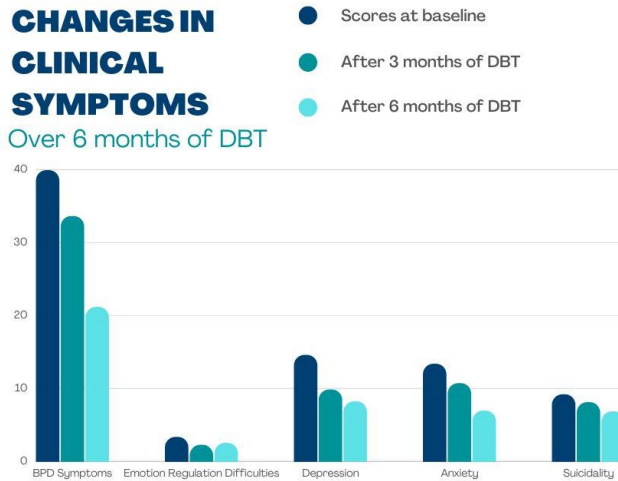


## Results

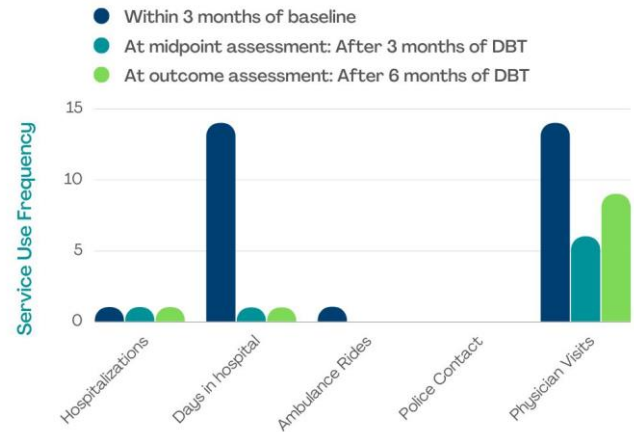
- Our participant cohort experienced gains in all outcomes assessed.
- Large effect sizes (exceeding Hedges  $g = 0.80$ ) were found for difference in means between pre- and post-testings for BPD symptoms, emotion regulation difficulties, depression, anxiety, and suicidality.
- Medium effect sizes (exceeding Hedges  $g = 0.50$ ) were found for participants' quality of life and quality of health
- Small effect size (exceeding Hedges  $g = 0.20$ ) was found for participants' reasons for living.
- For emergency service use:
  - Number of hospitalizations were reduced 67%
  - Days in hospital were reduced 92%
  - Ambulance rides were reduced by 100%
  - Police contact was reduced by 100%
  - Physician visits were reduced 78%
  - Medication use increased by 13%
- Attrition rate was 0%, compared to around 30% rate for most people with BPD in DBT

## CHANGES IN CLINICAL SYMPTOMS

Over 6 months of DBT



## Emergency and Healthcare Service Use Over 6 Months of DBT



## Limitations and Conclusions

- Change in means reflected in effect size estimates at the aggregate group level may be insignificant for individual participants. Changes in group means may result from relatively large changes in a few individuals, or conversely, numerous participants may experience small changes individually.
- Future evaluations could address this limitation by using analyses enabling us to parse changes at the individual level from changes at the aggregate level over time, such as a multilevel/hierarchical regression model. However, 50 level-2 units are required to produce unbiased estimates for standard errors. How could this be addressed with the constraints of trying to evaluate changes in a DBT cohort of  $N = 10$  participants?
- The very small sample size precludes firm conclusions about effect sizes.
- Still, these results are very promising and strongly justify ongoing virtual, 24-week DBT and future, high quality empirical evaluation.
- DBT made accessible to rural/northern/remote communities, including Indigenous communities.
- Could address a critical gap in literature about more cost/resource effective DBT; 24- vs. 48-week standard DBT.
- Also, these contributions widen the impact of our initiative to benefit the greater scientific and BPD community.