

NSW Ministry Health

Evaluation Intervention Innovation Fund

Summary of key findings and implications for policy and practice

Project title: Dialectical behaviour therapy for young people in residential substance use disorder treatment

Lead investigator and organisations: Mission Australia Gabriella Holmes Program Manager and Project Air Wollongong University Professor Brin Grenyer, University of Wollongong (UOW)

Other investigators and organisations: University of Wollongong

- Research Team: Lauren Mullaney Senior Psychologist TCF Mission Australia
- Research Team: Dr Ely Mrceau Research Fellow UOW
- Research Team: Dr Michelle Townsend Research Fellow UOW
- Joann Fildes Head of Research & Evaluation Mission Australia

Background and Rationale – what problem were you solving?

In 2015 for young people aged 15-24 in Australia, alcohol and use of illicit drugs were the leading causes of total burden of disease in males, and the second and third leading causes for females, respectively.¹

Residential rehabilitation programs in SUD treatment are interventions at a higher intensity level of care and may be particularly useful for clients who experience problematic substance use and comorbid mental and physical health issues, or other complexities. **There is currently a lack of research investigating the effectiveness of residential rehabilitation for young people with SUD.**² Despite this, there is evidence to support the effectiveness of psychosocial interventions such as family-based therapies and cognitive behavioural therapy, many of which are components integrated into the comprehensive treatment approach of residential rehabilitation programs.

In light of the lack of empirical evidence, **the development and evaluation of treatment for young people with SUD in residential treatment settings is a major priority.** Adolescence is a critical developmental period, in which maturational changes in neurobiology influence biopsychosocial processes and the unfolding of heightened risk in initiation of substance use and adverse long-term outcomes, highlighting the importance of effective early intervention.^{3,4}

This **study evaluated dialectical behaviour therapy (DBT)**, an evidence-based psychological therapy for borderline personality disorder in the context of substance use disorder (SUD) treatment. **It determines the clinical effectiveness of DBT for young people in residential SUD treatment and identifies factors which may predict who is most likely to benefit from DBT.**

Summary of Key Research Findings

Please summarise findings from the research below in abstract format (maximum 300 words)

Research questions

1. What is the clinical effectiveness of dialectical behaviour therapy (DBT) for young people in residential substance use treatment?
2. Do any factors predict who is most likely to benefit from DBT?

Methods

1. All participants at the Triple Care Farm (TCF) Residential Rehabilitation program were invited to participate. Assessments were conducted at five timepoints: baseline; 6-weeks; 12-weeks; 6-months; 12-months. Attrition rate was approximately 55%.
2. Outcome measures assessed global psychological functioning, severity of dependence, situational confidence, quality of life, substance use, cognitive functioning, personality disorders and attachment styles. Client and therapist satisfaction was assessed following each DBT session. Adherence to the DBT protocol was measured

using the Treatment Integrity Checklist. Archival data from TCF provided a historical comparison group (2008-2009).

Results

Recruitment rate was approximately 71% (N=100). One-third (34%) reported cognitive impairment, 56% BPD symptoms, 45% a personality disorder, and 83% insecure personality attachment style. Compared to the historical sample (N=100), the current sample had higher psychological symptoms.

RQ1. There were significant decreases in psychological symptoms over time for both groups, although the current sample had higher initial scores. Significant increases in confidence to resist using substances, and quality of life for both samples were found. There was moderate-to-high satisfaction levels with the DBT intervention and high levels fidelity to the DBT treatment protocol.

RQ2. BPD symptoms were highly prevalent and young people with higher BPD symptoms were significantly less likely to benefit from treatment over time compared to those with fewer BPD symptoms.

Conclusions

There is evidence to support the clinical effectiveness of DBT for young people in treatment, high fidelity in therapist delivery, and acceptable levels of client and therapist satisfaction. A key finding was that the current sample (2018-2020) had heightened levels of psychological symptoms, and comorbid problems, compared to the historical sample (2008-2009).

Implications for policy and practice

Wider implications for policy

Wider implications for practice i.e. services and programs

Please comment on the particular significance of this project to NSW including customer focus

Implications for practice include:

1. DBT appears to be an effective component of treatment at TCF and should continue to be routinely implemented. Other residential SUD treatment agencies may consider the implementation and evaluation of DBT interventions.
2. Young people accessing TCF in the current sample (2018-2020) had greater severity of psychological symptoms compared to those accessing TCF in 2008-2009. Thus TCF is presently supporting young people at the higher end of the spectrum of severity. Maintaining this service is critical, and ongoing support and funding to maintain and expand the capacity of residential services such as TCF is a priority.
3. Future research should further investigate the relationship between length of stay and treatment outcomes. This could guide service delivery and design through matching the optimal length of treatment to particular client groups, and staging of treatments to match the severity of clients' treatment needs.
4. The high levels of BPD and personality disorder symptoms and adverse effects on treatment outcomes indicate that routine personality disorder screening in residential SUD treatment settings would be beneficial. This would facilitate early identification of clients who likely require higher-intensity level of care, inform appropriate clinical decision-making and management. These efforts should focus on optimising interventions for residential settings and utilising existing resources to allow successful implementation and scaling-up in this context.
5. High rates of insecure attachment styles indicate the need for attachment-informed interventions and strategies in residential SUD treatment. Clinical interventions that utilise a framework to understand insecure attachment and promote secure attachment styles

Research Impact

Has this research study led to further investigations or collaborations that led to other funding applications?

YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>

Dissemination Activities completed and planned

The findings in this report will be shared extensively, both internally (within Mission Australia) and externally. This will be achieved through the following activities:

Publication in relevant scientific journals

A manuscript is being prepared for submission in *Drug and Alcohol Review* detailing the primary outcomes and major findings of the study. Further publications are expected describing the predictors of treatment outcome.

Presentation at national and/or international conferences and sector meetings

An abstract has been submitted for presentation at the 2020 NADA Conference. The Network of Alcohol and Other Drug Agencies (NADA) is the peak organisation for non-government alcohol and other drug services in NSW. An abstract will also be submitted for presentation at the 6th International Congress on Borderline Personality Disorder and Allied Disorders 2020, 24-26 September 2020, Antwerp, Belgium.

Distribution in appropriate social media channels

We will utilise existing University of Wollongong channels to promote this research.

References

1. AIHW. (2020). *Alcohol, tobacco and other drugs in Australia. Web report*. Retrieved from <https://www.aihw.gov.au/reports/alcohol/alcohol-tobacco-other-drugs-australia/contents/priority-populations/younger-people>
2. Lichvar, E. K., Stilwell, S., Ajmera, T., Alexander, A. L., Plant, R. W., Panzarella, P., & Blau, G. M. (2018). Residential treatment of adolescents with substance use disorders: Evidence-based approaches and best practice recommendations. In C. Leukefeld & T. Gullotta (Eds.), *Issues in Children's and Families' Lives* (pp. 191-213): Springer.
3. Gray, K. M., & Squeglia, L. M. (2018). Research review: What have we learned about adolescent substance use? *The Journal of Child Psychology and Psychiatry*, 59(6), 618-627. doi:10.1111/jcpp.12783
4. Lubman, D. I., & Yücel, M. (2008). Drugs, mental health and the adolescent brain: Implications for early intervention. *Early Intervention in Psychiatry*, 2(2), 63-66. doi:10.1111/j.1751-7893.2008.00059.x