

Research Bulletin

Stop, observe, and don't judge your thoughts...

What's the evidence for third wave cognitive behaviour therapies for depression in young people?

ISSUE

09

The third wave of cognitive behaviour therapies (CBT) is an evolving area of mental health treatment that has received considerable interest in recent years. They consist of novel therapeutic approaches characterised by themes such as mindfulness, acceptance, dialectics, and cognitive fusion. This research bulletin reviews the evidence for third wave CBT interventions in treating depressive symptoms in young people, with a focus on Acceptance and Commitment Therapy, Dialectical Behaviour Therapy, and Mindfulness Based Therapy.

Background

'Third wave' Cognitive Behaviour Therapy (CBT) refers to a collection of talking therapies that target the *process* of thoughts, rather than their content, to help people become aware of their thoughts and accept them in a non-judgemental way (Hunot et al., 2013). The aim of these approaches is to

promote a mindful relationship with thoughts and emotions, promote acceptance, and build coping skills (Kahl et al., 2012; Ost, 2007). Box 1 provides a description of some of the more commonly used third wave CBT interventions.

Box 1. Third Wave CBT in Brief

Acceptance and Commitment Therapy (ACT) - Rather than actively targeting how the client appraises a situation (as in CBT), ACT targets the emotional response and discourages emotional suppression (Hofmann & Asmundson, 2008). It aims to combat emotional avoidance and increase cognitive flexibility by promoting acceptance, letting go of the control of thoughts, being present, and using values as a life-guide (Hayes et al., 2004). The primary aim of ACT is to reduce psychological inflexibility rather than to achieve symptom reduction (Hacker et al. 2016).

Dialectical Behaviour Therapy (DBT) - DBT was originally developed by Linehan (1993) as a treatment for emotional dysregulation, self-harm, and suicidality in individuals with borderline personality disorder traits. DBT aims to reinforce adaptive behaviours and coping skills via mindfulness, distress tolerance, emotional regulation, and interpersonal effectiveness, and promote normative emotional expression (MacPherson, Cheavens, & Fristad, 2013).

Mindfulness Based Therapy (MBT) - MBT is based in attention regulation, openness to present experience, and non-judgmental awareness of thoughts, emotions, sensations and the environment (Bishop et al., 2004). MBT includes mindfulness-based stress reduction (MBSR) and mindfulness-based cognitive therapy (MBCT). MBT is usually a short-term treatment administered in a group setting (Segal, Williams & Teasdale, 2002).



The aim of these approaches is to promote a mindful relationship with thoughts and emotions, promote acceptance, and build coping skills

Third wave CBT has received a lot of attention for its potential to treat depressive symptoms in adults (Churchill et al., 2013; Dimidjian et al., 2016). A recent Cochrane review found that third wave CBT shows promise for preventing depression in young people (Hetrick et al., 2016), but there is less evidence for how effective these techniques are for treating depressive symptoms in young people. This research bulletin reviews evidence for third wave CBT interventions in treating depressive symptoms in young people, with a focus on Acceptance and Commitment Therapy (ACT), Dialectical Behaviour Therapy (DBT), and Mindfulness Based Therapy.

Acceptance and Commitment Therapy

Acceptance and commitment therapy for the treatment of adolescent depression: A pilot study in a psychiatric outpatient setting.

Hayes, L. B., Candice P.; Sewell, J. (2011) *Mindfulness*, 2(2): 86-94.

In this small study, 38 adolescents (71% female, mean age=15 years) from an Australian outpatient mental health service, experiencing moderate to severe depressive symptoms were assigned to either ACT, or treatment as usual (CBT). The ACT intervention involved individual sessions that could be flexibly delivered to meet clients' needs, meaning participants in the ACT group could have received different treatment components.

Those allocated to treatment as usual received manualised CBT treatment, with the only overlap with ACT being the use of goal setting and behavioural activation.

Thirty adolescents completed treatment; more in the ACT group compared to CBT (19 vs. 11). Participants who received ACT showed greater improvement in depressive symptoms over time whereas the CBT participants did not. Participants in the ACT group also showed an improvement in depressive symptoms at 3 month follow-up (although only 18 participants completed these follow-up assessments).

Take home messages ACT shows promise as an effective and acceptable treatment for depressive symptoms in adolescents, but more and larger studies are needed before researchers and clinicians can be confident of the benefits of ACT as a treatment for depression in this age group. Interventions that allow for a tailored, client-centered approach may be particularly appealing and acceptable to young people, as suggested by the lower drop out rate among participants who received ACT in this study.

Dialectical behavior therapy

Dialectical behavior therapy for nonsuicidal self-injury and depression among adolescents: Preliminary meta-analytic evidence. Cook, N. E. & Gorraiz, M. (2016) *Child and Adolescent Mental Health* 21(2): 81-89.

This comprehensive review analysed the findings from 12 studies (involving 382 participants) that examined the effectiveness of DBT for treating depressive symptoms in adolescents aged 12-18 years. The majority of studies used intensive DBT programs that combined group-based skills training and individual therapy, with some also including telephone support and family sessions.

The review concluded that DBT was effective in treating depressive symptoms following treatment, but noted the poor quality of much of the research. For example, studies were often small, none involved randomly assigning participants to treatment conditions, and less than half included a control group. More high-quality research is needed before firm conclusions can be made about the effectiveness of DBT for treating depression in adolescents.

Dialectical behavior therapy for adolescents with repeated suicidal and self-harming behaviour. A randomized trial. Mehlum, L., Tormoen, A.J., Ramberg, M. et al. (2014). *Journal of the American Academy of Child & Adolescent Psychiatry*, 53(10): p.1082-1091

This study compared a shortened form of DBT to enhanced usual care in adolescents (n=77; 88% female, mean age=16 years) with recent and repetitive self-harm, who were attending an outpatient mental health service. 60% of participants were also diagnosed with a depressive disorder. Participants were randomised to DBT or enhanced usual care. DBT was delivered over 19 weeks and involved an hour of individual therapy and a two hour multi-family skills training session each week, family therapy sessions, and telephone coaching with study therapists as needed. Enhanced usual care involved 19 weeks of CBT or psychodynamic therapy with at least weekly sessions. Participants in both groups received an equivalent number of individual therapy, family therapy, and telephone contact sessions, but the usual care group received far less group sessions than the DBT group (0.5 versus 11.2 sessions).

Participants in both groups *self-reported* a reduction in their depressive symptoms by the end of treatment, but only the DBT group also had a reduction in *interview-rated* depressive symptoms. Participants in the DBT group showed continuous improvement in depressive symptoms across the study, while improvements in the usual care group leveled-off from 15 weeks.

Group therapy for university students: A randomized control trial of dialectical behavior therapy and positive psychotherapy. Uliaszek, A. A., Rashid, T., Williams, G. E., & Gulamani, T. (2016). *Behaviour research and therapy*, 77, 78-85.

This study randomised 54 young people (78% female, mean age=22 years) to receive either group-based DBT or group-based Positive Psychotherapy (PPT). Participants were seeking treatment for difficulties including depression, anxiety, and borderline personality traits (with 71% receiving a diagnosis of a depressive disorder). Both treatments were delivered over 12 weeks, in 2 hour sessions. DBT was informed by the DBT skills manual (Linehan et al., 2015) and involved mindfulness exercises, regular homework reviews, and skill training on distress tolerance, interpersonal effectiveness and emotion regulation. The PPT used a strengths based approach and consisted of weekly in-session activities, handouts, homework and review. Most participants (70%) were receiving additional individual therapy when they started the study.

Both treatments were associated with a reduction in self-reported and clinician-rated depressive symptoms by the end of treatment. DBT appeared to be a more *acceptable treatment* than PPT, however, as 41% of the PPT participants dropped-out of treatment after only one session. Participants in the DBT group also reported greater therapist alliance – of a feeling of connectedness to their clinician – than the PPT group.

It's important to note that, as the majority of participants in this study were also receiving individual therapy (outside of the study) it's unclear whether the DBT and PPT were themselves responsible for the reduction in depressive symptoms.

Take home messages DBT appears to be an acceptable treatment for young people experiencing depressive disorders (including those who are, and are not, self harming). The evidence

for the effectiveness of group-based or individually-delivered DBT is less clear. More high-quality studies comparing individual or group-based DBT to other well established interventions are needed. It also remains to be seen if DBT can be effective in treating young people with depressive symptoms within a limited number of sessions (rather than the full two-year treatment program) and within primary care settings, rather than specialist outpatient mental health services.

Mindfulness Based Therapy

Mindfulness-based therapy and behavioral activation: A randomized controlled trial with depressed college students. McIndoo, C. F., A.; Preddy, T.; Clark, C.; Hopko, D. (2016). *Behaviour Research & Therapy* 77: 118-128.

This study randomised 50 university students (62% females, mean age=19 years) experiencing moderate depressive symptoms to one of three intervention groups: MBT, behavioural activation (BA) or a waitlist control. Two-thirds of the participants (66%) met the diagnostic criteria for major depressive disorder. The MBT was a brief adaptation of the MBSR program (Kabat-Zinn, 1982) and involved one-hour individual therapy sessions over 4 weeks with a trainee psychologist. The sessions include goal setting, guided mindfulness practice, encouraging participants to share their experience of these practices, body scan, yoga, and mindfulness practice homework tasks. The BA intervention also consisted of one-hour sessions over 4 weeks, and was an abbreviated version of the Brief Behavioural Activation intervention (Lejuez et al., 2001), which included goal setting, psychoeducation, identifying values, and activity scheduling. The waitlist control group did not receive any treatment during the study.

Participants in both the MBT and BA groups experienced improvements in depressive symptoms immediately after treatment and up to 1 month after treatment, compared to the waitlist control. The participants in both treatment groups reported being satisfied with their treatment, but more so in the MBT group.

The impact of Mindfulness-Based Cognitive Therapy (MBCT) on mental health and quality of life in a sub-clinically depressed population. Kaviani, H. H., N.; Javaheri, F. (2012). *Psychotherapia* (1): 21-28.

In this study 30 Iranian university students (100% female, mean age=22 years) experiencing mild to moderate depressive symptoms were randomly assigned to group-based MBCT or a waitlist control. The group-based MBCT intervention involved weekly 2.5 hour sessions over 8 weeks, which consisted of mindfulness practice, cognitive-behavioural skills, and review of homework tasks. The waitlist control group did not receive any treatment during the study.

Participants in the MBCT group experienced greater improvement in depressive symptoms immediately after treatment and up to 6 months after treatment, compared to the waitlist control.

Take home messages MBT appears to be an acceptable treatment for young people experiencing moderate depressive symptoms, however this research has only involved tertiary students. It remains to be seen if mindfulness-based therapies are acceptable and effective for young people in clinical settings like mental health services. High-quality studies with larger and more diverse populations (e.g., including more males, and younger age groups,) are needed that compare MBT to other active treatment conditions.



This group of interventions appears to be particularly acceptable to young people

Where to from here?

Summary of the evidence

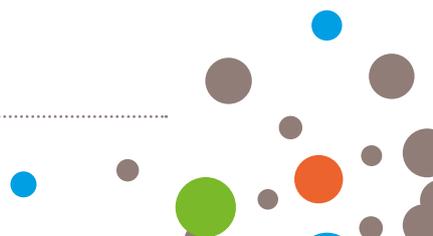
The evidence base for third-wave CBT interventions for young people experiencing depression is small and the quality of existing studies is not strong. This group of interventions appears to be particularly acceptable to young people, but more research is needed on their effectiveness compared to more established psychological interventions.

What does this mean for clinical practice?

Clinicians should continue to refer to current best practice guidelines to inform which talking therapies they provide to clients. The National Institute for Health and Care Excellence (2015) guidelines indicate that young people with mild or subclinical depressive symptoms should be offered individual supportive therapy, guided self-help, and/or group or individual CBT, whereas individual CBT or interpersonal therapy (IPT) are strongly recommended as first-line treatment options for young people with moderate to severe depression (and should be provided over a minimum of three months). Family therapy or psychodynamic psychotherapy could also be considered.

Questions for future research

- How effective are third-wave CBT interventions for young people experiencing depression, compared to other active interventions, such as problems solving therapy, CBT or IPT? Larger trials comparing active treatments in this age group should be prioritised.
 - Are the promising findings for ACT compared to CBT (Hayes et al., 2011) able to be replicated in a larger trial?
 - Are the benefits of third-wave CBT interventions sustained over time? Studies with longer follow-up periods are needed.
 - Are there differences in outcomes between shortened versions of third-wave CBT interventions and those based on the original treatment models and manuals?
 - Are there differences between individual and group-based third-wave CBT interventions?
 - Are third-wave CBT interventions effective for young people whose depression has not responded to other (guideline-recommended) interventions?
 - Can third-wave CBT interventions help prevent relapse for depression in young people? Some third-wave CBT approaches were originally developed specifically for this purpose (eg. MBCT, Ma & Teasdale, 2004).
 - What aspects of third-wave CBT interventions are acceptable to young people and why? How can we build on this to reduce dropout rates for young people receiving treatment for depression?
-



References

- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., ... & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical psychology: Science and practice*, 11(3), 230-241.
- Cook, N. E. & Gorraiz, M. (2016). Dialectical behavior therapy for nonsuicidal self-injury and depression among adolescents: Preliminary meta-analytic evidence. *Child and Adolescent Mental Health*, 21(2): 81-89.
- Churchill, R., Moore, T. H., Furukawa, T. A., Caldwell, D. M., Davies, P., Jones, H., ... & Hunot, V. (2013). 'Third wave' cognitive and behavioural therapies versus treatment as usual for depression. *Cochrane Database of Systematic Reviews* (10), Cd008705.
- Dimidjian, S., Arch, J. J., Schneider, R. L., Desormeau, P., Felder, J. N., & Segal, Z. V. (2016). Considering Meta-Analysis, Meaning, and Metaphor: A Systematic Review and Critical Examination of "Third Wave" Cognitive and Behavioral Therapies. *Behavior Therapy*, 47(6), 886-905.
- Hayes, S. C. (2004). Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies. *Behavior Therapy*, 35, 639-665.
- Hayes, L., Boyd, C. P., & Sewell, J. (2011). Acceptance and commitment therapy for the treatment of adolescent depression: A pilot study in a psychiatric outpatient setting. *Mindfulness*, 2(2), 86-94.
- Hetrick, S. E., Cox, G. R., Witt, K. G., Bir, J. J., & Merry, S. N. (2016). Cognitive behavioural therapy (CBT), third-wave CBT and interpersonal therapy (IPT) based interventions for preventing depression in children and adolescents. *The Cochrane Library*.
- Hofmann, S. G., & Asmundson, G. J. G. (2008). Acceptance and mindfulness-based therapy: New wave or old hat? *Clinical Psychology Review*, 28(1), 1-16.
- Hunot, V., Moore, T. H., Caldwell, D. M., Furukawa, T. A., Davies, P., Jones, H., ... & Churchill, R. (2013). 'Third wave' cognitive and behavioural therapies versus other psychological therapies for depression. *The Cochrane Library*.
- Kahl, K. G., Winter, L., & Schweiger, U. (2012). The third wave of cognitive behavioural therapies: what is new and what is effective? *Current Opinion in Psychiatry*, 25(6), 522-528.
- Kaviani, H., Hatami, N., & Javaheri, F. (2012). The impact of mindfulness-based cognitive therapy (MBCT) on mental health and quality of life in a sub-clinically depressed population. *Archives of Psychiatry and Psychotherapy*, 1(14), 21-28.
- Linehan, M. M., Heard, H. L., & Armstrong, H. E. (1993). Naturalistic follow-up of a behavioral treatment for chronically parasuicidal borderline patients. *Archives of General Psychiatry*, 50, 971-974.
- Ma, S. H., & Teasdale, J. D. (2004). Mindfulness-based cognitive therapy for depression: replication and exploration of differential relapse prevention effects. *Journal of consulting and clinical psychology*, 72(1), 31.
- MacPherson, H. A., Cheavens, J. S., & Fristad, M. A. (2013). Dialectical Behavior Therapy for Adolescents: Theory, Treatment Adaptations, and Empirical Outcomes. *Clinical Child and Family Psychology Review*, 16(1), 59-80.
- Mehlum, L., Tørmoen, A. J., Ramberg, M., Haga, E., Diep, L. M., Laberg, S., ... & Grøholt, B. (2014). Dialectical behavior therapy for adolescents with repeated suicidal and self-harming behavior: a randomized trial. *Journal of the American Academy of Child & Adolescent Psychiatry*, 53(10), 1082-1091.
- National Institute for Health and Care Excellence (2015) Depression in children and young people: identification and management. NICE guideline (CG28).
- Öst, L.-G. (2008). Efficacy of the third wave of behavioral therapies: A systematic review and meta-analysis. *Behaviour Research and Therapy*, 46(3), 296-321.
- Segal Z.V., Williams J.M.G., Teasdale J.D. (2002). Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse. New York: Guilford Press.
- Uliaszek, A. A., Rashid, T., Williams, G. E., & Gulamani, T. (2016). Group therapy for university students: A randomized control trial of dialectical behavior therapy and positive psychotherapy. *Behaviour research and therapy*, 77, 78-85.



Research Bulletin Writers

Dr Faye Scanlan
Alice Montague
Dr Stefanie De Silva

Research Bulletin Consultants

Dr Georgina Cox
A/Prof Rosemary Purcell

Research Bulletins are designed so that clinicians and researchers can access an overview of recent research on a specific topic without having to source the primary articles. The implications of the research for clinical practice and opportunities for future research to advance knowledge in the particular topic area are also canvassed.

Disclaimer

This information is provided for general educational and information purposes only. It is current as at the date of publication and is intended to be relevant for all Australian states and territories (unless stated otherwise) and may not be applicable in other jurisdictions. Any diagnosis and/or treatment decisions in respect of an individual patient should be made based on your professional investigations and opinions in the context of the clinical circumstances of the patient. To the extent permitted by law, Orygen, The National Centre of Excellence in Youth Mental Health will not be liable for any loss or damage arising from your use of or reliance on this information. You rely on your own professional skill and judgement in conducting your own health care practice. Orygen, The National Centre of Excellence in Youth Mental Health does not endorse or recommend any products, treatments or services referred to in this information.



35 Poplar Road
Parkville VIC 3052
1300 679 436
orygen.org.au

An initiative of The University
of Melbourne, Melbourne Health
and The Colonial Foundation

