

CADTH RAPID RESPONSE REPORT: REFERENCE LIST

# Resiliency Interventions for Adverse Childhood Experiences in All Ages: Clinical Effectiveness and Guidelines

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## Research Questions

1. What is the clinical effectiveness of psychological resilience-building interventions for patients (any age) exposed to adverse childhood experiences (ACEs) or trauma?
2. What are the evidence-based guidelines regarding psychological resilience-building interventions for patients (any age) with ACEs or trauma?

## Key Findings

Four systematic reviews, four randomized-controlled trials, and seven non-randomized studies were identified regarding the clinical effectiveness of psychological resilience-building interventions for patients (any age) exposed to adverse childhood experiences (ACEs) or trauma. No relevant evidence-based guidelines were identified.

## Methods

This report makes use of a literature search strategy developed for a previous CADTH report. For the current report, a limited literature search was conducted on key resources including PsycInfo, Medline, the Cochrane Library, University of York Centre for Reviews and Dissemination (CRD) databases, Canadian and major international health technology agencies, as well as a focused Internet search. Methodological filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, and guidelines. Where possible, retrieval was limited to the human population. The search was limited to English-language documents published between January 1, 2017 and January 11, 2019 to capture any articles published since the previous report.

## Selection Criteria

One reviewer screened citations and selected studies based on the inclusion criteria presented in Table 1.

**Table 1: Selection Criteria**

<b>Population</b>	All patients (pediatric, adult and pregnant patients) identified as having a history of adverse childhood experiences (i.e. ACEs score of 1+) or childhood trauma (based on known history or other assessment tool)
<b>Intervention</b>	Psychological resilience-building interventions (e.g., trauma-informed practice, meditation, cognitive behavioural therapy)
<b>Comparators</b>	Q1: No comparator; Any comparator (e.g., pharmacological treatment) Q2: No comparator
<b>Outcomes</b>	Q1: Effectiveness (e.g., improvements in ACEs pyramid indicators: resilience, disrupted neurodevelopment; social, emotional, and cognitive impairment, adoption of health-risk behaviors, disease, disability, and social problems (chronic health conditions); early death, reduced health care utilization (e.g. emergency room visits, hospitalizations, visits to primary care provider); harms Q2: Evidence-based guidelines
<b>Study Designs</b>	Health technology assessments, systematic reviews, meta-analyses, randomized controlled trials, non-randomized studies, evidence-based guidelines

## Results

Rapid Response reports are organized so that the higher quality evidence is presented first. Therefore, health technology assessment reports, systematic reviews, and meta-analyses are presented first. These are followed by randomized controlled trials, non-randomized studies, and evidence-based guidelines.

Four systematic reviews, four randomized-controlled trials, and seven non-randomized studies were identified regarding the clinical effectiveness of psychological resilience-building interventions for patients (any age) exposed to adverse childhood experiences (ACEs) or trauma. No relevant health technology assessments, meta-analyses or evidence-based guidelines were identified

Additional references of potential interest are provided in the appendix.

### Health Technology Assessments

No literature identified.

### Systematic Reviews and Meta-analyses

1. Bailey C, Klas A, Cox R, Bergmeier H, Avery J, Skouteris H. Systematic review of organisation-wide, trauma-informed care models in out-of-home care (OoHC) settings. *Health Soc Care Community*. 2018 Jul 23. [epub ahead of print]  
[PubMed: PM30033666](#)
2. Zakszeski BN, Ventresco NE, Jaffe AR. Promoting resilience through trauma-focused practices: a critical review of school-based implementation. *School Ment Health*. 2017;9(4):310-321.
3. Howarth E, Moore THM, Welton NJ, et al. IMPROving Outcomes for children exposed to domestic Violence (IMPROVE): an evidence synthesis. Southampton (UK): NIHR Journals Library; 2016. (*Public Health Research*, No. 4.10.)
4. Domhardt M, Münzer A, Fegert JM, Goldbeck L. Resilience in survivors of child sexual abuse: a systematic review of the literature. *Trauma Violence Abuse*. 2015;16(4):476-493.  
[PubMed: PM25389279](#)

### Randomized Controlled Trials

5. Berger R, Benatov J, Cuadros R, VanNattan J, Gelkopf M. Enhancing resiliency and promoting prosocial behavior among Tanzanian primary-school students: a school-based intervention. *Transcult Psychiatry*. 2018;55(6):821-845.  
[PubMed: PM30091688](#)
6. Rosenberg AR, Bradford MC, Barton KS, et al. Hope and benefit finding: results from the PRISM randomized controlled trial. *Pediatr Blood Cancer*. 2018;66(1):e27485.  
[PubMed: PM30270489](#)

7. McMullen J, O'Callaghan P, Shannon C, Black A, Eakin J. Group trauma-focused cognitive-behavioural therapy with former child soldiers and other war-affected boys in the DR Congo: a randomised controlled trial. *J Child Psychol Psychiatry*. 2013;54(11):1231-1241.  
[PubMed: PM23738530](#)
8. Slone M, Shoshani A, Lobel T. Helping youth immediately following war exposure: a randomized controlled trial of a school-based intervention program. *J Prim Prev*. 2013;34(5):293-307.  
[PubMed: PM23868708](#)

## Non-Randomized Studies

9. Sharp C, Penner F, Marais L, Skinner D. School connectedness as psychological resilience factor in children affected by HIV/AIDS. *AIDS Care*. 2019 Jan 9:1-8. [epub ahead of print]  
[PubMed: PM30626199](#)
10. Ashby BD, Ehmer AC, Scott SM. Trauma-informed care in a patient-centered medical home for adolescent mothers and their children. *Psychol Serv*. 2018 Nov 26. [epub ahead of print]  
[PubMed: PM30475045](#)
11. Cameron LD, Carroll P, Hamilton WK. Evaluation of an intervention promoting emotion regulation skills for adults with persisting distress due to adverse childhood experiences. *Child Abuse Negl*. 2018;79:423-433.  
[PubMed: PM29544158](#)
12. Goldstein E, Topitzes J, Birstler J, Brown RL. Addressing adverse childhood experiences and health risk behaviors among low-income, Black primary care patients: testing feasibility of a motivation-based intervention. *Gen Hosp Psychiatry*. 2018;56:1-8.  
[PubMed: PM30468990](#)
13. Kwasky AN, Serowoky ML. Yoga to enhance self efficacy: an intervention for at-risk youth. *Arch Psychiatr Nurs*. 2018;32(1):82-85.  
[PubMed: PM29413079](#)
14. Bellis MA, Hardcastle K, Ford K, et al. Does continuous trusted adult support in childhood impart life-course resilience against adverse childhood experiences - a retrospective study on adult health-harming behaviours and mental well-being. *BMC Psychiatry*. 2017;17(1):110.  
[PubMed: PM28335746](#)
15. Chandler GE, Roberts SJ, Chiodo L. Resilience intervention for young adults with adverse childhood experiences. *J Am Psychiatr Nurses Assoc*. 2015;21(6):406-416.  
[PubMed: PM26711904](#)

## Guidelines and Recommendations

No literature identified.

## Appendix — Further Information

### Previous CADTH Reports

16. Resiliency interventions for adverse childhood experiences: clinical effectiveness, cost-effectiveness, and guidelines. (*CADTH Rapid response report: summary with critical appraisal*). Ottawa (ON): CADTH; 2018:  
<https://www.cadth.ca/resiliency-interventions-adverse-childhood-experiences-clinical-effectiveness-cost-effectiveness-0>. Accessed 2019 Jan 17.
17. Resilience tools for trauma informed care in patients: clinical effectiveness. (*CADTH Rapid response report: summary with critical appraisal*). Ottawa (ON): CADTH; 2018:  
<https://www.cadth.ca/resilience-tools-trauma-informed-care-patients-clinical-effectiveness>. Accessed 2019 Jan 17.
18. Counselling or psychotherapy interventions for patients with a history of sexual or physical assault: patient benefits, harms, and guidelines (*CADTH Rapid response report: summary with critical appraisal*). Ottawa (ON): CADTH; 2013:  
<https://www.cadth.ca/sites/default/files/pdf/htis/jul-2013/RB0597%20Counselling%20Assault%20Victims%20Final.pdf> . Accessed 2019 Jan 17.

### Systematic Reviews and Meta-Analyses

#### *Alternative Population – General Population*

19. Joyce S, Shand F, Tighe J, Laurent SJ, Bryant RA, Harvey SB. Road to resilience: a systematic review and meta-analysis of resilience training programmes and interventions. *BMJ Open*. 2018;8(6):e017858.  
[PubMed: PM29903782](#)
20. Macedo T, Wilhelm L, Gonçalves R, et al. Building resilience for future adversity: a systematic review of interventions in non-clinical samples of adults. *BMC Psychiatry*. 2014;14:227.  
[PubMed: PM25266031](#)

### Qualitative Studies

21. Hughes K, Ford K, Davies AR, Homolova L, Bellis MA. Welsh adverse childhood experience (ACE) and resilience study. Wrexham (UK): Public Health Wales NHS Trust; 2018:  
[http://www.wales.nhs.uk/sitesplus/documents/888/ACE%20%20Resilience%20Report%20\(Eng\\_final2\).pdf](http://www.wales.nhs.uk/sitesplus/documents/888/ACE%20%20Resilience%20Report%20(Eng_final2).pdf). Accessed 2019 Jan 17.
22. Meloy M, Curtis K, Tucker S, et al. Surviving all the way to college: pathways out of one of America's most crime ridden cities. *J Interpers Violence*. 2018;28:886260518789899.  
[epub ahead of print]  
[PubMed: PM30056774](#)

23. Racine N, Madigan S, Plamondon A, Hetherington E, McDonald S, Tough S. Maternal adverse childhood experiences and antepartum risks: the moderating role of social support. *Arch Womens Ment Health*. 2018;21(6):663-670.  
[PubMed: PM29594369](#)
24. Cheong EV, Sinnott C, Dahly D, Kearney PM. Adverse childhood experiences (ACEs) and later-life depression: perceived social support as a potential protective factor. *BMJ Open*. 2017;7(9):e013228.  
[PubMed: PM28864684](#)
25. Roh S, Burnette CE, Lee KH, Lee YS, Easton SD, Lawler MJ. Risk and protective factors for depressive symptoms among American Indian older adults: adverse childhood experiences and social support. *Aging Ment Health*. 2015;19(4):371-380.  
[PubMed: PM25070293](#)

## Clinical Practice Guidelines – Unspecified Methodology

26. Alberta Health Services Child & Adolescent Addiction, Mental Health and Psychiatry Program. Adverse childhood experiences (ACEs)/trauma-informed resource guide; 2016:  
<http://www.hmhc.ca/brochures/ACE%20TIC%20Resource%20Community%20Guide%20Final%202016.pdf>. Accessed 2019 Jan 17.

## Review Articles

27. Immerfall SJ, Ramirez MR. Link for schools: a system to prevent trauma and its adverse impacts. *NASN Sch Nurse*. 2018:1942602x18785010. [epub ahead of print]  
[PubMed: PM30024821](#)
28. Osofsky JD, Stepka PT, King LS. Attachment and biobehavioral catch-up intervention. In: *Treating infants and young children impacted by trauma: interventions that promote healthy development*. Washington (DC): American Psychological Association; 2017.
29. Pachter LM, Lieberman L, Bloom SL, Fein JA. Developing a community-wide initiative to address childhood adversity and toxic stress: a case study of the Philadelphia ACE task force. *Acad Pediatr*. 2017;17(7S):S130-S135.  
[PubMed: PM28865645](#)
30. Korotana LM, Dobson KS, Pusch D, Josephson T. A review of primary care interventions to improve health outcomes in adult survivors of adverse childhood experiences. *Clin Psychol Rev*. 2016;46:59-90.  
[PubMed: PM27179348](#)
31. Lucio R, Nelson TL. Effective practices in the treatment of trauma in children and adolescents: from guidelines to organizational practices. *J Evid Inf Soc Work*. 2016;13(5):469-478.  
[PubMed: PM27104619](#)

## Additional References

### *Examples of Policies and Activities*

32. International Initiative for Mental Health Leadership. Healthy families: from ACEs to trauma informed care to resilience and wellbeing: examples of policies and activities across IIMHL & IIDL countries. 2016;  
[http://www.iimhl.com/files/docs/Make\\_It\\_So/20161206.pdf](http://www.iimhl.com/files/docs/Make_It_So/20161206.pdf). Accessed 2019 Jan 17.