

Review of academic literature on school-based mental health programs for 8–12-year-olds

June 2022



Table of Contents

Background.....	3
Recommendation 2 – Evidence-Based Mental Health Programs for 8-12 Year Olds Delivered in Schools	4
Research approach.....	4
Key Themes from the Literature.....	6
Schools as an ideal place for prevention and promotion.....	6
Specific considerations for children and young people aged 8-12 years	6
Design and Delivery of Programs	7
Program Design.....	7
Delivering Mental Health Programs in Schools	7
Reach of Programs – Environmental Determinants.....	9
Evaluation and Measuring Outcomes	9
Summary of Existing School-based Mental Health Programs Identified in this Literature Review	10
Discussion - Limitations and Gaps in the Literature.....	10
Recommendations	11
References.....	12

Background

The mental health and wellbeing of children and young people is a priority of the ACT Government and the community. Moore et al. (2017) describe the importance of the early years and the critical development period within the first 1000 days¹ for child mental health and wellbeing. Further, the World Health Organisations estimate that 50% of all mental health conditions arise before the age of 14 years, and 75% before the age of 25². The final report from the Productivity Commission's inquiry (the Report) into mental health has also emphasised the importance of investing in the needs of children and young people as an enabler of long term positive mental health outcomes. More specifically, the report makes several recommendations, including improving the early detection of risk factors for mental illness, expanding early intervention and enhancing the prevention and promotion for children and young people³.

In 2019, the Office for Mental Health and Wellbeing (the Office) conducted the Review of Children and Young People (the Review), which engaged closely with young community members to further our understanding of what impacts their mental health and wellbeing. This work built our evidence base and enhanced our understanding of the challenges and issues children and young people in the ACT are experiencing, including recommendations from the community⁴.

The ACT Government recognises the importance of developing targeted strategies and evidence to enhance their mental health and wellbeing and are committed to advocating for more support to be provided to children and families from the perinatal period through to adulthood. As such, the ACT Government is implementing key initiatives as recommendations from the Review, including working to make services more accessible, increasing education and awareness of mental health and improving support for individuals experiencing moderate to severe mental illness.

¹ Moore, T.G., Arefadib, N., Deery, A., & West, S., (2017) *The First Thousand Days: An Evidence Paper*. Parkville, Victoria; Centre for Community Child Health, Murdoch Children's Research Institute.

² WHO, Available at: <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>

³ Productivity Commission 2020, *Mental Health Productivity Commission Inquiry Report Volume 1*, Canberra: Commonwealth Government of Australia.

⁴ Office for Mental Health and Wellbeing 2019, *Review of Children and Young People in the ACT*, Canberra: ACT Government.

Recommendation 2 – Evidence-Based Mental Health Programs for 8-12 Year Olds Delivered in Schools

Throughout consultations for the Review, we heard that children and young people want to understand what they are experiencing and want the skills and knowledge to assist not only themselves but also their peers. We heard that young adults want to be able to access the right services at the right time and that services need to be affordable and well resourced.

This paper focuses on *Recommendation 2* of the Review, “increase awareness and education addressing stigma and fear around mental health”. Specifically, this paper is the first step in addressing part 2 of Recommendation 2 from the Review:

- Investigate appropriate evidence-based programs for 8-12 years old, including:
 - analysis of current programs available to schools including evaluation data;
 - analysis of best-practice programs available in other states and jurisdictions;
 - co-design workshops with key stakeholders to develop guidance on mental health and wellbeing programs.

In response to this recommendation and feedback received during consultations, the Office has committed to working with Government directorates and non-government organisations to undertake an analysis of the existing mental health programs for 8-12 year olds, currently available in ACT schools. The intention is to increase available information about evidence-informed programs that support the mental health and wellbeing of children and young people aged 8-12 as a resource for schools to inform choices around the provision of these programs.

The Office has conducted this literature review as an initial step towards investigating appropriate evidence-based programs for 8-12 year olds in the ACT to help inform further stages of delivering on this recommendation.

Research approach

This literature review has been conducted to identify what can be drawn on from peer-reviewed academic literature regarding the design and implementation of external mental health programs delivered in schools for students aged 8-12 years. More specifically the literature review sought to find out:

- the evidence base for programs;
- content (is it narrative, top-down teaching, song and games etc);
- mode of delivery (face-to-face onsite, camps or online etc – timeframes 1 day, 6 hours over 3 weeks etc);
- reach of program content (i.e. does it extend into the home environment with take-home resources or include sessions for parents etc.).

Academic databases were searched using the parameters outlined in *Table 1 and Table 2* to identify relevant articles. Of the 26 articles downloaded, 14 were excluded due to their subject matter not being relevant to the research question, the remaining 12 were included and subjected to review and assessment to determine what we could learn about best-practice for external mental health programs in schools for children aged 8-12 years old.

Table 1. PICO Grid with research focus and parameters

Population	Children aged 8-12 years	(ACT Grade 3-6)
Intervention	School-based Mental Health Programs (external – non-curriculum-based)	What mental health programs are out there?
Comparison	No intervention/curriculum-based programs only	Spirituality/parenting/SES
Outcome	Mental Health and Wellbeing Resilience Emotional Intelligence	
Context	School setting	Public, Catholic and Independent

Table 2. Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> • Date: published in the period 1990 to 2020 for meta-analyses and the period 2000 to 2020 for primary studies. • Language: articles in English. • Type of studies: peer-reviewed, empirical studies. • Study design: meta-analyses, systematic review, randomised controlled studies. • Measurement: studies in which the efficacy of mental health programs on wellbeing and mental health is measured. • Outcome: Mental Health and Wellbeing, Resilience, Emotional Intelligence. • Context: School-based. 	<ul style="list-style-type: none"> • Home-based learning • Juvenile justice settings • Vacation/Summer Camps/Extension or Gifted Schools

Key Themes from the Literature

Schools as an ideal place for prevention and promotion

There is agreement across the literature that schools are an ideal site for intervention for the promotion of mental health and the prevention of mental illness for children and adolescents. Schools are described as ideal as they are the place where most young people can be reached and where they spend a substantial amount of time^{5,6}. Garcia-Carrión, Villarejo-Carballido and Villardón-Gallego (2019) argue that the school can influence the cognitive, social and emotional development of children and adolescents and can contribute to the stabilisation of behaviours.

Murphy et al. (2017) highlight various school-based mental health and social and emotional programs that have been implemented at a large scale over years. Their meta-analysis argues that the evaluation data demonstrate significant, measurable and positive effects on students emotional, behavioural and academic outcomes. They further suggest that there is value in the potential of these school-based mental health programs to improve population-wide health outcomes for the next generation⁷.

The literature is also in agreement that a combined tiered approach to the implementation of mental health programs in schools is the best practice⁸. These include universal promotion programs that engage all students in the school and then targeted interventions for students that are in at-risk or vulnerable groups. The programs reviewed tend to focus on social and emotional skills, positive behaviours, social inclusion and effective problem solving⁹.

Specific considerations for children and young people aged 8-12 years

The literature reviewed did not find much analysis specifically relating to the 8-12-year-old age group concerning school-based mental health programs. Literature alternatively made more broad claims such as Sancassiani et al. (2015) who assert that programs aiming to address or enhance the emotional and social skills of young people, and those that seek to promote their wellbeing, are effective at all education levels¹⁰. Ronés and Hoagwood (2000) emphasise the importance of tailoring programs to specific age groups and developmental levels¹¹.

Fazel et al. (2015) describe the most common mental health difficulties experienced by school-aged children to include disruptive behaviours and anxiety disorders, in particular separation anxiety and defiant disorder. They identify predictors as bullying and poor relationships with caregivers, families and teachers¹².

⁵Eschenbeck, H., Lehner, L., Hofmann, H., Bauer, S., Becker, K., Diestelkamp, S., Kaess, M., Moessner, M., Rummel-Kluge, C., Salize, H.J. & the ProHEAD Consortium 2019, "School-based mental health promotion in children and adolescents with StressSOS using online or face-to-face interventions: study protocols for a randomised controlled trial within the ProHEAD Consortium", *BioMed Central*, 20:64-76.

⁶Garcia-Carrión, R, Villarejo-Carballido, B, Villardón-Gallego, L 2019, "Children and Adolescents Mental Health: A Systematic Review of Interaction-Based Interventions in Schools and Communities", *Frontiers in Psychology*, 10:918.

⁷Murphy, J.M., Abel, M.R., Hoover, S., Jellinek, M & Fazel, M 2017, "Scope, Scale, and Dose of the World's Largest School-Based Mental Health Programs", *Harvard Review of Psychiatry*, 25(5):1-11.

⁸Fazel, M, Hoagwood, K, Stephan, S & Ford, T 2014, "Mental Health Interventions in Schools 1: Mental health interventions in schools in high-income countries", *Lancet Psychiatry*, 1(5):377-387.

⁹Fazel, M, Hoagwood, K, Stephan, S & Ford, T 2014, "Mental Health Interventions in Schools 1: Mental health interventions in schools in high-income countries", *Lancet Psychiatry*, 1(5):377-387.

¹⁰Sancassiani, F, Pintus, E, Holte, A, Paulus, P, Moro, MF, Cossu, G, Angermeyer, MC, Carta, MG & Lindert, J 2015, "Enhancing the Emotional and Social Skills of the Youth to Promote their Wellbeing and Positive Development: A Systematic Review of Universal School-based Randomised Controlled Trials", *Clinical Practical Epidemiology Mental Health*, 11(1):21-40.

¹¹Ronés, M & Hoagwood, K 2000, "School-Based Mental Health Services: A Research Review", *Clinical Child and Family Psychology Review*, 3(4):223-241.

¹²Fazel, M, Hoagwood, K, Stephan, S & Ford, T 2014, "Mental Health Interventions in Schools 1: Mental health interventions in schools in high-income countries", *Lancet Psychiatry*, 1(5):377-387.

Design and Delivery of Programs

Program Design

Weist and Murray (2011)¹³ describe key considerations when developing social and emotional, and mental health programs for delivery in schools, including:

- active involvement of young people, schools and communities and the design and implementation of programs;
- an inclusive approach;
- building programs that are responsive to student, school and community needs;
- building connections between resources;
- ensure that staff are engaged and supported;
- ensure efforts are sensitive to developmental and diversity factors of students; and
- building strong interdisciplinary relationships in schools.

They further describe challenges that might undermine the successful design and delivery of programs, including:

- lack of adequate support, including staff willingness or funding;
- lack of clarity and consistency of terminology used, including how mental health is conceptualised;
- not having appropriately trained staff to provide support and supervision; and
- difficulties in engaging young people in the development in the promotion of mental health.

Delivering Mental Health Programs in Schools

Internal Facilitators

The literature describes several competing considerations about who should deliver mental health promotion programs to children and adolescents in schools to achieve the best outcomes. The majority of studies reviewed described programs delivered by teachers from the school setting, trained in the particular program. Franklin et al's (2012) analysis found that teachers play a central role in the implementation of strategies and interventions as pre-existing teacher-student relationships are key to the desired social and emotional development of students. Comparisons were drawn to the connection between these relationships and the academic achievement of students¹⁴.

However, literature also describes limitations to using teachers in this capacity, including that teachers may not have an in-depth understanding of the core concepts behind the interventions, impacting the successful delivery of these programs¹⁵. Sancassiani et al. (2015) emphasise that this approach can also have impacts on resourcing. They describe how contemporary schools are expected teachers to take on increasing responsibilities in terms of promoting the social and emotional wellbeing of students, often with the same or at times fewer resources available to them. This, they argue, can compromise on the delivery of these programs¹⁶. Studies undertaking interviews to develop our understanding of teachers' perspectives on delivering mental health programs in schools were also

¹³ Weist, M.D. & Murray, M 2011, "Advancing School Mental Health Promotion Globally", *Advances in School Mental Health Promotion*, 1(1):2-12.

¹⁴ Franklin, C.G.S., Kim, J.S, Ryan, T.N., Kelly, M.S. & Montgomery, K.L. 2012, "Teacher involvement in school mental health interventions: A systematic review", *Children and Youth Service Review*, doi:10.1016/j.chidyouth.2012.01.027.

¹⁵ Franklin, C.G.S., Kim, J.S, Ryan, T.N., Kelly, M.S. & Montgomery, K.L. 2012, "Teacher involvement in school mental health interventions: A systematic review", *Children and Youth Service Review*, doi:10.1016/j.chidyouth.2012.01.027.

¹⁶ Sancassiani, F, Pintus, E, Holte, A, Paulus, P, Moro, MF, Cossu, G, Angermeyer, MC, Carta, MG & Lindert, J 2015, "Enhancing the Emotional and Social Skills of the Youth to Promote their Wellbeing and Positive Development: A Systematic Review of Universal School-based Randomised Controlled Trials", *Clinical Practical Epidemiology Mental Health*, 11(1):21-40.

reviewed for this paper. Teachers expressed concerns about having to take on the role of social workers, in the delivery of school-based mental health programs, when that is not what many of them have been trained for. Further, some described that due to the subjective nature of the content, how the personal views of teachers towards mental health and wellbeing can impact how they view certain techniques or interventions, which may have an impact on their delivery¹⁷. Nicholson et al. (1999) emphasised the importance of school-based mental health intervention activities being consistent with teachers existing skills and knowledge, and/or that appropriate professional development should be provided to teachers expected to deliver them. He further argues that the interventions should decrease and not increase the burden of mental health interventions on classroom teachers and that they should complement other aspects of the school curriculum¹⁸. Additionally, data indicate that not all staff choose to or can participate in ongoing training and supervision to maintain their skills for the delivery of mental health programs¹⁹.

Considering the topic of social workers, school counsellors and school psychologists, their role was largely described as effective in supporting the implementation of mental health programs by collaborating with teachers as the deliverers. Their role is described as assisting administrative staff in the selection of appropriate programs, working with teachers for behavioural classroom plans, and supporting the delivery of tiered programs, through training and support of teachers or joint delivery^{20,21}.

External Facilitators or Hybrid

The role of mental health professionals in the design and delivery of mental health programs in schools has less available literature. Baskin et al. (2010) completed a meta-analysis of 107 counselling and psychotherapy studies in school comparing the outcomes of using licensed mental health professionals with teachers in the delivery of programs. Their analysis found that mental health professionals showed higher rates of success when compared to teachers delivering like programs. However, researchers did note that the teacher's delivery of interventions did still achieve a medium effect size that was consistent with the overall results²².

Atkinson and Robson (2012) explored the role of external art practitioners when conducting mental health programs in schools. They argue that external professionals can act as mentors and when able to remove students from their highly structured settings and rules, in their usual classrooms, they are able to create a unique space for students to explore new activities and identities²³. Other studies describe external programs including yoga being conducted by external practitioners indicating similar effectiveness to activities being conducted by teachers²⁴. Contrasting Atkinson and Robson (2012), Roness and Hoagwood (2000), argue that programs with the strongest evidence of an impact were

¹⁷ Reinke, W.M., Stormont, M, Herman, K.C., Puri, R & Goel, N 2011, "Supporting Children's Mental Health in Schools: Teach Perceptions of Needs, Roles, and Barriers", *School Psychology Quarterly*, 26(1):1-13.

¹⁸ Nicholson, J.M, Oldenburg, B., McFarland, M.L. & Dwyer, S.B. 1999, "Mental Health Interventions in the Primary School Setting: Perceived Facilitators, Barriers and Needs", *Health Promotion Journal of Australia*,9(2):96-104.

¹⁹ O'Reilly, M, Sviridzenka, N, Adams, S, Dogra, N 2018, "Review of mental health promotion interventions in schools", *Social Psychiatry and Epidemiology*, 53:647-662.

²⁰ Franklin, C.G.S., Kim, J.S, Ryan, T.N., Kelly, M.S. & Montgomery, K.L 2012, "Teacher involvement in school mental health interventions: A systematic review", *Children and Youth Service Review*, doi:10.1016/j.childyouth.2012.01.027.

²¹ Reinke, W.M., Stormont, M, Herman, K.C., Puri, R & Goel, N 2011, "Supporting Children's Mental Health in Schools: Teach Perceptions of Needs, Roles, and Barriers", *School Psychology Quarterly*, 26(1):1-13.

²² Baskin TW, Slaten CD, Sorenson C, Glover-Russell J, Merson DN. Does youth psychotherapy improve academically related outcomes? A meta-analysis. *J Couns Psychol*. 2010 Jul;57(3):290-6. doi: 10.1037/a0019652. PMID: 21133580.

²³ Atkinson, S & Robson, M 2012, "Arts and health as a practice of liminality: Managing the spaces of transformation for social and emotional wellbeing with primary school children", *Health and Place*, 18:1348-1355.

²⁴ Sancassiani, F, Pintus, E, Holte, A, Paulus, P, Moro, MF, Cossu, G, Angermeyer, MC, Carta, MG & Lindert, J 2015, "Enhancing the Emotional and Social Skills of the Youth to Promote their Wellbeing and Positive Development: A Systematic Review of Universal School-based Randomised Controlled Trials", *Clinical Practical Epidemiology Mental Health*, 11(1):21-40.

those that were directed towards changing specific behaviours and skills associated with the intervention, for example, depression; rather than general activities to promote overall wellbeing²⁵.

E-based mental health programs were also reviewed. Eschenbeck et al. 2019 evaluated the StressSOS e-based school mental health program, comparing it to data from face-to-face programs. Their analysis demonstrated that the e-based programs were not inferior to the face-to-face programs with no significant difference in outcomes. They argue that the success of e-based programs relies on dissemination being through trained professionals. They further argue the appeal of these programs as being easily accessible, attractive and resource-saving²⁶.

Reach of Programs – Environmental Determinants

Across the literature, there is an acknowledgement of the importance of considering the contexts within which children and adolescents live, in particular, their families and communities as crucial determinants of mental health. Garcia-Carrión, Villarejo-Carballido and Villardón-Gallego (2019) argue that the more impactful interventions include families, classrooms and a school-wide context. Families and communities are considered important in carrying on the learnings of these programs in other aspects of the child's life and therefore it is important to ensure effective communication and positive interactions between the school and home of the child^{27,28,29}. While this has been emphasised in multiple studies in the literature, as Sancassiano et al. (2015), there is a scarcity of literature describing programs that have implemented or evaluated these approaches³⁰.

Evaluation and Measuring Outcomes

Many of the studies reviewed emphasise the need for more and better quality evaluation of school-based mental health programs. In particular, long-term evaluations are noted as a current gap in the research³¹. This limits the available evidence to inform understandings of the long-term impacts and sustainability of these mental health programs. For example, Murphy et al. (2017) suggest that evaluation frameworks of school-based mental health programs need to be improved and that they should include parameters to assess relevance and accessibility. They further identify in their review that there is overlap between interventions aimed at improving mental health and broader social and behavioural programs³².

In terms of outcomes measurement, the literature highlights that there is a mix between mental health and academic outcomes being measured across studies, with some measuring both.

²⁵ Roness, M & Hoagwood, K 2000, "School-Based Mental Health Services: A Research Review", *Clinical Child and Family Psychology Review*, 3(4):223-241.

²⁶ Eschenbeck, H, Lehner, L, Hofmann, H, Bauer, S, Becker, K, Diestelkamp, S, Kaess, M, Moessner, M, Rummel-Kluge, C., Salize, HJ & the ProHEAD Consortium 2019, "School-based mental health promotion in children and adolescents with StressSOS using online or face-to-face interventions: study protocols for a randomised controlled trial within the ProHEAD Consortium", *BioMed Central*, 20:64-76.

²⁷ O'Reilly, M, Sviryzdenka, N, Adams, S, Dogra, N 2018, "Review of mental health promotion interventions in schools", *Social Psychiatry and Epidemiology*, 53:647-662.

²⁸ Franklin, C.G.S., Kim, J.S, Ryan, T.N., Kelly, M.S. & Montgomery, K.L. 2012, "Teacher involvement in school mental health interventions: A systematic review", *Children and Youth Service Review*, doi:10.1016/j.childyouth.2012.01.027.

²⁹ Hoagwood, Kimberly & Olin, Serene & Kerker, Bonnie & Kratochwill, Thomas & Crowe, Maura & Saka, Noa. (2007). Empirically Based School Interventions Targeted at Academic and Mental Health Functioning. *Journal of Emotional and Behavioral Disorders - J EMOTIONAL BEHAV DISORD*. 15. 66-92. 10.1177/10634266070150020301.

³⁰ Sancassiani, F, Pintus, E, Holte, A, Paulus, P, Moro, MF, Cossu, G, Angermeyer, MC, Carta, MG & Lindert, J 2015, "Enhancing the Emotional and Social Skills of the Youth to Promote their Wellbeing and Positive Development: A Systematic Review of Universal School-based Randomised Controlled Trials", *Clinical Practical Epidemiology Mental Health*, 11(1):21-40.

³¹ O'Reilly, M, Sviryzdenka, N, Adams, S, Dogra, N 2018, "Review of mental health promotion interventions in schools", *Social Psychiatry and Epidemiology*, 53:647-662.

³² Murphy, J.M., Abel, M.R., Hoover, S., Jellinek, M & Fazel, M 2017, "Scope, Scale, and Dose of the World's Largest School-Based Mental Health Programs", *Harvard Review of Psychiatry*, 25(5):1-11.

The most common tools for measuring mental health outcomes of school-based mental health programs include adolescent emotional distress, prosocial behaviour, and school functioning³³. Others such as Waters' (2011) American study measured hope and life satisfaction in students aged 10-18 years over one year. Those with a high hope score at the first time point reported greater life satisfaction a year later.³⁴ Overall, as Nabors and Reynolds (2010) note, evaluation for mental health outcomes of school-based mental health programs is lacking³⁵.

The most common outcome measures explored in the literature, largely in the American context, were concerned with academic achievements. Waters' (2011) review, for example, found that on average school students enrolled in social and emotional learning programs ranked 11 percentage points higher on achievement tests than school students who did not.

Summary of Existing School-based Mental Health Programs Identified in this Literature Review

The following programs were examined in the literature that was reviewed for this paper.

- Delivered by External Mental Health Professionals:
 - Skills for Life; and
 - Cognitive-Behavioural Intervention for Trauma in Schools.
- Delivered by teachers, provided with training and support for delivery
 - FRIENDS program;
 - Positive Action;
 - Promoting Alternative Thinking Strategies (PATHS);
 - Mind Matters/ Kids Matter;
 - Be You;
 - The Penn Resiliency Program;
 - The You Can Do It! Program; and
 - Positive Behaviour Interventions and Supports program (PBIS).

Discussion - Limitations and Gaps in the Literature

Based on this review of literature there are important gaps in current evidence for best practice school-based mental health programs for 8-12 year olds. The academic literature reviewed in this paper does not provide a rigorous analysis of external mental health programs for 8-12 year old children in schools, the literature largely focuses on internal mental health programs delivered by teachers. There is also insufficient analysis to assess how implementation by a mental health professional versus a teacher might impact the outcomes and effectiveness of school-based mental health programs. Some literature identifies limitations of using teachers in this capacity, and the importance of ensuring they are sufficiently trained and resourced to deliver these programs. This will be important to consider in more detail in future studies.

33 Frank, J.L., Kohler, K., Peal, A. *et al.* Effectiveness of a School-Based Yoga Program on Adolescent Mental Health and School Performance: Findings from a Randomized Controlled Trial. *Mindfulness* 8, 544–553 (2017). <https://doi.org/10.1007/s12671-016-0628-3>.

34 Waters, L 2011, "A Review of School-Based Positive Psychology Interventions", *The Australian Educational and Developmental Psychologist*, 28(1):75-90.

35 Nabors, L.A & Reynolds, M.W, 2000, "Program Evaluation Activities: Outcomes Related to Treatment for Adolescents Receiving School-Based Mental Health Services", *Children's Services*, 3:3, 175-189, DOI: 10.1207/S15326918CS0303_4.

The literature does not identify any processes to guide the selection of programs for delivery in schools and what considerations should be made when identifying a program to ensure investment in best practice and positive outcomes.

Further, the literature does not provide any specific analysis of the 8-12 age group about external mental health programs. The literature instead distinguishes the age groups as children, adolescents, or high school-aged students. The literature does, however, emphasise the importance of identifying the specific needs of children based on their age and developmental level and tailoring interventions accordingly, which should be considered when evaluating the appropriateness of programs in future.

There is an acknowledged gap in long term evaluations of these programs, which limits our ability to understand the long-term impacts on mental health and the potential benefits to the lifespan of the children and adolescents exposed to these programs. Some evaluations conducted during and immediately after the school-based mental health program measured effectiveness based on how these can impact academic outcomes, but there has been little in-depth work exploring the impacts on mental health and wellbeing of these programs in the medium and long-term following the interventions.

Finally, it is of note that there are few articles specifically exploring these issues in the Australian context, the literature reviewed has largely drawn on data from British and American studies.

Recommendations

Based on this literature review, this paper recommends that further research is required to build the evidence base on current mental health programs for 8-12-year-olds in ACT schools. Considering the notable gaps in knowledge identified through this review, there would be benefits in further analysis of specific current programs available in the ACT drawing on primary data collection and rigorous analysis of this data. Future research should consider:

- the types of programs being delivered in ACT school to the 8-12-year-old cohort;
- how programs are selected by schools;
- identifying the objectives of the mental health programs and how these may impact the delivery and evaluation of outcomes;
- the skills, training and resources of the teachers delivering these programs including their personal views;
- any evidence on the impacts of these programs on mental health and wellbeing outcomes in students;
- evaluating the medium to long-term impacts and outcomes to mental health and wellbeing of interventions;
- reviewing evaluation and outcome frameworks to determine whether they are in line with the objectives of these programs; and
- further exploration of external art and other creative programs and their potential for promoting mental health and wellbeing for 8-12-year-olds.

References

- Andermo, S, Hallgren, M, Nguyen, TTD, Jonsson, S, Petersen, S, Friberg, M, Romqvist, A, Stubbs, B & Elinder, LS 2020, "School-related physical activity interventions and mental health among children: a systematic review and meta-analysis", *Sports Medicine*, 6:25-52.
- Atkinson, S & Robson, M 2012, "Arts and health as a practice of liminality: Managing the spaces of transformation for social and emotional wellbeing with primary school children", *Health and Place*, 18:1348-1355.
- Baskin TW, Slaten CD, Sorenson C, Glover-Russell J, Merson DN. Does youth psychotherapy improve academically related outcomes? A meta-analysis. *J Couns Psychol.* 2010 Jul;57(3):290-6. doi: 10.1037/a0019652. PMID: 21133580.
- Bayer, J, Hiscock, H, Scalzo, MM, McDonald, MM, Morris, A, Birdseye, J & Wake, M 2009, "Systematic review of preventative interventions for children's mental health: what would work in Australian contexts?", *The Royal Australian and New Zealand College of Psychiatrists*, 43:695-710.
- Carta, MG, Fiandra, TD, Rampazzo, L, Contu, P & Preti, A. 2015, "An Overview of International Literature on School Interventions to Promote Mental Health and Wellbeing in Children and Adolescents", *Clinical Practice and Epidemiology in Mental Health*, 11(1): 16-20.
- Dray, J, Bowman, J, Wolfeden, L, Campbell, E, Freund, M, Hodder, R & Wiggers, J 2015, Systematic review of universal resilience interventions targeting child and adolescent mental health in the school setting: review protocol", *Systematic Reviews*, 4:186.
- Eschenbeck, H, Lehner, L, Hofmann, H, Bauer, S, Becker, K, Diestelkamp, S, Kaess, M, Moessner, M, Rummel-Kluge, C., Salize, HJ & the ProHEAD Consortium 2019, "School-based mental health promotion in children and adolescents with StressSOS using online or face-to-face interventions: study protocols for a randomised controlled trial within the ProHEAD Consortium", *BioMed Central*, 20:64-76.
- Fazel, M, Hoagwood, K, Stephan, S & Ford, T 2014, "Mental Health Interventions in Schools 1: Mental health interventions in schools in high-income countries", *Lancet Psychiatry*, 1(5):377-387.
- Frank, J.L., Kohler, K., Peal, A. *et al.* Effectiveness of a School-Based Yoga Program on Adolescent Mental Health and School Performance: Findings from a Randomized Controlled Trial. *Mindfulness* 8, 544–553 (2017). <https://doi.org/10.1007/s12671-016-0628-3>.
- Franklin, C.G.S., Kim, J.S, Ryan, T.N., Kelly, M.S. & Montgomery, K.L. 2012, "Teacher involvement in school mental health interventions: A systematic review", *Children and Youth Service Review*, doi:10.1016/j.childyouth.2012.01.027.
- Garcia-Carrión, R, Villarejo-Carballido, B, Villardón-Gallego, L 2019, "Children and Adolescents Mental Health: A Systematic Review of Interaction-Based Interventions in Schools and Communities", *Frontiers in Psychology*, 10:918.
- Hoagwood, Kimberly & Olin, Serene & Kerker, Bonnie & Kratochwill, Thomas & Crowe, Maura & Saka, Noa. (2007). Empirically Based School Interventions Targeted at Academic and Mental Health Functioning. *Journal of Emotional and Behavioral Disorders - J EMOTIONAL BEHAV DISORD.* 15. 66-92. 10.1177/10634266070150020301.
- Moore, T.G., Arefadib, N., Deery, A., & West, S., (2017) *The First Thousand Days: An Evidence Paper.* Parkville, Victoria; Centre for Community Child Health, Murdoch Children's Research Institute.

- Murphy, J.M., Abel, M.R., Hoover, S., Jellinek, M & Fazel, M 2017, "Scope, Scale, and Dose of the World's Largest School-Based Mental Health Programs", *Harvard Review of Psychiatry*, 25(5):1-11.
- Nabors, L.A & Reynolds, M.W, 2000, "Program Evaluation Activities: Outcomes Related to Treatment for Adolescents Receiving School-Based Mental Health Services", *Children's Services*, 3:3, 175-189, DOI: 10.1207/S15326918CS0303_4.
- Office for Mental Health and Wellbeing 2019, *Review of Children and Young People in the ACT*, Canberra: ACT Government.
- O'Reilly, M, Svirydenka, N, Adams, S, Dogra, N 2018, "Review of mental health promotion interventions in schools", *Social Psychiatry and Epidemiology*, 53:647-662.
- Nicholson, J.M, Oldenburg, B., McFarland, M.L. & Dwyer, S.B. 1999, "Mental Health Interventions in the Primary School Setting: Perceived Facilitators, Barriers and Needs", *Health Promotion Journal of Australia*, 9(2):96-104.
- Productivity Commission 2020, *Mental Health Productivity Commission Inquiry Report Volume 1*, Canberra: Commonwealth Government of Australia.
- Reinke, W.M., Stormont, M, Herman, K.C., Puri, R & Goel, N 2011, "Supporting Children's Mental Health in Schools: Teach Perceptions of Needs, Roles, and Barriers", *School Psychology Quarterly*, 26(1):1-13.
- Rones, M & Hoagwood, K 2000, "School-Based Mental Health Services: A Research Review", *Clinical Child and Family Psychology Review*, 3(4):223-241.
- Sancassiani, F, Pintus, E, Holte, A, Paulus, P, Moro, MF, Cossu, G, Angermeyer, MC, Carta, MG & Lindert, J 2015, "Enhancing the Emotional and Social Skills of the Youth to Promote their Wellbeing and Positive Development: A Systematic Review of Universal School-based Randomised Controlled Trials", *Clinical Practical Epidemiology Mental Health*, 11(1):21-40.
- Waters, L 2011, "A Review of School-Based Positive Psychology Interventions", *The Australian Educational and Developmental Psychologist*, 28(1):75-90.
- Weist, M.D. & Murray, M 2011, "Advancing School Mental Health Promotion Globally", *Advances in School Mental Health Promotion*, 1(1):2-12.
- World Health Organisation 2020, Adolescent Mental Health Key Facts, viewed 25 June 2021, < <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health> >.