Early Support
Supporting evidence

be you

Beyond Blue

With delivery partners

Early Childhood Australia
A voice for young children

headspace
National Youth Mental Health Foundation

Funded by

Australian Government
Department of Health and Aged Care

Supporting evidence for the Be You Professional Learning

Early Support domain

This review has been developed to support the Early Support domain of Be You Professional Learning. It provides an overview of the research and evidence underpinning each of the learning modules and allows you to further engage with the key themes and advice.

Educators are often among the first people children and young people turn to when experiencing a mental health issue. Knowing how and when to provide appropriate support is key to preventing more serious mental health outcomes down the track. This review looks at the programs and strategies which have been shown to be effective in improving mental health literacy in educators to assist them in identifying and responding to early signs of mental health issues.

Educators will best engage with this review if read in conjunction with the Professional Learning modules in the Early Support domain.

Suggested citation: Berger E. Reupert A. Allen K-A. Early Support for Children and Young People's Mental Health: an Evidence Check rapid review brokered by the Sax Institute (www.saxinstitute.org.au) for Beyond Blue, 2019

Contents

Glossary

Attachment	A relationship of safety and security created between one person and another – typically a child with a parent or carer.
Externalising behaviours	Behaviours that are easily observed by others and may be disruptive to others, such as inattention and defiance.
Mental health literacy	Knowledge and beliefs about mental disorders which aid their recognition, management and prevention.
Internalising behaviours	Expression of emotions and behaviours that are held within the person – such as anxiety and withdrawal.
Resilience	A person's ability to bounce back from adversity and hardship.
Social-emotional competence	The capability to recognise and respond appropriately to the emotions and social cues of other people.

Executive summary

Background

Mental health literacy is defined as 'knowledge and beliefs about mental disorders which aid their recognition, management and prevention' (1) Mental health literacy of educators is essential for providing early intervention and prevention of mental health issues in children and young people. Educators who have a good understanding of mental health are better able to recognise, manage and refer children and young people to appropriate and timely professional support.

Educators (including teachers working in schools and those working in early learning services) across Australia are required to maintain a certain level of professional development (PD) for accreditation. An area of growing need and importance for educators is to have sufficient mental health literacy to meet the needs and interests of the children and young people in their care.

Previous studies have found that PD has the potential to improve educator mental health literacy in addition to their confidence, knowledge and behaviour, as well as student wellbeing and mental health (2). Although PD for educators is understood to be important for improved professional knowledge and practice; little is known about what impact educator mental health literacy programs have on students.

Educators are often among the first people children and young people turn to when experiencing mental health issues. Therefore, knowing how and when to provide appropriate support is a key skill. This review looks at the following two questions:

1. *What programs targeted at educators to improve their knowledge about mental health and wellbeing have been effective in improving the mental health and wellbeing of children and young people?*
2. *What are the key components across the programs identified in Question 1?*

To answer these questions, the review identified educator professional development (PD) programs shown to be effective in improving students' mental health and wellbeing. Key components across identified PD programs are summarised to identify features associated with positive mental health and wellbeing changes in students, as well as changed educator practices and knowledge when responding to children and young people. This allows analysis of the evidence on what works to improve educators' knowledge about mental health and wellbeing, so they can identify and respond to early signs of mental health issues.

Summary of methods

An extensive review of the research literature was conducted on PD programs for educators in early childhood, primary, secondary and specialist school settings, in Australia, the United Kingdom (UK), Canada, New Zealand and the United States (US). The PD programs selected focused on improving children and young people's mental health and wellbeing. Evidence was sourced from peer-reviewed journal databases and grey literature (materials and research outside traditional academic publishing). All included research was published after 2014 and in English.

Assessing the quality of the evidence

Each identified study was evaluated using the National Health and Medical Research Council (NHMRC) guidelines for levels of evidence.

Key findings

Question 1: What programs targeted at educators to improve their knowledge about mental health and wellbeing have been effective in improving the mental health and wellbeing of children and young people?

A total of 30 studies were found as a result of the search of peer-reviewed and grey literature (see Appendix 3). Within the 30 studies, 25 distinct educator PD programs were found (some PD programs were investigated in more than one study) to improve educators' knowledge and skills, which in turn was associated with changes in the wellbeing and mental health of children and youth. The programs for educators addressed child and youth wellbeing and other issues including:

- depression, anxiety and stress in children and young people
- trauma and post-traumatic stress disorder in children and young people
- academic achievement and school engagement of students
- addressing disruptive and anti-social behaviour
- enhancing positive relationships between educators and children and young people, and attachments
- educator instructional and emotional support for children and young people
- strategies to promote student resilience and student pro-social behaviour.

Most of the studies assessing the 25 programs were conducted in the US (*n* = 28) rather than in Australia (*n* = 2), and most were conducted in early childhood settings (*n* = 13), followed by primary schools (*n* = 10), secondary schools (*n* = 4) and specialist schools (e.g. residential treatment schools; *n* = 4). These studies in specialist schools targeted educators in settings that specifically catered for children who were at risk of school failure, placed in residential care, or with a specific and identified emotional or behavioural disorder. Key delivery features of the PD for educators represented in the studies included one or more of the following formats, including:

- face-to-face workshops with a trainer training the educators (n = 27)
- online modules with content and self-assessments shared with educators online (n = 4)
- coaching (sometimes following a workshop) to provide ongoing advice and knowledge to educators (n = 17).

The studies reported on various educator and student outcomes that were found to improve following educator PD, however these outcomes varied depending on the aims of the PD. The identified PD programs were associated with the following changes in educators:

- knowledge about the early signs of mental health issues in children and young people
- knowledge about effective approaches to engage with children and young people to improve their wellbeing and behavioural control
- knowledge about effective approaches to communicate and consult with families to ensure a coordinated approach.

The educator PD programs were also associated with the following changes in children and young people:

- academic outcomes, relating to performance outcomes and academic achievement
- academic and school engagement
- social skills including social and emotional competencies
- decreased disruptive behaviour

- a decline in reported mental health problems.

In addition, the PD programs were associated with positive relationships between educators and children and young people.

Question 2: What are the key components across the programs identified in Question 1?

Key components across the identified PD programs demonstrated themes that involved educators identifying early signs of mental health problems, their ability to ask questions and talk about mental health with children and young people and their families; and engaging with families, encouraging help-seeking and providing ongoing support. Specifically, these key components included:

- helping children and young people to remain engaged in learning
- managing child and young person disengagement
- managing child and young person disciplinary issues and conflict resolution
- engaging children and youth in learning
- encouraging pro-social school relationships between peers and between children and educators
- encouraging emotion and behaviour regulation of children and youth
- providing predictability and routines for children and young people
- providing academic choice and self-directed learning for children and young people.

Gaps in the evidence

Although there are many PD programs for educators, few of these measure outcomes for children and young people. As a result, only 30 studies (and 25 PD programs) were included in the current review. Most studies examined self-perceived changes in educator knowledge, confidence and skills, as opposed to independent evaluation or observation. Likewise, most relied on educator or parent ratings of student emotional and behavioural outcomes. Few investigated the long-term changes in children or young people's mental health that was associated with changes in educator behaviour.

Discussion

Question 1: What programs for educators to improve knowledge about mental health and wellbeing have been effective in improving mental health and wellbeing for children and young people?

The studies included in this review found that educator PD programs were associated with a range of mostly child outcomes in relation to decreased disruptive behaviour, social skills and engagement, with some also reporting on selective changes to educators' behaviour. More studies focused on evaluating the impact of the PD on children and youth outcomes, than on the impact of the PD on educators' knowledge, skills and attitudes. Further studies are needed that specifically examine the relationship between educators' changes, that result from participation in PD programs, and are then associated with various wellbeing outcomes in children and young people. Such data could be used to inform the development of PD programs that ultimately make a difference to the lives of children and young people.

Question 2: What are the key components across the programs identified in Question 1?

Several key components emerged from the PD programs identified in the current review. First, most studies reported strong themes around improved educator pedagogy and instructional practices, improved classroom management and reduced peer conflict, and enhancing academic outcomes of children and young people. However, many of the PD programs also described approaches that focused on relationship building between the educator and child, social and emotional competencies, and whole-school approaches to enhance child and youth wellbeing and mental health (e.g. inquiring with and providing ongoing support/consultation to children, young people, families and also educators following PD programs). PD programs also aimed to build educators' knowledge of social and emotional competencies (including coping skills, social skills and emotional regulation), wellbeing literacy and wellbeing strategies for children and young people, as well as a few programs discussing engagement practices with parents and caregivers. The content of the PD programs identified in this review, and how they align with the Be You aim of empowering educators to notice, inquire about and promote mental health in children and young people, is described in more detail later in this report

Conclusion

Educators in early childhood, primary, secondary and specialist school settings play an important role in promoting and managing the mental health and wellbeing of children and young people. This has been identified in prior research, indicating that educators should be equipped to identify and refer children and young people facing mental health challenges, as well as to deliver and monitor student outcomes following delivery of school-based mental health interventions. (2)

The current review identified a number of high quality, empirically robust studies evaluating educator PD and its impact on children and young people. It was found that PD programs for educators aimed at improving the wellbeing and mental health outcomes of children and youth are essential, as are programs to improve the wellbeing and teaching practices of educators. The essential components of PD programs found to improve educator support around the mental health and wellbeing outcomes of children focused on improving educator inquiry practices around child mental health (e.g. collaborating with students on learning, behavioural and peer relationship concerns), noticing the mental health needs of children and young people (e.g. becoming aware of the signs and symptoms and impact of one's own behaviour on child mental health and wellbeing), and finally, providing support to children during transitions and improving their daily emotional awareness and regulation practices.

These aspects of PD should be prioritised in educator PD programs aimed at improving child and adolescent wellbeing and mental health. While the present review identified a large number of PD programs for educators on improving the mental health and wellbeing of children and young people, most research in the broader literature focuses on measuring educator attitudes, knowledge and practices following PD. Further research is needed to ensure that PD programs for educators are focused on improving the wellbeing and mental health of students as well as educators.

Background

In schools and early childhood settings, educators are integral to the identification, management and support of children and young people's wellbeing and mental health. Most educational settings prioritise the wellbeing and mental health of children and young people and regard this as an essential component of the curriculum and school ethos. The emphasis on children and young people's wellbeing stems from recognising that mental health, behaviour and learning are intertwined. (3, 4)

Accordingly, educators are a vital component of the mental health workforce. A national survey of mental health practices across primary and secondary schools in England, found that many educators with no specialist mental health training were delivering mental health and wellbeing programs, with less than 3% reporting receiving the support of external mental health practitioners. (6) However, educators report not feeling confident and equipped to notice, manage and deliver mental health and wellbeing support, interventions and referrals for children and young people. For example, Reinke, Stormont (2) examined educators' perceptions of mental health supports for children and young people in their schools. Although 89% of educators reported that schools should prioritise the mental health and wellbeing of young people, only 34% felt they had the necessary skills in managing child and youth mental health. Educators also experience physical and psychological health problems, job dissatisfaction, and burnout and stress when exposed to child and youth mental health concerns. (5, 6)

Moreover, studies have reported that young people are dissatisfied with school and educators' responses to their mental health concerns and adverse life experiences. Young people perceive that some educators are unprepared, unwilling and/or not helpful in responding to their concerns. (5) Simultaneously, educators report that resources and time constraints limit their ability to provide mental health and wellbeing support to children and young people. (7)

Overall, educators in schools and early childhood settings face a plethora of demands, of which youth mental health and wellbeing is just one. Regardless, educators are often the first line of support for managing mental health issues in children and young people (8) and in supporting parents who have concerns about their child's mental state. (9) Therefore, it is imperative that training and resources support the role of educators in promoting young people's mental health and wellbeing.

A child's mental health and how they feel about themselves is inseparable from whether, how and what they learn. Indeed, children with high levels of wellbeing and low levels of mental health problems achieve higher scores, have better school attendance, and drop out of school less often, compared to children with significant mental health difficulties. (10) Given the long-term impact of mental illness on engagement and productivity, supporting children's mental health is a wise use of public resources that delivers benefits not only to individuals, but society as a whole. It is therefore incumbent on school administrators and policy makers to ensure educators have the appropriate skills to notice, monitor and consult with others regarding the mental health and wellbeing of children and youth. Further, a young person's mental illness can impact on educators, raising important implications for improving child and youth mental health with the intention of also improving the wellbeing and retention of educators.

Mental health literacy of educators is key for supporting children and young people who may have emerging mental health issues. Professional development (PD) aimed at improving educators' knowledge and understanding around mental health issues is key for providing them with valuable skills and, perhaps even more importantly, the confidence to implement programs and initiatives that serve to address children's and young people's mental health and wellbeing needs. Previous research has shown that PD is

important for increasing educators' knowledge, attitudes and skill when identifying and responding to children and young people with mental health concerns. (11, 12)

To date, most research from the broader research that has evaluated PD programs for educators has focused on educator outcomes, that is, the direct impact of the program on the educator's skills, knowledge, attitudes and/or wellbeing. Comparatively less research is available that specifically examines the impact of the PD program on the outcomes for children and young people. This review aims to provide details of this scant research and recommendations for future PD programs for educators who are working to support young people's mental health and wellbeing, as well as for researchers and program evaluators seeking to examine the efficacy and impact of their programs. Importantly, this review also aims to detail for educators their role and available PD to support them in enhancing wellbeing and helping to prevent mental illness among children and young people.

Methods

Peer-reviewed literature

An extensive review of the peer-reviewed research and grey literature (materials and publications outside traditional academic publishing) published in the last five years was conducted on educator PD programs in Australia, the UK, Canada, New Zealand and the US. PD programs were those that focused on increasing the skills, knowledge and confidence of educators to improve their capacity to notice and manage the mental health and wellbeing of children and young people. Using the definition developed by the Teaching And Learning International Survey (13), educator PD was defined broadly as any activity that seeks to develop an individual educator's skills, knowledge, expertise and other characteristics that contribute to professional development.

The following is a description of the inclusion criteria, exclusion criteria, peer-reviewed databases and grey literature searched, and the search terms included in the review.

Peer reviewed databases and grey literature included:

- Ovid Medline, PsycINFO, Scopus, ERIC and A+ Education
- the first 100 results in Google Scholar and Google, Beyond Blue, Australian Childhood Foundation and headspace.

Inclusion criteria included:

- articles that provided a description of the educator PD program (of any nature including, e.g. face-to-face workshops and online modules)
- educator PD programs that addressed a range of child and youth mental health and wellbeing outcomes, including but not limited to: academic outcomes and school engagement of children and young people; recognising and responding to children and young people's mental health concerns; help-seeking of children and young people; youth risk taking behaviour; and disruptive classroom behaviour
- articles referring to mainstream and specialist school settings, including early childhood, kindergarten, primary, secondary and additional needs/disability specialist schools (e.g. juvenile justice schools).

Exclusion criteria included:

- evaluations of PD programs that were provided to pre-service educators in tertiary settings
- evaluations of PD programs with no measure of changed child or young person wellbeing, including behaviour, learning, mental health and relationships
- studies with no description of the content, delivery and intended focus or implications of the educator PD program.

Data were extrapolated from the literature using the following categories: author; year and country; program name; program aim; setting; target of the program; delivery format; evaluation methodology; impact on educators; impact on children and young people; and rating of the evidence (based on NHMRC guidelines).

Assessing the quality of the evidence

Peer-reviewed literature was evaluated using the NHMRC guidelines for levels of evidence. (3) Studies were rated according to an evidence hierarchy from a rating of 1 providing the largest amount of empirical evidence and methodological rigor, to a rating of 5 providing the least amount of empirical rigor. Appendix 2 provides a summary of the NHMRC levels of evidence and examples of study designs included at each level.

Included studies

The procedure for screening and selecting studies, including inclusion and exclusion of papers at each stage of the review is provided in Appendix 1.

Grey literature

Google Scholar, Google, and the Beyond Blue, Australian Childhood Foundation and headspace websites were included in the search and the first 100 results for each were screened. The Australian Childhood Foundation and headspace search engines did not return any results. No articles that met the inclusion criteria were returned from Google, Beyond Blue, headspace or the Australian Childhood Foundation. Google Scholar yielded two relevant articles, one of which was already included from the database searches.

Programs identified

The following 25 programs were identified from the 30 included studies (Table 1). More details of these programs can be found in Appendix 3.

Table 1. Name and delivery method of the identified programs

Name of program	Delivery method
Responsive Classroom (RC)	Face-to-face workshop Coaching
My Teaching Partner (MTP)	Coaching
Links to Learning (L2L)	Online modules Coaching
Reaching Educators and Children (REACH)	Face-to-face workshop Coaching
Behavioural, Emotional, and Social Training: Competent Learners Achieving School Success (BEST in CLASS)	Face-to-face workshop Coaching
Establish–Maintain–Restore (EMR) Method	Face-to-face workshop Coaching
THRIVE	Face-to-face workshop Coaching
The Heart of Teaching and Learning: Compassion, Resiliency, and Academic Success (HTL) (modified version)	Face-to-face workshop Coaching
Prevent-Teach-Reinforce (P-T-R)	Face-to-face workshop Coaching

Direct Behavioural Consultation Training	Face-to-face workshop Coaching
School-wide Positive Behavioural Support (SWPBS) and School-wide Positive Behaviour Intervention (SWPBI)	Face-to-face workshop Coaching
Child–Teacher Relationship Training (CTRT) with Conscious Discipline Training	Face-to-face workshop Coaching
Circle of Security-Parenting (COS-P)	Face-to-face workshop Coaching
My Teaching Partner-Secondary Program (MTP-S)	Face-to-face workshop Coaching
Pyramid Model for Promoting Social-Emotional Competence in Young Children	Face-to-face workshop Coaching
Head Start Trauma Smart (HSTS)	Face-to-face workshop
FRIENDS for Life	Face-to-face workshop Coaching
Cultivating Awareness and Resilience in Education (CARE for Teachers)	Face-to-face workshop Coaching
Colleague Observation And CoacHing (COACH) program	Face-to-face workshop Coaching
Second Step: Social-Emotional Skills for Early Learning	Face-to-face workshop
School Based Physical Activity Program	Face-to-face workshop
Freedom Writers Institute (FWI)	Face-to-face workshop
Winning Beginnings Learning Circles	Face-to-face workshop
Effective Instruction Delivery (EID)	Online modules
Behavioural Skills Training (BST)	Online modules

Findings

Question 1: What programs targeted at educators to improve their knowledge about mental health and wellbeing have been effective in improving the mental health and wellbeing of children and young people?

A total of 25 educator PD programs (see Appendix 3) were evaluated in 30 studies identified in this review. Tables 2-4 below classify the studies in terms of the country of origin of the identified studies; the settings of the evaluations (i.e. early childhood, primary, secondary or specialist school); the delivery format of the PD program evaluated in the studies (i.e. online, face-to-face workshop or ongoing coaching); and the rating of the evidence for the identified evaluations based on the NHMRC guidelines. (3)

Country	No. of studies
Australia	2
New Zealand	0
UK	0
US	28
Canada	0

Table 2. Country of origin for identified studies

Setting	No. of studies
Early childhood/ preschool/ childcare	13
Primary	10
Secondary	4
Specialist (e.g. juvenile justice)	4

Table 3. Setting of identified PD program

Some studies investigated multiple settings. See Appendix 3.

Table 4. Delivery format of identified PD programs

Delivery format	No. of studies
Online modules	3
Face-to-face workshop	21
Coaching	18

Some studies used multiple delivery formats. See Table 1 and Appendix 3.

Table 5. Evaluation methodology and NHMRC level of evidence of identified PD programs

Level of evidence	Study design	No. of studies
I	A systematic review of Level II studies	0
II	A randomised controlled trial	14
III-1	A pseudo-randomised controlled trial (i.e. alternate allocation or some other method)	4

III-2	A comparative study with concurrent controls (i.e. non-randomised experimental trials, cohort studies, case-control studies, interrupted time series studies with a control group)	1
III-3	A comparative study without concurrent controls (i.e. historical control study, two or more single arm studies, interrupted time series studies without a parallel control group)	3
IV	Case series with either post-test or pre-test/post-test outcomes	8

See Appendix 2 for explanation of NHMRC levels of evidence

Outcomes of the programs for educators and students

The PD programs for educators were associated with various changes in educators' skills and knowledge, as well as changes in the mental health of children and young people. This reflects much of the previously published work emphasising the importance of providing PD to educators to improve the social and emotional development and wellbeing of children and young people. These changes were unsurprisingly associated with various positive emotional, social and behavioural outcomes in children and youth. Programs were also found to be related to improved educator knowledge and engagement with children and youth about their social and emotional needs, monitoring of children and young people's mental health, and consultation and support with children, young people and families regarding the young person's social and emotional development. The outcomes of the identified literature related to identifying, managing and providing support for children and young people have been outlined in this section of the report, mostly related to noticing child social and emotional concerns and providing ongoing support.

In a case study of one educator, Wylczlynski et al. (14) found that after attending Behavioural Skills Training (BST) and Effective Instruction Delivery (EID) online training, there was an increase in the educator's knowledge of efficacious interventions for children with autism spectrum disorder (ASD). Hemmeter et al. (15) also reported an increase in preschool educators' knowledge and capacity to notice and improve the social and emotional literacy of neurotypical children (children not displaying autistic or other atypical neurological patterns of behaviour) after being trained in a program called the Pyramid Model for Promoting Social-Emotional Competence in Young Children. However, in another study, there were no reported differences between family day care educators who attended the THRIVE face-to-face workshop and coaching program and those that did not in regard to their knowledge of strategies (such as identification of children and consultation with parents) to promote children's social and emotional wellbeing, nor in the educators' knowledge about the number of risk and protective factors for children that can serve to either promote or hinder a child's social and emotional development. (16)

Two studies reported on the results of the Pyramid Model for Promoting Social-Emotional Competence in Young Children, a face-to-face workshop and coaching PD program for educators, and found that educators acquired practices associated with the model and maintained these practices after the training (in this case, coaching) ended. These practices were all associated with effective classroom management and provision of ongoing support to children, including delivering effective and clear classroom schedules and routines, setting and communicating behavioural expectations to children, and modelling and teaching problem-solving strategies to children. (15, 17) Also related to ongoing classroom management and support, Dufrene et al. (18) found that PD training in a program called Direct Behavioural Consultation resulted in an increase in primary school educators' behaviour-specific praise to students.

Few interventions focused on investigating how providing support to educators could lead to changes in the social and emotional wellness of children and young people, although some studies looked at changes in educator behaviour. Jennings et al. (19) investigated the Cultivating Awareness and Resilience in Education (CARE for Teachers) PD approach. The study found that compared with educators who had not received the PD training, educators who took part in the program showed higher levels of adaptive emotion regulation and

mindfulness, and lower levels of psychological distress and time urgency at the end of the school year. Those educators who had participated in the CARE for Teachers PD did not, however, report higher levels of teaching efficacy compared with the non-participating educators. Another program, the Australian based FRIENDS for Life program, demonstrated significant improvements in educators' emotional awareness and resilience. (20) As stated above, it remains unclear how these improvements in educators' emotional wellbeing impacted on their ability to support children and young people.

Various PD programs also resulted in support being provided from educators to improve academic outcomes for children and youth. For example, the My Teaching Partner (MTP) program was found to improve expressive vocabulary and literacy skills for all children after educators had participated in the program, and improved receptive vocabulary for the older (but not younger) children. (21) The MTP program involved supporting children's engagement with learning and determination of their own learning goals and activities. Other studies examined academic outcomes in terms of children's productivity in class time. Jennings et al. (19) examined the impact of the CARE for Teachers PD and found a significant gain in children's academic productivity through the provision of support by educators. Similarly, Johnson et al. (22) found that children's academic productivity was significantly improved after educators had engaged with the Colleague Observation And CoacHing (COACH) program, a program designed to improve educators ongoing support of and relationships with children.

The Behavioral, Emotional, and Social Training: Competent Learners Achieving School Success (BEST in CLASS) PD, an intervention that targets the prevention of emotional/behavioural disorders in young, high-risk children, also resulted in increased academic engagement and reduced behavioural concerns for children in early childhood settings (23). Another PD program, My Teaching Partner - Secondary (MTP-S) program, resulted in increased behavioural engagement, defined as young people's participation in classroom activities. (24) One PD program, the Freedom Writers Institute (FWI), found that students taught by educators who had received the training reported higher levels of school engagement than those with educators in the control group. (25) In the FWI program, school engagement was defined as more than academic engagement, and included the provision of ongoing support around the young person's cognitive, behavioural and emotional interactions in the classroom and school settings.

There were several other PD programs that resulted in a reduction in students' disruptive behaviour. For example, Maykel, Bray (26) found that once educators had engaged with Classroom Based Physical Activity Intervention, time-on-task rates increased among primary students. Other results in regard to provision of support and ultimately a reduction in disruptive behaviours were also found in preschool settings. Hemmeter et al. (15) found that educator training in the Pyramid Model for Promoting Social-Emotional Competence in Young Children was associated with decreases in classroom-wide challenging behaviour, compared to levels of challenging behaviour being quite variable in classes where the educator had not received the training. In another study into the same PD program, Hemmeter, Snyder et al. (17) found that children in classrooms of educators who had taken part in training were rated as having fewer challenging behaviours relative to children in control educators' classrooms. Children in the care of early childhood educators trained in the Head Start Trauma Smart (HSTS) program were reported to have improved attention. (27) Improvements were also seen in externalising behaviour and oppositional defiance, a finding which was also supported by parents' reports. Conners-Burrow et al. (28) also reported an increase in use of conflict resolution skills among students taught by early childhood educators who had attended the REACH PD. All of these interventions focused on providing PD for educators around supporting the ongoing academic, behavioural, social and emotional outcomes of children and young people.

Another study, reported decreased trauma and post-traumatic stress symptoms and survival scores experienced by youth in residential treatment involved in court cases, after educators had engaged in Heart of Teaching and Learning (HTL) training. (30) Children who were initially identified as at-risk showed a significant decrease in anxiety levels after they were placed in classrooms whose education staff had been

trained in the FRIENDS for Life program (20). In particular, these children showed a significant decrease in their levels of separation anxiety, obsessive-compulsive symptoms and physical anxiety.

Another significant outcome seen in children in early childhood, family day care and primary school settings after their educators participated in certain PD programs was improved positive educator-student interactions, and therefore increased capacity of educators to provide ongoing support to children and young people. The PD program, BEST in CLASS, recorded increased positive educator–child interactions and decreased negative educator–child interactions for those early childhood classes where educators attended the PD, compared to those who had not. (23) This was also the case for the REACH PD program (28) for children in early childhood settings and for preschool children whose educators had engaged in the COACH program. (22) Likewise, family day care educators' positive interactions increased and detached interactions decreased for those who had attended the THRIVE program. (16)

Positive interactions between students and educators were also found in primary and high school settings in studies included in this review. Abry et al. (29) found that the Responsive Classroom (RC) PD, which encouraged primary school aged children to greet and share news with each other, fostered respectful peer relationships. This in turn led to educator awareness and regard (and so impacted on positive student–student interactions as well as positive student–educator interactions). Duong et al. (30) found that the Establish-Maintain-Restore (EMR) PD program improved student–educator relationships (for those with weak- and average-rated relationships at baseline) for students in middle school (approximately from Grades 5–9). All of the above programs provide strong evidence for the capacity of educators to provide support and improve children and young people's mental health and wellbeing.

Question 2: What are the key components across the programs identified in Question 1?

The 25 identified PD programs covered the following key components, outlined below. These have been reported in line with Beyond Blue's Be You initiative, which outlines a model for educators of "Noticing, Inquiring and Providing Support" to students.

Noticing

THRIVE, a capacity-building program for family day care educators that was evaluated by Davis et al. (16) focused on providing interactive sessions with educators around child mental health problems, resilience and promotion of children's social and emotional wellbeing. Other PD programs also focused on improving the social and emotional awareness and therefore the responsiveness of educators (i.e. REACH as evaluated by Conners-Burrow et al. (28) and the Heart of Teaching and Learning (HTL) curriculum evaluated by Day et al. (31). The HTL curriculum specifically aimed to provide the educators of court-involved students in residentia l treatment with PD around: a) the background and definitions of trauma; b) creating compassionate schools and how trauma can impact student learning; c) educator self-care strategies; d) how to build school attachments, student self-esteem, trusting and secure school relationships, and joyful engagement; and e) how to engage in collaborative problem-solving with students. Some of these program aspects also relate to the Be You principles of inquiring and ongoing support (to be discussed later).

In the Head Start Trauma Smart (HSTS) PD program, educators were also taught about how to identify the needs and behavioural cues of children that may indicate that those children have experienced trauma or distress. (27) Another parent-based program adapted for family childcare providers, the COS-P, implemented and evaluated by Gray (32), taught caregivers about childhood attachment styles and how to identify the attachment–related needs of children, how to foster secure attachments with students, and how to react to students with different attachment styles. Again, these two final aspects of the PD relate strongly to the Be You initiatives of inquiring and ongoing support. Gray (32), implemented and evaluated a similar modified version of the COS-P which included principles of how to read the behaviour of children and common

mistakes when interpreting children's behaviour, how educators can become aware (or notice) their own reactions to children's behaviour, and strategies for responding to challenging child behaviour based on the attachment style of individual students.

Some PD programs outlined additional strategies and approaches that focsed on "noticing" targeted at children with additional needs and continued challenging behaviour. For example, Wilczynski et al. (14) evaluated a Behavioural Skill Training (BST) PD and coaching intervention with preschool specialist educators of children with autism spectrum disorder (ASD), which involved understanding the functions and consequences of the child's behaviour, to reinforce the desired behaviour and extinguish the undesired behaviour. Proximity to the child and immediate and scheduled reinforcement were also implicit in the BST program.

Inquiring

In the Responsive Classroom (RC) program, educators were trained to provide interactive modelling, whereby they followed a sequence of instructions – from providing explicit instructions to students to observing students as they practised carrying out tasks and rules, and inviting students to model the behaviour articulated in the class rule. (29) Training for educators around supporting student relationships and preventing student conflict were also discussed in several other PD programs, including in the REACH program (28), by focusing on improving students' identification and expression of emotions; problem-solving around negative experiences; educators' use of specific praise and positive attention with students (i.e. 'catching them being good'); and by modelling empathy, sharing and kindness towards others. These are all inquiry-based activities that were delivered to students and moderated by educators.

The BEST in CLASS PD approach included: making rules explicit to students; providing pre-corrective statements to students before an activity and transition; providing students with opportunities to respond to questions or commands; providing behaviour-specific praise to students; and giving students additional instructional information and corrective feedback to promote alternative behaviour and responses. This approach focused on supporting students to correct their behaviour either through direct instruction from the educator or through a process of educators guiding students to the correct behavior. (23, 33, 34)

The Links to Learning (L2L) PD program is another program focused on educating educators to inquire and consult with students around their disruptive behaviour. The strategies employed in this program included the Good Behaviour Game (GBG), whereby teams of students receive praise for rule-following and lose points for breaking rules, with daily and weekly rewards provided for good behavior. (35) Another feature of this PD was training in the use of the Daily Report Card (DRC) (36) for identifying, monitoring and reinforcing students' behaviour that does not interfere with learning, as well as the Good News Notes (GNN) strategy, for communicating with parents. Consultation with parents is a key area of focus for the inquiry aspect of the Be You professional learning. Praise and rewards were also offered for students' achievement of good behaviour and avoidance of bad behaviour in the L2L intervention. (37)

Kindergarten and primary school educators participated in the Prevent-Teach-Reinforce (P-T-R) PD program for students with behavioural problems. (38) This program emphasised educators supporting students by defining broad and short-term goals with them, in the areas of behaviour, social and academic development. Educators were trained to define and develop processes for monitoring and recording student behaviour, including the functions of the student behaviour and the contexts and conditions in which students' problematic behaviours occur. This approach of noticing and monitoring student behaviour can be likened to the Be You module of 'noticing' emerging signs of mental health issues in children and young people. Example inquiry strategies from the P-T-R program include: using visual cues to prevent problematic behaviour; teaching specific skills for students to engage in more appropriate behaviour; and reinforcing students' desired behaviours with positive reinforcement when they are behaving appropriately (and avoiding reinforcements when students are not behaving appropriately). (38)

Using a direct behavioural inquiry approach, Dufrene et al. (18) described a PD approach of teaching and coaching alternative classroom educators about behaviour-specific praise, i.e. using the child's name, stating the behaviours that are correct and expected, and providing a token economy to students for good behaviour. Consultation and feedback between professional groups and with parents and students was included in several of the programs. In the RC PD program, primary school educators were encouraged to collaborate with students on three to five positively-worded rules and expectations for the class. (29) Low et al. (39) evaluated the program Second Step among kindergarten and primary-aged children, to improve collaboration with children and children's ability to learn, develop empathy, manage emotions and solve problems. The approaches educators were trained in included: 1) using positive greetings with children to pre-correct problem behaviour; 2) providing children with opportunities to respond following directions/reprimands; 3) cueing of children to regain their attention; 4) intentionally creating relationships with the children; and 5) teaching, modelling and reinforcing expected behaviours with the children.

The importance of parent engagement was emphasised in several of the programs. (16, 37, 40) Specifically, partnering with parents through meetings, getting-to-know-you approaches and engaging in joint problem-solving was encouraged in educator PD. The Pyramid model studied by Hemmeter et al. (15) and Hemmeter, Snyder et al. (17) also promoted family engagement and educators offering support to families. This model offered strategies and skill development to educators across many of the social and emotional domains of childhood, including: developing meaningful connections with students; joining in on children's play; teaching friendship skills; and helping students to identify and manage their emotions, communicate with others, manage their anger and engage in social problem-solving.

The Pyramid model offers various other approaches for educators to prevent and address challenging behaviour in the classroom. Such strategies include:

- teaching behavioural expectations
- providing encouragement and feedback to students
- teaching rules and expectations
- using positive descriptive feedback
- praise and pre-corrections
- functional assessment
- prevention strategies
- development, implementation and evaluation of individualised behaviour support plans
- collaborative decision-making and behaviour monitoring
- teaching new skills
- responding in ways that support the child's acquisition of those new skills.

These skills relate to all areas of the Be You model of noticing but then inquiring about/monitoring and offering support to students.

Consistent with the Pyramid approach, McCurdy et al. (41) and Flannery et al. (42) described and evaluated the comprehensive School-wide Positive Behavioural Support (SWPBS) training with educators. SWPBS training consisted of modules focused on:

- defining and inquiring behavioural expectations with students
- establishing ongoing systems for rewarding student behavioural expectations
- delivering redirections to students and warnings for behaviour

- developing consensus on systems for responding to students behavioural concerns
- monitoring and observing student behaviour
- appropriately conducting transitions with students
- discussing/inquiring about contingencies related to impaired academic work completion.

Similar approaches were also defined by Cook et al. (43)

The REACH program, evaluated by Connors-Burrow et al. (28) also provided early childhood educators with knowledge about children's social and emotional concerns, how to help children identify feelings through pictures and songs and how to assist children to appropriately express their feelings and engage in peaceful problem-solving with others. In this program, expression of emotions and peaceful problem-solving was achieved through the inquiry stages of: acknowledging the problem, giving space and time for the children to express their feelings and experiences, engaging in active listening with children, and guiding the children through a process of brainstorming, selecting and testing out appropriate solutions.

Iizuka et al. (20) evaluated the FRIENDS for Life program, which was implemented for educators in primary school settings. This PD program provided the theoretical link between thoughts, feelings and behaviour, steps for facilitating coping and problem-solving approaches with children, and strategies for how educators can help students identify supports and how they can help others.

The Child–Teacher Relationship Training (CTRT) program, based on the Child–Parent Relationship Training (CRPT) model, included coaching for preschool educators around supporting children through noticing, inquiry (through reflective listening) and responding to children and young people's feelings and experiences, as well as building the self-esteem of these young people. (44) The CTRT program, similar to the REACH program, used 'daily centre time' – a block of time scheduled for children to engage in self-directed play and for individualised educator-student interaction. Noticing, responding to and offering ongoing support was a clear component of the CTRT PD program, similar to many of the other identified PD programs.

Another program that taught educators (in this case early learning educators) about positive attention and praise was the REACH program evaluated by Conners-Burrow. (28) The REACH program taught educators how to intentionally notice and describe appropriate behaviour to children to enhance educator–child relationships, enhance child self-esteem and minimise children's disruptive behaviour. Specific strategies included 'catching them being good' and the three-step process of using the child's name, naming their behaviour and using a 'tag line' to describe their efforts and the value of their behaviour. Similar strategies for appropriately providing praise as a method of support is also covered by McCurdy et al. (41) in the SWPBS program as outlined above.

The REACH program also taught educators about how to build and maintain positive educator–student relationships. The strategies used to foster and maintain these relationships included: a) day-to-day habits of greeting students by name, listening to and validating their feelings and experiences, and offering comfort to students when they are distressed; b) encouraging educators to engage in joint play with students and offering students encouragement and minimal direction during these activities; and c) using relaxed communication, active listening and positive reinforcement when speaking to students. (28) The BEST in CLASS program also used praise and positive attention to promote, maintain and restore educator-student relationships. (23, 33, 34)

The Establish-Maintain-Restore (EMR) program (30, 43) aimed to help primary and middle school educators learn how to strengthen their relationships with at-risk students across different stages: in the initial stages (e.g. scheduling in 'banking time' to interact and engage in one-on-one student-led activities); maintaining the relationship (e.g. using the 5-1 ratio of more positive and less negative educator-student interactions); and finally restoring the relationship (e.g. letting go of negative feelings and reactions when a student has

misbehaved, and engaging in collaborative problem solving with the student to find a solution). Approaches such as being nondirective, validating the student's feelings, demonstrating empathy, using open-ended questions, engaging in reflective listening, and expressing enthusiasm and interest in students were encouraged. (43) Building healthy and positive relationships between educators and students was also emphasised in the Heart of Teaching and Learning (HTL) curriculum for court-involved students in residential treatment. (31)

Ongoing support

CARE for Teachers is a mindfulness-based professional development and coaching program designed to promote educators' social and emotional competence and improve the quality of classroom interactions and provision of classroom support. (19) The research shows the program involved increasing educators' emotional literacy, mindful awareness and stress reduction practices (i.e. breathing awareness practice, mindful walking and stretching, listening and compassionate practices, and emotion awareness and regulation approaches), and various other practices related to caring for and listening to children and young people. The COACH PD, which involved coaching and self-reflection for preschool educators, also aimed to promote educator–student interactions and support using similar methods, such as specific praise, open-ended questions, joining in with children and young people during activities, involving children and youth in tasks and providing personalised communication. (22)

In the RC program, which improved educators' awareness about the importance of school relationships, primary school educators were trained to facilitate classroom meetings for students to share their feelings, experiences and events, and to ultimately provide a culture of ongoing support. The educators were trained in how to promote academic choice and self-directed learning among students and to involve students in making choices regarding their academic lessons and goals. (45) Providing greater academic choice to students was also included in the REACH educator PD program, including supporting students to make age-appropriate choices and guiding them through the process of making effective choices. (28) Early childhood educators in the REACH program were taught how to support students by developing appropriate and consistent daily routines and schedules for students in their classroom. In this PD program, routines followed the acronym P + FACT as a reminder to educators that routines should be Predictable, Fun, Engaging, Age-appropriate, Caring and Nurturing, and Taught. Teachers were provided with strategies to achieve appropriate classroom routines, such as making schedules visible to students, using songs to help students remember routine tasks, and using objects and games to help students during classroom transition periods. (28) The CTRT program also encouraged educators to help facilitate student decision-making. (44)

The research also shows that the My Teaching Partner-Secondary (MTP-S) program aimed to help educators to support adolescent autonomy by providing students with choices of partners and group projects. This PD program aimed to increase the significance for students of what is taught in the classroom by making repeated links between the curriculum and real-world experiences, and using peer groups to facilitate learning. (24) The MTP intervention was also implemented and evaluated with preschool educators by Roberts et al. (46) with the aim of improving educator-student interactions.

Powers et al. (25) implemented another program designed to support secondary school educators to cultivate personalised learning environments for students. Known as the FWI, this program targeted student engagement through interactive 'get to know you' activities, such as students describing their goals and what makes them unique, engaging students in journal writing, and encouraging sharing of personal information and reflection on shared experiences. These written and verbal relationship-building approaches between peers and between educators and students were all for the benefit of improving the capacity of educators to develop their mental health literacy and monitor/notice and provide ongoing support to students ongoing social/emotional wellbeing.

Another of the PD programs described in the research, Winning Beginnings Learning Circles, focused on student school readiness and preschool educator PD. The board domains of this program include school readiness, parent engagement, social-emotional development, and child assessment/effective use of data. The program included PD and coaching for educators about recognising a student's learning, social and emotional development; engaging with parents and actively enquiring about students; and providing support for students through child assessment and interpretation of assessment results, use of data to inform classroom practices, and writing and monitoring action plans for students. (40)

Maykel et al. (26) aimed to improve primary school students Time on Task (TOT) behaviour by implementing a whole-of-body movement intervention in which educators were taught one- to two-minute warm-up activities (e.g. marching in place and reaching for the sky), six- to eight-minute moderate physical activity whole-body movements (e.g. doing the twist, skiing down a mountain and juggling a soccer ball on your knees), and one- to two-minute cool-down activities (e.g. swimming like you are in jelly and climbing a mountain) to implement with students. Other strategies for appropriately conducting transitions and supportive routines with students were also covered by other programs (i.e. the SWPBS training as described by McCurdy et al. (41) and in the MTP-S program as described by Gregory et al.(24)). Some of the other programs studied emphasised the importance of structuring and planning transitions, providing clear directions, and implementing a predictable schedule. (15, 17)

Finally, the HSTS PD program, which was offered to preschool students who had been exposed to trauma, was informed by the Attachment, Self Regulation, and Competency (ARC) framework. (47) This program taught educators about how to improve the mental health literacy of children, arguably improving educators' own mental health literacy in the process, as well as about how to moderate the feelings of children through attachments and various self-regulation approaches (e.g. deep breathing). (27) The REACH program also taught educators how to support young people in developing and maintaining positive peer relationships and friendships. Joining children in play and modelling empathy, sharing and kindness to others were among the strategies taught to educators to encourage pro-social child relationships. (28)

Gaps in the evidence

Several gaps in the research evidence were identified in the current review. Of note, few of the identified papers concurrently examined the outcomes for educators and the subsequent outcomes for students following delivery of the educator PD program. This means that while a variety of professional development opportunities are available to educators, very few programs provide empirical evidence related to the specific outcomes for students. In the current review, many articles were excluded because they only addressed changes in educator self-perceived knowledge, confidence and skills following the PD program, and not changes in student social and emotional development and wellbeing. Moreover, in the identified studies there was an emphasis on educator *self-reported* changes in their own behaviour and responses or the behaviour and responses of students, from the educator's perspective, rather than objective ratings of behaviour change.

These points highlight a critical need for further research and signal a significant gap in the available evidence to support programs delivered to educators. It is important for educators and school leaders to be aware of this gap in evidence when they select appropriate programs. Educators should ensure their professional development meets their personal needs and the needs of the learners within their specific educational context. Educators should also ensure that programs have sufficient empirical evidence available to support them, and be wary of programs that have a limited research base.

Other concerns with the studies identified include the fact that there were limited randomised control trials, quasi-experimental and matched control evaluation designs, which are often considered to be the gold standard of evaluating programs and interventions in educational contexts. Most research and evaluations

focused on pre- and post-testing (testing before and after the program is implemented), and retrospective or qualitative measurement of educator and student outcomes. There were also limited long-term follow-ups that tracked sustained changes for students and educators over time. Therefore, the sustained benefits and fidelity of the programs over time are unknown. Educators and school leaders should not only be aware of the evidence-base of programs they select for professional development, but they should also be mindful of the quality of evidence provided from such research.

The present review also found there is little examination in the research evidence of educators' understanding of wellbeing and mental health and how these factors relate to student changes in behaviour and help-seeking, and family and practitioner partnerships. In addition to this, there is limited literature on parent–educator collaboration and consultation models regarding student social and emotional concerns, including educator preparedness to report concerns and observations of student mental health concerns to parents and other caregivers. Collaborative partnerships between educators and parents are crucial for successful outcomes for children and young people. There is a need to further develop this area and provide support and professional development to educators so they can work effectively with parents, caregivers and families. Specific areas that could be addressed relate to the interpersonal skills of educators and helping them to harness positive communication channels between the educational setting and home.

A common concern with professional development opportunities that are available to educators – and an issue identified in the present review – is that many programs lack a developmental perspective. For example, professional development might omit covering the skills necessary for educators to understand what might be typical and atypical emotional, social and behavioural development of students for their particular age of individual need. This can be problematic for educators who might be uncertain about when appropriate referral or intervention is needed. While this issue should be tackled at the educator training level, it should also be absorbed into professional development. Understanding that different levels of intervention are required based on the level of student social and emotional concerns (e.g. mild, moderate and severe symptoms) also provides important information to educators supporting children and young people.

Discussion

Ultimately, professional development programs delivered through workshops, ongoing coaching and online learning to improve educators' mental health literacy have been shown to improve academic engagement, academic outcomes, social skills and reduce disruptive classroom behaviour in children and young people. While the content of many of the PD programs described in the research over the past five years focused on improving the knowledge and skills of educators to notice, consult with parents and provide ongoing support to children and young people, unfortunately the outcomes measured were limited. Most studies identified outcomes of improving classroom and school-wide support for students, without evaluating changed educator identification with children with mental health issues and subsequent consultation with parents. More details about the content of the PD programs within the domains of noticing, inquiring/consulting and providing support regarding children and young people's mental health are detailed below.

There was only one study that identified gains in educator knowledge and this was in a single case study of an educator working with children with ASD (14). Three studies sought to investigate changes in educators' use of strategies to support children's social and emotional wellbeing; one found a difference (15), while two did not. (16, 31) The Pyramid model was found to increase the use of effective classroom management strategies and support of children and youth (15, 17). Two PDs resulted in significant changes to educators' adaptive emotion regulation, mindfulness and psychological wellbeing (20) and resilience (19), but not for other aspects of educators' wellbeing, such as depression, anxiety and stress. (20) Given the importance of educators' mental health and wellbeing on children and young people's mental health and wellbeing, it is critical that outcomes for educators continue to be evaluated and assessed following PD. Such data will inform the development of future PD programs and ensure that they focus on variables (e.g. particular types of knowledge, specific skill sets and educator wellbeing) that ultimately make a difference to children and youth.

Children's outcomes detailed in the research included gains in academic progress and readiness, school engagement, social skills and specific mental health outcomes including decreased trauma and anxiety symptoms. (15, 17, 19-25, 28, 30, 31, 33, 34, 38-40, 43, 46) Many studies identified in this review investigated the impact of the educator PD on disruptive behaviour. (14, 15, 17-19, 22, 26-28, 30, 38, 39, 41-44) Finally, the PD programs resulted in positive interactions between educators and children, which is important given the place of a positive school and classroom climate on teaching and learning, from the perspective of both parties. (16, 22, 23, 28)

Ultimately, research is still in its infancy in terms of educational staff professional development and the impact on student mental health and wellbeing outcomes. The types of PD programs that appeared to have the best success in giving educators the skills and knowledge to recognise and respond to emerging mental health issues in children and young people including those that focused on the following:

Noticing;

- increased educator knowledge and capacity to notice and monitor student mental health issues early, including the social and emotional development of children with identified learning and behavioural concerns (14, 15). Other programs that were not specifically evaluated for changes in educator knowledge and skills were those that taught educators about child and young person mental health and identification of child and adolescent challenges. (16, 27, 28, 31, 32)

Inquiring:

- improved classroom management and reduced student conflict, including: collaborating with students and practising classroom rules; conflict-resolution and restorative justice approaches; pre-correcting student behaviour and providing feedback to students; and modelling empathy, sharing and kindness to others. (15, 17, 18, 23, 28, 33, 34, 37-39, 41-43, 45)
- greater educator–student attachment and relationships through individualised greetings, play and conversations with students, intentionally showing interest in students, and using skills such as active listening, participation in student-led activities, and specific positive reinforcement for students. (19, 22, 23, 28, 30-34, 39, 41, 43, 44, 46)
- educators partnering with parents was also included in some programs (15-17, 37, 40) however the outcomes of this educator–parent consultation were not evaluated.

Ongoing support:

- improved educator pedagogy and instructional practices, such as giving students choice about what and how they learn, guidance to develop and monitor their own learning goals, and linking lessons to the students' experiences and real-world understandings (24, 25, 28, 29, 44)
- classroom routines involving consistent and predictable routines and schedules that are accessible, repeated and easily understood by students (e.g. visual timetables at students' eye level) (15, 17, 24, 26, 28, 41)
- increasing students' social and emotional literacy included providing students' knowledge about identifying, expressing and regulating their own emotions, as well as recognising the emotions of others and engaging in brainstorming, selecting and testing appropriate solutions (20, 27, 28)
- enhancing students' academic outcomes through providing support and meaningful and regular feedback to students and pairing less able students with more able students for specific support and guidance (21, 37)

Although this review did not focus on tertiary institutions and pre-service training of educators, previous literature has also indicated the clear need for improved tertiary education in student mental health and teacher wellbeing. (48, 49) Based on this review, existing programs and evaluations focusing on pre-service training in child development, and child and youth mental health and wellbeing, should incorporate elements of:

- enhancing school relationships
- improving school routines
- providing clear consequences and praise
- encouraging student self-guided learning
- providing clear and regular instruction and feedback to students in relation to their academic, social, emotional and behavioural performance.

In addition to this, encouraging student help-seeking and providing ongoing consultation to parents was only mentioned in a few studies. Although this is a limitation of research in this field, it can be extrapolated from the findings that approaches to improve child–educator relationships, classroom sharing of personal experiences and events, and engagement in social problem-solving and conflict resolution strategies could serve to increase help-seeking and consultation in schools. Improving educators' social and emotional knowledge was done by teaching them about childhood mental illness, how to promote student mental health and resilience, the importance of communicating and partnering with parents, and educator-to-educator sharing and problem solving of strategies. (16, 28, 31, 39)

Conclusion

The review identified a number of high quality, empirically robust studies evaluating educator PD and its impact on children and young people. It was found that PD programs for educators aimed at improving the wellbeing and mental health outcomes of children and youth are essential, as are programs to improve the wellbeing and teaching practices of educators. The essential components of PD programs that have been shown to improve educator support around the mental health and wellbeing outcomes of children focused on improving educator inquiry practices around child mental health (e.g. collaborating with students on learning, behavioural and peer relationship concerns), noticing the mental health needs of children and young people (e.g. becoming aware of the signs and symptoms and impact of one's own behaviour on child mental health and wellbeing), and finally, providing support to children during transitions and improving their daily emotional awareness and regulation practices. These aspects of PD should be prioritised in educator PD programs aimed at improving child and adolescent wellbeing and mental health.

While there are a large number of PD programs for educators on improving the mental health and wellbeing of children and young people, most research focused on measuring educator attitudes, knowledge and practices following PD. There is a need for ongoing development and monitoring of educator PD programs, as well as a need for evaluation of educators' and students' immediate and long-term outcomes following such programs. Specifically, there is a need for further rigorous long-term research to evaluate the impact of participation in various forms of PD on educators' behaviours, confidence and knowledge and on their ability to notice, refer and provide ongoing support to children and young people around mental health and wellbeing.

The review also identified a gap in the evidence in terms of research into the direct impact of PD programs on educators' ability to notice or identify issues around children and young people's mental health and wellbeing, and to consult with parents. Despite many PD programs including elements of these approaches, there is little evaluation available of the outcomes of educator PD on improved identification of at-risk children and youth and improved educator–parent consultation practices. Gaining further understanding of how PD programs impact on educators' capacity to notice and follow up with parents about children and young people's mental health, resilience and coping, academic learning and school engagement outcomes is critical.

Furthermore, while positive outcomes have been reported for children and young people as a result of educators taking part in particular PD programs and acquiring specific knowledge or skillsets, it is important to note that the results presented in this review draw together outcomes from a range of studies. For example, children and youth taught by educators who had participated in the Establish–Maintain–Restore (EMR) program reported improved student–educator relationships – an outcome which was shown in a separate study (43) to be associated with improved academic engagement and reduced disruptive classroom behaviour. Similarly, in PD programs that encompassed multiple elements, it was difficult to determine how each aspect resulted in specific outcomes for educators and/or young people. It is likely that a combination of the approaches discussed in this review are important for improved mental health responding in schools.

Findings of this review did point to positive gains for educators in terms of increasing their capacity and skillset to provide ongoing support to children and young people, through improved educator–child relationships, supporting students to become critical and engaged learners, and providing space and support for children and young people to develop and practice pro-social and productive classroom behaviours. These areas of support are likely to improve the way educators practice and outcomes for children and youth

around help-seeking behaviour, as well as improving educator and family consultation. However, it cannot be understated how important it is for educators to firstly be taught to notice and monitor (or inquire with parents about) the ongoing wellbeing and mental health of children and young people, in order to provide them with support that can make a difference to their mental health and wellbeing.

References

1. Jorm A, Korten A, Jacomb P, Christensen H, Rodger B, Pollitt P. Mental health literacy: a survey of the public's ability to recognise mental disorders and their beliefs about the effectiveness of treatment. Medical Journal of Australia. 1997;166(4):182.
2. Reinke WM, Stormont M, Herman KC, Puri R, Goel N. Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. School Psychology Quarterly. 2011 Mar;26(1):1-13.
3. Allen KA, Kern P, Vella-Brodrick D, Waters L. Understanding the priorities of Australian secondary schools through an analysis of their mission and vision statements. Educational Administration Quarterly. 2018;54(2):249-74.
4. Waters L, Sun J, Rusk R, Cotton A, Arch A. Positive education: Visible wellbeing and positive functioning in students. Wellbeing, recovery and mental health. New York, NY: Cambridge University Press; US; 2017. p. 245-64.
5. Andrews A, McCabe M, Wideman-Johnston T. Mental health issues in the schools: are educators prepared? The Journal of Mental Health Training, Education and Practice. 2014;9(4):261-72.
6. Herman KC, Hickmon-Rosa J, Reinke WM. Empirically derived profiles of teacher stress, burnout, self-efficacy, and coping and associated student outcomes. Journal of Positive Behavior Interventions. 2018;20(2):90-100.
7. Pinkelman SE, McIntosh K, Rasplica CK, Berg T, Strickland-Cohen MK. Perceived enablers and barriers related to sustainability of school-wide positive behavioral interventions and supports. Behavioral Disorders. 2015;40(3):171-83.
8. Ekornes S. Teacher perspectives on their role and the challenges of inter-professional collaboration in mental health promotion. School Mental Health: A Multidisciplinary Research and Practice Journal. 2015 Sep;7(3):193-211.
9. Teagle SE. Parental problem recognition and child mental health service use. Health Services Research. 2002;4(4):257-66.
10. Weare K. What works in promoting social and emotional well-being and responding to mental health problems in schools? . London: National Children's Bureau, 2015.
11. Jorm AF, Kitchener BA, Sawyer MG, Scales H, Cvetkovski S. Mental health first aid training for high school teachers: A cluster randomized trial. BMC Psychiatry Vol 10 2010, ArtID 51. 2010 Jun;10.
12. Kutcher S, Wei Y, McLuckie A, Bullock L. Educator mental health literacy: A programme evaluation of the teacher training education on the mental health & high school curriculum guide. Advances in School Mental Health Promotion. 2013 Apr;6(2):83-93.
13. Organistion for Economic Co-operation and Development. Teaching and Learning International Survey. Organistion for Economic Co-operation and Development, 2008.
14. Wilczynski SM, Labrie A, Baloski A, Kaake A, Marchi N, Zoder-Martell K. Web-Based Teacher Training and Coaching/Feedback: A Case Study. Psychology in the Schools. 2017;54(4):433-45.
15. Hemmeter ML, Hardy JK, Schnitz AG, Adams JM, Kinder KA. Effects of Training and Coaching With Performance Feedback on Teachers' Use of Pyramid Model Practices. Topics in Early Childhood Special Education. 2015;35(3):144-56.

16. Davis E, Gilson K, Christian R, Waters E, MacKinnon A, Herrman H, et al. Building the capacity of family day care educators to promote children's social and emotional wellbeing: Results of an exploratory cluster randomised-controlled trial. Australasian Journal of Early Childhood. 2015;40(2):57-67.
17. Hemmeter ML, Snyder PA, Fox L, Algina J. Evaluating the Implementation of the Pyramid Model for Promoting Social-Emotional Competence in Early Childhood Classrooms. Topics in Early Childhood Special Education. 2016;36(3):133-46.
18. Dufrene BA, Lestremau L, Zoder-Martell K. Direct Behavioral Consultation: Effects on Teachers' Praise and Student Disruptive Behavior. Psychology in the Schools. 2014;51(6):567-80.
19. Jennings PA, Brown JL, Frank JL, Doyle S, Oh Y, Davis R, et al. Impacts of the CARE for Teachers program on teachers' social and emotional competence and classroom interactions. Journal of Educational Psychology. 2017 Oct;109(7):1010-28.
20. Iizuka CA, Barrett P, Gillies R, Cook C, Marinovic W. Preliminary Evaluation of the FRIENDS for Life Program on Students' and Teachers' Emotional States for a School in a Low Socio-Economic Status Area. Australian Journal of Teacher Education. 2015;40(40).
21. Ansari A, Pianta RC. Effects of an early childhood educator coaching intervention on preschoolers: The role of classroom age composition. Early Childhood Research Quarterly. 2018;44:101-13.
22. Johnson SR, Finlon KJ, Kobak R, Izard CE. Promoting Student-Teacher Interactions: Exploring a Peer Coaching Model for Teachers in a Preschool Setting. Early Child Educ J. 2017 Jul;45(4):461-70.
23. Conroy MA, Sutherland KS, Algina JJ, Wilson RE, Martinez JR, Whalon KJ. Measuring Teacher Implementation of the BEST in CLASS Intervention Program and Corollary Child Outcomes. Journal of Emotional and Behavioral Disorders. 2014;23(3):144-55.
24. Gregory A, Allen JP, Mikami AY, Hafen CA, Pianta RC. Effects of a Professional Development Program on Behavioral Engagement of Students in Middle and High School. Psychol Sch. 2014 Feb;51(2):143-63.
25. Powers K, Shin S-H, Hagans KS, Cordova M. The Impact of a Teacher Professional Development Program on Student Engagement. International Journal of School & Educational Psychology. 2015;3(4):231-40.
26. Maykel C, Bray M, Rogers HJ. A Classroom-Based Physical Activity Intervention for Elementary Student On-Task Behavior. Journal of Applied School Psychology. 2018;34(3):259-74.
27. Holmes C, Levy M, Smith A, Pinne S, Neese P. A Model for Creating a Supportive Trauma-Informed Culture for Children in Preschool Settings. J Child Fam Stud. 2015;24(6):1650-9.
28. Conners-Burrow NA, Patrick T, Kyzer A, McKelvey L. A Preliminary Evaluation of REACH: Training Early Childhood Teachers to Support Children's Social and Emotional Development. Early Childhood Education Journal. 2016;45(2):187-99.
29. Abry T, Rimm-Kaufman SE, Curby TW. Are all program elements created equal? relations between specific social and emotional learning components and teacher–student classroom interaction quality. Prev Sci. 2017;18:193-203.
30. Duong MT, Pullmann MD, Buntain-Ricklefs J, Lee K, Benjamin KS, Nguyen L, et al. Brief teacher training improves student behavior and student-teacher relationships in middle school. Sch Psychol. 2019 Mar;34(2):212-21.
31. Day AG, Somers CL, Baroni BA, West SD, Sanders L, Peterson CD. Evaluation of a Trauma-Informed School Intervention with Girls in a Residential Facility School: Student Perceptions of School Environment. Journal of Aggression, Maltreatment & Trauma. 2015;24(10):1086-105.

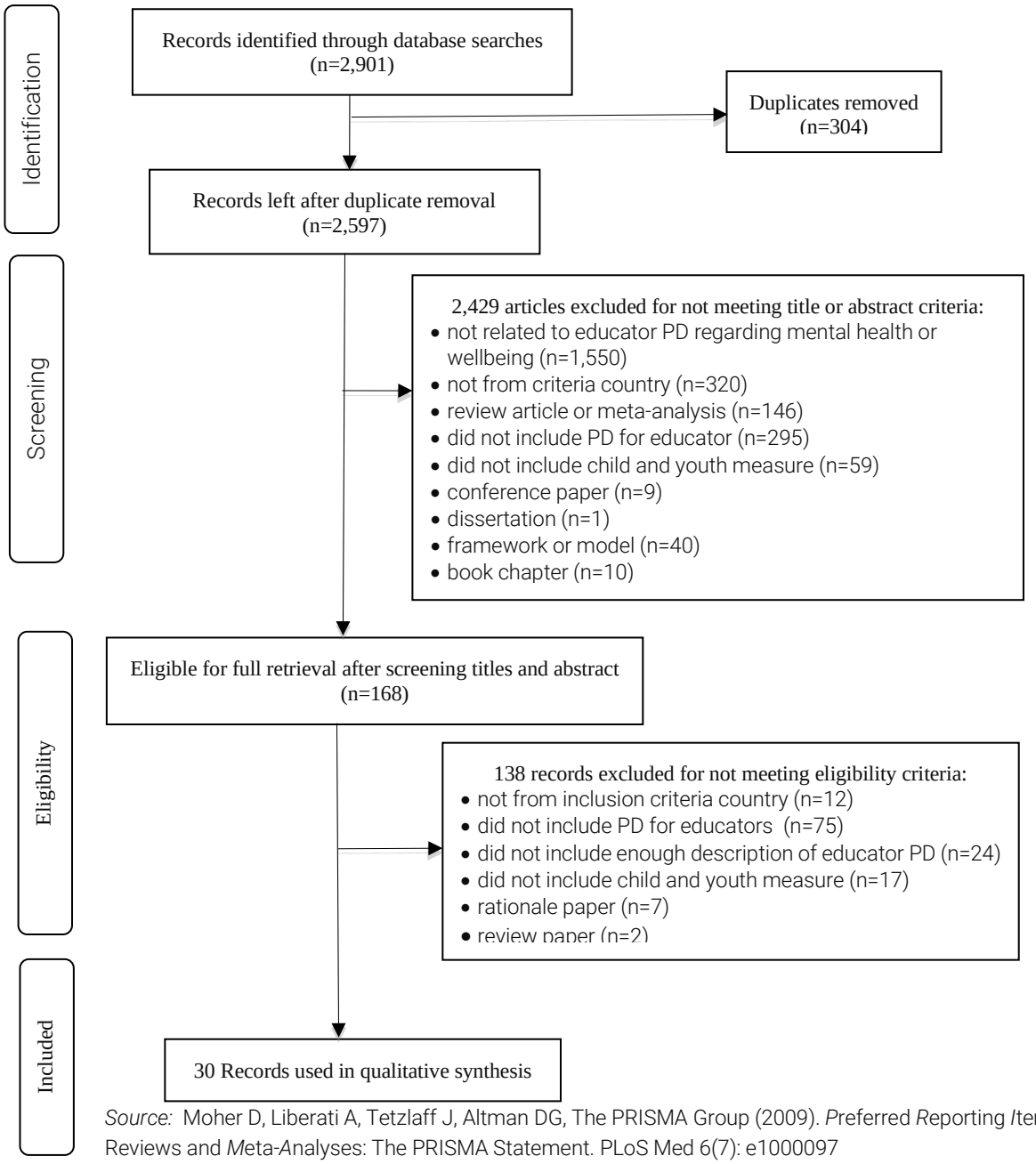
32. Gray SA. Widening the circle of security: a quasi-experimental evaluation of attachment-based professional development for family child care providers. Infant Ment Health J. 2015 May-Jun;36(3):308-19.
33. Conroy MA, Sutherland KS, Algina J, Werch B, Ladwig C. Prevention and Treatment of Problem Behaviors in Young Children: Clinical Implications From a Randomized Controlled Trial of BEST in CLASS. AERA Open. 2018;4(1):233285841775037.
34. Sutherland KS, Conroy MA, Vo A, Ladwig C. Implementation Integrity of Practice-Based Coaching: Preliminary Results from the BEST in CLASS Efficacy Trial. School Mental Health. 2014;7(1):21-33.
35. Barrish HH, Saunders M, Wolf MM. Good behavior game: Effects of individual contingencies for group consequences on disruptive behavior in a classroom. Journal of Applied Behavior Analysis. 1969;2(2):119-24.
36. Kelley ML, McCain AP. Promoting academic performance in inattentive children: The relative efficacy of daily behavior report cards with and without response cost. Behavior Modification. 1995;19:357-75.
37. Atkins MS, Shernoff ES, Frazier SL, Schoenwald SK, Cappella E, Marinez-Lora A, et al. Redesigning community mental health services for urban children: Supporting schooling to promote mental health. J Consult Clin Psychol. 2015 Oct;83(5):839-52.
38. DeJager BW, Filter KJ. Effects of Prevent-Teach-Reinforce on Academic Engagement and Disruptive Behavior. Journal of Applied School Psychology. 2015;31(4):369-91.
39. Low S, Smolkowski K, Cook C. What Constitutes High-Quality Implementation of SEL Programs? A Latent Class Analysis of Second Step(R) Implementation. Prev Sci. 2016 Nov;17(8):981-91.
40. Swaminathan S, Byrd SW, Humphrey CM, Heinsch M, Mitchell MJ. Winning Beginnings Learning Circles: Outcomes from a Three-Year School Readiness Pilot. Early Childhood Education Journal. 2013;42(4):261-9.
41. McCurdy BL, Thomas L, Truckenmiller A, Rich SH, Hillis-Clark P, Lopez JC. School-Wide Positive Behavioral Interventions and Supports for Students with Emotional and Behavioral Disorders. Psychology in the Schools. 2016;53(4):375-89.
42. Flannery KB, Fenning P, Kato MM, McIntosh K. Effects of school-wide positive behavioral interventions and supports and fidelity of implementation on problem behavior in high schools. Sch Psychol Q. 2014 Jun;29(2):111-24.
43. Cook CR, Coco S, Zhang Y, Fiat AE, Duong MT, Renshaw TL, et al. Cultivating Positive Teacher–Student Relationships: Preliminary Evaluation of the Establish–Maintain–Restore (EMR) Method. School Psychology Review. 2018;47(3):226-43.
44. Gonzales-Ball TL, Bratton SC. Child-teacher relationship training as a head start early mental health intervention for children exhibiting disruptive behaviour. International Journal of Play Therapy. 2019;28(1):44-56.
45. National Health and Medical Research Council. NHMRC levels of evidence and grades for recommendations for guideline developers. Canberra: NHMRC, 2009.
46. Roberts AM, LoCasale-Crouch J, DeCoster J, Hamre BK, Downer JT, Williford AP, et al. Individual and contextual factors associated with pre-kindergarten teachers' responsiveness to the MyTeachingPartner coaching intervention. Prev Sci. 2015;16:1044-53.
47. Blaustein ME, Kinniburgh KM. Treating traumatic stress in children and adolescents: How to foster resilience through attachment, self-regulation, and competency. New York, NY: Guilford Press; US; 2010.

48. Reupert A, Woodcock S, editors. Creating engaging and motivating learning environments. Port Melbourne: Cambridge University Press; 2018.
49. Woodcock S, Reupert A. Does training matter? Comparing the behaviour management strategies of pre-service teachers in a four-year program and those in a one-year program. Asia-Pacific Journal of Teacher Education. 2013 Feb;41(1):84-98.

Appendices

Appendix 1. Search terms and PRISMA diagram

Search terms: Training OR 'professional development' OR program OR 'professional learning' AND Teacher OR educator OR 'early childhood' AND 'Mental health' OR wellbeing OR resilien* OR Psycho* OR 'Mental illness' OR 'social emotional' OR social-emotional OR 'mental health literacy' OR SEL OR 'social emotional learning' OR 'social-emotional learning' AND Evaluat* OR effect* OR trial OR comparison OR impact OR outcome OR efficacy OR effectiveness



Source: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). *P*referred *R*eporting *I*tems for *S*ystematic Reviews and *M*eta-*A*nalyses: The PRISMA Statement. PLoS Med 6(7): e1000097

Appendix 2. NHMRC Levels of evidence

Level of Evidence	Study Design
I	A systematic review of Level II studies
II	A randomised controlled trial
III-1	A pseudo-randomised controlled trial (i.e. alternate allocation or some other method)
III-2	A comparative study with concurrent controls (i.e. non-randomised experimental trials, cohort studies, case-control studies, interrupted time series studies with a control group)
III-3	A comparative study without concurrent controls (i.e. historical control study, two or more single arm studies, interrupted time series studies without a parallel control group)
IV	Case series with either post-test or pre-test/post-test outcomes

Source: NHMRC levels of evidence and grades for recommendations for guideline developers. Canberra: National Health and Medical Research Council; 2009.

Appendix 3. Summary of included articles

Authors	Year	Country	Program name	Setting	Delivery format	Research Design	Rating (NHMRC)
Abry, Rimm-Kaufmann & Curby	2017	US	Responsive Classroom (RC)	Primary school	Two week-long face-to-face training sessions, readings and materials, and onsite coaching.	Stratified sample of schools for RCT	II
Ansari & Pianta	2018	US	MyTeachingPartner & Head Start	Preschool	Web mediated feedback and coaching based on observational data	The current study used a randomised control trial to evaluate the impacts of a PD intervention; teachers and their students were not randomly assigned to classrooms as a function of age composition.	II
Atkins et al.	2015	US	Links to Learning (L2L)	Primary school	Web-based training sessions, supervision sessions, and field based training.	Two by six longitudinal design with random assignment of schools to conditions	III-1
Conners-Burrow et al.	2016	US	Reaching Educators and Children (REACH)	Childcare centre	Six 1.5-hour workshops, trainer observation and feedback related to classroom implementation and ongoing coaching	One-group, pre–post-test design	IV

					(via email and texts)		
Conroy et al.	2014	US	Behavioural, Emotional, and Social Training:Competent Learners Achieving School Success (BEST in CLASS)	Federally- or state-funded early childhood classrooms (e.g. Head Start, Title I, state funded pre-K) serving children (ages 3 to 5 years old) who were at risk for school failure due to a variety of factors (e.g. SES).	Workshop, reading material (manual), and practice-based coaching.	Multilevel analysis and carry out planned comparisons of the means for the BEST in CLASS group and comparison group at the post-test and maintenance time points. In addition, planned comparisons were conducted to compare means for the BEST in CLASS group at the baseline and post-intervention time points and at the baseline and maintenance time points.	II
Conroy, Sutherland, Algina, Wrch & Ladwig	2018	US	Behavioural, Emotional, and Social Training: Competent Learners Achieving School Success (BEST in CLASS)	Early childhood	Workshop, reading material (manual), and practice-based coaching.	Randomised controlled pre-post test group design	II
Cook, Coco, Zhang, Fiat, Duong, Renshaw, & Frank	2018	US	Establish–Maintain–Restore (EMR) Method	Primary school	3-hour workshop and follow-up web mediated consultation	A randomised-block longitudinal design. Classes were matched and placed into five pairs according to their baseline estimates of academic engaged time and percent of students receiving FRL to increase the likelihood of comparable groups at baseline. Each class within the matched pair was then	III-1

						randomly assigned to either the treatment or attention control condition.	
Davis et al.	2015	Australia	THRIVE	Family day care	Three two hour workshops, evidence-based resources, coordinator discussions with educators and peer-to-peer support.	RCT	II
Day, Somers, Baroni, West, Sanders, & Peterson	2015	US	Modified version of The Heart of Teaching and Learning: Compassion, Resiliency, and Academic Success (HTL)	Public charter school that exclusively serves court-involved youth placed in residential treatment.	Two half-day trainings, with booster trainings occurring monthly over 2-hour periods at staff development meetings followed by a series of classroom observations and individual coaching by a therapist certified in trauma and attachment.	Pilot, pre- and post- testing.	IV
DeJager & Filer	2015	US	Prevent-Teach-Teinforce (PT-R)	Primary school	Face-to-face training and coaching	A single-subject experimental research design	IV
Dufrene, Lestremau, &	2014	US	Direct Behavioural	Primary school	One-tone training/consultatio	A multiple baseline design across classrooms was used	III-2

Martell			Consultation Training		n and evaluation of teaching practices	to evaluate indirect and direct training procedures for increasing teachers' implementation of behaviour-specific praise.	
Duong et al.	2018	US	Establish-Maintain-Restore (EMR) approach	Upper primary to early high school equivalent (i.e. middle school)	Face-to-face 3-hour training	RCT	II
Flannery, Fennning, Mcgrath Kato, & McIntosh	2014	US	School-wide Positive Behavioural Support Interventions	High school	Face-to-face team teaching and technical assistance (e.g. coaching, modelling, training, referral to resources)	Individual student problem behaviours during a 3-year effectiveness trial without random assignment to condition.	III-3
Gonzales-Ball & Bratton	2019	US	Child–teacher relationship training (CTRT) and conscious discipline training	Preschool	Face-to-face training, supervision, and coaching in CTRT protocol	A randomised repeated-measures controlled group design	II
Gray	2015	US	Circle of Security-Parenting	Family Childcare	Four day training involving educational video materials, focus groups and ongoing training	Quasi-experimental pilot program evaluation	III-1
Gregory, Allen, Mikami, Hafen, & Pianta	2014	US	My Teaching Partner-Secondary program	High Schools and Middle Schools	One day workshop, materials and resources, and	Randomised controlled design	II

					coaching.		
Hemmeter, Hardy, Schnitz, Morris Adams, & Kinder	2015	US	Pyramid Model for Promoting Social-Emotional Competence in Young Children	Preschool	Face-to-face training and coaching	A multiple probe design across sets of Pyramid Model practices replicated across three teachers was used in this study	III-3
Hemmeter, Snyder, Fox, & Algina	2016	US	Pyramid Model for Promoting Young Children's Social-Emotional Competence	Preschool	Face-to-face training and coaching	A cluster-randomised controlled potential efficacy trial	II
Holmes, Levy, Smith, Pinne, & Neese	2015	US	Head Start Trauma Smart (HSTS)	Preschool	Face-to-face training	Preliminary case study evaluation	IV
Iizuka, Barrett, Gillies, Cook, & Marinovic	2015	Australia	FRIENDS for Life	Primary school	Face to face training and group coaching	A single group, pre/post-test design	IV
Jennings, et al.	2017	US	CARE for Teachers Program	Primary school	Face-to-face training and coaching calls.	A cluster randomised trial design	II
Johnson, Finlon, Kobak & Izard	2017	US	Colleague Observation And CoacHing (COACH) program	Preschool	Training workshop and coaching sessions	A treatment–control design pre and post testing	III-1
Low, Smolowki, &Cook	2016	US	Second Step®	Primary school	Face-to-face training	A randomised controlled trial	II
Maykal, Bray, & Rogers	2018	US	School-based Physical Activity Program	Primary school	Face-to-Face training	Single-subject withdrawal design study	III-3
McCurdy et al., 2016	2016	US	School-wide positive behavioural interventions	Self-contained school for students with	Face to face training and coaching	Participatory action research method	IV

				emotional and behavioural disorders			
Powers et al.	2015	US	Freedom Writers Institute (FWI)	High school	Face-to-face training	A randomised control trial design	II
Roberts et a.	2015	US	MyTeachingPartner (MTP)	Preschool	Web-mediated coaching intervention	A randomised control trial design	II
Sutherland, Conroy, Vo & Ladwig	2014	US	BEST in CLASS	Preschool	Face-to-face training and coaching	A randomised control trial design	II
Swaminathan, Byrd, Humphrey, Heinsch, &Mitchell	2013	US	Winning Beginnings Learning Circles	Preschool	Face-to-face training	Pilot evaluation based on pre- to post assessment	IV
Wilczynski, Labrie, Baloski, Kaake, Marchi, & Zoder-Martell	2017	US	Effective instruction delivery (EID; Ford, Olmi, Edwards, & Tingstrom, 2001) Behavioural Skills Training (BST)	Preschool	Online (web based training and video conferencing)	Case study evaluation	IV

be you

Beyond Blue

With delivery partners

Early Childhood Australia
A voice for young children

headspace
National Youth Mental Health Foundation

Funded by

Australian Government
Department of Health