

A photograph of two women in conversation outdoors. The woman on the left is wearing a light blue hoodie with 'Still' written on it. The woman on the right is wearing a black and white striped shirt under a black jacket. In the background, there are trees and other people, including a child in a red shirt.

Family Partnerships *Supporting evidence*

Supporting evidence for the Be You Professional Learning

Family Partnerships domain

This review has been developed to support the **Family Partnerships** 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.

Families and the home environment play a primary role in the health and development of children and young people. This review summarises what is known about how and why partnerships between families and educators are important for supporting the mental health and wellbeing of children and young people. It provides recommendations that can be used by school and early learning services to support educators to build partnerships with families, and examines the evidence behind these strategies.

Educators will best engage with this review if read in conjunction with the Professional Learning modules in the **Family Partnerships** domain.

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Glossary

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| Emotional competence | The skills to recognise and manage one's own emotions and their effect on others as well as being aware of others' feelings and perspectives |
| Externalising behaviours | Maladaptive behaviours, directed outward toward others, and reflective of emotional dysregulation and impulsivity. Examples include anger, aggression, bullying, vandalism, and arson. |
| Family partnerships | Be You defines family partnerships in the education context as "collaborative relationships between people who agree to share responsibility and work together towards a common goal" |
| Internalising behaviours | Anxious, fearful, withdrawn and sad behaviours that are focused inward. These behaviours are usually associated with internalising disorders, such as depressive and anxiety disorders and somatic complaints. |
| Manualised programs | Programs for which there is a clear and replicable set of instructions for delivery and a defined program curriculum or modules specifying program components, such that content is reliably delivered in a systematic and replicable way. |
| Modifiable risk factors | Factors associated with an increased likelihood of mental illness or distress, and which can be addressed through individual, group or community actions (as opposed to genetic or pre-determined risk factors such as age or gender). For child and adolescent mental health and wellbeing, modifiable risk factors can include family conflict, academic failure, antisocial behaviours and low community attachment. |
| Prevention | Refers to strategies or programs that seek to avert or delay the onset or severity of mental health problems |
| Protective factors | Factors associated with a decreased likelihood of mental illness or distress, and which can be promoted at individual, group and community levels. In child and adolescent mental health and wellbeing, protective factors include individual and environmental factors such as bonding and positive parenting, resilience, positive peer group norms and school engagement |
| Randomised experimental studies and Quasi-experimental studies | Experimental studies randomly divide participants into two groups, a control group and an experimental/intervention group. The control group does not receive the intervention and are used as a comparison Quasi-experimental studies are not randomised, but are similar in other respects to experimental studies. |

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| Social bonding | Refers to being part of social networks and peer groups. These can be either a positive or negative influence on mental health and wellbeing |
| Social capital | Characteristics of social groups such as relationships, shared values, trust and cooperation |
| Socio-emotional competence training | Explicit or implicit learning and teaching strategies that seek to promote social and emotional competence. |

Executive summary

Background

Be You sees partnering with families as a key factor in supporting positive mental health outcomes. This review summarises what is known about partnerships between families and educators, and how they work to support the mental health and wellbeing of children and young people. It provides an overview of existing research evidence that can be used by school and early learning settings to support educators to build partnerships with families. Specifically, this review addresses the following question:

What strategies to build and maintain partnerships between families and educators have been effective in supporting mental health and wellbeing in children and young people?

What is meant by partnerships between families and educators and how do they influence children and young people?

Be You defines family partnerships in the education context as “collaborative relationships between people who agree to share responsibility and work together towards a common goal”. Effective partnerships are based on mutual trust and respect, and shared responsibility for children and young people’s education. In this report, ‘families’ refer to the broad range of people that play a role in housing and caring for children.

Given that the risk factors for child and adolescent mental health problems operate through the early education and school years, it is logical that partnerships between families and educators should form a component of prevention responses. Although family-educator partnerships are widely recognised as important for children’s education, education settings typically find them difficult to implement. One model that has been used to think about the process of improving community initiatives such as family-educator partnerships is “community readiness” theory. Community readiness theory recognises that education communities are at different “stages of readiness” for engaging in family-educator partnerships.

Much of the existing research on family-educator partnerships has focused on educational outcomes, and how professional staff can work effectively with parents to help children and young people achieve academic outcomes. Reviews of the research literature identify that children from different contexts and countries receive substantial benefits from early childhood interventions that involve families in activities such as playgroups and parent home reading. The present review examined whether family-educator partnership interventions can also reduce mental health problems in children and young people.






Summary of methods

To identify peer-refereed review papers of interventions with the primary aim of preventing mental health problems or promoting mental health and wellbeing, keyword and subject headings were searched on 29 April 2019. Six literature reviews were identified that met the inclusion criteria. The reference lists of included reviews were examined for relevant studies. A concurrent search of grey literature (materials and research outside traditional academic publishing) was also completed, examining national and international evidence-based program repositories.

Assessing the quality of the evidence

To be included in this review, interventions had to have been evaluated via peer-reviewed literature.

To rate the quality of the research evidence for programs and services, we used the 'thumbs rating' method, which uses the following categories:

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|  | there are at least two good studies showing significant effects |
|  | three studies showing significant effects |
|  | four or more studies showing significant effects |
|  | there is consistent evidence showing that the intervention does not work |
|  | there is not enough evidence to say whether or not the approach works. |

Key findings

What strategies to build and maintain partnerships between families and educators have been effective in supporting mental health and wellbeing in children and young people?

While there is evidence that partnerships between families and educators have been effective in reducing mental health issues in children and young people, there has not been enough research to be confident as to which strategies are the most effective, or which components of family-educator partnerships are most critical, hence the available evidence is limited. This review summarises the major constructs and partnership strategies and principles identified in the included literature reviews, as outlined in the discussion below.

The review also summarises information about nine family programs that have been implemented in Australian educational settings such as preschools, primary or secondary schools and have achieved improvements in child and adolescent mental health outcomes. The strategies used in these effective Australian programs were used to further elaborate on the successful strategies and principles for family partnerships.

Gaps in the evidence

We examined the settings and age groups where family partnership programs have been evaluated. While the review revealed a range of interventions that reach 100% of families, active parent involvement in family interventions tended to be below 10% in many programs. Increasing the population reach of parent and family interventions is therefore an important area to consider in implementation planning.

At this point, there is no family intervention that has demonstrated a universal prevention effect, whereby the mental health and wellbeing of the majority of children and young people improved within an educational setting. As factors within the family and school are important in looking at both the risk and prevention of child and adolescent mental health problems, it is important to further evaluate parent and family interventions.

There have been no evaluation studies comparing different family-school partnership strategies. As outlined in a review by Skvarc and colleagues: "Future evaluation research is required to better understand

the factors that explain variation in program outcomes (e.g. service delivery staff and setting, implementation fidelity monitoring). Variations in programs and implementation models should be competitively evaluated to distil critical components and superior models”.

There is emerging evidence that online parenting programs may be effective in engaging families and building family–education partnerships. Given the scope to scale-up these programs, and the low demand on education setting resources in their delivery, emerging evidence indicates that such programs warrant consideration as potential strategies to improve family–education partnerships for child mental health.

Discussion

Research studies have not yet identified the specific components of family partnerships that are the most critical for improving the mental health and wellbeing of children and young people. Although there are now a range of effective programs available to early learning services and schools, many of these programs face problems and challenges recruiting and engaging families. However, these challenges can be overcome with committed school planning priorities and practices.

The present review includes research papers, such as Garbacz et al. (2017) that provide a comprehensive model of the process of how family partnerships can potentially enhance conditions to implement effective partnership programs, and in this way improve child and adolescent mental health. The review identified a range of concepts, strategies and principles that can be used to enhance family partnerships.

A key finding was that to improve the implementation of evidence-based strategies overarching community policies need to promote and emphasise the importance of working with families to support children and young people. School policies and educator attitudes to parental involvement and practices to support families emerge as important elements for successful family–education partnerships. The review also showed that universal communication strategies should be considered a necessary, but not sufficient, element of an effective family-education partnership approach.

Conclusion

This review identified evidence for the importance of strong educator-family partnerships when implementing programs to support child and adolescent mental health and wellbeing. Although the specific components that are most critical for successful family-educator partnerships have not yet been identified, based on the available evidence this review recommends the following:

- Firstly, the selection of specific programs, interventions or focus areas based on the local profile of risk and protective factors that affect the development of child and adolescent mental health problems within the community and educational setting.
- Secondly, modifiable risk factors – those risk factors that can be addressed through actions – should be the focus of any intervention. This report identified nine family and parent programs, implemented in the Australian education context, that have evidence for enhancing child and adolescent mental health.
- Thirdly, wider consideration of community and school policies and strategic priorities to ensure readiness for partnerships between educators and families. The model presented by Garbacz et al. (2017) is recommended as a comprehensive account of the domains that should be considered to enhance the readiness of learning communities and alignment with community and educational policies and programs.

- Fourthly, innovative strategies need to be evaluated to increase parent recruitment and engagement in evidence-based programs. To achieve this, education planning priorities and practices need to be aligned, and innovative and flexible approaches used to encourage parent engagement, including greater use of online and e-mediated forums.

Background

Be You sees partnering with families as a key factor in supporting positive mental health outcomes. This review summarises what is known about partnerships between families and educators, and how they work to support the mental health and wellbeing of children and young people. This review provides an overview of existing evidence that can be used by school and early learning settings to support educators to build partnerships with families.

The development of mental health problems in children and young people: why partnerships between families and educators are important

Families are the first educational setting for children, and are a major influence on the mental health and wellbeing of children and young people. As children move through the life span, –educational settings – early learning, primary and secondary schools – also become critical influences for children and youth. Building partnerships between educators and families supports communication and consistency in responses, and can assist in supporting children and young people’s mental wellbeing. Family–education partnerships have been found to have personal, social and academic benefits for students (1), families (2, 3) and educational settings, through enhanced staff retention. (4)

A 2015 survey of the mental health of Australian children and adolescents called ‘Young Minds Matter’ (5) identified that 40.5% of emotional or behavioural problems among children and young people aged 4 to 17 years were first identified by a school staff member. Research shows that effective approaches to promote mental health and wellbeing and prevent mental health problems should be prioritised, given the scale of human suffering and health, social and economic consequences of poor mental health. (6)

Prevention refers to strategies or programs that avert or delay the onset or severity of mental health problems. (7) In this review, prevention responses are classified as: universal, where they are applied to an entire population; and selective, or targeted, where they targeted groups with elevated risks. (7) The review seeks to identify strategies that are likely to benefit populations across large educational settings, but does not review highly targeted intervention or treatment strategies.

There are known modifiable risk factors in early childhood and adolescence, which contribute to the development of mental health conditions. In infants and young children, depression and anxiety is generally expressed through ‘internalising behaviours’, observed by parents and others as anxious, fearful and sad child behaviours. These behaviours may be first observed in the early learning and school settings by carers and educators. (5)

In the preschool years, during the infant and toddler stage of development, child internalising is influenced by biogenetic, parent and environmental factors. (8, 9) Early child behaviour problems and parent–child relationship difficulties in the infant and toddler stage are significant risk factors predicting child internalising problems. (9)

Observations from longitudinal life course studies lead to theoretical distinctions between child-onset and adolescent-onset pathways to youth mental health problems. Modifiable factors that influence child-onset problems include stress and trauma experiences early in the life course. These experiences can impair neurobiological development, with more severe impacts where children and young people have intense negative experiences (such as child maltreatment, peer bullying and family violence) that continue over time. (10) These early stress experiences are risk factors affecting cognitive and physical disability and the

onset of mental health problems in childhood, including the development of social–emotional skills. (11, 12)

An Australian longitudinal study has shown that the onset of depression in adolescence is influenced both by child-onset internalising problems, and also by adolescent experiences such as peer relationship problems (13), often occurring within educational settings. The emergence of these problems tends to have different developmental pathways for girls and boys, with gender differences emerging most clearly around puberty (adolescence).

Social development risk process theories suggest that behavioural development is influenced by positive social bonding and role modelling from family, school and peer groups. (14) These theories argue that characteristics in peer and family social interactions influence child and adolescent pathways to depression. Anxiety triggers include actual and perceived threats of violence and trauma. Depression is also known to be influenced by internalisation of actual and perceived social exclusion and negative social evaluation. In addition to social development risk process theories, cognitive risk process theories (which address the influence of cognitive processes in the development of mental health problems; Beck et al. emphasise thoughts as key drivers for emotional problems. (15)

Findings from longitudinal studies emphasise the importance of family partnerships in the transition to secondary school. Toumbourou et al. (13) noted that adolescent depression was influenced by adolescent protective factors including emotional competence and supportive parent and peer relationships (for girls). Letcher, Smart et al. (9) also reported that factors associated with recovery from elevated internalising symptoms included higher social competence, more positive parent and peer relations, and school adjustment. A systematic review of longitudinal research found that high and increasing depressive symptom trajectories in childhood and adolescence were predicted by: female gender; low socioeconomic status; higher stress reactivity; conduct problems; substance misuse; and problems in peer and parental relationships. (16) These findings are consistent with the idea that school programs that build social emotional competence and enhance social support may act as protective factors that assist in both prevention and recovery from child and adolescent-onset emotional problems.

As noted above, social bonding and role modelling can be risk factors for depression and may also contribute to anxiety, for example when safety is threatened and social support is lacking. Social relationship processes appear to be important in explaining the emergence of anxiety through adolescence. (17) This research suggests that the promotion of positive social interactions and encouraging peer supports within educational settings can be a positive influence for reducing adolescent anxiety symptoms.

The effect of peer relationships is also in keeping with the above theories around social development. Individuals with high levels of depression symptoms are commonly found to cluster in peer settings such as school classrooms. (18) Dishion and Tipsord (19) have argued this is partly explained by peer contagion, where “co-rumination” of pessimistic, critical and emotionally upsetting cognitions can contribute to emotional problems. Peer contagion influences are known to affect antisocial, suicidal and lifestyle risk behaviours and need to be monitored and managed in peer interventions and school and community settings. (19)

The above findings, summarised from longitudinal studies, identify that there are different developmental settings (e.g. family, early learning, primary and secondary school) that influence child internalising behaviours and child and adolescent anxiety and depression. This report looked at different settings in order to organise the existing evidence and highlight gaps where there may be prevention opportunities.

What is meant by partnerships between families and educators and how do they influence children and young people?

Family partnerships in the education context refer to “collaborative relationships between people who agree to share responsibility and work together towards a common goal. Each person is valued and thought of as equal. They contribute their own views, skills and knowledge. Everyone communicates openly and decisions are made together. Effective partnerships are based on mutual trust and respect, and shared responsibility for children and young people’s education”. (20) In this report, ‘families’ refers to the broad range of people that play a role in housing and caring for children and young people.

Given that risk factors for child and adolescent anxiety and depression are experienced throughout the early childhood and school years, it is logical that partnerships between families and schools should form a component of prevention responses. Although family partnerships are widely recognised as important for children’s education, schools and early learning services typically find them difficult to implement.

While the current report examines family partnerships for child and adolescent mental health and wellbeing, it is important to note that there is considerable research examining the effects of such partnerships on educational outcomes. Some of the social science theories and frameworks used in the research literature to describe the influence of family partnerships on educational outcomes are outlined below.

Bronfenbrenner’s socio-ecological theory points out that child mental health and education outcomes are influenced by a broad range of family, school and community factors. As relevant to family-school partnerships, this theory suggests that relationships between parents and teachers and also enhanced home and school supports each contribute to positive student mental health and education outcomes. (21)

Social capital theories, as outlined by Bourdieu, Coleman, and Lareau, (22) recognise that family–school partnerships offer opportunities for individuals and families to increase their access to social capital, which includes resources, support and networks. School partnerships that support and link families to resources may lead to reductions in family stressors, both economic and social, that can otherwise exacerbate child-onset and adolescent-onset risk processes. As a result, the theory suggests there are opportunities for family–school partnerships to enhance social equity or supporting diverse communities.

Epstein outlined six categories of family involvement activity in school partnerships: 1) providing access to basic needs for parenting such as material support, offering a means of reducing family stress and related child risk processes; 2) communication between schools and homes about children’s education; 3) offering potential for families volunteering time to contribute in ways that assist education, including attending school events; 4) learning at home to promote educational objectives; 5) decision making on policy and management of school programs; and 6) community collaborations for resources and services to support education. (23) Later sections of this report describe how these six activities may be relevant to promoting children’s mental health.

One model that has been used to look at the process of improving community initiatives such as family-school partnerships is ‘community readiness theory’. Community readiness theory (24) recognises that school communities are at different stages of readiness in engaging family–school partnerships. School communities at the highest level of readiness have in place policies, procedures and systems that enable strategic partnership actions to be agreed and measurably achieved. School communities at a low level of readiness have low parent involvement and participation. The theory argues that school “champions” can advance school readiness by providing persuasive information to overcome objections and convince others.

The sections that follow give a brief overview of the systematic reviews and evidence summaries that have examined the effects of family–school partnerships on educational outcomes. This information is included as it points to potential mechanisms that promote partnership, given that direct studies focusing on family–education partnerships and their impacts on mental health and wellbeing are limited.

A 2010 systematic review by Reese, Sparks et al. (25) included a total of 11 studies that had evaluated the effects of parent–child reading interventions. Overall, these interventions were found to be effective in improving child reading and other educational outcomes. Most evaluations were conducted from the 1970s with middle class families in the United States (US) using a “dialogic reading” program. This involved parents being trained in around four, 30-minute sessions to read books with children using a format that taught the child to read to the parent. Parents were instructed to encourage their child to learn the words and sentences of the story and to discuss the story plot. Interventions were less effective when parents had low education levels.

Sénéchal and Young (26) reported a meta-analysis of 16 evaluation studies and found that parent involvement had a positive effect on children’s reading skills. Training parents to tutor their children using specific exercises was the most effective strategy. The specific tutoring methods that parents were taught included teaching children: the alphabet, reading one-syllable words, recognising and sounding parts of multi-syllable words, and combining syllables to sound out new words. Training parents to listen to their children read books was also associated with significant benefits.

Much of the existing research on family–school partnerships has focused on how educators can work effectively with parents to overcome child educational problems. Sheridan and Wheeler (21) outlined one model, called conjoint behavioural consultation, involving a behavioural expert (e.g. school psychologist) providing guidance to the teacher and parent, and a focus on enhancing a student’s social-emotional competencies and learning skills, via family–school partnerships.

Studies conducted in low-income countries can provide insights into how educational partnerships can work with disadvantaged families. Nores and Barnett (27) completed a review of international studies that used quasi-experimental or randomised experimental designs to evaluate the educational benefit of interventions involving pre-schoolers. The authors found that children from different contexts and countries received substantial benefits from early childhood interventions. Preschool interventions that had an educational or stimulation component showed the greatest benefits for child cognitive development (e.g. improved child intelligence). This review did not provide a clear summary of what was implemented in each intervention. The largest improvement in child cognitive skills was associated with an intervention in the Philippines that included a mixture of health and preschool education services. (28) An intervention in the Kathua district in India found that non-formal preschool education (e.g. play groups, parent home reading) resulted in child cognitive improvements. (29)

The UNICEF Getting Ready for School program was designed for regions with no preschool program where parents had at least primary school literacy levels. Parents with children that were to enrol in primary school in the following year participated in nine sessions (one per month) generally held at a school (outside of regular school hours). Parents were taught to tutor their children at home to promote child academic learning and skill development. Activities included things like: recognising letters, numbers and words; storytelling; and writing at levels appropriate to the child’s age. Children were also taught skills that are needed at school such as counting, taking turns, and following instructions (30, p.32). In the first year of follow up, implementations in Bangladesh and the Congo were shown to have significant benefits (31, p. 29 onwards), while effects were not evident in Tajikistan due to poor implementation (31, p. 42 onwards). In the second year, evaluation findings were positive in Tajikistan, suggesting the initial implementation problems had been resolved. (30)

In overview, there is reasonable evidence that family partnerships can play an important role in preparing children for school and in improving educational outcomes. It is feasible to target partnership activities to address preschool needs in disadvantaged contexts. The methods used to train parents are also important, with some methods more effective than others. (25) The following sections of this report review whether parent–school partnership interventions can also reduce mental health problems and encourage wellbeing in children and young people.

Methods

Peer-reviewed literature






To be included in this review, interventions had to have been evaluated via peer-reviewed literature. The strategy used to search for papers in peer-reviewed journals is summarised in Appendix 1. In total, six literature reviews were identified that met the inclusion criteria. A summary table of the included literature review papers is reported in Appendix 3, Table 1.

Grey literature

To identify relevant programs we also conducted a concurrent search of grey literature. This involved formally searching Google Scholar and national and international evidence-based program repositories, as listed in Appendices 1 and 2.

Assessing the quality of the evidence

To rate the evidence for programs and services, we used the ‘thumbs’ rating method that has been used in previous Beyond Blue reports: (32)

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|  | there are at least two good studies showing significant effects |
|  | three studies showing significant effects |
|  | four or more studies showing significant effects |
|  | there is consistent evidence showing that the intervention does not work |
|  | there is not enough evidence to say whether or not the approach works |

Interventions were organised to identify the settings relevant to preschool, primary and secondary school. Outcome measures were organised to identify reductions in depression, suicidality and/or anxiety symptoms and disorders. We coded educational indicators as secondary outcomes.

Findings

What strategies to build and maintain partnerships between families and educators have been effective in supporting mental health and wellbeing in children and young people?

While a number of trials have demonstrated evidence that partnerships between families and educators have been effective in reducing mental health problems in children and young people, there has not been enough research to be confident of which strategies are the most effective. Given the paucity of general evidence, we have drawn on the main constructs, principles and strategies emphasised in literature reviews and also described how these apply in evidence-based programs implemented within education contexts. Table 1 lists the main partnership strategies and principles emphasised in literature reviews, with relevant reviews summarised briefly in Appendix 3.

Table 1 identifies constructs, strategies and principles that emerge from the available literature that can guide family-educator partnerships in different educational settings. The information summarised in Table 1 is presented in more detail in the discussion section.

The papers by Garbacz et al. and Bruns et al. noted that while the partnership strategies listed in Table 1 provide relevant foundations, in order to change mental health outcomes for children and young people, it was important to select and carefully implement evidence-based programs. (33) (34) Table 2 summarises information for family programs that have been implemented in Australian educational settings and evaluated for child and adolescent mental health outcomes. The thumbs rating method (32), was used to indicate the evidence for impacts on child and adolescent mental health.

Table 2 summarises nine programs that were identified through this review's search strategy that achieved improvements in child and adolescent mental health through family service delivery in a preschool, primary or secondary school education context. Further detail on each of these programs is presented in Appendix 4. The following describes how the features of these programs relate to the partnership strategies and principles summarised in Table 1.

There are a number of other Australian programs that could be included in Table 2, if given further evaluation support. For example, *smalltalk* is a program that operates in early childhood services (the Maternal and Child Health service in Victoria, and supported playgroups). Through the program, families from socio-economically disadvantaged backgrounds are invited to attend a facilitator-led parenting program. The program has been tested in a cluster randomised controlled trial (RCT), with results showing improvements in parent-child interactions, the quality of the home learning environment, and children's language and social skills. (35) Future follow-up studies are in process to evaluate child mental health impacts.

Table 1. Main partnership strategies and principles emphasised in literature reviews

| Reference Details | Lessons for partnership strategies and principles |
|---|--|
| Castañeda et al. (2012) Outlines community readiness theory. | Some educational communities are at a low level of readiness to engage family partnerships, indicated by low parent involvement and participation. To move from low, one or more “champions” are required within the community to provide persuasive information, to overcome objections and convince others. |
| Garbacz et al. (2017) Narrative review. | Provides a model of family engagement listing the conditions, context variables and mechanisms that lead to child educational and social-emotional outcomes (see Fig 1 under Discussion section). |
| McDowall, Taumoepeau, and Schaughency (2017). | Teacher attitudes to parental involvement are a critical element of successful family–educator partnerships. Where teachers are seen by families to genuinely value engagement with them and are approachable and flexible, partnerships are more likely to be more successful. Adapting language to ensure communication with parents and carers is an important element in effective engagement. |
| Bruns et al. (2016) Narrative review. | A public health approach is important. In selecting effective programs, alignment within the educational setting should include consideration of the local profile of risk and protective factors that affect the development of child and adolescent mental health problems within that specific educational community. |
| Marx et al, (2017) Cochrane review. | School policies affect family capacity to manage adolescent mental health and wellbeing. This review found that later school start times improved adolescent sleep (six studies) and mental health (one study). |
| Yamauchi et al., (2017) | Providing basic information to all parents and carers through online and other methods can contribute to universal prevention. All families can benefit from basic information on setting boundaries for reasonable and consistent expectations, positive and regular family communication and engagement. |
| Lochman et al., (2017) | To maximise family engagement in effective programs, it is important to overcome barriers and minimise burdens. This can include options such as online delivery mechanisms, flexible timing and locations and resources to support attendance at critical program sessions, such as catering and child-minding. |
| Sanchez et al. (2018) | Selective (targeted) family programs may require rigorous follow-up and financial incentives for participation and completion of evaluations. |

Table 2. Family school partnership strategies used in different Australian educational settings that have evidence for improving mental health in children and young people

| Setting / Partnership model | Rating | Key outcome evidence and sources | Partnership strategy | Issues and future challenges |
|---|--------|--|--|---|
| Home visiting. Preschool. | 👍👍 S | Child mental health improved in 3 studies. | Preschool services refer vulnerable families. | < 5% of target families received interventions. Best model unclear. |
| Exploring Together. Preschool, Primary. | 👍 | Pre-post intervention improvements in 3 studies. Small samples no control group. | Educators invite families into facilitated sessions. Teachers are involved. | On average, < 5% of families in each school participated. |
| Triple P Parent Education. Preschool, Primary & Secondary | ? | Positive effects on internalising in 1 study. | Staff in educational settings are trained to deliver a multi-level program. | Level 1 offers 100% information coverage for parents. Unclear what level required to improve mental health. |
| Tuning into Kids/Teens. Pre-school, primary & secondary. | ? | Positive effects in reducing child internalising in 1 study. | Schools invited families to parent education events in community centres. | On average, < 10% of parents in each school participated. |
| Strengthening Family Connections. Primary school. | 👍👍 S | Positive effects in 3 trials, 1 in Australia. | Schools invite families and host sessions. Teachers participate. | On average, < 5% of families in each school participated. |
| Families and Schools Together (FAST). Primary school. | 👍👍 S | Positive effects in 3 trials. | Schools invite families and host sessions. Teachers participate. | On average, < 5% of families in each school participated. |
| Coping Cat. Primary school. | 👍👍👍 | Meta-analysis showed effects on anxiety disorders. | A program for children with high anxiety that can be delivered by school staff, guided by a manual. | Targeted high child mental health symptoms. Whole school impacts are unknown. |
| Resilient Families. Secondary school. | ? S | One trial found reductions in depression where families participated. | School staff receive training, then implement a multi-level program and review school family policies. | Universal components (book, student homework) delivered to 100% of parents, 10% of parents attended parenting events. |

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| Resourceful Adolescent Program. Secondary School. | 👍 | Positive effects in reducing adolescent depression in two trials. | Includes student curricula and parent interventions implemented by school staff. | Universal components delivered to 100% of parents. Parent groups may not benefit beyond the student curricula. |
| 👍 At least 2 good studies showing evidence of effects; 👍👍 3 studies showing positive effects; 👍👍👍 4 or more evaluations showing positive effects; ? 1 study showed effects, more studies needed. S – Evidence supporting educational outcomes (see Appendix 4). | | | | |

Gaps in the evidence

We examined the settings and age groups where interventions have been evaluated. Table 1 revealed there are few interventions that reach 100% of families. Increasing the population reach of parent and family interventions is therefore an important challenge in efforts to encourage family–educator partnerships.

There have been no evaluation studies comparing different family school partnership strategies. One review stated: “Future evaluation research is required to better understand the factors that explain variation in program outcomes (e.g. service delivery staff and setting, implementation fidelity monitoring). Variations in programs and implementation models should be competitively evaluated to distil critical components and superior models.” (8) Given that risk and protective factors within the family and school are important in the development of child and adolescent mental health problems, it is important to further evaluate parent and family interventions.

Given the rapid proliferation of internet usage, prevention researchers have advocated for the use of web-based technologies to increase the uptake of preventive interventions (36). This is supported by the fact that the 2016 ABS data (37) indicated that 97% of households with children aged under 15 have internet access.

Parents in three separate surveys – including parents of preschoolers (38); primary school-aged children (39) and teens (40) – have indicated a preference for technology-assisted modes of receiving parenting information for supporting their child’s mental health. Despite this, a recent systematic review of technology-assisted parenting interventions for the prevention of child mental health problems found only four out of 25 included RCTs evaluated programs that specifically targeted internalising problems. (41) They were a selective prevention approach in preschool children (42), an indicated prevention approach in middle-school children (43), and two studies in adolescents, both universal. (44, 45) At short-term follow-up, two of the four programs found significant positive impacts on child internalising outcomes when a selective or indicated approach was used (i.e. for children with increased risk or elevated symptoms). Nonetheless, the two universal programs targeting parents of adolescents found significant effects on parenting risk and protective factors, suggesting the potential for longer-term benefits for adolescent internalising outcomes.

Given the scalability of technology-assisted programs, and the low demand on school resources in their delivery, emerging evidence indicates that such programs warrant consideration as potential strategies to improve family-school partnerships for child mental health, perhaps in a multi-level approach. (46, 47)

Discussion

This review addresses the question: *What strategies to build and maintain partnerships between families and educators have been effective in supporting mental health and wellbeing in children and young people?*

The review found that currently, no research studies have identified the specific components of family partnerships that are the most critical for enhancing mental health and wellbeing in children and young people. As such, there is limited evidence to answer the review question.

Table 1 summarises the major constructs and partnership strategies and principles identified in the included literature reviews. Evidence from Australian studies showing that family programs implemented in educational contexts can enhance mental health and wellbeing for children and young people is provided in Table 2.

Previous reviews of existing research identify a significant body of evidence evaluating the impact of family-school partnerships on educational and behavioural outcomes in early childhood, primary and secondary settings. (33) While much of the research regarding educational outcomes is cross-sectional and correlational, the smaller literature regarding behavioural outcomes provides more consistent evidence of the importance of parent involvement. Most of this evidence has examined child externalising behaviours. However, there is growing support for parental involvement in interventions targeting internalising behaviours. (34, 48)

Garbacz, Herman et al. (33) proposed the model of family engagement in education detailed in Figure 1, and noted support for models, frameworks and programs that recognise the need for a consistent and integrated approach in working with children and adolescents in school and family partnerships. While other settings can be relevant for specific populations, the family and school contexts provide the greatest potential scope for universal and early intervention initiatives, with opportunities for capturing the majority of the target population. The review found that the development of partnerships can offer recognition of families and school staff as co-equal partners, planning and working together to promote positive child outcomes through a strength-based approach that delivers consistency in messages to the child or children. Sanchez, Cornacchio et al. (49) noted that family partnerships were crucial for the success of any intervention into student outcomes, whether relating to educational outcomes or social and emotional health, and successful partnerships between school and families are vital for ensuring that any effects endure.

Figure 1. Conceptual model of family engagement conditions, variables, mechanisms and outcomes (reproduced from Garbacz et al. (33))

| Conditions | Context variables | Core variables | Mechanisms | Outcomes: Short term | Outcomes: Long term |
|---|--|---|--|---|---|
| <ul style="list-style-type: none"> State and federal emphasis on family engagement to support children | <ul style="list-style-type: none"> School atmosphere to support family engagement Teacher/staff interactions with parents Effective communication mechanisms District and school investment in family engagement to support children Well-defined role for working with parents in the district and school School and home systems to support student academics and behaviour Data systems to proactively screen and monitor student academics and behaviour, and family engagement | <ul style="list-style-type: none"> Family use of empirically-validated behaviour and academic practices School staff use of empirically-validated academic & behaviour systems & practices Family engagement in school academic & behaviour systems Coordination across home & school systems Support and assistance to parents for implementing practices Collaborative interactions among families & school staff Engaged parent-child and teacher-child interactions Family & school staff use of proactive strategies | <ul style="list-style-type: none"> Child regulation Children's peer relationships Home-school connection Parent and teacher efficacy Parent-teacher relationships Teacher and parent beliefs and expectations Parent-child relationship Teacher-child relationship | <ul style="list-style-type: none"> Student engagement Family engagement Teacher engagement | <ul style="list-style-type: none"> Reduction in problem behaviour Improved social and adaptive skills Improved academic performance Reduction in school dropout Improved school attendance |

The first element in the Garbacz, Herman et al. model (Figure 1), (33) Conditions, refers to the overarching community policies needed to promote and emphasise the importance of working with families to support children. Community policies are likely to enhance readiness where they have an explicit public emphasis on family engagement, and the critical role that families can and do play in the development of children and young people. Policies of this type are likely to have most impact where they are reinforced across universal settings, including parental and child health, early education, and primary and secondary schools. National initiatives such as Be You and public communications that emphasise the role of families as the first educators are helpful in setting this expectation that families are and should be engaged across all educational settings.

While multi-component programs are attractive (see Triple P, Resilient Families, Table 1), the research suggests that they can be challenging to implement, requiring an increase in resources particularly staff time and training. Smolkowski et al. described a comprehensive multi-level family program that was trialled in public schools in Oregon, US. (50) Although this program achieved improvements in early adolescent mental health, significant challenges were faced due to an economic downturn that resulted in staff funding cuts.

It is important to remain aware that educational settings can contribute important benefits through school policies that affect the capacity of families to manage child and adolescent mental health and wellbeing. A 2017 Cochrane systematic review by Marx et al. found that later school start time policies improved adolescent sleep (six studies) and mental health (one study). (51)

The second element in the Garbacz, Herman et al. (33) model (Context variables) refers to those aspects of the educational context that are modifiable at the local level, through policies and practices defined and implemented by the educational organisation. These include the atmosphere and interactions between staff with parents; effective two-way communication and defined roles for parents; and investment in systems and resources that promote and facilitate family engagement.

Of particular note for educational partnerships are teacher attitudes to parental involvement. Such attitudes are a critical element of successful family–school partnerships to address mental health, as noted by McDowall, Taumoepeau et al. (52) Partnerships are more likely to be successful where teachers that are seen by parents to genuinely value engagement with them and are approachable and flexible. Adapting language to ensure communication with parents is an important element in effective engagement. Adjustments of this type by school staff are particularly important for families facing barriers to school engagement, such as their own difficult school experiences, perceived inadequacies, or fear of public sector agencies and the potential use of data. As such, it is critical to ensure teacher training and professional development that focuses on understanding the importance of the role of parents, building capacity for empathy and adapting communications to genuinely engage with parents in a planned and coherent support program.

Core variables (the third element in Figure 1) include the application of positive, caring and consistent evidence-based behavioural and academic practices in both family and educational contexts, which provide children and young people with a consistent set of rules and guidelines against which to develop their own standards. In order to achieve this consistency, coordinated communication, alignment of expectations and engagement between families and children, between educational staff and children, and between families and educational staff, is critical. As noted in the Garbacz, Herman et al. model (33) such alignment is likely to contribute to both behavioural and education outcomes.

This review also identified evidence for a range of different types of active and structured interventions in varied age periods and settings (see Table 2). The findings suggest that future program investment and evaluation should seek to assess the specific organisational methods and implementation strategies that

maximise the benefits of effective programs, as well as the elements that are most critical to successful family–education partnerships, and whether these differ by age or setting.

Of importance, the findings suggest that any local intervention should be targeted to the relevant needs and context of the school. Identifying the most relevant local issues, via a needs analysis processes, is a critical first step, and is best informed through use of local data. Once key local issues have been identified and prioritised, Bruns, Duong et al. (34) noted that a public health approach, including tiered intervention delivery, was the next important consideration. This was particularly relevant when considering resource allocation. This could enable appropriate resourcing of universal supports and structures that promote wellbeing and prevent harm, provision of selected or targeted interventions for those identified as being at risk, and intensive interventions for those at greatest need.

If family partnerships are to result in the improvements for child and adolescent mental health and behaviour problems detailed in the outcomes columns in Figure 1, then they must support evidence-based program implementation, with key messages reinforced across the classroom and at home. Table 2 identifies nine family programs for which clearly structured program manuals and/or training to guide consistent program delivery are available, which may be implemented in Australian schools, and which have evidence for improving child and adolescent mental health. Although there are now a range of effective programs available to schools, many of these face problems recruiting and engaging families. These problems can be overcome if school planning priorities and practices are aligned with solving them. A key consideration raised in models of family–school partnership (see Figure 1) is the alignment of effective programs and practices within the broader school strategies and activities. (33)

In line with readiness theory and Garbacz, Herman et al. (33) who stressed the importance of the school atmosphere and educational staff interactions, several of the programs listed in Table 2 – such as Strengthening Families, Families and Schools Together, and Resilient Families – included activities to train and prepare school staff for family partnership work. These elements of preparation are critical and need to include consideration of how any intervention or approach will fit with the identified needs, culture and resources within the school.

Many of the programs listed in Table 2 also targeted specific risk and protective factors known to be relevant to child and adolescent mental health, as described in the introduction. In this context, it is important that schools complete needs analyses to understand the specific profile of risk and protective factors that impact child and adolescent mental health in their local school context, so that limited resources and energy can be directed to the most relevant areas.

For example, in some schools, family economic stress may be a contributing factor to higher levels of child-onset problems. This may mean that prioritisation of material support services and strategies focused on more immediate and tangible outcomes, such as breakfast programs or resourced homework clubs, could help reduce the impact of family economic stress for children and support their engagement in educational settings. In most schools, universally targeted family management approaches and socio-emotional competence training will tend to offer benefits for child and adolescent mental health. Providing basic information to parents through online and other methods about issues such as setting boundaries for their child, reasonable and consistent expectations, positive and regular family communication, engagement during family meals and shared activities, and authoritative parenting styles, are strategies that result in positive child and adolescent mental health outcomes, the research suggests. (22)

Lastly, in order to facilitate family engagement in effective programs, the research shows that it is important to minimise the burden of involvement and consider flexible mechanisms (53). This can include options such as online delivery mechanisms and flexible timing, locations and resources to support family attendance at critical program sessions, for example by providing catering and child-minding. Sanchez, Cornacchio (49) noted that in some cases, parental engagement also required rigorous follow-up and

financial incentives for participation and completion of outcome tools. Passive parental engagement strategies, such as newsletters or emails, are less likely to independently build partnerships, although they can complement and support more active strategies such as parental training interventions. As such, the findings suggest that universal communication strategies should be considered a necessary, but not sufficient, element of a family–educator partnership approach.

Conclusion

This review identified evidence showing the importance of strong educator–family partnerships when implementing programs to support child and adolescent mental health and wellbeing. Although there is limited evidence about which specific components are most critical for successful family–educator partnerships, based on the findings of this review (including a number of intervention studies), the following strategies are recommended.

Firstly, in selecting effective programs or interventions to be implemented within education settings, planning should include consideration of the local profile of risk and protective factors that affect the development of child and adolescent mental health problems within the specific learning community. This enables any approach to be tailored to relevant local factors.

Secondly, modifiable risk factors – those risk factors that can be changed – should be the focus of any intervention. This report summarises what is known about the developmental processes that lead to child and adolescent mental health problems, identifying both child-onset and adolescent-onset pathways to mental ill health. Modifiable risk processes that can be addressed through actions within family–education partnerships were identified. This report identified nine family and parent programs, implemented in the Australian education context, that have evidence for enhancing child and adolescent mental health.

Thirdly, in order to integrate effective programs in their entirety or to integrate components of evidence-based practices, the current review suggested the importance of broad consideration of community and organisational (school or early learning service) policies and strategic priorities to ensure they are at a stage where they are ready to implement family-education partnerships. The model presented by Garbacz et al. (see Figure 1) is recommended as a comprehensive outline of the factors that should be considered to enhance implementation readiness. This model emphasises the importance of aligning with broader community and educational policies and programs. (33)

Fourthly, innovative strategies need to be designed and evaluated to increase parent recruitment and engagement. Although there are now a range of effective programs available for education settings, many face problems and challenges recruiting and engaging families (Table 2). To increase parent recruitment and engagement, education planning priorities and practices need to be aligned, and innovative and flexible approaches must be used to encourage parent engagement. Such innovation should include greater use of online and e-mediated forums.

Conflict of interest disclosures

Professor Toumbourou has intellectual property management responsibility for the Resilient Families program. Associate Professor Havighurst has intellectual property management responsibility for the Tuning into Kids/ Teens program. Dr Keri Little is a Deakin joint appointment partly based at Barwon Child Youth and Family, the agency that manages the intellectual property for the Strengthening Families program in Australia (known as Strengthening Family Connections).

References

1. Henderson A, Mapp K. A new wave of evidence: Impact of school, family, and community connections on student achievement. Austin, TX: SEDL; 2002.
2. Delgado-Gaitan C. Involving parents in the schools: A process of empowerment. *American Journal of Education*. 1991;100(1):20-46.
3. Price-Mitchell M. Boundary dynamics: Implications for building parent–school partnerships. *School Community Journal*. 2009;19(2):9-26.
4. Allensworth E, Ponisciak S, Mazzeo C. The schools teachers leave: Teacher mobility in Chicago Public Schools. Chicago, IL: Consortium on Chicago School Research. , 2009.
5. Lawrence D, Johnson S, Hafekost J, Boterhoven De Haan K, Sawyer MG, Ainley J, et al. The Mental Health of Children and Adolescents. Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing. Department of Health; Canberra, Australia: 2015.
6. McDaid D, Hewlett E, Park A-L. Understanding effective approaches to promoting mental health and preventing mental illness. OECD Health, 2017.
7. National Research Council and Institute of Medicine. Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities. Washington, DC: 2009.
8. Skvarc D, Varcoe J, Reavley N, Rowland B, Jorm A, Toumbourou J. Depression and anxiety programs for children and young people. An Evidence Check rapid review brokered by the Sax Institute for beyondblue. Sydney: Sax Institute, 2018.
9. Letcher P, Smart D, Sanson A, Toumbourou JW. Psychosocial precursors and correlates of differing internalizing trajectories from 3 to 15 years. *Social Development*. 2009;18(3):618-46.
10. Middlebrooks JS, Audage NC. The Effects of Childhood Stress on Health Across the Lifespan. Atlanta (GA): 2008.
11. Center on the Developing Child. The Foundations of Lifelong Health Are Built in Early Childhood. 2010.
12. Shonkoff J, Boyce W, McEwen B. Neuroscience, molecular biology, and the childhood roots of health disparities: building a new framework for health promotion and disease prevention. *JAMA*. 2009;301(21):2252-9.
13. Toumbourou JW, Williams I, Letcher P, Sanson A, Smart D. Developmental trajectories of internalising behaviour in the prediction of adolescent depressive symptoms. *Australian Journal of Psychology*. 2011;63(4):214-23.
14. Catalano R, Hawkins J. The social development model: A theory of antisocial behaviour. In: Hawkins J, editor. *Delinquency and crime: Current theories*. New York, NY: Cambridge University Press; 1996. p. 149-97.
15. Beck A, Rush A, Shaw B, Emery G. *Cognitive Therapy of Depression*: Guildford Press; 1987.
16. Shore L, Toumbourou JW, Lewis AJ, Kremer P. Longitudinal trajectories of child and adolescent depressive symptoms and their predictors – a systematic review and meta-analysis. *Review: Child and Adolescent Mental Health*. 2017;23(2):107-20.

17. Letcher P, Sanson A, Smart D, Toumbourou JW. Precursors and correlates of anxiety trajectories from late childhood to late adolescence. *Journal of Clinical Child and Adolescent Psychology*. 2012;41:417-32.
18. Buttigieg JP, Shortt AL, Slaviero TM, Hutchinson D, Kremer P, Toumbourou JW. A longitudinal evaluation of the Resilient Families randomized trial to prevent early adolescent depressive symptoms. *Journal of adolescence*. 2015;44:204-13.
19. Dishion TJ, Tipsord JM. Peer contagion in child and adolescent social and emotional development. . *Annual Review Psychology*. 2011;62:189-214.
20. Beyond Blue. What partnerships look like. Online learning resource: Beyond Blue; 2019. Available from: <https://beyou.edu.au/learn/family-partnerships/partner/early-learning/what-partnerships-look-like/-/id/5b7c14a875ff14436fc41727>.
21. Sheridan SM, Wheeler LA. Building strong family–school partnerships: transitioning from basic findings to possible practices. *Family Relations*. 2017;66:670-83.
22. Yamauchi LA, Ponte E, Ratliffe KT, Traynor K. Theoretical and conceptual frameworks used in research on family–school partnerships. 2017;27(29):9-34.
23. Epstein J. *School, Family, and Community Partnerships: Preparing Educators and Improving Schools*. Philadelphia: Westview Press, 2011.
24. Castañeda SF, Holscher J, Mumman MK, Salgado H, Keir KB, Foster-Fishman PG, et al. Progress in Community Health Partnerships: Research, Education, and Action. *Progress in Community Health Partnerships: Research, Education, and Action*. 2012;6(2):219-26.
25. Reese E, Sparks A, Leyva D. A Review of parent interventions for preschool children’s language and emergent literacy. *Journal of Early Childhood Literacy*. 2010;10(1):97-117.
26. Sénéchal M, Young L. The Effect of Family Literacy Interventions on Children’s Acquisition of Reading From Kindergarten to Grade 3: A Meta-Analytic Review. *Review of Educational Research*. 2008;78(4):880-907.
27. Nores M, Barnett WS. Benefits of early childhood interventions across the world: (Under) Investing in the very young. *Economics of Education Review*. 2010;29:271-82.
28. Armeccin G, Behrman J, Duazo P, Ghuman S, Gultiano S, King E, et al. *Early childhood development through an integrated program: Evidence from the Philippines*. Washington, D.C.: The World Bank. , 2006.
29. Arora S, Bharti S, Sharma S. Comparative study of cognitive development of ICDS and non-ICDS children (3–6 years). . *Journal of Human Ecology*. 2007;22(3):201-4.
30. Spier E, Britto P, Pigott T, Roehlkapartain E, McCarthy M, Kidron Y, et al. Parental, community and familial support interventions to improve children's literacy in developing countries: a systematic review. London: International Initiative for Impact Evaluation (3ie). 2016.
31. UNICEF. *Getting Ready for School: A child-to-child approach: Programme Evaluation for Year One, Grade One Outcomes*. New York: United Nations Children’s Fund, 2011.
32. Jorm A, Allen N, Morgan A, Ryan S, Purcell R. *A guide to what works for depression*. Melbourne: 2013.
33. Garbacz SA, Herman KC, Thompson AM, Reinke WM. Family engagement in education and intervention: Implementation and evaluation to maximize family, school, and student outcomes. *Journal of school psychology*. 2017;100(62):1-10.

34. Bruns EJ, Duong MT, Lyon AR, Pullmann MD, Cook CR, Cheney D, et al. Fostering SMART partnerships to develop an effective continuum of behavioral health services and supports in schools. *The American Journal of Orthopsychiatry*. 2016;86(2):156-70.
35. Hackworth N, Berthelsen D, Matthews J, Trajanovska M, Yu M, Nicholson J. Impact of a brief group intervention to enhance parenting and the home learning environment for children aged 6-36 months: a cluster randomised controlled trial. *Prevention Science*. 2017;18:337-49.
36. Cuijpers P, van Straten A, Warmerdam L, van Rooy M. Recruiting participants for interventions to prevent the onset of depressive disorders: Possible ways to increase participation rates. *BMC Health Services Research*. 2010;10(1):181.
37. Australian Bureau of Statistics. Catalogue 8146.0 - Household Use of Information Technology, Australia, 2014-15. . Canberra, Australia: Australian Bureau of Statistics, 2016.
38. Metzler CW, Sanders MR, Rusby JC, Crowley RN. Using Consumer Preference Information to Increase the Reach and Impact of Media-Based Parenting Interventions in a Public Health Approach to Parenting Support. . *Behaviour Therapy*. 2012;43(2):257-70.
39. Sim WH, Jones AE, Jorm AF, Yap MBH. The Impact and Reach of Web-Based Parenting Guidelines to Prevent Childhood Depression and Anxiety: Findings from Online User Surveys. *Mental Health Prevention*. 2017;7:1-7.
40. Yap MBH, Martin PD, Jorm AF. Online parenting guidelines to prevent adolescent depression and anxiety: Evaluating user characteristics and usefulness. *Early Intervention Psychiatry*. 2017:1-8.
41. Hansen A, Broomfield G, Yap M. A systematic review of technology-assisted parenting programs for mental health problems in youth aged 0–18 years: Applicability to underserved Australian communities. 2019; *Australian Journal of Psychology* (In press).
42. Morgan AJ, Rapee RM, Salim A, Goharpey N, Tamir E, McLellan LF, et al. Internet-delivered parenting program for prevention and early intervention of anxiety problems in young children: Randomized controlled trial. . *Journal of the American Academy of Child & Adolescent Psychiatry*. 2017;56(5):417-25.
43. Khanna MS, Carper MM, Harris MS, Kendall PC. Web-based parent-training for parents of youth with impairment from anxiety. *Evidence-Based Practice in Child and Adolescent Mental Health*. 2017;2(1):43-53.
44. Cardamone-breen M, Jorm A, Lawrence K, Rapee R, MacKinnon A, Yap M. A single-session, web-based parenting intervention to prevent adolescent depression and anxiety disorders: Randomized controlled trial. *Journal of Medical Internet Research*. 2018;20(4):e148.
45. Yap M, Mahtani S, Rapee R, Nicolas C, Lawrence K, MacKinnon A, et al. A tailored web-based intervention to improve parenting risk and protective factors for adolescent depression and anxiety problems: Postintervention findings from a randomized controlled trial. *Journal of Medical Internet Research*. 2018;20(1):e17.
46. Sanders MR. Triple P-Positive Parenting Program as a public health approach to strengthening parenting. *Journal of Family Psychology*. 2008;22(4):506-17.
47. Yap MBH, Lawrence KA, Rapee RM, Cardamone-Breen MC, Green JM, Jorm AF. Partners in Parenting: A multi-level web-based approach to support parents in prevention and early intervention for adolescent depression and anxiety. *Journal of Medical Internet Research in Mental Health*. 2017;4(4):e59.

48. Sheridan SM, Witte AL, Holmes SR, Coutts MJ, Dent AL, Kunz GM, et al. A randomized trial examining the effects of Conjoint Behavioral Consultation in rural schools: Student outcomes and the mediating role of the teacher–parent relationship. *Journal Of School Psychology*. 2017;61(33-53).
49. Sanchez AL, Cornacchio D, Poznanski B, Golik AM, Chou T, Comer JS. The effectiveness of school-based mental health services for elementary-aged children: A meta-analysis. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2018;57(3):153-65.
50. Smolkowski K, Seeley JR, Gau JM, Dishion TJ, Stormshak EA, Moore KJ, et al. Effectiveness evaluation of the Positive Family Support intervention: A three-tiered public health delivery model for middle schools. *Journal of School Psychology*. 2017;62:103-25.
51. Marx R, Tanner-Smith EE, Davison CM, Ufholz LA, Freeman J, Shankar R, et al. Later school start times for supporting the education, health, and well-being of high school students. *Cochrane Database of Systematic Reviews*. 2017 (7).
52. McDowall PS, Taumoepeau M, Schaughency E. Parent involvement in beginning primary school: Correlates and changes in involvement across the first two years of school in a New Zealand sample. *Journal Of School Psychology*. 2017;62(11-31).
53. Lochman JE, Boxmeyer CL, Jones S, Qu L, Ewoldsen D, Nelson III WM. Testing the feasibility of a briefer school-based preventive intervention with aggressive children: A hybrid intervention with face-to-face and internet components. *Journal Of School Psychology*. 2017;62:33-50.
54. Jorm AF, Allen N, Morgan A, Ryan S, Purcell R. A guide to what works for depression: 2nd edition. Melbourne, Australia: beyondblue, 2013.
55. Langford R, Bonell C, Jones H, Pouliou T, Murphy S, Waters E, et al. The WHO Health Promoting School framework for improving the health and well-being of students and their academic achievement. *Cochrane Database of Systematic Reviews Issue 4 Art No: CD008958*. 2014.
56. Olds D, Kitzman H, Hanks C, Cole R, Anson E, Sidora-Arcoleo K, et al. Effects of Nurse Home Visiting on Maternal and Child Functioning: Age Nine Follow-up of a Randomized Trial. *Pediatrics*. 2007;120:e832-45.
57. Bierman K, Heinrichs B, Welsh J, Nix R, Gest S. Enriching preschool classrooms and home visits with evidence-based programming: sustained benefits for low-income children. *Journal of Child Psychology and Psychiatry*. 2017;58:129-37.
58. Field T, Widmayer S, Greenberg R, Stoller S. Effects of parent training on teenage mothers and their infants. 1982;69:703-7.
59. Reid K, Littlefield L, Hammond S. Early intervention for preschoolers with behaviour problems: Preliminary findings for the Exploring Together Preschool Program. *Australian e-Journal for the Advancement of Mental Health*. 2008;7(1):15-29.
60. Hemphill S, Littlefield L. Child and Family Predictors of Therapy Outcome for Children with Behavioral and Emotional Problems. *Child Psychiatry and Human Development*. 2006;36(3):329-49.
61. Kehoe C, Havighurst S, Harley A. Tuning in to Teens: Internalizing Outcomes. *Social Development*. 2014;23:413-31.
62. Burn M, Lewis A, McDonald L, Toumbourou J. An Australian adaptation of the strengthening families program: parent and child mental health outcomes from a pilot study. *Australian psychologist*. 2019;54(4):261-71.

63. Toumbourou J, McDonald L, Taylor L, Burn M. Integrating family prevention in primary schools: Lessons from the Australian pilot of the Strengthening Families Program. Strengthening Families International Workshop Nov 20, 2018; Mallorca, Spain 2018.
64. Singh N, Minaie M, Skvarc D, Toumbourou J. Impact of a secondary school depression prevention curriculum on adolescent social-emotional skills: evaluation of the resilient families program. *Journal of youth and adolescence*. 2019;48(6):1100-15.
65. Shortt A, Hutchinson D, Chapman R, Toumbourou JW. Family, school, peer and individual influences on early adolescent alcohol use: First year impact of the Resilient Families program. *Drug and Alcohol Review*. 2007;26(6):625-34.
66. Shochet I, Ham D. Universal School-based Approaches to Preventing Adolescent Depression: Past Findings and Future Directions of the Resourceful Adolescent Program. *International Journal of Mental Health Promotion*. 2004;6(3):17-25.

Appendices

Appendix 1. Search strategy for peer-reviewed papers

We used EBSCOHost to search the following databases: Academic Search Complete, AMED - The Allied and Complementary Medicine Database, Applied Science & Technology Source, CINAHL Complete, E-Journals, Global Health, Health Policy Reference Center, Health Source - Consumer Edition, Health Source: Nursing/Academic Edition, MEDLINE Complete, PsycARTICLES, PsycEXTRA, Psychology and Behavioral Sciences Collection, PsycINFO, OpenDissertations. The final search was completed on 29/04/2019.

First strategy:

((depress* OR anxi*) AND intervention* AND (community OR school-based OR universal) AND (adoles* OR youth OR child*))

Limiting the timeframe of the search from 2013 to present yielded 7759 papers.

Limiting this amount to full text, peer-reviewed sources reduced this to 2184 papers.

Specification of limiting methodology to "literature review", "systematic review", or "meta analysis" reduced this number to 32 unique, English language papers.

Second strategy:

(("Mental health" OR "Mental health problem" OR "Mental wellbeing" OR "Emotional wellbeing")) AND ((Depressi* OR Affective OR Mood OR internal* OR anxie*)) AND (interventions or strategies or best practices)

First search: 49,558.

Limiting to Full-text, Peer-reviewed sources, 12,971 papers.

Limiting by methodology to "literature review", "systematic review", "meta-analysis", and "meta-synthesis" reduced this amount of papers to 415.

Limiting the populations non-adults (<18 years) further reduced this to 75 unique papers for review.

Appendix 2. Evidence repositories searched to identify relevant grey literature*

To identify relevant programs we searched the national and international evidence-based program repositories below:

- Institute of Education Sciences, What Works Clearinghouse. Search results were filtered for Emotional/internal-behavior. <https://ies.ed.gov/ncee/wwc>
- Californian Evidence Based Clearinghouse for Child Welfare (CEBC) under the headings Anxiety and Depression Treatment (Child & Adolescent) www.cebc4cw.org/program
- Washington State Institute for Public Policy (WSIPP) <http://wsipp.wa.gov/BenefitCost?topicId=5>
- What Works for Kids web site, hosted by ARACY, listed by Mental Health <http://whatworksforkids.org.au/programs>
- The online search facility available through the Substance Abuse and Mental Health Services Administration (SAMHSA): using the search terms for “Mental health” and “Children and youth” <https://www.samhsa.gov/ebp-resource-center>,
- AIFS Guidebook <https://apps.aifs.gov.au/cfca/guidebook/programs>
- Investing in Children <http://investinginchildren.org.uk>
- Early Intervention Foundation Guidebook <https://guidebook.eif.org.uk>
- Previous What Works resources completed for Beyond Blue (8, 54).

* Grey literature comprises materials and research outside traditional academic publishing, such as reports, government and policy documents and evaluations.

Appendix 3. Included systematic reviews relevant to Table 1

| Author Date | Literature review design | Comments on family partnerships | Implications for how family partnerships might benefit student mental health |
|-----------------------------|---|---|--|
| Bruns et al. (2016) (34) | Narrative review explaining the models used to implement mental health programs within schools. | Family involvement identified as crucial to improve mental health effects, and academic performance improvements. | Effects on student mental health are described in general terms. Overcoming barriers is emphasised as important. |
| Garbacz et al. (2017) (33) | The opening article of a special edition on family engagement in school-based interventions. | Narrative review examining the role of family engagement with school-based interventions. | Figure 1 provides a model for family–educator partnerships |
| Langford et al. (2014) (55) | Systematic literature review of a widely-used framework to evaluate its effects on student mental health and wellbeing. | Examined the World Health Organization Health Promoting Schools (HPS) framework | This review found no evidence of the effectiveness of the WHO Health Promoting Schools framework on mental health of students. |
| Marx et al. (2017) (51) | Cochrane systematic literature review included 11 studies | Implementation of school start-time policies that affect families | Six studies found improved sleep from later school start times. One study found mental health benefits. |
| Sanchez et al. (2018) (49) | Meta-analysis of mental health and behavioural interventions for school-aged children. | Family–school partnership examined in two included papers. | Family partnerships are described as crucial for the success of any intervention to improve student outcomes. |
| Yamauchi et al (2017) | Narrative review to summarise the theoretical or conceptual frameworks used in family–school partnership research. | Identified four main theories including the Hoover-Dempsey and Sandler’s model of the parent involvement process. | Family participation results in better educational engagement and fewer behavior problems. |

Appendix 4. Program details relevant to Table 2

Further details of the nine programs summarised in Table 2 are presented below.

The thumbs rating system is used to rate the quality of the evidence, as described in Table 2: 👍 At least 2 good studies showing evidence of effects; 👍👍 3 studies showing positive effect; 👍👍👍 4 or more evaluations showing positive effects; ? 1 study showed effects, more studies needed; 'S' denotes evidence supporting educational outcomes.

| Program and rating | Detail |
|--|--|
| <p><i>Home visiting</i></p> <p>Preschool</p> <p>S</p> <p>👍👍</p> | <p>A range of benefits are noted in review sites https://www.blueprintsprograms.org/programs/nurse-family-partnership/ and internalising reduced in the Memphis evaluation. (56) However, evaluation findings are inconsistent and not all interventions show positive child mental health effects. Two papers found improvements for child mental health. (57, 58)</p> <p>Vulnerable women are referred by pre-school educational and health services to receive home visiting services during the child's early years. The content of visits may focus on parenting, child development education, support or service referrals. Evaluation is needed regarding effective models for Australia, the optimal service dosage (frequency of services) and how to address recruitment and retention issues. On average, less than 2% of vulnerable preschool families receive these interventions.</p> <p>Positive early education effects are noted in "language and mental development, particularly among children born to mothers with low psychological resources" https://www.blueprintsprograms.org/programs/nurse-family-partnership/</p> |
| <p><i>Exploring Together</i></p> <p>Preschool, primary school</p> <p>👍</p> | <p>WW4K: http://whatworksforkids.org.au/program/exploring-together-primary-school-program (WW4K Program rating = supported)</p> <p>Reid et al. reported reductions in child internalising in preschool from before to after children took part in the program. (59)</p> <p>Be You: https://beyou.edu.au/resources/programs-directory/exploring-together (2 studies) Significant reductions in depression/anxiety symptoms at six months. (60) Internalising d = 0.57). Both studies are relatively small and have not been audited in an independent systematic review.</p> <p>Preschools and primary school invite families into a 10-session program that has separated and combined family interaction skill-building activities for parents and children. Teachers are involved in sessions. On average, less than 5% of families in each school participated. Innovative recruitment strategies are required to increase participation.</p> |
| <p><i>Triple P Parent Education</i></p> <p>Preschool, primary & secondary</p> <p>?</p> | <p>WW4K: http://whatworksforkids.org.au/program/triple-p-positive-parenting-program (WW4K Program rating = well supported)</p> <p>WSIPP: http://www.wsipp.wa.gov/BenefitCost/Program/79 (WSIPP, 2018, Universal Triple P: No effect estimates for internalising, anxiety or depression) http://wsipp.wa.gov/BenefitCost/Program/81 (WSIPP, 2018, Level 4 groups: 1 included study internalising Cox effect size at post intervention = -0.025 and at first follow-up = -0.018). No meta-analysis estimates for depression or anxiety.</p> <p>School staff with a post-high school degree in education, health, child care or social services deliver a multi-level, manualised program to parents organised through preschools, or primary or secondary schools. Triple P has resources targeting different levels, with Level 1 offering 100% information coverage for parents. It is unclear what intensity is required to improve child mental health.</p> |

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| <p><i>Tuning into Kids/Teens</i></p> <p>Preschool, primary & secondary ? (61)</p> | <p>WW4K http://www.whatworksforkids.org.au/program/tuning-in-to-kids (WW4K Program rating = Supported)</p> <p>Schools invited families to parent education sessions run in community centres using a facilitated and manualised program focussed on emotional coaching skills. On average, less than 10% of parents in each school participated.</p> |
| <p><i>Strengthening Family Connections</i></p> <p>Primary school S 👍👍 (62)</p> | <p>WSIPP: http://wsipp.wa.gov/BenefitCost/Program/138</p> <p>7 included studies, 2 included for internalising Cox effect size post-intervention = - 0.129, at first follow-up = -0.094.</p> <p>Schools invite families into an eight-session program that has separated and combined family interaction skill-building activities for parents and children. Teachers participate in sessions.</p> <p>On average, less than 2% of families in each school participate. Innovative recruitment strategies are required to increase participation.</p> <p>Positive school effects were observed based on significantly increased parent reports of child attendance and engagement in primary school from pre to post intervention. (63)</p> |
| <p><i>Families and Schools Together (FAST)</i></p> <p>Primary School S 👍👍</p> | <p>WW4K http://whatworksforkids.org.au/program/families-and-schools-together-fast-0 (WW4K Program rating = Well supported)</p> <p>WSIPP http://wsipp.wa.gov/BenefitCost/Program/150 (WSIPP, 2018: Meta-analysis from 7 studies shows the program reduces internalising symptoms (Cox effect size post intervention = - 0.056 and at first follow-up = -0.041) (downgraded to 👍👍 due to negative economic returns based on one study).</p> <p>Schools invite families into an eight-session program that has family bonding activities involving teachers, parents and children. On average, less than 5% of families in each school participate. Innovative recruitment strategies are required to increase participation.</p> <p>School effects are evaluated in the WSIPP meta-analysis (http://wsipp.wa.gov/BenefitCost/Program/150)</p> |
| <p><i>Coping Cat</i></p> <p>Primary school 👍👍👍</p> | <p>http://www.cebc4cw.org/program/coping-cat/ CEBC Evidence Rating 1 — Well-Supported by Research Evidence.</p> <p>WSIPP: http://wsipp.wa.gov/BenefitCost/Program/66 (WSIPP, 2018, 13 included studies anxiety disorders Cox effect post-intervention = -0.414, first follow-up = -0.191). Effects on depression and internalising unknown.</p> <p>A manualised program for children with high anxiety that can be delivered by school staff. Parent education materials are provided.</p> <p>This program is targeted based on high levels of child mental health symptoms, with a reach of less than 5%. Whole school impacts on child mental health or education are unknown.</p> |

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| <i>Resilient Families</i> Secondary school S ? (18, 64) | <p>School staff receive training, then implement a universal social competence curricula to students. Schools invite parents into brief (self guided parenting book; 2-hour event, app) and long (eight-session) parent education sessions. Staff are supported to review school family policies and procedures.</p> <p>Universal components (book, student homework) are delivered to all parents. On average, 10% of parents participated in parenting events in each school and adolescents in these families reported reduced depression. (64) Innovative recruitment strategies required to increase participation.</p> <p>Positive school effects are noted in the first year randomised trial outcomes where youth-reported increased school rewards and attendance. (65)</p> |
| <i>Resourceful Adolescent Program</i> Secondary school S 👍 | <p>Positive effects in reducing adolescent depression in two trials. (66)</p> <p>A school-based program for 12 to 15-year-olds that aims to improve the coping skills of teenagers, with a specific focus on preventing depression. Includes teacher and parent intervention components. The parent program consists of three, two 30 minute sessions run weekly in groups of up to 16 parents.</p> <p>In the effectiveness trial all parents received some parenting education components. There was no evidence that the target parent education groups added benefits beyond the student curricula. (66)</p> <p>Positive school effects are observed in improvements in adolescent reports of school connectedness. (66)</p> <p>WW4Ks www.whatworksforkids.org.au/program/resourceful-adolescent-programs-rap-a-rap-p-rap-t (WW4K Program rating = Supported)</p> |

