**EARLY
INTERVENTION
FOUNDATION**

SUMMARY

Adolescent mental health

A systematic review on the effectiveness of school-based interventions

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Acknowledgments

About EIF

The Early Intervention Foundation (EIF) is an independent charity established in 2013 to champion and support the use of effective early intervention to improve the lives of children and young people at risk of experiencing poor outcomes.

Effective early intervention works to prevent problems occurring, or to tackle them head-on when they do, before problems get worse. It also helps to foster a whole set of personal strengths and skills that prepare a child for adult life.

EIF is a research charity, focused on promoting and enabling an evidence-based approach to early intervention. Our work focuses on the developmental issues that can arise during a child's life, from birth to the age of 18, including their physical, cognitive, behavioural and social and emotional development. As a result, our work covers a wide range of policy and service areas, including health, education, families and policing.

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Summary

There is increasing concern about the mental health and wellbeing of young people. According to international data, the peak age of onset for any mental disorders is 14.5 years (Solmi et al., 2021). Prevalence data in England shows that approximately one in seven young people (14.4%) aged 11–19 experience at least one mental disorder (NHS Digital, 2018). Emotional disorders, including anxiety and depression, are the most common mental disorders experienced by young people, followed by behavioural disorders. The most recent data suggests that young people's mental health has further deteriorated (NHS Digital, 2020). Covid-19 is likely to have played a role in the latest deterioration due to the unprecedented degree of disruption and uncertainty the pandemic has brought to the lives of young people.

Emotional and behavioural problems, if left unaddressed, often persist into adulthood. Longitudinal research has shown that young people who experience persistent emotional and behavioural problems during adolescence are at greater risk of negative outcomes throughout their adult life, including increased risk of depression and anxiety during adulthood, poorer employment outcomes, and not in education, employment or training (NEET) status (Clarke & Lovewell, 2021).

The growing national and international concern about young people's mental health and wellbeing has led to increasing emphasis being placed upon promotion, prevention and early intervention (Solmi et al., 2021). It is increasingly recognised that treatment approaches alone are not sufficient to address the burden of mental disorders among the adolescent population and to bring about improvements in mental health and wellbeing at a population level (Barry et al., 2019). Intervening early to prevent problems from developing brings several advantages, including intervening before patterns become ingrained and difficult to reverse, reducing the burden on young people and their families, and reducing the costs associated with treating mental disorders (Ormel et al., 2019; Barry et al., 2019; Catalano et al., 2012).

Our mission at the Early Intervention Foundation (EIF) is to ensure that effective early intervention is available and used to improve the lives of children and young people, in particular, those at risk of experiencing poor outcomes. Schools are likely to play a crucial role in supporting many young people's mental health and can also enable intervention with young people displaying early symptoms. The school setting provides an opportunity to reach large numbers of young people simultaneously. Staff spend significant time with young people which provides them with an opportunity to develop a trusting and supportive relationship. School staff are also well placed to notice changes in young people and to intervene early in relation to mental health or behavioural concerns (Barry et al., 2019; Fazel et al. 2014). The delivery of interventions in secondary schools provides real opportunities to enhance a range of outcomes and prevent or reduce emotional and behavioural problems in young people, especially as the prevalence of disorders increases with age across secondary school (NHS Digital, 2018).

It is essential that what is delivered in schools is informed by the evidence base. In this review we examine the latest evidence on the effectiveness of school-based interventions designed to address young people's emotional and behavioural needs.

The report consists of three major parts which provide evidence of the effectiveness of interventions designed to:

- enhance young people's mental health and wellbeing outcomes: this includes social and emotional learning interventions, positive psychology interventions, mindfulness-based interventions, positive youth development interventions, and mental health liteacy interventions

- reduce or prevent internalising symptoms/mental health difficulties, including anxiety and depression prevention interventions, and suicide and self-harm prevention interventions

- reduce or prevent externalising symptoms/behavioural difficulties, including aggression and violence prevention interventions, bullying prevention interventions, and sexual violence prevention interventions.

Interventions were categorised according to their core aim and primary outcomes. It is, however, important to acknowledge that there is a certain degree of overlap across these categories and the interventions within these categories.

Drawing on evidence from 34 systematic reviews published since 2010 together with 97 primary studies published over the past three years, this evidence review provides a comprehensive and up-to-date summary of what works, for whom and under what circumstances. The findings from this review will form the basis of EIF's ongoing programme of work to support young people's mental health, including the development of guidance for secondary school staff on supporting young people's emotional and behavioural needs (March 2022).

Key findings

We found that:

- **Universal social and emotional learning (SEL) interventions have good evidence of enhancing young people's social and emotional skills and reducing symptoms of depression and anxiety in the short term.** Other approaches to enhancing young people's mental health and wellbeing have produced inconsistent (mindfulness interventions) or limited evidence of impact (positive youth development interventions). Mental health literacy interventions have been shown to have an impact on young people's mental health knowledge; however, there is less evidence of impact on improving help-seeking behaviour. Limited research has been carried out to date on the long-term impact of any of these interventions.

- **There is good evidence that universal and targeted cognitive behavioural therapy (CBT) interventions are effective in reducing internalising symptoms in young people.** Universal CBT interventions have evidence of improving symptoms of depression and anxiety in the short term. Targeted cognitive behavioural therapy interventions delivered to young people with minimal but detectable signs of depressive symptoms appear to be effective in reducing symptoms of depression in both the short and medium term.

- **There is limited evidence on the effectiveness of school-based interventions designed to prevent suicide and self-harm.**

- **Violence prevention interventions have been shown to have a small but positive effect on aggressive behaviour in the short term.** There is evidence that some of these interventions can also have an impact on other behavioural outcomes including bullying victimisation and pupil wellbeing. Programme effects are greater among students considered at high risk of violent behaviour.

- **Bullying prevention interventions are effective in reducing the frequency of traditional and cyberbullying victimisation and perpetration.** There is also good evidence that these interventions have a long-term effect on traditional bullying perpetration.

- **There is promising evidence on the effectiveness of interventions designed to reduce sexual violence and harassment when delivered to young people at risk of experiencing sexual violence.** The evidence shows that these programmes can reduce sexual violence perpetration and victimisation.

- **The impact of depression and anxiety prevention interventions and violence prevention interventions tends be stronger when they are targeted at young people with elevated but subclinical symptoms.** It is likely that interventions aimed at preventing mental health and behavioural problems are less effective among the general population because there is less scope for change. This would suggest that interventions aimed at intervening early to reduce emotional and behavioural difficulties are best directed towards at-risk populations and individuals.

- **In addition to reducing mental health and behavioural difficulties it is essential to support the development of social, emotional and behavioural competencies at a universal level.** A growing body of evidence indicates that enhancing social, emotional and behavioural skills (including emotional identification, articulation and regulation; communication skills; conflict resolution skills; behavioural self-regulation; empathy and perspective taking) is a key determinant to young people's mental health and wellbeing, and supports them in achieving positive outcomes in school, work and life.

- There are a limited number of interventions which report evidence of improving mental health and behavioural outcomes among diverse groups and an **even smaller number of interventions specifically designed for and evaluated with minority ethnic groups.** Findings from these studies do, however, suggest promising impact on mental health and behavioural outcomes when delivered at both universal and targeted level.

- **Universal interventions can be effectively delivered by teachers; however, there is no evidence that teacher-delivered interventions are effective in addressing the needs of students with symptoms of depression or anxiety.** Our review has found that for this group of young people, CBT interventions delivered by external professionals, such as psychologists, provide the only convincing evidence in terms of improving mental health outcomes.

- **High-quality programme implementation is critical to achieving positive outcomes.** Where monitored, research has shown that positive effects are observed when programmes are implemented with high quality (measured in terms of dosage, adherence, quality of delivery and participant responsiveness). This is in contrast to inconsistent/poor implementation which has been shown to result in diminished or null effects. Research on the sustainability of mental health interventions beyond the efficacy trial is very limited.

Implications for policymakers

Over the past two decades, we have witnessed deteriorating mental health among young people in the UK. Most recently, the significant disruption and uncertainty created by Covid-19 has put more young people at risk of experiencing mental health and behavioural difficulties (Mansfield et al., 2021). Now more than ever, there is an urgent need for high-quality school-based support to address young people's mental health and behavioural needs.

The findings from this review provide important insights into what works to support young people's mental health and behavioural needs, for whom, and under what conditions these interventions work. The evidence in this report should be used in current national policy, including the implementation of the *Transforming Children and Young People's Mental Health* green paper proposals and future policy decisions. There are a number of implications to take into account when designing policy.

- **Incentivise and support the use of programmes and approaches which have established evidence of improving young people's outcomes.** The evidence review provides clear evidence on the effectiveness of some approaches in improving young people's wellbeing, reducing symptoms of depression and anxiety, or reducing aggressive behaviour, bullying perpetration and victimisation. It is vital that evidence-based programmes are prioritised over the vast array of programmes and resources that are available to schools, many of which lack evidence of effectiveness or have evidence of not improving outcomes.

- **Support schools to adopt a whole-school approach.** Programmes are more likely to be effective and result in enduring positive change when they are implemented as part of a multi-tiered whole-school approach to improving young people's mental health and behaviour. A mental health or behavioural intervention should not be a one-off event in the school's yearly calendar. Instead, schools need to be supported in the adoption of a whole-school approach which encompasses: (i) universal and targeted interventions; (ii) the embedding of this work within a supportive school environment which fosters positive relationships, a sense of belonging and purpose; and (iii) extending learning to the home environment and developing strong connections with mental health services to support the most vulnerable young people.

- **Develop teachers' skills and confidence in supporting young people's mental health.** As part of a whole-school approach, there is a need for teacher training to enable all school staff to understand and model these skills and behaviours through their everyday interaction with young people. Teachers frequently report limited confidence in being able to respond to young people's mental health and behavioural needs. The provision of high-quality pre-service teacher training and continuing professional development is necessary to equip teachers with the knowledge and skills to enable them to develop learning experiences that support young people's social, emotional, behavioural and academic competencies.

- **Provide external mental health expertise to schools to support the most vulnerable.** A system of identification is needed to better target the most vulnerable pupils at risk of developing mental health and behavioural problems to ensure that they can receive timely early intervention support. It is essential, therefore, that the necessary interventions and support are available for young people most in need. Our evidence review has found that for young people with symptoms of depression or anxiety, CBT interventions delivered by external professionals are necessary to improve mental health outcomes. There is no evidence that teacher-delivered interventions are effective among students with internalising symptoms. Schools should be provided with the necessary external support to intervene early with those most in need. If appropriately resourced and trained, Mental Health Support Teams could provide a real opportunity to address this issue.

- **Focus on high-quality implementation of interventions.** Implementing evidence-based interventions and support within complex systems like schools requires a supportive implementation system in ensuring successful outcomes. National policymaking must focus on high-quality implementation and providing schools with implementation support, for example in building readiness and commitment for change among all school staff, understanding the needs of the pupil population, developing an action plan, addressing barriers to implementation, and sustainability of evidence-based interventions within schools.

Recommendations for future research

Our review has identified substantial gaps in the evidence base which must be addressed if we are to offer high-quality mental health and behavioural support in secondary schools which has the potential to impact not only short- but long-term mental health, educational and social outcomes. Key research priorities are presented below.

- Despite the fact that we identified 97 primary studies published in the last three years and nine of these were carried out in the UK, only one UK study was designed to strengthen young people's mental health and wellbeing. **We need to invest in the evaluation of mental health and behavioural interventions in the UK, in particular interventions designed to enhance young people's mental health and wellbeing.** As part of this we need to avoid common pitfalls when evaluating interventions to ensure confidence in programme outcomes.[1]

- **Future research needs to examine the long-term impact of school-based mental health and behavioural interventions.** This review repeatedly points to the limited number of studies which examined if benefits are maintained at follow-up. Of the studies that report long-term follow-up, the evidence is mixed: some studies report that effects were maintained; others found that effects had disappeared; and a small number of studies reported that effects had become significant only at follow-up. Future research needs to investigate the additional supports required to maintain positive impact at long-term follow-up.

- Despite consistent evidence on the effectiveness of mental health and behavioural interventions delivered to minority ethnic young people and young people from lower socioeconomic backgrounds, relatively few of these interventions were specifically developed for these at-risk groups. **Future research needs to invest in developing and evaluating interventions which have been specifically designed to meet the needs of minority ethnic young people and young people from a lower socioeconomic background.** As part of this, we need to investigate the degree to which cultural adaptations or the designing of intervention materials that are representative of diverse student populations result in a larger impact on young people's outcomes.

- **Additional research is necessary to understand the effectiveness of mental health and behavioural interventions among other vulnerable groups of young people including, for example, young people at risk of school dropout, LGBTQIA young people, young people with special educational needs and disability (SEND), young people with chronic illnesses, and young people with autism spectrum disorder.** Research should examine whether interventions that currently exist are equally, less or more effective for vulnerable groups. In addition, research should also examine whether interventions can be effective when delivered at the universal level in order to prevent marginalising vulnerable groups.

- **We identified a very limited number of interventions addressing cyberbullying, conduct problems and self-harm.** Future research should invest in developing and evaluating the efficacy of interventions designed to address these important issues which can have a significant impact on young people's long-term mental health and wellbeing.

- Despite the evidence regarding the coexistence of mental health and behavioural problems during adolescence and their combined impact on adult functioning (including mental health, suicidality, low education level, financial difficulties and delinquency), we identified a very limited number of interventions designed to address young people's mental health and behavioural needs. **Future research should examine the efficacy of an integrated prevention model which combines evidence-based mental health and behavioural approaches.**

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1   See https://www.eif.org.uk/resource/evaluating-early-intervention-programmes-six-common-pitfalls-and-how-to-avoid-them

Implementation research: priority areas

- Evaluation studies continue to provide limited, if any, data on implementation. Without data on what was implemented (dosage, adherence) and the quality of delivery, **we are unable to determine what led to a programme's success or failure.** In addition, we risk misinterpreting null effects in cases where the intervention was poorly implemented. It is crucial that we address this gap in future research trials.

- As part of evaluation research, there is a need to identify barriers to delivering universal and targeted mental health support within schools (such as resourcing; programme model and its fit within the school context; implementer readiness in terms of skills, knowledge and beliefs; pupil acceptability; stigma associated with receiving targeted interventions, and so on). **Reporting on implementation barriers as part of efficacy trials will advance our understanding of the conditions necessary to support programme outcomes**, which will have implications for future programme development and teacher training.

- **Further clarity on what works for whom is necessary.** While our review provides evidence on the effectiveness of various approaches designed to address young people's mental health and behavioural needs, there is limited evidence on whom these approaches are effective/ineffective with. Future research should investigate which young people (gender, age, risk factors) are more likely to benefit from particular types of interventions (universal, targeted).

- **Research on the sustainability of effective interventions is urgently needed** to progress the field of research beyond our understanding of what works to understanding the supports required to sustain evidence-based interventions over time. Future research should examine barriers and facilitating factors that affect the sustainability of interventions after external funds and other resources end.

Download
To download this report or the appendices, which provide in-depth information on all of the systematic reviews and primary studies that were analysed as part of this systematic review, please visit:
https://www.eif.org.uk/report/adolescent-mental-health-a-systematic-review-on-the-effectiveness-of-school-based-interventions